# Styles of making a living and ecological change on the Fon and Adja plateaux in South Bénin, ca. 1600-1990

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# Styles of making a living and ecological change on the Fon and Adja plateaux in South Bénin, ca. 1600-1990

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To ‘Mordecai’ Jouke S. Wigboldus,
In memory of Jan H.B. den Ouden,
And to my brother Sjoerd

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# Acknowledgements

"*Dɛdɛ kabakaba agama non liyá hùn*" (slowly and prudently the chameleon approaches the top of the kapok tree) said the Fon king Akaba (1685-1708) when he ascended the throne in already advanced age. His name Akaba is derived from this aphorism. The savannah kapok tree, *hùn* or *Bombax costatum*, is a prickly tree (Ségurola 1988:234-235). In another rendering of Akaba's saying (Le Herissé 1911:15), the chameleon climbs on the giant forest kapok tree *geđehunsu* or *Ceiba pentandra*. Whichever was the original version, climbing a kapok tree stands in South Bénin for a difficult and prickly undertaking which requires prudence, time and effort.

This also applied to my PhD project. Thorns and obstacles on my way were many. Most painful were discouragements from friends and relatives who argued that I should better give up. Among them, my dear auntie Heidi occupies such a prominent place that she deserves to be mentioned here. Even after submitting the thesis to the reading committee she wrote me three more letters, trying to convince me of the futility of my PhD project, and this in spite of repeated pleas from my side to mind her own business, and in spite of the warning that she would be named here in the acknowledgements.

What kept me going over the years was the encouragement and support from many others, first and foremost my MSc thesis supervisor Jouke Wigboldus and my God. Jouke Wigboldus was the one who proposed to me to compete for one of the five available 'BRAIO' positions at Wageningen University in 1988, that is positions for 'brilliant AIO' candidates who hand in their own PhD research proposal. Upon inquiry, the deadline for handing in proposals appeared to be already one week later. Normally, about six months are required for writing a good PhD proposal, but I decided to try anyhow. During this week I was encouraged by the story in Esther chapters 1 and 2, which narrates how the orphaned girl Esther successfully competes for the position of first wife in king Xerxes' harem, encouraged by her uncle Mordecai. A few hours later I sat before intended promoter Norman Long's office, waiting to discuss my proposal with him before submitting it for selection. A fellow student came in and asked "Hey Doortje, are you also waiting to see the king?" With these and other omens it was no real surprise that the BRAIO-committee selected my proposal. Nevertheless, in later stages I supposed repeatedly that my PhD research has had its best time and that it is time to quit and to do something else. But each time an independent source (speaker, written text, or circumstance), ignorant of my doubts, encouraged me to remain faithful to my first calling, or provided support which helped me to continue, or reminded me of Esther's story without knowing of the significance that this story had for me. Jouke Wigboldus was initially the only person in the Leeuwenborch (social science department) and in my family to encourage my PhD plans and, with his wife Giely, to pray for me. They did so as long as their health permitted. Only some months ago my mother also started praying; thanks mom and Jouke, you contributed to the completion of this thesis.

Soon several other colleagues in the Leeuwenborch also provided support. Jan den Ouden taught me much about African anthropology and Bénin, and was extremely dedicated to reading and commenting upon my long draft chapters – so much that I sometimes thought he hoped that the circle of reading, commenting and rewriting would never to come to an end. But it came to an end when, at his retirement party, the department offered him an ancient stone sculpture of the Hindu god Shiva, with the remark that the gift of an elephant is, in India, a deathly curse. He gladly accepted with the words "it won't harm because Jan does not believe in this." He fell ill a few days later and passed away within less than 17 months.

Leontine Visser took over his role in supervising and in committed reading, but with a great gift to prune and structure my long and chaotic chapters. Her stimulus to develop core qualities and to trim secondary issues helped me to bring this PhD project to a successful end.

The same goes for our shared interest in combining sociological and agro-ecological research. I thank Norman Long for his continued thrust in my PhD project, for his inspiring theoretical comments, and for improving my rugged English in the first three chapters and the summary. Karen Batjes-Sinclair, Agnès Galimard, Mariame Maiga, Pablo Laguna and Leontine Visser did their best to further improve the English, French and Dutch summaries.

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Most important was also the hospitality of the inhabitants of Atindehouhoué, Honsouhoué, Lissazounme, Kana-Dodome, and Lele where I lived. Inhabitants of many surrounding villages and staff of the CARDER's Mono and Zou gave their time to talk with me and to show me around. Also family Ayosso in Bohicon, Henri Mupila and Jon & Marjon Daane in Cotonou, and David Mensah and Victor & Precede Olympio in Porto-Novo lodged me for some nights. The Université Nationale du Bénin allowed me to use equipment and offered intellectual support. I also acknowledge the kind assistance from the CENAP, IITA, INSAE and SERHAU in Godomey and Cotonou. Without you this research would have been impossible!

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While I write this I have not yet reached the top of my kapok tree. I do not know yet what the end of my PhD project will bring. But the climb was definitely worth the effort. It offered new (in)sights and perspectives, in other words I enjoyed the journey and learned much on the way. My gratitude goes to all those who made this possible.

# 1

# Introduction: Distant prejudices and inverted realities

> A chameleon climbs a kapok tree and sees three rings. He says: I expected some precious metal, but it's just ordinary tin. *(Agamã yi hùntinji bo mon alokɛ atòn so. E đo: gan jo gan de anyi sin lo o flele gan yaya wɛ)*. Fon proverb.

The first time I visited Lele village and the Fon plateau was on 22 June 1985. For half a year I had been living in a village in the centre of the Adja plateau, Atindehouhoué, as part of my studies at Wageningen University. But that Saturday in June the kindergarten teacher of Atindehouhoué, a Fon whose mother was from Lele, wanted to show me his native culture, his village, and the ancient royal palace in Abomey. Lele was only 4 kilometres from Abomey, the former capital of the pre-colonial kingdom of Danhomɛ (Dahomey), and hence in the centre of the Fon plateau.

After a journey of 50 kilometres by moped we reached Lele in the early afternoon. On our way we had a short stop at the market where some typical Fon products, which I had never seen on the Adja plateau, drew my attention: Sorghum porridge, ridging hoes, and a scythe which, according to the teacher, "we use for clearing bush, because we still have much more fallow than the Adja", and also lots of pottery for ritual use. The people of Lele received us with more lemonade than I had ever received in a single day, and with great cultural pride:

> "You poor guys from Adja-land, for sure, have not eaten anything else but ordinary maize *pâte* with *flefi*[1] during the last seven months! For we know that the primitive Adja are content to survive on maize, *sodabi* and *flefi* all the year long. They even lack palm oil because they fell their palms to distil *sodabi*! They are constantly drunk and fight, and their *flefi* stinks. Our *afintin* spices smell and taste much better. Our cuisine is much more varied and refined than theirs! So we will prepare you a dish which you have certainly never eaten before: *telibowo* (thick porridge from powdered yam) with soup from *gusi* (melon seed), bitterleaf and *afintin*!"

While the meal was being prepared, I was shown around the village by the teacher and some adult inhabitants – to my surprise hardly any children were to be seen.

> "See how we grow our crops on ridges, that way they produce much more than the way the Adja grow them on the flat. And look at our tall oil palms! An Adja is content if he has his maize, but we Fon are more aggressive, we always seek to gain. If we can make profit by selling palm oil, we do so, while the Adja waste their palm fruit. Watch this large basin in which we pound our palm fruit with our feet! The Adja make so little palm oil that they can pound all their palm fruit in their wooden mortars. Through our aggression we occupied large parts of South Bénin. Most young people of our village migrate to earn money, that's why the village is so quiet and you see so many empty houses here. But our migrants send us cash! See these cement-brick walls around our compound, around the 'little palace' of our lineage head, and around our *vodunkpamɛ* convent where the initiates of our three *vodun* gods live during their training as cult members. The whole lineage assembled thousands of FCFA to pay for these walls. We Fon prosper and live long lives because we show proper respect to our lineage elders, to our ancestors and to our gods!"

We came to an old woman living next door to a hut which contained a kind of iron umbrella, which I had never seen on the Adja plateau:

> "These are the altars to our ancestors – the Adja don't honour their ancestors like this. And this woman is our *tanyinon,* the priestess of our lineage ancestors. Her old age is proof of what I just said. She sacrifices on these altars daily, and the whole lineage gathers annually to sacrifice a cow and other animals to the ancestors and to our gods. And when we gather we all bow before the lineage head, wear nothing but loincloths, and sit on the ground. He alone sits on a stool. It is appalling to see how the Adja disrespect their elders, remain standing when they greet them, and even call them by their personal names!" (Wartena letter 24-6-1985; 1988b:250, 252-253)

We enjoyed dinner, which was indeed very different from anything I had tasted among the Adja, and when we had our fill with *telibowo*, *gusi* and bitterleaf we had to carry home the six boiled and ten un-boiled maize cobs and several loaves of *akpan* (very white fermented maize porridge of a recipe not known by the Adja) which we had not been able to eat on the spot. We thanked our hosts, and the teacher, who was one of their migrant sons, gave them 2000 FCFA[2]. Later he told me that their generosity made him give more than he had planned. We returned home after brief stops at the Fon royal palace and the statue of king Gbehanzin (1889-1894), which Bénin's Marxist government had erected to praise him for his resistance to French colonisation.

Still impressed by what I had seen in Lele, I asked 22 Adja farmers whether the Fon's ridge tillage and oil palm management styles could be a solution to their own soil fertility problems. They all knew the Fon practices, but did not deem it worthwhile to try them out, and preferred to stick to their own farming styles (Wartena 1987:118-120, 240).

Adja people had often served me food, but it was indeed almost always maize. Whenever I passed by Adja who were eating they expected me to share their meal of maize-*pâte* with palm fruit soup and small smoked fish. When Atindehouhoueans cooked a feast they called me to join – at Christmas five times in one afternoon – but even then it was mostly maize-*pâte* and sometimes rice or pounded yam with goat meat, and if I could not come they brought it to my house. After the harvest I received many bags of maize and some yam tubers from Adja farmers to prepare myself. But sorghum, *telibo, akpan, gusi, afintin,* and bitterleaf were indeed unknown to the Adja. So far I had assumed that Adja styles of farming, the dishes prepared with their crops, and Adja social organisation were best adapted to their environment. Now it surprised me to see very different socio-religious institutions and styles of farming in the same ecological zone, and such a different menu composed from the same local ingredients.

These differences between the linguistically-related Fon and Adja and their geologically and climatologically similar plateaux triggered my curiosity and drove me to the colonial archives. The Fon plateau and the north-eastern part of the Adja plateau belonged, until 1931, to the same *cercle,* and from 1911 to 1920 even the whole Adja plateau belonged to this *Cercle* d'Abomey. The *cercle* was led by the same French administrator, who frequently compared the two ethnic groups. One of them, *commandant* Le Herissé[3], expressed the general French opinion when he labelled the Adja as 'savages' and as 'bad farmers', and praised the Fon (or *Dahoméens*) for their commercial mentality and their 'trust' in the French administration:

> *'Les Adja vivent encore comme des sauvages. Quand on visite ceux qui dépendent du cercle d'Abomey, on reste étonné de les voir, presque nus, habiter de misérables huttes encerclées d'épais buissons épineux. Ils ne labourent pas leurs champs et ne connaissent pas la jachère comme les Dahoméens; ils se contentent d'un défrichement sommaire par le coupe-coupe et le feu et ils ensemencent sans même retourner la terre. Au lieu de cultiver le palmier pour trafiquer de ses fruits, ils l'abattent pour s'enivrer de son vin. Si, d'aventure, un Européen ou même un*

> *noir étranger se risque chez eux, hommes, femmes, enfants se sauvent dans les forêts. En un mot, rebelles à toute pénétration, les Adjas n'ont jamais eu aucune action dans l'histoire du Dahomey; ils sont comparables au kaké*[4] *qui peuple leurs forêts et dont ils n'ont pu jamais tirer aucun parti, parce que son bois ébrèche leurs haches'*. (Le Herissé 1911:48-49)

> *'Les 'Fons' travaillent et mettent convenablement le pays en valeur. (…) Le Cercle d'Abomey est un de ceux où l'on cultive le plus de maïs. Ses habitants, travailleurs, ne demandent qu'à gagner de l'argent. (…) Les populations continuent à avoir la plus grande confiance dans l'administration française et se livrent avec ardeur à la culture du sol.'* (Rapports mensuels Septembre 1905, Août 1906 et Octobre 1907 Cercle d'Abomey, ANB Porto-Novo)

> *'Les cultures des Adjas sont des simples débroussements. Les indigènes ne tracent aucun sillon, ne retournent même pas la terre; ils se contentent de gratter le sol pour le débarasser des mauvaises herbes et l'ensemencent après cette opération'*. (Rapport mensuel Octobre 1905 Cercle d'Abomey, ANB Porto-Novo)

> '*La région des Adjas qui dépend d'Abomey a été jusqu'ici fort délaissée. Les habitants cultivent tout juste pour se nourrir. Aucun doute que le commerce en pénétrant chez eux leur créerait des besoins et ne les aiderait à sortir de leur sauvagerie.'* (Rapport mensuel Novembre 1907 Cercle d'Abomey, ANB Porto-Novo)

French colonial administrators generally agreed that the Adja's farming practices were a sign of backwardness, and those of the Fon praiseworthy. One reason for this judgement was that the Fon ridged their fields, called *labour, tracer sillons* or *retourner la terre* in French, while the Adja farmed on the flat and tilled their fields only very superficially. Le Herrissé described the latter as *gratter le sol*, while the administrator of all the other Adja labelled it as laziness:

> *'Les populations que nous avons visitées sont très sincères, la paresse est leur principal défaut; ils n'ont pas d'énergie suffisante pour débrousser leurs champs, à l'approche des pluies, autrement que par le feu.'* (Rapport mensuel Février 1905 Cercle de Mono Poste d'Athiémé, ANB Porto-Novo)

Also the administrator of the western and central Ehwe-Adja plateau judged that they were farming 'badly':

> *'L'indigène cultive peu et très mal. Il récolte à peine ce qui lui est nécessaire, et ses transactions commerciales sont presque nulles. Dans ces conditions, la question agriculture et commerce ne prête qu'à bien peu de développement.'* (Correspondance cercle de Grand Popo subdivision de Parahoué 1908-1910, Rapport d'ensemble 1909, ANB Porto-Novo)

Ridge tillage successfully suppressed weeds, looked neat in European eyes, and gave good yields in the short run. It was customary practice around the major towns of Whydah, Porto-Novo and Abomey with which Europeans were familiar since pre-colonial times, though not in the other areas of South Dahomey. This probably made the French regard ridging as the norm.

Le Herissé also mentioned above that the Adja felled oil palms to tap their wine, which conflicted with the production of palm fruit, while the Fon produced considerable amounts of palm oil and fruit. From 1905 to 1907 Le Herissé and his colleagues of the *Cercle* d'Abomey who surveyed the oil palms in the whole area, described the oil palms on the Fon plateau as *nombreux* (numerous) and *belles* (beautiful) and those in the Adja areas in pejorative terms:

> *'On rencontre autour d'Avégamé beaucoup de jeunes palmeraies; les fruits n'en sont pas récoltés. Les indigènes abattent les palmiers quand ils ont 5 ou 6 ans pour en extraire du vin'*. (Rapport mensuel Octobre 1905 Cercle d'Abomey, ANB Porto-Novo)

The Adja's palm wine production was in French eyes another sign of the backwardness of their farm practices and of their economic irrationality. Administrators of the western and central Adja wrote:

> *'Les palmiers produiraient beaucoup plus si les propriétaires les soignaient, mais la brousse les envahit et les naturels s'en occupent fort peu. De plus la fabrication du vin de palme, boisson très goûtée dans le pays, est une plaie pour la région. Insouciant au suprême degré l'indigène s'occupe point du lendemain, jusqu'au jour où l'on sera arrivé à lui créer des besoins. Alors peut-être se rendra-t-il compte des pertes considérables qu'il aura faite en n'entretenant pas ses cultures et en ne cherchant pas à les étendre, alors qu'il pourra le faire aisément sans que cela ne lui coûta rien, si ce n'est quelques heures de travail par jour'.* (Correspondance cercle de Grand-Popo subdivision de Parahoué no. 285 31-11-1908; Rapport d'ensemble 1909, ANB Porto-Novo)

> *'Chez les Adjas à l'ouest de la Colonie on plante aussi l'Elaïs guinéensis mais les indigènes de cette région ne font ces plantations, souvent importantes, que pour receuilir le vin de palme lorsque l'arbre atteint 10 à 15 ans; il ne s'occupent pas ou peu des fruits.'* (Service de culture rapport annuel Dahomey 1904, AOM Aix-en-Provence)

Palm wine production was not only silly but also prejudicial in French eyes. As early as 1903 the colonial government planned to prohibit it[5], and wrote about the Adja:

> *'Ils cultivent aussi le palmier (…) pour en tirer le vin de palme. Cette dernière production a pris ces derniers temps une extension excessivement préjudiciable pour le commerce des huiles et amandes. Une mesure de préservation s'impose, si l'on ne veut pas voir les palmiers complètement détruits dans le cercle d'ici 10 ans, et par suite le commerce réuni.'* (Correspondance des cercles Grand Popo, rapport annuel de l'année 1903, ANB Porto-Novo)

The Fon in contrast were persistently commended by their administrators for their zeal in producing commodities and for their discipline. As early as 1900, only a few weeks after the French deposed their puppet king Agoli-Agbo (1894-1900), they judged that

> *'Si autrefois, la ville d'Abomey était envahie par la brousse, aujourd'hui des cultures magnifiques la remplace. Maintenant que les habitants ne sont plus forcés de donner au roi le fruit de leur travail (…) ils n'hésitent plus à agrandir leurs cultures.'* (Rapport commercial et administratif, Juin 1900 Cercle d'Abomey. Rapport sur la situation agricole dans le Cercle d'Abomey Février - Novembre 1900, ANB Porto-Novo)[6]

Other domains in which the Fon and Adja were described very differently were their social organisation and the utility of their chiefs for the French cause. Administrators considered the *chefs de canton* and *chefs de village* whom they had appointed among the Fon to be loyal to the French as well as capable of commanding their people's respect:

> *'Cercle d'Abomey. (…) A l'occasion du recrutement le concours des chefs a été d'une façon générale constant et parfait. (…) les opérations du recrutement se sont poursuivis assez facilement (…) Grâce à l'action dévouée des principaux chefs du cercle d'Abomey. (…) M. Noufflard a également pensé qu'il y aurait intérêt a déposséder les Hollis d'une partie de leurs palmeraies dont ils ne tirent, en général, que du vin de palme, pour les donner aux chefs de canton d'Abomey, toujours prêts à seconder nos efforts et dont le dévouement s'est manifesté d'une façon toute particulière à l'occasion du dernier recrutement de troupes indigènes.'* (Rapport politique et administrative du Dahomey 4eme trimestre 1915, AOM Aix-en-Provence)[7]

In contrast, the *chefs* of the Adja were blamed of lacking authority, attributed to a lack of coherence and hierarchy in Adja society. This applied especially to the Ehwe-Adja, called *Houé* or *Ehoués* by the French. The Ehwe-Adja, not to be confused with the Ewe of Ghana and Togo, are the largest Adja subgroup[8] and the one which I studied. They live and lived

in the west, centre and north-east of the Adja plateau and its northern savannah fringes, in an area roughly corresponding to the colonial *Subdivision* de Parahoué.

> *'Les chefs sont pleins de bonne volonté, malheureusement ils n'ont qu'une faible autorité sur leurs administrés, et ils l'avouent assez ingénument. Pour le moindre petit ordre à faire exécuter dans les villages ils demandent immédiatement un garde, parce que disent-ils: 'Si tu n'envoies pas un garde, les gens ne nous croiront pas'. (…) Le nombre d'imposables est encore au dessous de la réalité, un certain nombre d'habitants ne sont pas déclarés par les chefs de cases. Si les chefs de villages et de cantons n'avaient pas cette crainte inexplicable de leur gens (…). Ils préfèrent laisser faire, comprenant fort mal leur rôle en ceci et ne prenant guère leurs intérêts, leurs remises sur l'impôt étant diminués d'autant.'* (Correspondances cercle Grand-Popo subdivision de Parahoué 1908-10 no. 285 du 31-10-08, ANB Porto-Novo)[9]

> '*Le chef du Poste de Parahoué se plaint régulièrement de l'indolence des chefs de son secteur, qui manquent d'autorité, et de l'extrème indifférence de leurs sujets qui restent insensibles aux punitions.'* (Rapport mensuel Novembre 1910 Poste d'Athiémé, ANB Porto-Novo).

The Adja, especially the Ehwe-Adja, were accused of disobedience to their *chefs*, of an 'exaggerated individualism', an 'outrageous spirit of independence', and in passing also of being liars and drunkards. Confronted with an Ehwe-Adja village which rebelled against its *chef* and tried to impeach him, an administrator wrote:

> *'Il ne faut pas oublier que le Houé est très menteur. (…) Le seul motif, résidait dans cet esprit d'indépendance des indigènes dont j'ai souvent parlé et qui les pousse à se diviser le plus possible chacun, voulant se gouverner soi-même et n'obéir à personne. (…) C'est une habitude de l'indigène de ce pays ci de vouloir changer de chefs le plus souvent possible.'* (Rapport mensuel Janvier 1910 Poste d'Athiémé et Grand-Popo, et Rapport mensuel Août 1910 Poste d'Athiémé, ANB Porto-Novo)

> *'(…) dans la région du Mono, nous nous trouvons en contact avec une poussière de races, secondé par une poussière de chefs, (…) il est difficile d'espérer en quelques mois, voire quelques années, modifier un état social caractérisé par un individualisme exagéré, un sentiment outré de l'indépendance, un abus général et très prononcé des boissons alcooliques. Nous avons là une tache délicate et de longue haleine que la pénétration par le rail ne pourra que faciliter.'* (Rapport d'ensemble Dahomey 1911, 14 Mi 1661 série 2G 11-14, AOM Aix-en-Provence)

Early colonial administrators continually repeated the same value judgements about the Fon and Adja. The Fon, according to a great number of early colonial reports, were 'disciplined', 'industrious' and 'eagerly cultivating the soil', had 'replaced the bush by splendid crops', were 'working and developing their land', 'disposed to work as porters' and 'demanding employment', had 'trust in the French administration' and were 'loyal' to the coloniser. The Fon chiefs were 'committed' to the administrators and 'always ready to help them in their efforts'. The only setback was the Fon princes, who 'distinguish themselves by their laziness and their pride'.

The Adja in contrast, especially the Ehwe-Adja, were labelled as 'savage', 'backward', 'brutes', 'a speck of dust', 'liars', 'drunkards', 'lazy', 'heedless', 'not developing their land', 'wasting a large part of their field products', 'letting a large part of their harvest rot', having 'defective farming practices', 'farming little and very badly', 'not performing any corvée labour', and 'selling only gimcrack'. They were judged to be 'insensible to punishment', 'unwilling to pay taxes', 'extremely unconcerned', 'difficult to administrate' and 'refractory to each form of penetration'. They were characterised by an 'overdone spirit of independence', an 'exaggerated individualism', a 'bad family organisation', an 'unreasoned fear of Europeans' and a 'skittish character'. Their local elite, called *notables* by the French, were

accused of having a 'bad will' and being 'unyielding enemies of everything which could liberate the spirits' of the people. Adja *chefs* were labelled as 'nullities', 'slothful', 'a speck of dust', 'weak', 'lacking authority' and 'not seizing their interests'. One administrator summarised the essence of his own and his predecessors' opinions about the Ehwe-Adja:

> *'Situation politique Parahoué. (…) Je pourrais sans inconvénient recopier tout ce qui a été écrit sur le Houé depuis que le poste existe, depuis dix ans, sans crainte de dire quelque chose qui ne soit pas d'actualité. Mollesse et manque d'autorité des chefs; paresse, indifférence, indépendance de caractère des indigènes, peur irraisonnée de l'Européen, mauvaise organisation de la famille qui crée dans le pays des complications sans nombre, rien n'a changé, rien ne s'est modifié à aucun point de vue, et rien, de longtemps ne changera ni se modifiera. (…) Le Houé est un brute et un sauvage, et brute et sauvage il restera.'* (Rapport mensuel Mai 1910 Poste d'Athiémé, ANB Porto-Novo)

> *'(…) les Sahoués et les Houés restent toujours effarouchés à la vue d'un Européen; les Dogbos, peut-être, un peu moins. L'apprivoisement – puisque c'est le mot consacré – de tous ces Adjas sera long et difficile'* (Rapport mensuel Juin 1910 poste d'Athiémé, Parahoué et Bopa, ANB Porto-Novo)[10]

With such descriptions the early colonial administration established the Fon's and the Adja's long standing reputations. The administrators' classifications solidified and were repeated again and again, first in colonial documents and soon also in popular and scientific discourse. When I first heard about the Adja in 1984, before going there, they were described to me, by Dutch and Béninese intellectuals, in similar terms as the administrators had used before 1918: The Adja were backward, savage, hardly commoditised, having weak family structures, and bad agricultural techniques. The supposed backwardness of the Adja plateau was precisely the reason why scholars of the Universities of Wageningen and Cotonou – thinking that it was the area most in need of research and development of all regions of Bénin – sent me there in 1984-1985.

Also much of what I learned about the Fon before I was able to spend more time with them from 1989 to 1991 corresponded with the early colonial images of them. They were seen as modern, good farmers and entrepreneurs, seizing their opportunities, and having a strong and very functional socio-cultural organisation. At the same time outsiders (throughout the 1980s and 1990s), be they in Europe or in Béninese towns, continued to describe the Adja in early colonial terms.

Was the administrator of Athiémé in 1910 right that nothing would change over the long run among the Ehwe-Adja? Was the colonial government right that Adja trade and agriculture would not develop? Were the Adja indeed 'individualist' and disobedient, and were the French right that they would remain so for many years? Or had administrators as well as popular opinion lazily but erroneously continued to apply the early colonial labels to each ethnic group? And also, were the French right in labelling Adja agricultural practices bad and backward as compared to the Fon's? Were they right that flat minimal tillage and palm wine production were economically irrational, and ridge tillage and palm oil production rational?

### 1.1 Distant prejudices

Geographically, South Bénin and Togo are made up by a chain of plateaux, divided by rivers, whose soils are classified as belonging to the same categories and which have almost the same climate, namely two rainy seasons of about the same duration and annual rainfall.

The Fon- or Abomey plateau averaged 1051-1165 mm and the Adja plateau, its immediate neighbour to the south-west, 1113 mm rain per year during the colonial period (Rapport annuel SATEC 1970; FAO n.d. in Kerkdijk 1991). Ethno-linguistically the Fon and Adja (and the inhabitants of most of the other plateaux) are closely related and their cultures have much in common; they are usually regarded as having the same ancestors. Today, the Fon proper are with 19.9 % of the total population Bénin's largest and the Adja proper with 8.6% the second largest ethnic group (INSAE/MPAE 1994); most Adja and almost half of the Fon live on their own plateaux. The population density of the two plateaux was of the same order, namely around 200-240 inhabitants per $km^2$ in the 1970s. The plateaux infrastructure of roads, distances to markets, schools, agricultural extension, colonial and post-colonial administration was comparable. Therefore the South Beninese plateaux, in particular those inhabited by Adja-related groups – to which also the Fon and their plateau belong – are usually described as a homogeneous category, and it is often assumed that agronomic and socio-economic data from one plateau can be extrapolated to the rest.

On the other hand, and in contradiction to this image of homogeneity, common knowledge holds that Fon and Adja differ somewhat in social organisation, economic success, degree of market incorporation, oil palm planting densities, and soil tillage techniques (Decalo 1976; Mondjannagni 1977; Pijnenburg 1987:2). The general opinion, expressed both in popular and in scientific discourses, is that the Fon are dominant and economically more successful than the Adja. The Fon are internationally known for their centralised Danhomɛ kingdom, their pre-colonial involvement in slave trade, and their predominance in all spheres of public life in the colonial and post-colonial state. Fon men, together with the 'Brazilians' (creoles of Portuguese-speaking origin) and the Gun from the colonial capital Porto-Novo, are generally believed to occupy the socio-politically most influential and economically most rewarding positions in Bénin. At present as in the past many Fon, Gun and Brazilians, but hardly any Adja, are found in the bureaucracy, in formal public service, and in interregional trade. Wealthy market women are Fon or Gun, not Adja, and Fon women would generally achieve their economic success in trade not in agriculture. The Fon also succeeded in imposing their language as the trade language. The capital Cotonou is both in numbers and culturally a Fon town, where Fon is spoken and where other ethnic groups principally live in the outer quarters (Mondjannagni 1977:336-337; Djagoun 1982:272[11]; INSAE 1987). Houses on the Fon plateau are more often made of cement-bricks than on the Adja plateau. All this gives the impression that both urban and rural Fon are economically more successful than the Adja and other ethnic groups. This image of Fon dominance and success yields them national admiration and also contempt.

The Adja are not as well known as the Fon, certainly not in international circuits. Hardly anything was published officially about them until the 1990s. Neither do the neighbouring ethnic groups know much about the Adja; they speak with reverence about them as 'our ancestors' (most of South Bénin's ethnic groups are believed to descend from Adja-Tado) but consider them to be economically, culturally and technologically backward, uneducated and socially disorganised. Administrative and (semi)-scientific reports echo the same image of the Adja; dissonant descriptions of them did not exist. These two images – economic and cultural backwardness of the Adja and economic and political predominance of the Fon – are probably responsible for the general impression that the Fon have been and are more successful.

Fon agriculture continued to be commended by development experts and the administration for its rationality. Their ridge system was and is presented by agronomists and politi-

cians as higher yielding then the Adja minimal tillage system[12], and the Fon oil palm system has always been given as an example for the Adja who 'destroy their palm plantations for tapping palm wine'. The administration further approved the Fon's early involvement in commercial agriculture.

South Bénin is considered internationally to be one of the few black African societies where women do very little work in agriculture. The image that Fon women don't cultivate, or only marginally, is maintained by the ethnographic studies of Herskovits (1938 I:30), Luning (1985:33), Pijnenburg (1987:47), and Ederveen (1989:37, 39). Luning (1986:37) adds to this by arguing that Fon women are more active in trade, and that their trades are more rewarding than (Adja) women's wage labour in agriculture. This has again contributed to the image that the Fon are economically more successful than the Adja. Previously (Wartena 1997, 2001) I have discussed flaws in this perception and changes in Fon and Adja women's farm activities; I will not elaborate on this here.[13]

In the early 1980s the Université Nationale du Bénin and Wageningen University planned a joint sociological and agronomic research project, with the intention to fill knowledge gaps on rural Bénin, to train their staff and students in doing research[14], and to provide information for development intervention. SNV and other Dutch organisations planned to set up new development projects in Bénin and demanded research. The selection of a research site was guided by the two contradictory images of South Bénin. On the one hand, the researchers hypothesised that their findings in a few villages on one plateau could be extrapolated to all the South Béninese plateaux. On the other hand, the supposed backwardness of the Adja was the reason to select their plateau for research and, by extension, for Dutch development intervention.

### 1.2 Personal research history

In early stages of the new Dutch-Béninese research project, I established contact with the University of Bénin (UNB) through my lecturer in cultural anthropology, Jan den Ouden. He and my professor in rural development sociology, Norman Long, triggered my interest in genealogical-network and gender analysis, male and female entrepreneurship in Africa, and the importance of socio-cultural values in commoditisation processes. Besides rural development sociology as a major, I had studied tropical agriculture as a minor specialisation. Farming systems approaches were in vogue, and I developed a keen interest in soil quality issues, including problems of nutrient cycles and erosion. The UNB replied that I was welcome to study Adja household economic systems. While considering South Bénin as site for my internship, I took practical classes in tropical agriculture under the supervision of two senior students, Fred Mul and Wim Quak, who also happened to be preparing themselves for research in South Bénin (around Bopa). Upon arrival in Bénin, Adja farmers and the scholars who studied them also appeared to be strongly concerned about processes of soil degradation and farm household economics. Therefore my attention was naturally drawn to the Adja's agricultural techniques, fallowing, soil nutrient management, and changes taking place in these.

Just before I set off for the Adja plateau in December 1984, my lecturer in rural tropical history (a minor topic in the curriculum) started literature research on the agronomic and commercial history of South Bénin between 1470 and 1660 (Wigboldus 1986). Though I informed him of my journey to Bénin only two days before departure, he was kind enough

to offer advice in case I wanted to study historical processes on the Adja plateau. Under his guidance I developed an interest in history, acquired my first experiences with colonial archives and (life) history interviews, and wrote a minor thesis on the colonial and post-colonial history of the Adja (Wartena 1988b).

My first fieldwork experience was hence on the Adja plateau, from mid-December 1984 to mid-November 1985, for an internship (Wartena 1987) and for two theses for the degree of agricultural engineer[15], the first in rural development sociology (Wartena 1988a) and the second in rural history (Wartena 1988b). In 1985 I paid a brief one-day visit to the Fon plateau, which I have described above, and spent the rest of the year in the Ehwe-Adja villages of Atindehouhoué and Honsouhoué. That year several rural development scholars from the Universities of Bénin and Wageningen studied the Adja, but none of them had yet any intention to study the Fon plateau.

Already during my first fieldwork period on the Adja plateau, differences in styles of making a living and in commoditisation of internal and external relations between neighbouring Adja families and villages had struck my attention. The two villages that I studied were not as representative for the Adja plateau as assumed before, and differences with the Fon seemed even larger. In pondering these differences, the concepts of 'styles' and of 'technological and administrative task environment' (TATE), used by Hofstee, Long, Bennett, Van der Ploeg, Benvenuti and other rural sociologists in and outside Wageningen seemed appropriate to me.

By 1987, more scholars were aware that differences within and between the South Béninese plateaux were greater than first hypothesised. The studies of Luning (1986) and Pijnenburg (1987) pointed to some differences in socio-economic organisation and ways of making a living between Fon and Adja villages, others revealed differences between some Adja villages[16]. I was open for a new research challenge. Therefore I proposed to conduct a comparative study of Fon and Adja history and styles of farming on their respective plateaux[17]. I chose the Fon rather than another plateau because I knew already more about the Fon and their plateau than about the other groups and plateaux, and because more written documents were available on Fon history than for that of other groups. Therefore, in December 1988, I returned to Lele, the Fon village visited in 1985. Between then and March 1991 I spent almost two years living in two new Fon villages, Lissazounme and Kana, and the same two Adja villages which I had studied before, Honsouhoué and Atindehouhoué, for the present PhD research.

The condition of the Fon plateau soils and fallow vegetation, and local complaints about soil degradation, immediately attracted my attention when I arrived there again in December 1988 with the intention of comparing Fon and Adja styles of farming. Hence, the sustainability of these styles became a major focus of research. I was not alone in studying Fon and Adja plateau soils and plant life. Two Dutch students, specialising in soil science (Ina Kerkdijk) and tropical agriculture (Erna Meuleman), did their internship and MSc thesis research on the Fon and Adja plateaux in 1989 under my supervision. Pedologists from IITA Cotonou, the CENAP (Centre National d'Agro-Pédologie) at Godomey, and the UNB, especially professor Yekini, offered valuable advice. Thomas Gayser, a German pedologist attached to IITA Cotonou and Hohenheim University, and Jan Brouwers, a Dutch agronomist at the UNB (see Brouwers 1993) assisted Kerkdijk and me in taking, analysing and interpreting soil samples on the Fon and Adja plateaux. Anne Floquet, a French agronomist attached to Hohenheim University who studied ecosystems on the Allada plateau (Floquet et al. 1988),

introduced me to dominant models of vegetation succession stages on the South Béninese plateau, to Allada farmers' knowledge on the role of particular species in such stages, and to the art of doing interviews on spontaneous vegetation. Through UNB, IITA, CENAP and WAU connections, Kerkdijk and I also gained access to aerial photographs of the Fon and Adja plateaux and advice in interpreting these. Professor Iroko and other staff of the history department of the UNB provided 'grey' documents on local history, advice and moral support in collecting historical narratives. Jon Daane, lecturing rural development sociology at the UNB, was available for advice throughout my fieldwork period. Jan den Ouden and Jouke Wigboldus remained very interested and willing to comment on my work as long as their health permitted it. Unfortunately, Den Ouden did not live to see the final result of his support.

My research on Fon and Adja styles of making a living and their interaction with the ecological environment thus includes perspectives and methods from various disciplines, which seems necessary because of the complexity and trans-disciplinary nature of the problem under study. The combination of sources, including non-conventional ones, in a historical study of a fairly long period, offers new insights in local socio-economic and ecological dynamics.

Shortly after my return from Bénin several studies appeared which had, more or less independently from each other, all used a similar combination of sources for the study of agro-ecological change in Africa as I had done, amongst them those of Fairhead & Leach (1994; 1995), Tiffen, Mortimore & Gichuki (1995), and Kreike (1996). Later, more studies on ecological history used similar multi-methodological and interdisciplinary approaches, situated at the interface between history, sociology, anthropology, ecology, agronomy, forestry, soil science etc. They all reached conclusions which were in many regards comparable to mine. One of the discoveries in the field of agro-ecology was that the human impact on landscapes and so-called 'natural' ecosystems was far greater and started much earlier than commonly assumed. A second finding was that people's socio-cultural choices are decisive for the direction of ecological change, and a third that, even under population pressure, this change was not always as gloomy as often portrayed but depended to a large extent on cultural choices. I share these conclusions, even though they are still met with scepticism by the majority of the leading thinkers of all these disciplines, and despite the widespread lip-service paid to the integration of natural and social sciences.

Most of the above-mentioned studies analyse a single socio-ecological setting and emphasise ecologically sustainable local developments; only Kreike compares two. They have been criticised for neglecting cases of degradation and more general trends in wider areas which might be unsustainable. My study of the Fon and Adja addresses some of this critique by comparing two neighbouring socio-ecological situations, and in so doing it reveals positive as well as gloomy trends, while still being able to understand them from the inside.

The finalisation of my PhD thesis based on this integrative study from many different angles has entailed a long process of maturation. Encouraged by the arrival of professor Leontine Visser in Wageningen in 2001, I compared Fairhead & Leach's more recent work and other relevant literature with my own theoretical and methodological approach. This convinced me that my multi-dimensional approach offers a much deeper and more reliable insight than any mono-disciplinary or mono-methodological approach could possibly provide.

### 1.3 Historical images and inverted realities

During my second research period in South Bénin, that is, between December 1988 and March 1991, I had the chance to acquire a much deeper understanding of the Fon and Adja and especially of the villages where I lived: Atindehouhoué, Honsouhoué, Lele, Lissazounme, and Kana. These deeper realities appeared, in many respects, to be the opposites of previously perceived historical images and distant prejudices. Three examples of such inverted realities are the hidden Fon poverty and individualism[18], the hidden Adja prosperity and solidarity, and Fon and Adja female farming. In order to highlight some essential features of this, I begin this introduction deliberately with coarse-grained, black and white images. More fine-grained images, showing internal variations, colours and shades, will be painted in the following chapters of my thesis.

#### *Fon walls of pride and poverty*

Lele had impressed me in 1985 by its great number of cement-brick walls and shrines, by the culinary variety of the many (in Adjaland unknown) dishes served to us, and by the importance of rural out-migration. Its people spoke with pride of the cement-brick wall around their ceremonial place, of the socio-religious rites they conducted there, of their hierarchical social structure, of their ridging and oil processing techniques, and of their young people who had left the village and obtained white collar jobs.

When I had a closer look at the inside of Lele's nice cement walls I saw that many of its houses were actually in ruin. In December 1988, its people had nothing to eat but *gari* (a poor man's food) and pigeon peas with rancid palm oil. Timidly they asked me whether I would accept pigeon peas for dinner, ashamed that they were unable to offer me a normal evening meal consisting of maize-*pâte* with stew. Pigeon peas were cheap but disdained by the Fon. When I later moved to Kana and Lissazounme I found similar food and housing situations as in Lele. People did not let me in for fear that I would see them eating sorghum, the hungry season crop, instead of the more expensive and prestigious maize. In the beginning most Fon told me "In our house we never eat sorghum, only poor people do that", but later their children admitted with a bashful giggle that their mother cooked it most of the time, or I saw them eating it when I arrived by surprise. If I passed by while Fon were eating they too, like the Adja, said "*wa đu nu*" (come and eat), but when I did this the Fon speaker looked embarrassed. Soon I learned that it was proper to accept such invitations from an Adja but to reply "*un ko đu*" (no thanks, I have eaten already) to a Fon. And while poor Adja sometimes had to buy maize, they never had to rely on *gari* and sorghum, except for some during a few days of the famine of 1977.

General opinion held that Fon cultivation techniques were more sophisticated than the Adja's, but also that fallow vegetation and soil fertility in all the South Béninese plateaux were in decline due to overexploitation. But a closer look revealed that Fon plateau vegetation was far poorer than that of the Adja. The Adja still had broad-leaved herbs and shrubs, the Fon mainly grass and bare soils. Local farmers and extensionists were convinced that Fon plateau soils had become far poorer than those of the Adja plateau. Ridging had become an absolute necessity for growing crops on Fon soils, and even with ridging the yields were extremely low.

The Fon also had the reputation of being a coherent, harmonious, hierarchical society, modelled on their pre-colonial kingdom. This image was upheld by well-known scholars

such as Herskovits (1938), Ahanhanzo Glele (1974), Mondjannagni (1977), Manning (1982), and by the Fon themselves. But a closer look revealed that their alleged social hierarchy was only preserved in the symbolical domain. Solidarity, productive cooperation and reciprocity were confined to the *hwedo* (lineage segment) and could only be mobilised if the honour of the *hwedo* was at stake. In economic life, Fon society had become very individualistic. Cooperative agricultural labour on the higher village level was now rare; I witnessed it only in one village at the edge of the plateau. Fon *hwedo* were separated from the rest of the village by a compound wall and by some home gardens. The honour of the *hwedo* is accorded high social value by the Fon. Common funds could only be raised if this honour had to be preserved, and were mainly spent on religious festivals and on the building of nice compound walls. The Fon abhor curiosity, and behind the compound walls nosy parkers, or *pottenkijkers* (Dutch for 'people who look into the cooking pots'), are not welcome. The outer walls looked beautiful, but inside there was often hunger and conflict, in many cases about food. Within, women frequently quarrelled with their husbands about their staple contributions. But, although the husband's insufficient support was an accepted reason for divorce, women rarely brought their case into the open for fear of dishonouring the *hwedo*. Fon hierarchy and vertical solidarity was only honorific. Economic solidarity was absent, and there was more socio-economic differentiation and more poverty among the Fon than among the Adja.

From a distance, the Fon economy seemed to shine like gold. At first the outer cemented walls and religious shrines in Lele had impressed me. Few Adja compounds had outer walls. Now I understood that the Fon's walls only served to protect the *hwedo*'s prestige. A closer look revealed that the Fon economy was 'only ordinary tin'. Instead of being the most successful people of south Bénin, many Fon on the Abomey plateau were the most miserable. This poverty was not easy to discover because of their sense of honour, which made them hide misfortune. Ancient travellers, administrators and the earlier researchers among the Fon also failed to observe their poverty because of what Chambers (1981, 1983) calls 'urban, roadside, project, elite, male, adopter and diplomatic bias'. Moreover, as I will show in Chapter 3, the well-known anthropologist Herskovits (1938) also failed to do so. By staying longer in the field, being 'unimportant', and adopting a listening and learning attitude myself, as also Chambers (1981:12) advises, I managed to redress these biases. Many Fon finally admitted to me that "there is nothing that the Adja would have to envy us for, the soils on their plateau are much richer" and "the land yields more to the Adja".

### *Hidden Adja prosperity and village solidarity*

Since early colonial times the Adja have been reputed to be poorer and their agricultural practices worse than those of the Fon. Ever since, economic and agronomic studies stress the Adja's unwillingness to adopt Fon farming techniques, Adja plateau soil degradation, difficulties for Adja to accumulate through farming, and their tendency to invest in transport and trade rather than in agriculture (Wartena 1987:283; Den Ouden 1986, 1991; Breusers 1990; Kerkdijk 1991; Brouwers 1993). At the same time, extensionists continued to commend the Fon, and the inhabitants of Lele commended themselves, for their ridge tillage and their oil palm management styles. This fuelled the belief that the poverty of the Adja, of their soils, and of their farming techniques were, as compared to the Fon, even greater than in the past.

Also since early colonial times Fon society is reputed to be more hierarchical with a higher-level of solidarity than the Adja's, who were labelled as individualist, their families disorganised, and their *chefs* lacking authority. The first sociological studies of the Adja stem from the 1980s and 1990s. They emphasise growing individualisation, the breaking up of extended households into smaller productive units where both wives and sons more and more run their own affairs, the erosion of authority relations between young men and elders, and growing conflicts about food responsibilities between husband and wives (Daane & Perthel 1988; Wartena 1987, 1997; Van der Schenk 1988; Laarakker 1990; Fanou 1992; Den Ouden 1995; Vodouhè 1996). This has fed the image that the Adja are today even more individualist and egalitarian, when compared to the Fon, than in the past. My PhD research does not fundamentally challenge these earlier, general findings about the Adja, but these developments do not have much to say so long as we cannot compare them with trends in similar regions.

A closer look behind the rough surface of the Adja rural economy revealed to me that outward appearances, such as housing, are bad indicators (still often used in development studies) for wealth or poverty. When my Fon interpreter visited my Adja interpreter at his father's brother's unpretentious mud house and learned that this man was the owner of the village maize mill, he commented: "But I believed that a maize mill cost one million, how could this peasant?" I too was impressed again and again by the large amounts of cash that Adja, owning nothing but a few hectares, could suddenly produce in order to set up their sons in private enterprise. One Adja added: "Well, there are people who keep their money in old calabashes!"

When I compared Fon and Ehwe-Adja more closely I found to my surprise that the socio-economic authority of Adja elders was greater than the Fon's. Many Fon who lived among Ehwe-Adja suggested that "Adja wives and children are more docile and work harder for the household head then we do". And I observed that Fon schoolchildren and Fon adolescents hardly worked in their fathers' fields, while most Adja schoolchildren and adolescents did. There also seemed to be more cooperation at the village and higher level among the Adja. Village plots, agricultural cooperatives, a group of village boys working for the father-in-law of one of their friends, a village-owned well[19], even a trade-union of all Adja cotton growers, although not without problems, nevertheless worked better on the Adja than on the Fon plateau. In 1974-1975, the Adja cotton growers of Aplahoué, organised as trade union, boycotted the cotton marketing board during a whole year. Also in 1974, three of the six female farmers' unions of Dahomey were on the Adja plateau but none on that of the Fon. The Adja women took a leading role in protests against the extension service by all six unions, requesting the restitution of their pulverisers (Adjahi Bai 1976; Hodonou 1976:257).

While Fon villages consisted and consist of dispersed *hwedo* enclosed by a compound wall, Adja villages more often are one agglomeration (Adjahi Bai 1976) where the compounds of all households communicate with each other. My Fon interpreter experienced this difference in a fresh and indigenous way on his first visit to an Adja village. He noticed the absence of compound walls, and after a nightly village walk, through the friendly hubbub of conversation between people moving freely from hut to hut and sitting within each other's sight before their houses, he remarked with surprise: "The whole village lives in harmony like one big family, I have never seen something like this!"

What puzzled me was the ease with which average Adja farmers and women bought and rented land even from their cousins, brothers and husbands, apparently demonstrating a

lack of solidarity, but also demonstrating a willingness to invest not only in maize mills and their son's education and trade, but also in agriculture. The latter puzzled me all the more when I compared it with the low level of investment in agriculture on the Fon plateau. To the Ehwe-Adja the land looked promising but to the Fon it did not.

Finally I wondered why virtually no landless class emerged on the Adja plateau. There was impoverishment, but most poor could access a tiny plot of land. In spite of individualisation, there still was solidarity and care for each other at the village level. Take the family of my cook Emile and his paralysed father Kofi. In 1985 they owned but 0.3 ha. Maternal kin lent them an additional 0.4 ha in spite of the high market value of land even between relatives. In 1990, they lived in constant debt but they still farmed their 0.3 ha. None of their creditors, fellow villagers, had taken it as a pawn or forced them to sell it. The council of village elders appointed the poor boy Emile to be my assistant in spite of the fact that he spoke less French than several other villagers and that he could cook only poor man's food. After my departure they selected him as assistant to a Dutch development project that came to the village. They could have chosen one of their own children, but they did not, probably out of care for a fellow villager who was more in need of a job (Emile and Kofi's family history is narrated in Wartena 1997 and 2001). In contrast, among the Fon councils of village elders had existed in the past but had now ceased to function.

### *Adja female farming bypasses Fon female farming*

In 1985 I had been surprised by the discovery that almost all Adja women till the soil and engage in all field activities on their own account. This was not what I expected, because Baumann (1928:304) and Boserup (1970:21) had written that women in Dahomey (present day Bénin) hardly work in agriculture, and Mondjannagni (1977:221) had argued that Béninese women don't prepare the soil but only help with weeding the family fields. Only in her appendix did Boserup (1970:260) admit that her statement about Dahomey was based on a survey in 1965 of 12 families in 'Ouémé'; she neither indicated that Ouémé is the south-easternmost province of Bénin, nor did she explain how the survey was conducted. Baumann (1928:304, 313) based his opinion about 'Dahomey' on Forbes (1860:84). In earlier work, however, Forbes (1851:8) had explained that agriculture 'around Abomey, as elsewhere in Africa', is women's work. My research among the Adja revealed that Adja women had started to cultivate from 1920 onwards. Ethnographic literature on the Fon until 1989 however maintained that Fon women hardly worked in agriculture and as a rule did not perform soil tillage. This ethnographic image was supported by the observation that Fon bridewealth was, in post-colonial times, lower than Adja bridewealth (expressed in money, 80.000-110.000 FCFA among the Fon as against 120.000-160.000 FCFA among the Ehwe-Adja in the 1980s). Functionalist anthropologists working in Tylor's cross-cultural comparative tradition assumed bridewealth value to be causally related to women's unpaid labour for their fathers and husbands (Boserup 1970:50; Goody 1976:31-34; Schlegel & Barry 1986; Tambiah 1989:416).

When I arrived on the Fon plateau in 1989, I was at first told the same things about their women's roles in agriculture as Herskovits (1938 I: 30), Luning (1986:37-38), Pijnenburg (1987:47) and Ederveen (1989:37-39) had written. Fon men emphasised that Adja women had to till the soil, but that their own women did not have to do this hard physical work. But when I started to observe Fon cropping techniques, I was surprised to see so many women weeding and even ridging the soil. Ederveen (oral communication) was equally astonished,

seeing Fon women tilling the soil, but male Fon tried to convince her that this took place only in the home gardens: "Oh, you have seen women weeding our fields? That's just in the home gardens, you have not walked far enough". However, when I walked farther away I still saw Fon women ridging and weeding. Then many Fon tried to convince me that their women only cultivated in order to buy themselves some luxuries, and that the men were responsible for all other purchases, but even this appeared to be untrue. Finally I observed and many Fon admitted that women did have to contribute substantially to home consumption, and that they also had to do most of the weeding and part of the ridging on their husbands' fields. Adja women did not have to do this for their husbands. Adja women only tilled their own fields.

Perhaps, weeding and ridging by Fon women was such a novelty that researchers and many Fon themselves did not know about its existence? No. All my Fon informants now admitted that their women had ridged and weeded for their fathers, husbands and themselves during the whole 20th century, be it to varying degrees. Probably so far most researchers on the Abomey plateau only asked men and did not walk far enough to see Fon women tilling the soil. Herskovits, for example, spent most of his 2½ months period of research on the Fon plateau conducting interviews in his flat in Abomey town and undertook relatively few observations (1938 I: iv-vi; Preston Blier 1989:4, 10). Again, Fon society was different from what it appeared to be. During this whole century, the claim that Fon women don't till the soil has never had any solid grounding.

A careful comparison between Fon and Adja women's farming in 1989 and 1990 in my research villages showed that Adja women now spend more time in agriculture than Fon women, and that there are more Adja than Fon women who farm on their own account. This was again surprising, for Fon women started much earlier to cultivate. There has been an increase in female farming during this century in both ethnic groups, but Adja women's own account farming increased much faster than among the Fon, with the result that since about 1950 Adja women farm much more on their own account than do Fon women. Now almost all Adja wives (95%) cultivate their own plots, while only about 70% of the Fon wives. Why did Adja women quickly bypass Fon women in own-account agriculture? Both had to contribute maize to home consumption. Why did some women prefer to do this through trade? The reason might be the different attitude towards farming in general and towards female farming in particular of both ethnic groups. While most Fon, especially men, consider it a shame to admit that their women work the land and at first try to deny that they do so, whereas the Adja see agriculture as an opportunity and not as a shame. For the Fon, trade is the ideal, especially for women. Agriculture is only for those Fon women who have missed the chance for trade. The Adja however see agriculture as a chance for women, and evaluate the change in women's labour orientation in a positive way. Elsewhere (Wartena 1997, 2001) I have discussed changes in and differences between Fon and Adja women's farming in the 20th century in more detail.

### 1.4 Rationale of the study and problem definition

Even more striking than the fact that Fon and Adja differed from what they appeared, at first sight, to be was the fact that they differed from each other. There seems to be no compelling external reason for Fon and Adja economics to differ, for Fon and Adja agricultural techniques to differ, for Fon and Adja social organisation to differ, nor for Fon and Adja women to have different roles in agriculture. Climatologically, geo-pedologically, demographically

and ethno-linguistically the plateaux and their inhabitants are similar. Their economic and political environments and infrastructure have been the same since the early colonial period. If it is true that the Fon and Adja lived under quite similar external conditions, why then did they develop so very differently?

This question has socio-economic, ecological, agronomic and paradigmatic relevance. First, the comparison puts the relative importance of social and environmental developments in each group into perspective. It reveals processes of soil degradation, de-aggregation of social institutions and low investments in agriculture on the Adja plateau, but also that the same processes are far more important among the Fon. The relative success of the Adja in coping with these problems can be very instructive. Second, most classic theories in sociology, anthropology, development economics, ecology and agronomy attribute changes at local level to external forces alone. These classic, structural theories continue to be influential. Some of the most influential theoretical approaches to socio-economic and ecological change will be reviewed in Chapter 2. The Fon and Adja cases shed a critical light on these theories and show the relevance of an inductive analysis. If external conditions cannot explain the differences between Fon and Adja economic practices, their own norms, values, and cognitive dispositions might be able to do so. Such an analysis drawn from actual fieldwork provides understanding from a development anthropology perspective, showing the limitations of macro-economic analysis from outside. Third, in a comparison of differential processes under almost similar conditions the factors of difference will stand out clearly and the observer's attention is drawn to them. Therefore a comparison serves as an eye opener to how differential developments occur. It will help to understand these processes and reasons why they differ, though it might be impossible to discern the precise causal chains due to the complexity of the processes. Chapter 2 elaborates the various theoretical approaches considered and the units of analysis used in this study.

My critique of determinist structural approaches to change necessarily implies different social actors and research units. I not only consider individual actors but also slightly larger entities, namely actors' families and other network relationships, and on a more inclusive level, two adjacent regions or two linguistic communities that live there. I focus, for methodological and epistemological reasons, on a number of villages and families in each region. This helps to show how actors' practices are embedded in social networks rather than distributed randomly and based on purely individual 'rational' decision making. It also shows to what extent Fon and Adja villages can be treated as a socio-cultural 'community'.

The main purpose of this study is to understand the differential developments of the styles of 'making a living' of the Fon and Adja on their respective plateaux between ca. 1600 and 1990 as the outcome of historical processes that are, at the same time, conditioning and conditioned by actors' choices. I will try to assess the ecological sustainability and the performance of these styles. Attention will be paid to differences and changes in socio-cultural practices and cultural values represented in these styles of making a living.

The main question is orientated to understanding which diverging, homogenising or more general differentiating social and ecological processes took place on the Fon and Adja plateaux? To answer this question, we must delve into history and find out how similar were the two plateaux, the people that settled on them, and their styles of making a living around 1600. We must understand the socio-cultural practices, relations and cultural values into which Fon and Adja styles of making a living were embedded in the process of change.

To assess the relevance of classic theories on socio-cultural and ecological change, we must investigate to what extent the differences and changes in Fon and Adja styles of making a living can be explained by external influences, such as climate, supra-regional markets, (inter)national policies, (standardised) agricultural extension, external 'scientific' hegemonic knowledge, or fixed relations between population density and ecological systems.

My research of 1985 and popular knowledge indicate that Fon and Adja plateaux ecologies and styles of making a living were not homogeneous. To understand the different styles that developed over the years we must, amongst others, study the distribution patterns of these styles within Fon and Adja societies, the relations that exist between and among adherents of different styles, and what motivates the adoption of one style or another.

Finally, to assess the ecological sustainability and the performance of Fon and Adja styles of making a living, I will first estimate, on the base of various indicators, how the quality of the plateaux' ecological capital, as an asset for Fon and Adja styles of making a living, changed. Indicators will include soil and vegetation analysis, aerial photographs, traveller and colonial administrators' descriptions, and local knowledge. Second, I will evaluate the performance of the different styles of making a living on the basis of the Fon and Adja's own opinions.

These questions address historical processes over almost 400 years. The study of such a long period was not intended in the original PhD research proposal when I set out for Bénin; then I 'only' planned to cover the 20th century. But an abundance of written and oral sources on the 17th, 18th and 19th centuries indicated that important divergent developments took place between ca. 1600 and 1900, which significantly add to our understanding of present-day practices. Many 20th century practices and processes seemed to be rooted in pre-colonial styles. Therefore I extended the research questions to cover four centuries.

The recent literature on livelihoods emphasises that African people's livelihood portfolios often comprise a range of agricultural and non-agricultural activities. This was also the case, throughout 1600-1990, of Fon and Adja styles of making a living. Those of their activities which interact most with the ecological environment are agriculture, to a smaller extent hunting and gathering, and localised pottery. Of these, arable farming contributes by far the most to Fon and Adja livelihoods. Fon and Adja farming practices differ considerably, and therefore this study will pay particular attention to agriculture, and will analyse these in a wider context of styles of making a living.

A combination of anthropological and historical methods to study Fon and Adja socio-economic and ecological history, like Fairhead & Leach, Tiffen et al., and others had done, gives insight from inside the concerned societies in relationships between socio-cultural practices and environmental continuity and change. An innovation of my study is that it compares two neighbouring socio-ecological settings, which enables me to transcend the micro-level, to relate to, and discover, wider processes of ecological sustainability as well as degradation, and to understand how internal and external socio-cultural, economic and political forces have been major drivers of these processes. Thus, the picture of 'human intervention' over the past four centuries in South Bénin is given content and meaning.

### 1.5 Outline of the book

In Chapter 2 I develop a theoretical framework for the study of the questions mentioned above. Most grand theories on social, economic, cultural, technological and ecological change

expect converging processes and homogeneous outcomes when external conditions are similar. The chapter discusses approaches to ecological change and to the impact of market incorporation, of scientific knowledge and of policy on socio-cultural values and on technology. Then it develops a framework to understand socio-cultural and economic diversity and differential developments, centred on the concepts styles, socio-technical networks and styles of making a living. I will argue that these concepts are useful to analyse differential responses under similar conditions.

Chapter 3 presents the research methodologies which I used and the itinerary of the research.

In Chapter 4 I try to reconstruct the ecological situation on the Fon and Adja plateaus at the arrival of the first settlers as well as the early migratory flows by which they arrived. The intention of this is to find out how similar the Fon and Adja plateaus were before ca. 1600, being the time of the first European contact and the foundation of the Fon kingdom. This chapter also discusses the question which production technologies the inhabitants of the plateaus are likely to have used before 1600, and tries to reconstruct their socio-technical knowledge networks.

Chapter 5 deals with the era of the slave trade and of the Fon kingdom, roughly 1625-1900. We will see how during this period, under the impact of divergent socio-technical networks and actors' choices, Fon and Adja social organisation, lifestyles and cultural attitudes towards different livelihood activities started to evolve into two divergent directions.

Chapter 6 zooms in on the last half pre-colonial century and the first years after colonisation, the era which I will call the palm oil boom. It offered in principle very homogeneous commodity production opportunities for Fon and Adja farmers through the European demand for palm oil and -kernels on the West African coast. Did Fon and Adja styles of making a living converge during this period?

Chapter 7 presents the homogenising policies and market forces to which the Fon and Adja were exposed during the 20$^{th}$ century, and analyses Fon and Adja reactions to these. Prices were similar on both plateaux and policies encouraged the production of the same agricultural commodities by means of the same technologies in the whole South. But the Fon and Adja developed their own commodities and trajectories of commoditisation, which diverged from each other and from those demanded by the State. Most of their commodities and many of their technologies were not encouraged, and sometimes even discouraged, by the State. Chapters 6 and 7 show that commoditisation did not simply penetrate Fon and Adja societies from outside as an irresistible external force, but was actively shaped by the people themselves.

The literature on livelihoods draws attention to the diversity of many African livelihood portfolios. Some authors perceive general trends of de-agrarianisation and/or commoditisation and hypothesise that world market forces and individual economic assets are responsible for this. Chapter 8 describes trends in Fon and Adja styles of making a living on the base of Fon and Adja family histories in the villages that I studied. It highlights the role of historical experiences, of socio-technical network relationships, and of socio-cultural values in the emergence of specific mixes of activities in the livelihood portfolios, showing that these were not constituted by economic forces alone. Styles of making a living developed differentially, those of most Adja based on commercial and non-commercial agricultural production and those of most plateau Fon more on non-agrarian activities.

Chapter 9 discusses how Fon and Adja agricultural production technologies changed after the foundation of the Fon kingdom, how they came to differ between the two ethnic

groups, and probes into the question how this affected the ecological environment. The hypothesis that the technological and ecological diversity and change could be explained by differences in population density is examined and rejected. Instead, different knowledge networks and differences in internal social organisation seem to have facilitated different production techniques.

In Chapter 10 the perspectives of the previous chapters are combined and integrated to obtain a multidimensional perspective on our research problem, and to draw conclusions from our comparison about the theories I discussed and about the role and the performance of Fon and Adja styles.

## Notes

1 A spice made from seeds of the *kakɛ* tree (*Prosopis africana*), also called *Aja sin kake* in Fon, because of the Adja's preference for the wood, roots and spice from the *kakɛ*. See also the quotation on Adja backwardness from Le Herissé below.

2 In those days equal to 40 French francs, which would now be about € 6.60. An agricultural wage labourer earned about 400-500 FCFA per day's work in the informal sector (clearing or tilling an area of one *abowo* or one *kantin*, a task which adult males could achieve in 3-4 hours; some strong labourers did the double amount per day), a primary school teacher earned 20,000-30,000 FCFA per month.

3 He was the administrator with the longest service in the *Cercle* d'Abomey, namely 9 April 1904 to 7 July 1906 and 7 Mai 1907 to 15 December 1908. (Rapport annuel de 1912 du Cercle d'Abomey, ANB Porto-Novo)

4 This was the same *kakɛ* tree (*Prosopis africana*) as the Adja used for their preferred spice *flefi* which our Fon hosts in Lele ridiculed. Administrator Le Herissé compared Fon and Adja after quoting a Fon myth in which the Adja are symbolically identified with the *kakɛ* tree, the Fon people with the *fon* bush, and two other South Béninese people groups with other trees. This myth is quoted and explained in Chapter 5, and the cases studies in sections 5.2.4 and 8.3 illustrate the use of *kakɛ* seeds by Adja women.

5 From 1909 the felling of oil palms was indeed decreed illegal.

6 English translation: In the past the town of Abomey was encroached by bush, but now wonderful crops replace it. Now that the inhabitants are no longer obliged to render the king the fruit of their labour they hesitate no longer to extend their fields. (Between the lines the administrator also commends the colonial regime for its policies among the Fon.)

7 The Holli are an ethnic group to the east of the Fon plateau. They refused to be recruited for the first World War, declined until the 1930s to pay head taxes, resisted all colonial population censuses, hardly sold commodities on external markets during the first 25-40 colonial years, and still sold very little there at the time of my research (Mondjannagni 1977:93, 105; Elwert 1983:280-281).

8 The principal other Adja subgroups are the Dogbo-Adja in the South, the Tchikpè-Adja in the East, and the Tado-Adja who live largely in the savannah. The languages of these four Adja groups differ a little in pronunciation and in a few words. The Adja language is also fairly close to the Ewe language of Togo and Ghana. Many Adja understand Ewe reasonably well (better than the Fon language), but the Adja are not identical to the Ewe.

9 *Chefs de village* and *chefs de canton* received a proportion of the poll tax of their villages. In 1908 it was proposed that *chefs de village* receive 4,5% and *chefs de canton* 5,5% of the tax (Correspondance cercle de Grand Popo no. 4 du 4-1-09).

10 English translation: Political situation Parahoué. (…) I could without inconvenience copy everything which has been written about the Ehwe since the post exists, since ten years, without fear of saying anything which would not apply today. Weakness and lack of authority of the chiefs; laziness, indifference, a character of independence of the natives, unreasoned fear of Europeans, bad family organisation which creates countless complications in the country, nothing has changed, nothing was modified in any way, and for long nothing will change nor modify. The Ehwe is a brute and a savage, and brute and savage he will remain. (…) The Sahwè and the Ehwe are still terrified by the sight of

a European, the Dogbo perhaps a bit less. The taming – for this is the appropriate word – of all these Adja will be long and difficult. (The Dogbo is an Adja subgroup on the South of the Adja plateau, the Sahwè are an Adja-related group between the plateau and the coast).

11 In 1961, 10% of the men from the Abomey region migrated to town, which seems to have been the largest percentage of the country's internal rural-urban migration. Only in some *cantons* around Djougou were the percentages of migrants higher, but most of these migrated seasonally.

12 Ridge tillage belonged to the agricultural services' standard recommendations in the whole of South Bénin. Since 1900 until at least 1991 extensionists advised Adja farmers to ridge their soils before sowing (own interviews with extensionists, a.o. with Edou Gnagnimon in Atindehouhoué 1985 and Béatrice Zonvidé in Akwevɛadja 13-2-1991; Neefjes 1986:101; CARDER Zou DSEI 1988), though I did not have the impression that they insisted very much, knowing that the Adja would not listen to this recommendation.

13 Influential scholars, such as Baumann (1928:304) and Boserup (1970:21), portrayed South Bénin, together with Yorubaland, as the only non-Islamic area in Africa where men do more work in hoe culture than women. The popular image that Yoruba women did and do not farm is refuted by Berry (1975), Afonja (1981, 1986), Adeyeye (1988), Babalola (1988), Babalola & Dennis (1988) and Ezumah (1988). Henn (1984:2-3) and others followed them. Fon women in particular were described as never handling the hoe. Herskovits (1938 I: 30) was explicit in his opinion that Fon women do not participate in soil preparation: 'Work of this kind is only done by men, who cut the trees and brush, supervise the burning, and hoe the earth. Burton['s] (…) statement (vol. ii p. 165) that "the women ridge the ground neatly with their little hoes" is contrary to the practice at the present time, if it does not represent [sic] a false observation on his part'. Herskovits' opinion was echoed by later ethnographers. Pijnenburg (1987:47) was told in a Fon plateau village in 1986 that the norm is that 'women never ridge the soil', and he had the impression that only few women violated this norm. Ederveen (1989: 37, 39) claimed that most Fon women in 1988 only engaged in sowing, not in other field tasks. They, as well as Luning (1985:33; 1986:37-38), agreed that Fon women in the 1980s were only marginally involved in farming.

With the image of non-cultivating Béninese women in mind, I was surprised to discover in 1985 that virtually all Adja women did engage in soil preparation, weeding and all other field activities, and that they did spent a considerable amount of time doing so. They did so mainly on their own account. However I was told that this was a recent development, around 1900 Adja women would not have tilled the soil.

14 The first academic research on the Adja plateau I know of are a handful of *stages de monographie villageoise* (fieldwork of ±8 weeks) by 2nd year agronomy students of the Université Nationale du Bénin in 1983, interviews by the sociologist Valentin Agbo, himself a Dogbo-Adja, in the mid-1980s (Agbo 1991, 1995), 5 months of anthropological fieldwork by the Dutch student Sabine Luning in 1984 (she lived in a Fon village on the eastern Adja plateau but studied also a neighbouring Adja village, Luning 1986), and a one-day survey in twelve Adja villages by staff of the *Faculté des Sciences Agronomiques* of the UNB.

15 This degree, almost equivalent to an MSc degree, was given at Dutch Universities before the introduction of the Bachelor-Master system in 2002 to all graduates in the natural and technical sciences. Rural sociologists from Wageningen Agricultural University also obtained this title.

16 Oral communications, and later some publications appeared, a.o. Wartena (1988a:59-60; 1997:126, 137-139, 148), Verhagen & Wipfler (1992:62-64); Den Ouden (1995).

17 See research proposal mid-1988.

18 I define 'individualism' as a lack of multiplex and particularistic relationships. Instead, individuals have few relationships, and those they have are uniplex (often market-like) relationships.

19 See the section on tomatoes in Chapter 9.

# 2

# Homogenisation versus differential development theories

> A prosperous farmer invited his pastor over for dinner after church one Sunday. After the meal, the farmer took the parson on a walk around his farm. They hiked to the top of a hill to get a panorama of the place. All around them, for acres and acres, there were beautifully kept orchards, crops, patches in various shades of green. The pastor began to rhapsodise: "O look! God is so wonderful! How beautiful are the works of his hands."
>
> The farmer looked at his guest quizzically and replied, "I'm sure you are right, pastor. But you should have seen this place when God had it all to himself, before I got my hands on it."[1]

## PART 1: WHY COMPARING, WHAT, AND HOW?

The purpose of this book is to understand how Fon and Adja styles developed so differently under apparently similar external conditions. Ecologically the Fon and Adja plateaux seem to have been similar when they were colonised. The same mixture of ethno-linguistic groups settled on the two plateaux. The Fon and Adja had similar economic opportunities. Since 1900 the population density of the plateaux was of the same order, the Fon and Adja were submitted to the same colonial and post-colonial governments and to basically the same policies and government programmes, and had similar infrastructural facilities. Most grand scientific theories, which I will present in Part 2 of this chapter, predict Fon and Adja styles to converge under such homogeneous conditions and homogenising forces. Some alternative models will be presented in Part 3. But first, what is the relevance of comparing Fon and Adja, what will I actually compare, and how can this be done?

### 2.1 Homogenisation or differential development in Bénin?

The Fon and Adja developed differently in several domains, among others in economic activities (productive specialisation), in agricultural techniques, in socio-economic organisation, in relations vis-à-vis the State. This raises the question: How and why did these differential developments take place, and what was their relationship with homogenising forces?

On the basis of the most widely accepted theoretical models in development economics, politicology, sociology, ecology, agronomy, one would expect processes of homogenisation to occur under similar conditions, because in all scientific disciplines the classic and most influential theories have sought to explain change in causal and mechanistic terms. These macro-structural theories remain relevant because they still inspire much academic and popular thinking. Most scientific models have an inherent blindness for small scale everyday diversity. Homogeneity is more accessible to investigation. Modelling, both deductive theoretical and modelling on the basis of empirical description, implies simplification, and this means that much empirical diversity is simply disregarded. Scientific models tend to consider diversity as a residual category, as either a legacy from the past which is to disappear

with time, or as the materialisation of different stages in a linear development process, or as a small accidental deviation from the mean (Wiskerke 1997:19). Scholars who are interested in general theories tend to view diversity as undesirable because it complicates scientific modelling (ibid; Hofstee 1982:8). The science of homogeneity excludes what is inexplicable in the framework of homogeneity, and homogeneous society rejects heterogeneity, including ritual or aesthetic expression, as if it were anti-productive waste or dirt (Bataille 1997:126-127 discussed in Albertsen & Diken 2003). Models that describe general trends, either of convergence or of divergence into a few categories, presuppose the existence of structural forces which drive these developments. Grand deterministic theories such as (neo)-classical economics, (neo)-Marxism, modernisation approaches to development, and ecological equilibrium models thrive on this search for and belief in forces and central trends.

Academics and policy makers also regard diversity as negative for development. First because only one way of doing is believed to be best and all the other practices thus deviate from the optimum (Van der Ploeg 1993a:51-54) and second, because it is easier for policy makers to deal with uniform situations than with heterogeneous ones. Scott (1998:2, 12-13) argues that policy makers' preference for uniformity also makes them blind to the complexity of the real world and encourages a tunnel vision. While some level of abstraction is necessary for any analysis, the State's partial analysis regards only what it considers utilitarian, makes static observations, aggregates facts, codes and classifies, and presents facts on standardised scales or grids (ibid:13, 80). Likewise, Hirschman (1967) and Hoben (1995: 1008) show that those development policies and programmes that succeed in mobilising funds, institutions and technology are the ones that depend on a set of more or less naïve, unproven, simplifying and optimistic assumptions about the problem to be addressed and the approach to be taken. Hajer (1995:265) argues that policy discourse uses a limited set of emblems or metaphors to present complex problem issues, and that these emblems have great organisational potential. The labels that colonial administrators applied to the Fon and Adja, as I showed in the introduction, are an example of this. However, the practical utility of such standardised approaches turns out to be limited. In forestry and agriculture, the monocultures which result from uniform thinking and planning tend to be vulnerable to ecological stress. Attempts to apply uniform socio-economic measures often meet socio-political resistance (Scott 1998:20-21, 24) and, I would add, are rarely adapted to socio-economic realities and shocks. Even in certain policy circles, awareness that standardised policy solutions to socio-economic problems may be less sustainable than localised strategies is on the rise (Long 2001:216). Be this as it may, the State preference for simplification and standardisation in analysis and planning encourages applied researchers to describe only general trends and to disregard inconspicuous diversity and differential developments. As a result, studies of diverse and differential phenomena are hardly recognised. Anthropological studies are a notorious example.

Inconspicuous diversity, however, does not need to be meaningless. Diversity which is localised or momentarily hidden from the public eye and from public discourse or for some reason has gone unnoticed by systematic investigation may be at least as important, on theoretical, humanitarian and ecological grounds. Scientifically it reveals the fallacy of mechanistic, deterministic models which leave no room for contingency, ecological complexity, and human creativity, values and choice. As mentioned above, grand deterministic theories that presuppose the existence of structural forces behind developments thrive on the description of universal trends and uniform categories. Therefore, attention to 'erratic'

differential developments shows the limitations of such universalising and deterministic approaches. Likewise the socio-humanitarian and ecological relevance of highlighting diverse practices is great. First, it honours the creators of these practices. Second, it can inform more sustainable policy solutions because it takes actors' perceptions and strategies into account (Long & Van der Ploeg 1994:5; Wiskerke 1997:20). As Scott (1998:12-13) remarks, the simplified and standardised products of social and ecological engineering are often too vulnerable to shocks. Therefore, recognition of real life complexities and diversities is a condition for their sustainable management.

Since the 1970s we saw a move away in anthropological and sociological thinking from structural and institutional approaches to a focus on individual and collective actors who have the capability to influence their own and other people's lives, and to a focus on change and on dynamic structures. A strong emphasis on actors' creativity, however, runs the risk of methodological individualism. In the behavioural sciences, human creativity and choice are often presented as if they result from a person's psychological disposition or from individual, independent decision making. Such approaches have rightly been blamed of voluntarism and of overstating rational choice. In this thesis the empirical and historical comparison of diverse social processes and practices in the same environment will reveal that human creativity, values and choice are not an entirely individual matter. I adopt an actor-oriented approach to differential responses to change (Long 1984b:3), but one that analyses the actor in interaction with his past and present socio-cultural, economic and physical environment. I will do this through a historical analysis of socio-technical networks and styles from within the concerned societies.

### 2.1.1 Outline of the chapter

In this chapter I first discuss influential paradigms stressing the homogenising impact of demography, climate, geology, markets, policy, and science-based knowledge on socio-economic, cultural, agro-technological and ecological change. Then I develop a perspective on diversification based on the concepts of style, livelihood, and making a living.

In section 2.2 I analyse approaches to agro-ecological change. Most models attribute a determining role to geological conditions, climate and human population density; if these are similar, homogeneous ecological and agro-economic systems emerge. Contrasting approaches that are based on long-term historical analysis from inside, like those of Fairhead & Leach and other Africanists, emphasise the – often beneficial – impact of human cultures on ecology. Rare are studies that combine such an historical-anthropological approach with a comparison of two neighbouring cultures, like the present study of the Fon and Adja, which shows that there is no mechanical relationship between demography and ecology.

Important factors to which many thinkers attribute homogenising influences on socio-cultural values and organisation are markets, formal science, and supra-local policy. Markets have been important in South Bénin for many centuries, though their form and their impact on local societies are not yet clear. Similar policies were applied to the whole of Bénin under colonial and post-colonial rule. Section 2.3.1 presents some approaches to market incorporation that predict a replacement of local socio-cultural values by global market values, in particular neo-liberal commercialisation- and the neo-Marxist commoditisation approaches. In section 2.3.2 I discuss perspectives that assert that scientific knowledge, bureaucratisation, and globalisation of supply chains favour the standardisation of production techniques.

Then, in sections 2.4 and 2.5, I develop an actor-oriented perspective on the diversity of socio-economic practices which transcends the level of the individual, by considering patterns of diversity and of regularity. Section 2.4 presents the livelihood concept and how it is used by social scientists and development practitioners to describe actor's diverse strategies in their wider context. Its current uses tend to under-expose socio-cultural values and therefore I discuss in section 2.5 the concept of 'styles', which seems a promising notion for the study of diverse practices on the Fon and Adja plateaux because it addresses people's values and discourses as well as the material expression of these ideas and intentions. Therefore it can give insight into the social meaning of diversity as well as regularity of practices of which I provided a first glimpse in Chapter 1. However, the styles approach is theoretically and methodologically not yet well developed. Therefore I discuss how it has been employed by other scholars, some problems with these uses, and how I propose to improve its application. One limitation of the styles concept is that it always denominates a style of 'something', for example farming, tillage, oil processing, marketing, or management of the socio-economic relations of an enterprise. These activities are however related. Therefore I develop the more holistic concept of 'styles of making a living', which combines all these activities, offering a more dynamic integration of object and subject, and of technique, activity and actor.

### 2.1.2 A typology of diversity in change

The notions of diversity, differential development and homogenisation refer to directions of change and how these relate to each other and to their environment. In my reading of scientific theories and historical studies, three principal notions and their underlying assumptions come to the fore: first, homogenisation or convergence, second, differentiation or divergence, and third differential development processes. Logically speaking we may also distinguish 'parallel development' as a fourth concept. This concept has been used in very different ways in the literature, though none of them are relevant for my research[2]. Therefore I will not elaborate here on the term 'parallel development'. Each of the three relative directions that I want to discuss is closely interwoven with particular theoretical paradigms. I will give some examples from ecological and socio-economic theory, without pretending to be exhaustive.

**Convergence** or **homogenisation** is the process in which distinct phenomena or groups become gradually more similar to each other. Differences between those of their traits that we are interested in become smaller on our scales, they converge. This suggests to the observer that there must be one or more underlying forces that operate against the differences, and invites him to search for these forces. Ecologists define 'convergent evolution' as the independent evolution of similar traits among unrelated organisms resulting from similar selective pressures; they believe, for example, that the similarity in body forms and hunting behaviours of the Tanzanian serval (a small cat) and the Brazilian maned wolf result from convergent evolution. Homogenisation must be distinguished from two types of non-homogenising processes, namely processes of differentiation and differential development.

**Differentiation** or **divergence** is the opposite of homogenisation. We speak of differentiating or diverging phenomena if we perceive that the features that interest us become more and more distant from each other. Also the observation of differentiation processes conjures up the image that there must be underlying forces that drive the phenomena or groups apart, and invites one to search for these. In both cases, of convergence and divergence, the driving

forces may be external or internal, or the result of interacting processes such as mutual learning, (cultural) adaptation, competition and the like.

Both convergence and divergence may be explained by cybernetics and by general systems models which are based on them (Odum 1983:17, 128, 259). Cybernetics is the science of command processes in machines and robots, operating through feedback mechanisms. Negative feedback reacts on disturbances by compensation and by seeking homeostasis and convergence towards a stable state. Negative feedback occurs for example in thermostats, which stabilise temperature in a room or in the body of a warm-blooded animal. The 'invisible hand' in classical economics also operates through negative feedback to cancel out price differences and generate a homogeneous distribution of wealth. Positive feedback takes place when a small initial divergence accelerates a development in the same direction. Exponential growth of population or capital is a case in point. Marketing economists have long assumed that economics of technology and scale would cause gradual homogenisation of products offered on markets. Recently they discovered that divergent developments based on product innovation and the eking out of niche markets may also be a rational economic strategy.

Systems frameworks, which predict homogenisation and exceptionally differentiation, have guided much thinking on society-ecology relationships, and therefore merit a short explanation here, before I come back to them in section 2.2. Systems ecology, which accords an important role to negative feedback, is still the dominant paradigm in ecological science. Of broader importance, general systems models have since the 1970s been widely used as a unifying framework in interdisciplinary research and by policymakers. The latter seem to welcome systems thinking because it simplifies, predicts trends, and is not stained by Marxist political ideologies. General systems theory and systems ecology are based on cybernetics, mainly emphasise negative feedback, and postulate that a system has a goal, or what is sometimes called a called mission, intention, finality or teleology (Von Bertalanffy 1968:16-17, 43-46; Hurtubise 1984:3-5; Kwa 1984:29)[3]. The assumption of teleology in behaviour which is not fully understood is now mostly dismissed as unscientific, but it remains a cherished idea of systems thinkers[4]. Von Bertalanffy (ibid:79), one of the founders of general systems theory, counters the critique by distinguishing between equifinality and true finality or purposiveness. Equifinality is a property of organic systems and means that, through convergence, the same final state can be reached from different initial conditions and in different ways. True purposiveness, however, assumes intelligence and foresight of the goal and is a characteristic of humans. Farming systems thinkers such as Spedding (1979), Fresco (1986) and Flach (1988) attribute purposiveness rather uncritically not only to individuals, but also to corporate human actors, for they argue that when systems involve humans they are sometimes defined as a group of interacting components operating together and making decisions for a common purpose. In summary, it is the assumed equifinality and the negative feedback mechanisms of ecosystems that drive towards homogeneity.

Dominant ecosystems approaches, especially the systems ecology school of Eugene Odum, also accord an important role to negative feedback. Clements (1916) likened the ecosystem to an organism; Howart Odum (1983:407, 443) and Eugene Odum (1993:189-190, 198) describe it more mechanically as a system with an inherent capacity for self-organisation. Even if positive feedback occurs in early stages of an ecosystem's development, negative feedback would take over after some time due to limitations in, for example, food supplies. The result is that the system converges towards a stable state (Olff 1996:15). Negative feed-

back mechanisms are good for explaining how a system functions at one particular moment in time, but they cannot explain change and differentiation, as Von Bertalanffy (1968)[5] himself admits. Nevertheless, Clements (1916) and the systems ecology school predict convergent developments of vegetation succession towards a stable climax vegetation community. I will come back to these dominant as well as some competing approaches in ecosystems science in the next section.

**Differential** development differs from the former three categories in that it does not suppose a determined direction of change, especially no linear change. It suggests that trajectories do not run parallel. It is furthermore distinguished from convergence in that it has neither a predetermined goal nor a homogeneous outcome, and from divergence in that it does not need to move from a relatively homogeneous to a more diffuse situation. It refers to the existence and movement of difference, but also to a degree of conformity, a degree that is large enough to justify comparison. Differential simply means that groups or phenomena which are in the same category differ in certain regards (Hofstee 1982). By 'the same category' Hofstee refers to phenomena which have a 'platform of conformity' and only a few differences; below I will explain why comparisons between these are more feasible and reliable than others. Differential developments hence start from a fairly similar but not necessarily homogeneous situation, and follow each their own trajectory, a trajectory which is not causally determined by the directions of change of the other phenomena. The result does not need to be more or less homogeneous than the start, and there is no linear development. There might be mutual influences between the phenomena, or external forces operating on each of them, but these forces appear too diffuse, not strong enough or to ephemeral to make them con- or diverge. The occurrence of differential development points to a strong internal dynamics of actors' choices and creativity, to chance, to historical contingencies, or to a complexity of factors which is too great for a simple causal model. In systems terminology, 'co-evolution' is a promising new concept, used rather by evolutionary- than by systems ecologists[6], which seems more suitable to describe differential development than feedback mechanisms or the notion of the survival of the fittest. Co-evolution denotes simultaneous development of two or more phenomena which do not simply con- or diverge, but interact in a more complex manner through a mix of competition, complementation, avoidance, exchange of information and the like.

In some cases one might identify convergent, divergent, differential and parallel development in various time periods and/or domains. Whether this is the case or not, distinguishing between relative directions of change may contribute to an understanding of the nature of the underlying forces, and of the value of theoretical models that are designed to explain the observed processes. For this it is, however, necessary to compare both between phenomena and over time. This is rarely done, probably because this is considered too complex and too difficult.

In Fon and Adja socio-economic and ecological history I perceived in some domains processes of divergence or temporary convergence, but most development is best described as differential. Chapters 4 and 7 will deal with the issue of similarity of the Fon and Adja's conditions since the 16th century, and will argue that they were similar enough to justify both a comparative study and the conclusion that they rather became more diverse than more homogeneous. Through a historical analysis of internal dynamics, of external homogenising forces, and of social networks and Adja-Fon interactions I will further show how internal dynamics and actors' styles largely resisted the homogenising forces of markets, policies,

'scientific' knowledge, ecological drives towards homeostasis and stable climax vegetations, and even of knowledge of each others' styles.

### 2.1.3 The logic of comparison

A study of convergence, divergence or differential development is inherently comparative. Only by comparing two or more developments we can say anything about their direction in relation to each other. As mentioned above, the purpose of this book is to understand how the Fon and Adja developed so differently under apparently similar external conditions. This means we have to compare Fon and Adja societies and ecologies.

Undertaking a PhD research of a comparative nature in the high-days of postmodernism and social constructivism in Wageningen, I often felt I was facing an impossible challenge. Anthropology is mainly oriented towards holistic case studies, often of small communities, and the use of highly qualitative techniques of data collection through participant observation. During the 1990s also most sociologists, certainly in Wageningen, paid at least lip service to the idea that the only 'proper' ways of doing research are highly qualitative and interpretive in nature. All other approaches were blamed of being 'positivist', in this context a very negative label. With the rise of social constructivism, sociologists' and anthropologists' research interest was increasingly addressed to the uniqueness of phenomena. Comparative research, especially if it was explicitly labelled as such, and if it involved comparison of large numbers of differences or aimed at reaching higher level theoretical generalisations, was 'not done'[7]. The logic behind this is obviously that if all we 'know' about phenomena are social constructions then there is no point in comparing them. My comparative research project was frequently challenged by colleagues in Wageningen who suspected me of deductive generalisations or of using Tylor's cross-cultural 'Comparative Method'. Also my attempts to use comparable research procedures received open and tacit critique, as I will explain in Chapter 3[8]. Often I felt tempted to abandon my comparative ambitions and study one group only. But I persevered because I remained convinced, against the odds, of the potential added value of some types of comparison. Why? In this section I will describe different forms of comparative social research and the rationales behind them. I will show their epistemological advantages and weaknesses, and some methodological implications. Finally I will explain the approach I adopted for this study and the insights that I gained from the comparison.

The anthropologist Evans-Pritchard once remarked that 'There's only one method in social anthropology – the comparative method – and that is impossible.' (E.E. Evans-Pritchard, quoted in Peacock 1986:76). By this he implied that each society, group, culture or social situation is unique. Each of them differs from others in so many aspects, on so many factors, that they cannot be compared. Nevertheless the authors and readers of anthropological texts of his time (the mid-20$^{th}$ century), who typically belonged to cultures different from the one described, could not avoid comparing at least their own and the culture studied.

Many anthropologists have been more ambitious than Evans-Pritchard in their attempts to compare and to reach generally applicable conclusions, amongst others those of the functionalist and the structuralist schools. Lévi-Strauss and the French structuralists argued that it is a universal feature of the human mind to classify. Culture is seen as imposing categories on natural continua. The very essence of language, kinship, mythology would be classification, often in a dualist manner. Human cultures everywhere would classify the

world into oppositional categories such as male and female, spiritual and temporal, right and left (Lévi-Strauss 1962; Peacock 1986:28, 78). I contend that many non-structuralists would agree on this point. Also scientists' preoccupation with processes of convergence or divergence, rather than differential development, is an example of dichotomous thinking.

Indeed I defend, with Van den Bosch (1980), the idea that human language is by its very nature comparative. Every meaningful word[9] we speak, think or write implies a comparison with other words with other meanings. By expressing our lifeworld in language we compare, classify and structure. Words imply that we consider the denoted 'thing' (item, person, situation, process or idea) to have internal characteristics which make it essentially similar to certain 'things' and essentially different from others. These characteristics are sometimes expressed in terms of extremes: similarities are rendered as analogies and differences as opposites. Since human language has these qualities, describing social phenomena means classifying and comparing them implicitly, be it consciously or unconsciously, with other phenomena which we know already.

Lévi-Strauss once stated that *ce sont les différences qui se ressemblent*, by which he meant, first, that humans tend to think in oppositional categories. Second, he underlined that dualist oppositions are like mirror images (Van Baal 1977:337-339) and contrasted to each other because they have something in common. A good example is the prefix *anti-* in words like antiphon, antipode, antipole, Antichrist, anticlockwise, and the Fon and Adja word *antigudron* (literally 'it looks like tar' (*goudron* in French), used for black rubber shoes made from used tyres). All these words indicate that there is both a resemblance and an opposition between the antitype and the original phenomenon. Lévi-Strauss also stated that *l'opposition, au lieu d'être un obstacle à l'intégration, serve plutôt à la produire* (1962: 128), in other words, opposition creates social integration because people agree to recognise and accept distinction; it helps them to order their life world. Finally, Lévi-Strauss (1958b: 21) argued that transformations consist of a series of mutations, of leaps and bounds; at each leap one aspect changes but the others remain the same. Present patterns build on previous patterns and experiences; part of history survives in the present. What exists is like the work of a potterer (*bricoleur*) which is made from and partly structured by whatever scraps of raw material he has at his disposition (Van Baal 1977:332). Historical leaps and bounds neither always take the same direction, nor have a goal, nor the same general trend. Neither do they always represent an improvement. Lévi-Strauss (1958a:5-11) therefore rejects evolutionism[10].

A particular form of classification is the construction of typologies. Just like many concepts in everyday language, typologies tend to be expressed in terms of extremes. Weber's (1925:35-41, 456-458) *ideal types* should be understood in the same way as analogies and opposites. Weber did not intend ideal types to be exact representations of historical reality, but to create clear concepts which could serve as a standard model in the observation, interpretation and comparison of real life (Van den Bosch 1980:11, 19, 25-26). In other words, ideal types are metaphors which illustrate some general principles, but do not exist in reality. Some scholars reject typologies as simplistic representations. Their objection makes sense if typologies are seen as objective and accurate descriptions, but not if used in Weber's metaphorical way. In everyday language, most people probably understand analogies, opposites and ideal types as cognitive tools which facilitate our perception, and not in absolute terms. Analogies and opposites indicate that things are better understood by reference to something else. By extension, comparisons may sharpen our focus and draw

our attention to factors which were previously vague or blurred in our mind. This, I will argue, is one of the main advantages of comparing Fon and Adja.

Not only anthropologists, but social scientists in general have long held the opinion that it is the attempt to draw conclusions about general social principles on the base of comparisons which makes good science. Durkheim (1947/1956:124-128) argued that in sociology comparison needs to replace the experiment of the natural sciences, and Radcliffe Brown followed him in this opinion (Van den Bosch 1980:5, 28). In the 1980s, sociologists like Hammel, Hofstee and Van den Bosch still took for granted that sound sociology must be comparative, strive to generalise, and generate theory, though Hofstee (1982:12-13) specified that comparisons of concrete groups could only generate theories of the lower range, limited through time and place.

> 'Of course one may say that comparison occupies an important place in every science. But in the study of concrete social groups it plays a very special role. (…) Obtaining certain generalisations, of theories and concepts on the base of comparisons of social phenomena in groups of the same category is hence possible and for a sound development of concrete research desirable, yes necessary'. (Hofstee 1982:9, 11-12; my translation)

> 'I am particularly concerned with the use of comparison to reach inductive generalisations or to form deductive conclusions, not with the use of comparison merely to cite illustrative cases that exemplify but do not demonstrate generalisations. This last use of comparison is trivial, although misleading, and unfortunately common in anthropology, history, and other social sciences'. (Hammel 1980:145-146)

> Van den Bosch (1980:4, my translation): 'In every sound scientific research comparison plays a role in one way or the other'.

Since the later 1980s and 1990s (and the rise of social constructivism) sociologists and anthropologists moved away from generalisation and comparison and became more interested in the uniqueness of phenomena. Many paid at least lip service to the idea that their own disciplines are interpretive humanities rather than sciences. This was one of the reasons why Tylor's so-called 'cross-cultural comparative method' lost its appeal during the 1980s and 1990s (Mace and Pagel 1994:549), and also the so-called 'illustrative' type of comparison (Bonnell 1980:164-171) between concrete phenomena and scientific theory went out of use.

However, even convinced constructivists continued to compare more than many would like to admit or than some were even aware of. Implicitly they related their analysis and constructions to their own previous experiences and to existing theories and concepts. If we use language, as argued above, we cannot avoid comparing. More explicitly, several social scientists continued to call for small-scope comparisons between a limited number of cases and for diachronic studies (i.e. comparisons through time) without aiming at higher level generalisations. Many continued to illustrate, though not overtly, their own cherished ideas or theories with descriptions of social phenomena. Also research on styles, which was popular in the 1990s, is inherently comparative, though not often labelled as such.

### *Some types of comparison*

The term 'comparative research' is a conceptual ragbag which must be disentangled before we can discuss it meaningfully. All comparative research considers equivalent units or phenomena; these might be social groups, or aspects or traits of groups (for example

government, economics, ideology, marriage, ritual practice, styles) or social situations. It should be obvious that there is no point in comparing one aspect of one group with another aspect of a second group, but unfortunately this is what is often done, for example when ideology in one group is compared with practice in another group, or when Marx and Engels implicitly compared the British economy with French politics and with German history (Van den Bosch 1980:21).

An important distinction concerns the respective roles of theory and of empirical evidence, both in what is being compared and in scientific reasoning. Bonnell (1980) speaks of an illustrative comparison if the main point of comparison is between equivalent units on the one hand and a theory or a general concept on the other. Even if there are several units, they are not compared with each other but only with the pre-established conceptual model; hence one might call this comparison deductive. A comparison is analytical if the main point of comparison is between or among equivalent units, with an aim of inductive generalisation by juxtaposing equivalent units with each other in order to discern regularities that might provide explanatory generalisations[11]. These generalisations might be simple typologies or more ambitious causal explanations, but conceptual models play no role in the initial analytical comparison. Skocpol makes the same division on the basis of research goals, which is for the first type the application of theory, and for the second type the construction of theory (McMichael 1990:386-387). In their ambition to find invariable, universal generalities, analytical comparativists usually accepted the positivist idea that comparison replaces the experiment of the natural sciences, and therefore regarded their units of comparison as clearly demarcated and self-contained wholes which are independent from each other. This definition of units as wholes legitimises the attribution of observed generalities to intrinsic systemic properties of either the unit-cases or an encompassing global system. Most analytical comparativists were firm believers in (social) evolution of one type or another, and many used an approach akin to Tylor's cross-cultural comparative method (McMichael 1990:389-390), about which more below.

Another distinction, which cross-cuts the first, concerns the time frame of the comparison. It is called diachronic if it compares a particular phenomenon or (aspect of) a unit in different historical moments or periods. Re-studies are a special type of diachronic comparison. Diachronic studies can be limited to a single unit or phenomenon, but might also include many. A comparison of historical processes has the additional advantage that the phenomena to be compared, in other words the units of analysis, are themselves emerging properties. Since the comparison is between processes at work in the cases under study, the units evolve and might also interact with each other or with their surroundings. The predefinition of unit boundaries, and the problematic assumptions that 'units' are systemic wholes and independent from each other become therefore superfluous. Unit formation, relevant boundaries, horizontal interactions between units, vertical interactions with global forces, and how these interactions contribute to the unit's genesis[12], become visible in the process, and do not need to be set in advance or assumed to be absent. McMichael (1990) calls this approach an incorporating comparison, a term which betrays that his main concern is with vertical interactions between global forces and local counter-movements, and with the degrees to which global systems succeed to incorporate spatially or historically specific ones[13]. Since the later 1990s the comparative study of processes becomes increasingly popular among anthropologists according to Moore (2005), but also the studies which she reviews are mainly concerned with 'vertical' state-citizen interactions. My study compared simulta-

neous developments among Fon and Adja (kinship) networks, styles, and plateau ecologies, including the processes by which networks, styles, and ecologies were constituted. Vertical interaction with encompassing economic, political, ecological etc. forces appeared however of limited relevance for local processes of formation[14]. Of equal importance were horizontal network ties and interactions between Fon, Adja, and their neighbours. Therefore I prefer to speak of a comparison of historical processes rather than of incorporating comparison.

Sociologists in Wageningen often think of Tylor's cross-cultural comparative method as the only type of comparative anthropological research. When I said that I did a comparative study of the Fon and Adja, many suspected that I used Tylor's approach. The cross-cultural comparative method however is a very particular type of comparison, to which I will devote a few lines because of its historical importance, and to show that it hardly had anything in common with my approach. In 1889, Tylor introduced his cross-cultural method to compare traits of large numbers of societies[15]. The method underwent only few changes thereafter, was widely used until the 1970s, and was still popular in the United States in the 1990s. Data were often gathered by travellers, more rarely by anthropologists, never by the same person in all the societies under study, and hardly ever by the analyst himself. Raw data were coded and submitted to statistical analysis rather than to an analysis from inside and in context. This lack of inside knowledge often led to highly speculative causal functional, evolutionary or diffusionist explanations for the observed statistical relations between traits[16]. I agree with Hammel (1980:151) that comparisons become more reliable if the compared societies are studied as wholes and the traits under investigation are examined in their social context. In my view, such holistic inside analysis of compared phenomena gives a better insight into patterns and the logic behind these than the Tylor's evolutionist cross-cultural comparative method. This almost excludes reliable comparisons between large numbers of cases. Another flaw in the use of Tylor's comparative method is the unreliability of many of the basic data used, most of which were derived from traveller accounts from the late 19th and early 20th century. Since the late 1960s most cross-cultural comparative studies rely on Murdock's (1967) Ethnographic Atlas and on Murdock & White's (1969) Standard Cross Cultural Sample, which were largely based on such accounts from between 1830 and 1950. The vast majority of data on South Bénin in this Atlas repeat common misconceptions of such travellers. Other weaknesses of Tylor's method are reductionism and loss of information in the process of codification, and dissimilarity of data collection procedures. Some later comparativists abandoned evolutionism and/or had their own research teams gather data according to closely specified procedures[17], but as I will argue in section 3.3 even if the same research strategies are applied they work out differently in different situations.

Another distinguishing factor is the scope of the differences to be compared. Scholars appear to agree that when comparing phenomena, all factors that differ between them must be included in the comparison. This seems to be an implicit acceptance of Durkheim's (1947/1956:124-128) idea that comparisons replace experiments, which require that all factors but the one under investigation must be equal. Criticising Tylor's method, Hammel (1980:150) argues that the dangers of producing unwarranted speculative explanations in functionalist and/or evolutionist terms are minimised if societies are compared which differ in only a few respects, and Schweizer (1994:561) that the comparison of neighbouring societies is generally richer and better and more likely to produce causal relations than worldwide cross-cultural studies, not only because regions are more homogeneous and closer ontologically, but also because a scholar of a particular region usually has a better command of and in-

sight into the relevant ethnographic and historical sources. Hofstee (1982:9-10) defends that before comparing concrete groups one should first establish their similarities. These similarities he calls their 'platform of conformity' *(overeenkomstigheidsvlak)*. Consequently one should describe especially the points of difference between the groups and compare only them; only in this way one might be able to explain particularities. Also Marc Bloch (1967:58, quoted in Bonnell 1980:165) calls for a focus on differences: 'Too often people have believed or affected to believe that our only aim is to search for similarities. (…) On the contrary, the comparative method, rightly conceived, should involve especially lively interest in the perception of the differences, whether original or resulting from divergent developments from the same starting point.' Such an approach makes an almost controlled comparison; I say almost first because the circumstances on the platform are similar but not always absolutely equal, and second because the researcher of real life situations can neither control these situations nor the external circumstances. Another good example of such an approach is Mencher's (1966) comparative study of Kerala and Madras, which first emphasised the common features of the two areas and then went on to describe each region, focusing on their differences. The main advantage of this kind of 'controlled' comparison is that it makes the study more concise and to the point, and focuses on the dynamics of change.

A problem with social phenomena is that contexts are rarely if ever completely identical. In my view the solution to this problem is not to abandon comparisons altogether, but to compare units and/or ideas whose contexts have to our knowledge a fair degree of conformity, to inform our readers about any differences we perceive which we did not include in the comparison, and to provide them with sufficient information about our basic data and our sources to enable them to add their own knowledge of the context and to draw their own conclusions. Unfortunately this is not often done.

Hofstee, Bloch and Lévi-Strauss' views imply that holistic comparisons between a small number of groups, the type which Hofstee favoured, require that also traits of similarity be analysed, even though, for Hofstee, this should *precede* the comparison of the differences, and Bloch wants that the search for similarities receives relatively less attention than the search for differences. Van den Bosch (1980:11) calls for balance between analogous and dichotomous thinking. The fact that *les différences se ressemblent*, in other words that phenomena are seen as opposite *because* they have something in common, implies that a balanced view needs to consider both contrast and similarity. The analysis of analogies as well as differences is essential to understand the internal logic of each group. It is also required if we want to establish whether processes converge, or diverge or move differentially in an undetermined direction.

The choice to emphasise either analogy or opposition often reveals preconceived ideas or worldviews. Ingold (1996) provides an interesting example of this. In Western thought, nature versus culture, humans versus animals, and persons versus organisms are usually seen as dual oppositions. The same holds for the mind-body and spiritual-temporal divides. Ingold convincingly shows that Westerners as well as hunter-gatherers also see commonalities between human and non-human animals. All believe that men and animals have in common that they are alive, and some Westerners now speculate about the possibility of non-human animal awareness. The American Cree Indians and other hunter-gatherers go one step further and attribute personality to animals and also to plants, spirits and certain geophysical agents, whom they all see as partners in the forest they dwell in. Also nature and

culture are united and constitute both 'dwelling place' for hunter-gatherers. However, hunter-gatherers do distinguish between humans and non-human animals, for example humans may eat certain of the latter and have sexual relations with certain of the former, but not the other way round. Emphasis on analogies or on opposition is a matter of degree and of cultural choice. Whereas Western thought sets out from the assumed dichotomy between the human and the animal and then searches for possible homologies, hunter-gatherers assume fundamental homology and then explore the differences. By extension, an emphasis on either similarity or difference in comparing has important consequences for the patterns that will be perceived and hence on theory formation.

### *First observe or first (decide what to) compare?*

Related to the issues of establishing a platform of conformity and the role of concepts or theory in the comparison is the question at which stage the comparison starts: before, during or after observation? Also the (desired or possible) degree of standardisation of research agenda and –procedures, and the opportunities for the researcher or the people under study to set them, depends on this. There is a tension between the observation of the phenomena to be compared and the comparison itself. On the one hand we need to be well informed before we can compare, but on the other hand we often compare in order to fill our knowledge gaps (Van den Bosch 1980:14-15). As explained above, comparison may be a cognitive tool which sharpens our focus and enables us to observe better.

Two basic types of procedures are possible if we want to compare phenomena. Either we first observe the phenomena and then compare any differences we come across, or we first decide which factors or categories we want to compare and consequently focus our observation on these. Dialectical combinations of both procedures are for example Hofstee's (1982:9-10) two-step strategy to establish first a 'platform of conformity' and then compare what is above this platform. This approach was adopted by Van den Breemer (1984:1-13) in his structuralist study of two Ivorian villages which were similar except for their acceptance of rice cultivation and for the relative percentages of their inhabitants in each major religion. Others (for example Long 1968:37-38, 218, 231) first observe with an open mind, then come across important differences, consequently draw a stratified sample, and focus research questions to understand the initially observed differences.

Scholars using the empirical and idiographic approach put much emphasis on describing each case and trying to understand it in its own right before they compare. They tend to be modest in their generalisations and to underline the uniqueness of each case. Others prioritising comparison, are more direct in the selection of principles in the cases to be studied which might be generalised, and neglect the context of these principles: the nomothetic tradition. Apart from scope of differences also the analysis may differ between idiograpics and nomothetics[18]. While the first type of analysis tends to be overburdened by detail, the second risks overlooking important empirical aspects and to draw unwarranted conclusions. In my view it is necessary to strike a balance, like in the dialectical approach that starts with broad observation and then zooms in on observed differences, which was used by Hofstee (1946; 1985) and Long (1968) for their studies on life- and farming styles. This dialectical approach may unburden the publications of the first group from repetitions and may contribute to their analytic clarity, without having to sacrifice principles of empirical carefulness. Some other studies on styles, for example those of Bennett (1980, 1982) and Van der Ploeg and

his team in the early 1990s, adopted a more nomothetic procedure by drawing a stratified sample based on 'social mapping' in a very early stage of the research.

### *Comparing Fon and Adja: Units of analysis, approach and insights*

The present study on the Fon and Adja uses a dialectical approach to observation, selection of units of analysis, and comparison. Any analytical comparison is, per definition, between two or more units. This begs the question what are my units of analysis, in other words what do I compare? From the moment that one starts comparing the units must be specified, but the choice of units has an impact upon what similarities and differences one is likely to perceive.

By defining a phenomenon as a unit which can be compared with others one emphasises homogeneity within that unit, and potential differences with the others. Internal heterogeneity risks to be overlooked, similarities with other units neglected and dissimilarities with them magnified. This is a consequence of the human inclination to create distinction and to classify, and also a result of Bloch's (1967:58, quoted in Bonnell 1980:165) and Hofstee's (1982:9-10) advice that a comparative study should show a particular interest in differences. Hence the choice of units affects which differences will stand out, and that the greater the number of units one observes the more differences one is likely to find. The selection of units thus facilitates comparison but at the same time encourages biased observation. The delimitation of units to be compared may be a stepwise process, either by first observing with an open mind to find a platform of conformity and then discern units that differ, or by alternating between open observation and classification in a dialectical way, or by studying 'units' in their process of formation and hence in continuous change. My own approach was a combination of the last two possibilities.

There are different ways to choose units of analysis. A common distinction is between units described in the researcher's (scientific or English) terminology and units described in the language of the researched people. This is related to Whatmore's (1994) distinction between classification in taxonomic categories, based on measurements and observation by the researcher, and classification in folk categories, based on the researched people's own interpretation. In my view these distinctions have to be refined. Researcher's observations, descriptions and classification can come about in many different ways. Folk terminologies may be multiple and inconsistent, and may not cover all distinctions which they (and the researcher) consider of practical relevance; Giddens (1984:6-7) speaks of practical consciousness instead of discursive consciousness in this regard and Lévi-Strauss (1962) argues that the culturally most significant things often remain unnamed. Very often, multiple and mutually conflicting folk classifications exist within a single research population. It can make a difference whether the studied people are allowed to classify themselves or are classified by other members of the research community; see also my critique of the social mapping technique in 2.5.2.

What is the optimal size of units of analysis? In his classical handbook on research methods in anthropology, Bernard (1988:47) commands us to always collect data on the lowest level unit of analysis possible, for example about individuals rather than about groups, because 'you can always aggregate data collected on individuals, but you can never disaggregate data collected on groups'. Otherwise you risk drawing conclusions about individual people from data about groups, a sin known as 'ecological fallacy'. His advice should not be interpreted as a plea for studying individuals in isolation to draw conclusions on social practices and on

the functioning of larger groups. Data on isolated units only allow statistical inferences. They show numerical frequencies of traits and at best the size of correlations between these traits, but they cannot explain *why* and *how* these relationships occur. One way to understand the role of social practices and -interaction in the operation of (larger) units is to study the unit as a holistic case as defined above. Such a case study allows one to make logical inferences, to draw conclusions about essential linkages between two (or more) characteristics, rather than to draw only statistical conclusions (Mitchell 1983:198-202). To achieve this, a case unit however must be analysed at different levels: as a whole, but also at lower levels of its constituent parts and of the relationships between these parts. In other words, a case study is a holistic analysis of a real life situation. Such an analysis at different levels also helps to avoid unwarranted conclusions about homogeneity within a unit that is compared with others. Case analysis shares its advantage to give a better perception of general principles and essential internal linkages than statistical analysis, with the study of ideal types. For this reason, case studies are a useful research tool regardless of whether they are typical representatives of a larger population or ideal typical representatives of certain traits.

Until the mid-1980s the group of scholars in the new research project coordinated by the Université Nationale du Bénin assumed that all South Béninese plateaux were socially and ecologically the same and internally homogenous. But during research in several Adja villages, we came across unexpected differences between villages and families regarding social organisation, productive specialisation, soil types, and relationships with markets. My brief visit to the Fon plateau in June 1985, literature and local information suggested that there were even greater differences between Adja and Fon styles of making a living, for example their tillage- and oil palm cultivation techniques, gender roles in agriculture, apparent wealth and urban migration, and ritual and lineage organisation. The stereotypical images of Fon and Adja cultural dualism given by the literature and by local informants were very consistent, and my own explorative observations confirmed these, while the image that the two plateaux were conform in geological and ethno-linguistic origins, climate, population density and political-economic environment still remained intact. Therefore I chose as first grand units of comparison and analysis the Fon and the Adja as self-defined cultural groups (people usually identify themselves as Fon or Adja if they grew up in that culture and speak that language as their mother tongue). To study differences in styles of making a living under geographical (soils, climate, distances to markets etc.) and demographic circumstances which were as similar as possible, I decided to limit my analysis to Fon and Adja families who had a place on the plateaux which they called their own since pre-colonial times (next to no villages were founded on the plateaux after that date), and who had members who made at least part of their living on the plateaux. I included migrants from the plateaux who still entertained cultural and/or economic relations with their home villages, but excluded the Fon and Adja groups who lived since many generations in the savannas to the north of the plateaux and the Fon who settled around Whydah in the 18$^{th}$ and 19$^{th}$ centuries. This also meant that I studied Fon and Adja families as historically emerging networks rather than as units with clearly demarcated boundaries.

Soon it became obvious that also the Fon plateau was internally heterogeneous in soil types and population densities, but that its soil- and demographic categories were the same as those of the Adja plateau. Also the distances between villages and local markets, roads and offices of administrators and extensionists were within the same range on both plateaux. Since demographic and ecological conditions, markets, knowledge and policies are homo-

genising forces according to conventional theories; a logical next step was to select, as a second level of analysis, smaller units for comparison within each of these categories. This to check the hypothesis that diversity can be explained by external factors rather than by culture. Hence I targeted at least one Fon- and one Adja village for each of the principal soil categories, population densities, and distances to administrative and commercial centres. Towards the end of the fieldwork I also studied some Fon and Adja in two mixed villages on the north-eastern Adja plateau (including some migrants from my Fon plateau research villages) to find out how and to what extent their practices were inspired by their place of residence, their own culture or that of their neighbours. All these villages were chosen because of their external conditions, not because of already perceived style differences. I could only hope that, if there was heterogeneity of styles within each cultural group, I would find these in my sample.

The villages had between 500 and 2,500 inhabitants, which is too many to study the values, practices and relationships of them all. Besides that, important social ties transcend village boundaries. Therefore third and fourth levels and units of analysis were chosen to obtain a better insight into these issues. The third unit of analysis was the family or lineage branch, stretching over several generations, mostly four or more. The living members were studied as much as possible through participant observation; information about the death and long-term migrants was obtained through interviews with their relatives. Yin (1984:13, 19) argues that case study methods are impossible to use in historical research[19], but my family history approach allowed me to use extended case analysis, interviews and observation for the study of historical periods longer than one generation. I neither made attempts to define boundaries of the kinship networks nor to study all members with equal depth. Following Fon and Adja usage, kinship ties were in the first place defined by patrilineal descent, but matrikin, wives and in-laws were taken into account (see Tables 5.2 and 5.3 for Fon and Adja titles for particular patrikin, matrikin and affines).

Box 1: Fon and Adja concepts for social units

Which social units do the Fon and Adja identify themselves? The smallest well defined unit in Fon terminology is the *hwedo* (in some regions called *hweta*), which is in the first place a fairly large residential unit, sometimes roughly translated as 'compound'. It usually consists of several adult men who descend from the same father or grandfather and of all their co-resident dependents (wives, children etc.). Several *hwedo* constitute together one *hɛnu* or patrilineage, but this concept excludes wives who have been born in another patrilineage. The *hɛnu* is not co-residential: Most married women do not live in their own but in their husband's *hɛnu*, where they are regarded as temporary members. Migrants may and usually do remain members of their original *hɛnu* for a considerable time period, often for generations. *Hɛnu* or patrilineage is also the smallest well-defined unit among the Adja. In addition, both Fon and Adja have the concept *akò*, roughly translated as 'clan', which consists of several *hɛnu*. The role of the *akò* has become mainly ritual. The definitions of *akò*, *hɛnu* and *hwedo* are formal and their boundaries are quite clear. Every *ako*, *hɛnu* and *hwedo* has its proper name. Each individual knows exactly to which *hɛnu* he or she belongs by descent, and if he is a Fon in which *hwedo* he or she resides, and most people also know the name of their *akò*. In spite of their official patrilinearity however, the Fon and Adja also regard their matrikin as relatives, see Tables 5.2 and 5.3. Therefore I will use the concept 'family' as a synonym for a (section of a) patrilineage, extended where appropriate by matrikin. In other words, I use the term family as a synonym for a kinship network with flexible boundaries.

A much employed concept among both Fon and Adja is *xwe*, which corresponds to the English word 'house' in many ways. *Xwe* has multiple meanings and is of little use to define boundaries.

*Xwe* refers on the one hand to inhabited areas and on the other hand to groups of people. In the sense of inhabited area, it can be the hut(s) of a person and his dependants with the open space around them where their domestic life takes place (but not the fields), or a ward, or a whole village. In the sense of a group of people, it can be a descent group or a residential group of various sizes. It also designates the residents of any of the above mentioned inhabited areas. Among both Fon and Adja it is often used for a husband and his wives, children and dependents, or if there is no husband, a woman and her children and dependents (Fanou 1992:116), but it may also be an extended family, a *hwedo*, a lineage branch, a whole *hɛnu*, or a group of people living together in a religious community (Ségurola 1988:599-601). When people speak about their *xwe* they may refer on one occasion to their spouse and children, on another occasion to their village, and on yet another occasion married women may refer to their paternal compound. The term refers to internal characteristics and does not pretend to have a precise delimitation. It is used most often for a group of patrikin with their wives and other dependents who live close to each other and who maintain some non-commoditised economic relations with each other, but who do not necessarily produce and consume together. I will follow Fon and Adja's usage and use the term *xwe*, 'house' or family whenever boundaries are vague.

*Xwe* and *tò* are the common Fon and Adja words for village or town. *Tò*, but more commonly *tomɛ*, is also used to designate the whole space controlled by a particular social group, loosely translated as state or country. *Xwe*, *tò*, and *tomɛ* are mostly used as a suffix to a proper name which identifies and delimits the particular unit, for example Atindehouhoué is the village of Atindehu and his dependents, *Adjatomɛ* is the land of the Adja, *Yovotomɛ* (country of whites) is France or Europe.

The Fon and Adja have neither a word for the husband-wife/wives-children unit, nor a word for the matrifocal unit of a woman with her children, nor any other word for 'household'. They say that in the past the norm was that all wives of one husband cooked together from common resources under the supervision of the first wife, which might be the reason why there is still no word for matrifocal unit, even though today most wives have their own food budget and cook mainly for their own children. If co-wives cook separately from separate budgets the Fon say that *e kan do* (= they have divided the stoves), but this concept does not delimit a unit of production and/or consumption. Hence I conclude that there is no word for household in Fon and Adja. They can do without such a word, and I suggest that I can do without it too.

In each lineage branch I focused my observations on some clusters of more closely interacting people, mostly some brothers with their wives and children, sometimes sons' wives and children, widows at their charge, children entrusted to these people by relatives, etc. These people often live near each other and pool relatively large parts of their resources also when migrating, but I did not define or draw boundaries of households because the Fon and Adja had not term for it[20]. Rather I concentrated, like the Fon and Adja languages and Van den Breemer (1984:423-427), on personal relationships. Therefore, the study of historically emerging social networks rather than of precisely delimited units is not only in line with a non-positivist comparison of historical processes as I argued above, but also fits in with folk conceptions. Studying entire lineage-branches in the context of their villages also allowed me to study the impact of some network relationships on learning, practices and styles.

My choice of families as a network for closer observation was a gradual process, guided by practical considerations such as proximity to my house, by their livelihood practices and attitudes which I perceived, and by their social status and reputation as described by themselves and by their neighbours. In both cultural groups I included descendants of commoners, chiefs and slaves, early settlers and latecomers, and among the Fon some princes. First I observed many families and heard their neighbours gossiping about them. Several

families received labels which seemed realistic compared to how I saw them, for example 'lazy', 'industrious', 'traders', 'real farmers', 'backward rural people', 'arrogant', 'hierarchical', 'individualised' or 'working together'. For in depth study I retained some families whose practices and qualifications seemed reasonably typical to the region, that is to say those who seemed to represent a major type. Some were perhaps slightly ideal typical, but I excluded all those who were atypical. During further study I tried to find out whether they really represented (ideal) types and if so, what was the logic behind their style.

A fourth level and unit of analysis are individuals. Through observation, interviews with them and with their relatives, I obtained detailed information about individual members of the families I studied, including migrants, instead of considering families as homogeneous units or relying on information from one family member only. Besides, my research assistants and I also conducted (semi)-structured interviews with individual Fon and Adja in- and outside the research villages and families, both to obtain standardised (and hence more comparable) information on particular topics and to check information from the case-families and villages against the larger population. These survey data were analysed at the level of the individual. In addition, specific information was obtained from individual informants, but these data were not always comparable. This means that I studied agency and social action both at the level of corporate families and at the level of individuals. The concept of agency will be defined in section 2.3.3 and my methodology discussed in more detail in section 3.2.

Not only people but also land was a unit of analysis. To understand the interactions between human practices and ecological environment, I studied the histories of fields of my respondents, and of the past and present vegetations and human activities on them through interviews and observation. Maps in the archives and aerial photographs, combined with my own ground observations on the same sites, provided information on larger sections of Fon and Adja plateau land. I also collected historical narratives about small or larger sections of land and vegetation, often related to settlement histories. Together with Kerkdijk (1991) and some soil scientists of the IITA and the CENAP (Centre National d'Agro-Pédologie) I took and analysed soil samples from a few of the fields and fallows whose history we studied through interviews, as well as from four sacred forests.

For the study of secondary data like administrative documents, maps and other texts I was bound to the units presented in them. Data on the same type of unit are not available for every year, due to unsystematic recording, lost documents, and changes in border definitions of documented units over the years, often related to changes in administrative boundaries. Time-series of the same unit are mostly limited to some years or decades. Especially for pre- and (early) colonial years I often had to make do with larger units than I wanted to compare. In many colonial documents the smallest units are the *subdivision* d'Abomey (Fon) and the *subdivision* d'Aplahoué (Ehwe-Adja) which comprise the plateaux and a large stretch of savannah to their north, or the even larger *cercles* d'Abomey and d'Athiémé. Pre-colonial documents name but poorly define units such as 'the Slave Coast', 'Dahomey', 'Fon kingdom', 'Abomey', 'Fon', 'Adja', 'Djedji', 'Arada'[21] etc. Some of these names are used interchangeably for regions with fluid boundaries, chieftaincies, palace towns, and linguistic groups, probably under the assumption that the European model of the State as a territorial and linguistic unit with one capital, unambiguous membership and clear boundaries also applied here. I tried to discern from the historical and literary context what these labels designated in each case.

Most of the units of analysis – villages, individuals, families – were selected before I knew whether they differed or not. Rather they were chosen for their similar external circumstances. When I later perceived differences this was not the result of pre-conceived ideas. Only the two major units – the two plateaux and their inhabitants – and some research families were chosen through a dialectical process of explorative observation, perception of dual opposition, and singling out for in depth study. In very early stages of the research I tried to select style units within each cultural group more directly for their differences, but I failed. This was a combined attempt to let the people researched define relevant units of analysis, to adopt a technique akin to 'social mapping', which was the dominant method of styles research of those days, and to draw a stratified sample. Social mapping implies that local people identify major local styles and name actors which adhere to them. The mapped styles and actors can then be taken as units for analysis and comparison. I started my comparative research in 1989 by asking local Fon and Adja and extensionists to identify villages and individuals representing various styles. But my respondents did not understand my question, not even when I asked for specific differences[22]. They did not yet have much discursive consciousness of styles, except for the most visible differences between Fon and Adja practices, and might have been reluctant to label their neighbours. Later however, after several discussions, some of them were able to express in words what (style) differences they perceived within their own cultural group. Therefore I first observed with an open mind. When I came across labels given by neighbours and differential practices, I then discussed the logic behind these with the actors, and retained the families of some actors which seemed typical for more intensive study.

Also the selection of factors to be compared was a gradual process, since I did not know in advance which ones would differ. It is true that during my explorative research in 1985 I had some preconceived ideas about general similarities and differences between the Fon and Adja cultural groups (Wartena 1988b:248-254), but I re-examined these from 1989 onwards. Some differences were confirmed, others appeared to be erroneous. For example, my ideas that Adja women farm, Fon women don't, that Adja are poor and many Fon rich, and that Fon families are more hierarchical and coherent than Adja families, turned out to be prejudices. Farming or not farming did not distinguish a priori Fon and Adja women, and some of the other presumed differences turned out to be the other way round. Also my assumptions about conformity – that the two plateaux were ecologically similar and the Fon and Adja had the same ancestry some 500 years ago and that in the 20th century climate, demography, political and economic circumstances were the same – were checked and rechecked and these appeared to be true.

The perception that the Fon and Adja and their plateaux were analogous as well as opposed triggered and also partly guided the comparison. But it did not set the whole research agenda, for I did not wish to cling blindly to preconceived ideas about conformity of plateau origins and external conditions and about dichotomy between cultural groups but instead continually re-examined assumptions. I was careful not to reify the Fon and Adja as ethnic groups or their plateaux as geophysical units. Throughout the study I searched for potential style differences within each plateau and ethnic group, as well as for similarities in styles across the plateaux and groups.

The main advantage of such comparison was that it sharpened my focus and drew my attention to phenomena, relationships and processes which would otherwise have gone

unnoticed. Studying several styles in similar environments obliged me to question more profoundly what I observed in each of them. The English saying 'a fish does not talk about the water' also applies here. It is common knowledge that one often perceives better in a strange culture than in one's own because one tends to take for granted what is familiar. In the same way, when studying only one culture, as I did in 1985 with the Adja, one assumes too quickly that things in that particular environment must be the way they are. One is tempted to conclude that because phenomena occur together they must be causally related: the mechanistic view. Systems approaches and also most popular thinking tend to endorse such rapid conclusions; it is just too tempting to fill our knowledge gaps with assumptions about functionalist relations. During my fieldwork in only two neighbouring Adja villages I was tempted by the populist view that the inhabitants' ways of making a living were socially, economically and ecologically optimal in the plateau environment. But when I started to compare within the allegedly homogeneous environment I came across many unexpected style- and ecological differences which surprised me. Were conditions less similar or man and nature's interrelations with them more complex than I had assumed? Every one of these differences demanded an explanation, and a careful investigation of factors and relationships which I had so far taken for granted among the Adja, and would probably have taken for granted among the Fon too if I had studied them alone. In many cases this investigation revealed that factors and phenomena were not as uni-causally related as assumed. Not all elements of the observed styles stood the test of being functional, and many appeared to be sub-optimal solutions. The conclusion that indigenous practices may be ecologically or economically sub-optimal has rarely been drawn from non-comparative research, and is one innovative outcome of my study.

Additional insights were gained from combining the comparison between phenomena with a comparison over time. It gave a deeper understanding of the processes involved in generating the different phenomena and styles. The historical analysis of each transformation process in isolation showed how later forms were informed by earlier ones in the sense that they were partial mutations of these, while some past elements survived into the present. The analysis of simultaneous transformation processes under fairly similar conditions however was almost like a controlled comparison. It showed how phenomena and trajectories mutually influenced each other, and how they interacted with the environment and external forces. It revealed how processes sometimes converged, sometimes diverged, occasionally ran parallel, and mostly developed differentially. This helped to isolate factors of influence and to draw conclusions about the explanatory value of certain theoretical models, in particular homogenisation and divergence models.

## PART 2: HOMOGENISATION APPROACHES TO AGRO-ECOLOGY, SOCIETY AND TECHNOLOGY

### 2.2 Demography, ecology and fixed carrying capacity?

Ecological change is mostly assumed to be a function of human population density (natural disasters exempted). There are various opinions on the exact nature of this functional relationship, but in all these demography is seen as the decisive, driving factor behind the exploitation of natural resources and agro-ecological change. All these models predict homogeneous agro-ecological zones if population densities, geological conditions and climate are the same.

One view, influential not only in academic but even more in popular circles, considers population growth to be a direct threat to the environment. This view is usually associated with the economist Malthus (1798) and the Neo-Malthusians, who attribute to each ecological setting a fixed carrying capacity, defined as the number of humans that it can support. Others consider population growth to be a necessary factor for triggering human inventiveness and technological innovation, leading to changes in resource use and in ecological environment, but in a sustainable way. In economic anthropology, Boserup (1965) was the first exponent of this view, focusing mainly on technological change and productivity growth in agriculture. (Neo)-Malthusian and Boserupian views have in common that they conceptualise ecology and agriculture as systems which relate in a mechanical way to demography. I will argue that both views disregard the impact of people's individual and cultural practices vis-à-vis the environment. Furthermore, I will challenge the underlying assumption of most system models that systems have an inherent drive towards equilibrium and stability.

Fairhead, Leach and Mearns are known for their attack on dominant 'eco-pessimist' narratives. Their own counter-narrative, based on historical and environmental ethnographic analysis, emphasised the dynamics and ecological viability of many indigenous African management practices. But critics accuse them of playing down the environmental crisis. Although their publications appeared after I had completed my fieldwork, our approaches have much in common. But what they did not do was to compare two societies with similar population densities and in similar geo-economic environments. In contrast, my comparative study allows me to discern the role of environmental management styles and to observe that not all styles are equally viable in the economic and ecological sense.

### 2.2.1 Systems and ecosystems approaches

In the natural sciences, the idea that physical reality can be described as a hierarchy of systems has gone virtually unchallenged. Since the 1970s, systems thinking is widely seen as a promising unifying theoretical framework for the interdisciplinary study of complex problems. The publication of Von Bertalanffy's (1968:48) General System Theory, which extended the biological and mathematical systems concept to the social sciences and to psychology with the goal of achieving a unity of science, was probably a catalyser in this regard. In a hierarchical systems approach the fields of study of the various disciplines were considered subsystems of a general system. Farming systems analysis blossomed in this period[23], especially among scholars (including practitioners) of agricultural development. It tried to combine all the different farm activities in a certain farm or region as well as social, technological and economic dimensions of farming in one single model (Byerlee, Harrison & Winkelmann 1982:887) and called for multi-disciplinary research teams (Conway 1985: 32-39, 51; Collinson 1987:366).

Systems thinking was, since the 1980s, adopted by social scientists, for example Checkland (1981), Checkland et al. (1990; 1998), Röling (1988; 1991; 1995) and Niehof & Price (2001) as a welcome escape from unsuccessful attempts to study social processes in isolation, as well as from the politically stained (neo)-Marxist and modernisation approaches. Röling (1988:186-189; 1991:490-498) embraced a systems perspective to analyse interface[24]- and communication processes between cognitive sub-systems, in particular those of farmers and of research and extension institutions, and the production of synergy in an encompassing knowledge system. This organisation of system components would lead to entropy or same-

ness (1991:492) and to shared meanings in the knowledge system (1988:189), in other words to a more homogeneous distribution of knowledge and meanings. Olivier de Sardan (1995: 34-38) rightly stresses that the social systems concept was initially useful when it was loosely and metaphorically applied to social phenomena. But it lost its utility when the metaphorical comparison was stretched too far, when the notion of social system was reified, as if it existed in reality and social practices were considered to be or at least to behave like a real system. This unwarranted paradigmatic use of social system notions implied also the dangers of functionalism (everything that happens in the system is functional), of neglecting agency and conflict, and of assuming that all social systems have objectives. The idea that social groups operate together and make decisions for a common purpose is indeed a major flaw of Fresco (1986) and Flach's (1988) farming systems approach. Becoming aware that human activity does not always have predefined goals, Röling (1995:27-29) adopted Checkland's (1981) and Checkland et al. (1990; 1998) conceptualisation of 'soft systems' consisting of stakeholders with conflicting interests who, through negotiation, finally reach agreement about collective action. In my view however, even the assumption that stakeholders will agree upon a common goal and act in synergy *after* negotiation might be too optimistic. The soft system concept therefore does not overcome the fundamental problems of applying a systems notion to social action. Nevertheless, attempts to unite scholars from various disciplines around a kind of general systems theory continue until today, but as Visser (2004:28, 30) shows, these attempts fail to recognise that the systems concept is used very differently and has a different status in these disciplines.

The ecosystems concept is central to the ecological sciences and is taken for granted by most approaches to society-ecology relationships. The dominant paradigm in ecosystems thinking is still the equilibrium model, which is based on Clements' theory of plant succession (1916) and was developed especially by the systems ecology school of Eugene Odum. The theory of plant succession postulates that under given climatic and geological conditions, a 'climax vegetation community' develops through particular stages of vegetation succession. The climax vegetation is the crest of growth and dominated by the highest plants capable of thriving in the given climate because of their relative advantage in competing for light. It is homogeneous and in equilibrium in the absence of human intervention and of natural disaster. Temporary disturbances (for example through cultivation, climatic fluctuation, a hurricane, fire, flood, earthquake, volcanic eruption, plant or animal disease) imply a setback in the succession process and a regression to a sub-climax situation. When the disturbance ends, succession proceeds again towards the climax vegetation due to the self-organising feedback qualities of the ecosystem. Ecosystems with a greater complexity and species diversity have more feedback loops, can recover from disturbances more rapidly, and have more resilience stability than less diverse systems. Some ecosystems undergo cyclic changes either due to their own internal characteristics (pulse-stabilised climax) or due to small recurrent natural disturbances which are endemic to the region (cyclic succession or wave-generated succession). In these cases a cyclic equilibrium is reached, in which mature climax vegetation alternates either in time or in space (as well as time) with immature sub-climax vegetation as a normal state of affairs. In the second case, the vegetation is not absolutely homogeneous but consists in a steady mosaic pattern whose patches move but remain of the same proportional size. (Odum 1983:443-450; Odum 1993:59, 191-206; Stortenbeker et al. 1990: 32-36). This theory of plant succession is a homogenisation model. One implication of this

theory is that the taller plants and vegetations are, the closer they are assumed to be to the ideal situation and the higher their quality in terms of ecological potential; primary forests are therefore preferred in this view. Another implication is that human activity is always a disturbance to ecology, but in the absence of humans the highest possible vegetation quality automatically develops.

As mentioned in 2.1, the systems notions of negative feedback and equifinality explain how systems function at one particular moment in time and how they (re)converge, after temporary disturbance or divergence, to their predestined stable state, but they cannot explain long term change, differentiation and organic evolution (see also Von Bertalanffy 1968:153). In their search for a solution, evolutionary ecologists, for example Winterhalder (1994), try to retain system notions but prefer those that allow for process and differential development. From the late 1970s, the questions of whether nonequilibrium- or irreversible thermodynamics[25] can shed light on the problems of organic evolution and of the teleology[26] of ecosystems were much discussed among ecologists and philosophers. Prigogine & Stengers (1981:152-161) agree with the Odums that living matter has self-organising properties, but describe it as an unstable 'dissipative structure' which absorbs and dissipates energy, does not strive for thermodynamic equilibrium, and whose development is therefore not goal-oriented but unpredictable. It is a system whose operation and evolution cannot be described by general laws, but only in hindsight, through empirical historiography (Kwa 1984:32-33). During a symposium on thermodynamics, Allen (1985) concluded that the relationship between resource allocation and thermodynamics is too complex to explain how ecosystems are governed, and that ecosystems are history dependent (McIntosh 1987:335). Through empirical historical studies more and more ecologists started to recognise that the impact of ephemeral historical events and of the wider environmental setting on ecosystems can be so large or long-lasting that it is difficult if not impossible to speak of equilibrium states, and that ecological developments are less predictable than the cybernetic school pretends (McIntosh 1987:333-334; Zimmerer 1994:110-111). Sprugel (1991) describes several African and North American cases where a single forest fire, hurricane, plant- or animal disease, or small climate change was felt over hundreds of years. Theoretical modelling led to similar conclusions. In contrast to Odum's (1993:59) thesis that species diversity enhances resilience stability, May (1973) argued on the base of both empirical historical analysis of little species-diverse but resilient Asian agricultural systems and of theoretical foodweb models that stability may be unrelated or inversely related to species diversity, and that a population may have several rather than a single stable state (Kwa 1984:32). As a result, ecologists became reluctant to use the stability concept (Olff 1996:18). In my view, the flaws of ecological equilibrium models also make the connected assumptions of equifinality and of homogenisation in ecosystems rather problematic. Since I fully agree that ecological change is history dependent and can only be described in hindsight, I prefer – contrary to Prigogine and the evolutionary ecologists – to abandon the systems concept, which is so strongly connected to the notion of equifinality and equilibrium, altogether. Many new ecologists called for pluralism in data collection methods and in analytical models, including most importantly the empirical investigation of ecological histories (McIntosh 1987:331). This was also the methodological approach that I adopted. These new ecological insights remain so far mainly within academic walls. The equilibrium paradigm is still dominant in popular, semi-scientific and most scientific thinking.

### 2.2.2 Demography and ecological change

The idea that a given climatic- and geological zone can support a maximum amount of life was not new when Clements published his theory of plant succession. Almost 120 years earlier, the economist Thomas Robert Malthus (1798) formulated the thesis that each set of ecological conditions has a limited carrying capacity, which is a limited number of people whom it can feed (Bieleman 1992:12). If human population density grows beyond this number, starvation will be the result. This notion fitted well into the dominant view among 16th, 17th and 18th century Europeans that the world was in decay rather than static, cyclically renewed or in progressive improvement (Russel 1994:21-26). In the biophysical sciences the concept of carrying capacity is applied to the largest population of a certain organism which an ecosystem can support (Odum 1993; Whitmore 1990:64-65; see also Maserang 1977:474; Zimmerer 1994:112). Malthus' crisis narrative or 'essay on the principle of population' has remained highly influential until today. In 1904 for example, Sjollema (quoted in Van der Ploeg 1987:119) feared that the 'enormous growth of the population of the earth' would soon outstrip staple food production. On these grounds he pleaded, like in the 1960 the architects of the Green Revolution, for the breeding of high-yielding crops. From a more cultural than systems ecological perspective, Geertz' (1963) argued that if growing populations *believe* that resources are limited, they may fail to innovate to use these resources more productively, but rather prefer to share their (resource) poverty among a greater number of people. This may lead to what Geertz calls 'agricultural involution', where cultivators work harder per unit of land but with the same technologies and steadily declining labour productivity, leading to economic poverty if not to ecological poverty as well. Since the 1960s neo-Malthusianism has found many new supporters. The voices of Malthus' critics reached less far beyond academic walls.

Boserup (1965) launched a storm with the, for her time revolutionary, statement that population growth is rather a condition than a threat to agricultural growth. On the basis of a comparison of farming in a large number of 19th and 20th century societies, she admits that population growth in a given area implies increased *pressure* on natural resources, but argues that this rarely leads to their overexploitation. Rather it encourages indigenous agro-technological innovations and more sophisticated resource uses. The principal resource that she considers is land. Population growth would trigger agricultural intensification, which she defines as a gradual change towards a pattern of land use which makes it possible to crop a given area of land more frequently than before (1965:43)[27]. It includes increased cropping/fallow ratios, multiple- and relais-cropping[28]. She implies that farm output compared to available land also grows, and that this happens in a sustainable manner. Under pre-industrial conditions this agricultural intensification usually demands higher labour inputs per unit of land for activities such as weeding, ploughing, terracing, manuring, irrigating etc. At first it is often accompanied by declining labour productivity, especially when intensification is simply achieved by shortening fallow periods from long forest-fallow through mid-term bush-fallow to short-fallow with mainly grasses. But with more fundamental technological innovations, especially ploughing, returns to labour might increase again (ibid:28-34). Under industrial conditions, power-driven irrigation or chemical fertilisers combined with other methods of fertilisation could have similar results (ibid:113-114). At this point Boserup appears to be more optimistic than Geertz (1963) and than Malthus' predecessor Botero (1588, 1589 quoted in Glacken 1967:370-371, 373). Botero believed that Boserupian principles applied up to a certain density of population, and Malthusian ones from a God-given

threshold onwards, determined by the region's 'nutritive virtue'. Until this threshold, population growth would be a result of 'the virtue generative of men', including intensive cultivation, human industry, skill, ingenuity, and the introduction of seeds, trees and animals from other countries, which would be more important to make a country fertile and prosperous than soil fertility itself., but from this threshold onwards, 'if it [i.e. population] do not increase in infinite I must needs say it proceedeth of the defect of nutriment and sustenance sufficient for it.' [sic]

It should be noted that, at a time when most scholars still esteemed western science and top-down extension to be indispensable for agricultural development, Boserup (ibid:31-41, 56-58, 65-68) argued that (threatening) labour productivity decline is a powerful incentive for people to innovate, often more so than extension efforts, and that the knowledge for innovations is mostly generated locally or learned from neighbours or from people they meet during historical migrations. Since then, the dynamics of 'indigenous' or 'local' knowledge has become widely recognised. But the importance of the historical dynamics which Boserup underlines (ibid:116) has been recognised much less. Her analysis is most powerful where she compares data on the same area from different historical periods, for example on Java in 1816 and in the early 1960s, showing that population growth did not lead to the expected food deficits[29]. Contrary to Geertz (1963:80-81) she does not attribute this to agricultural involution but rather to growth. She is less convincing where she draws historical conclusions from a comparison between contemporary societies. A weak point of her model is her assumption that population growth, combined in some cases with knowledge obtained from neighbours, automatically triggers sustainable innovations and agricultural productivity growth. She states for example that 'Agricultural land use in the savannah areas has adapted to population densities. (…) the people living in the densely populated savannah region of the Indian subcontinent and in parts of West Africa, particularly Nigeria, have long ago learned to use their savannah environments more intensively. In these latter areas, permanent agriculture with annual cropping is maintained by the application of manure or other fertilisers and sometimes by irrigation.' (1982:233).

However, my study of the Fon and Adja shows that West Africans in densely populated savannah's can deal differently with similar demographic and ecological situations and that their solutions are not necessarily equally productive or sustainable. In 1965 Boserup described essentially closed systems and paid very little attention to external influences on local demographic, socio-economic and technological developments. In 1980, 1981 and 1982 she tried to redress this bias, pointing out that accelerated population growth is often due to improved health services (Boserup 1980:233), and that international politico-economic relations since the 1960s were often geared towards cheap food imports or food 'aid' from developed to developing countries, which inhibited the growth of food production in the recipient countries (Boserup 1981:188-192; 1982:280-282).

The neo-Malthusian camp struck back soon after Boserup's (1965) thesis, advanced through the publication of Ehrlich's popular book 'The population bomb' (1968/1971), Hardin's (1968) *Tragedy of the commons*, the Club of Rome's (1972) *Limits to growth*, and anthropological studies such as that of Maserang (1977). While Boserup expected sustainable solutions from technological innovation fuelled by population growth, Ehrlich and the Club of Rome considered population and industrial technology to be the principal causes of environmental degradation. Hardin (1968) applied Malthus' ideas to livestock populations, and Maserang (1977) argued on the basis of a survey in 124 countries around the year

1960 that carrying capacity can only grow if new sources of energy are tapped. Ehrlich's, Hardin's and the Club of Rome's neo-Malthusian views were well received by the general public. Criticism of Hardin only addressed his ideas on the (lack of) management of communal resources, not his assumption of carrying capacity[30]. I remember that the Dutch version of *The population bomb*, dramatically subtitled 'while you are reading this five people are dying from hunger', appeared when I was a schoolchild and had a great impact on my teachers, classmates, and the journalists of the newspapers and magazines we read. Ehrlich (1968/1971:144) wrote for the common man and for academics, and took an antagonistic stand against dominant policies of his time, encouraging his readers to 'exercise pressure on politicians to take effective measures to tackle the most urgent problems of humanity'. But not only 'ignorant' kids and sensation seekers hailed Ehrlich. In 1998, thirty years after 'The population bomb' and in spite of the fact that it had not yet exploded, Ehrlich visited the Netherlands and Wageningen University to receive a prestigious award. Wilson (2002) in the *Scientific American* repeated the Malthusian view that demographic pressures result in more forest loss, more land degradation, increased flooding, drought, fossil fuel consumption and climate change. Paul & Anne Ehrlich (1970/1972:193) based their doom scenario on a systems approach to ecology. They portray human activity, in particular agriculture, logging and the construction of dams, buildings and pavements, as damaging to ecosystems. These reduce biodiversity, create deserts and wastelands, and destabilise or destroy ecosystems (ibid: 202). Ehrlich & Ehrlich (ibid:119-123) did not expect agricultural productivity to increase from fertilisers and high-yielding varieties because of lack of capital, credit, infrastructure, water, and education on the advantages of fertiliser for farmers, and also a lack of demand for food. This last argument paradoxically undermines Ehrlich's own theory and rather supports Boserup's view.

One wave of criticism aimed at both Boserupian and neo-Malthusian models came in the 1980s from political ecology. The geographers Blaikie & Brookfield (1987:30, 102-110) acknowledged that increased inputs of labour, nutrients or capital might raise the productivity of land without degrading it, and that African farmers often adapted their indigenous land management practices successfully and sustainably even to new ecological environments or to a certain degree of cash crop production, but stated that in spite of this 'there is little doubt that there has been a large increase in degradation during and since the colonial period.' They attribute this to the fact that most land was managed by an elite social class in pre-colonial, colonial and post-colonial states which squeezed surpluses from small farmers or expelled them to formerly avoided (ecologically fragile) areas, the ecological unsustainability of the technological packages that often accompanied cash cropping (monocropping, varieties that produced little crop residues, ploughing fragile soils etc.), and poor cultivators' lack of access to productive resources such as labour or nutrients, which often frustrated soil-conserving investments and led to land degradation. The neo-Marxist Bernstein (1977/1982:165-166) argued that commoditisation combined with deteriorating terms of trade or development schemes which promote ecologically or economically unsustainable cultivation techniques cause African farmers to exhaust their soils or to cultivate more marginal lands.

Boserup's thesis has triggered not only theoretical debates but also a number of empirical studies. On a more theoretical level, political economists argue that surplus extraction from peasant societies, be it through taxation or through unequal market relations, forces peasants to exploit their environment. Longitudinal studies of change in a single area, covering several decades, support Boserup in many cases and aspects. One case is that of the hilly,

semi-arid Machakos district in Kenya. In the 1930s, the colonial administration was concerned about soil erosion and land degradation and feared that the district was beginning to exceed its carrying capacity. They considered Machakos an area with such low potential that it deserved very little government attention. Photographs, written and oral evidence from the 1930s indicate that erosion was indeed a problem on the slopes. Between 1930 and 1994, the population of the district multiplied by five. But agricultural production per capita multiplied by about three, and the condition of the land resource improved in many respects due to a generalisation of terracing initiatives by local farmers. During the colonial period little land was terraced (about half of the district land in 1948), compulsory narrow-based terracing programmes had little effect, and terraced areas declined when the programmes were stopped in 1957. But between 1960 and 1978, without external pressure or support farmers developed their own bench-terracing techniques and by 1978 about 96% of the Machakos land was terraced. Income and knowledge acquired through migrant labour were important assets to achieve this. (Tiffen, Mortimore & Gichuki 1994:1, 6-11, 16, 178-201, 261; English, Tiffen & Mortimore 1994:1, 24-28, 69). Dietz (1996:54), a social geographer with fieldwork experience in southern Kenya, finds their message convincing. Koning & Smaling (2002:7, 10) object that Machakos was quite unique in that it had good access to markets, that its severe erosion problems in the 1930s coincided with the world economic depression, and that its farmers' bench terracing initiatives were facilitated by high world market prices for their crops in the 1950s and 1970s. Without markets and favourable prices few farmers would have been able to reverse a degradation trend.

The Malthusian perspective that humans and their numbers constitute a danger to ecological sustainability received a new boost in 1987 by the 'Brundtland-report' *Our common future* (the report of the UN World Commission on Environment and Development). In the 1990s and early 2000s the writings of the politicologist of international relations Thomas Homer-Dixon, the World Bank, and others (Watts & Peet 1996/2004:5; Hinrichsen 1997) did the same. While Ehrlich (1968/1971) wrote mainly for the general public and against policymakers, Brundtland' and Homer-Dixon's writings were partly commissioned by international and US political bodies and became highly influential in policy circles. Now it became 'politically correct' or acceptable to major political players of the time to be concerned about environmental degradation. Contrary to Ehrlich and the Club of Rome, who considered industrial technology to be one of the major roots of the ecological problem because it produces toxins and enables population growth, the Brundtland report and Homer-Dixon mainly blame the rural poor for using environment-degrading techniques (Hartmann 2001:39, 47). Their argument is that poor people's lack of knowledge and capital keep them from managing resources in sustainable ways. Homer-Dixon states that population growth and unequal access to resources forces the poorest groups to migrate to ecologically vulnerable areas and to exploit them until they are irreversibly degraded, which he calls 'ecological marginalisation' (ibid:41; Homer-Dixon 1999:16, 73-74, 77-79). Unlike Blaikie & Brookfield (1987) however, Homer-Dixon and the Brundtland report pay little attention to supra-local economic and political inequalities as causes of poor farmers' lack of access to capital and other resources and their migration to fragile areas. As opposed to Blaikie & Brookfield (1987:102-104), Homer-Dixon has a very low esteem of local people's knowledge of sustainable management practices and of their capability to acquire such knowledge. He thinks that problems generated by environmental scarcity can be alleviated by ingenuity, by which he means 'ideas applied to solve practical social and technical

problems'. Through social ingenuity, markets, legal regimes, financial agencies, educational and research institutions, and horizontal as well as vertical management (i.e. horizontal and vertical integration between system levels) can be created, improved and maintained. These would be a precursor of technical ingenuity and aid a 'successful' use of resources. Homer-Dixon (1999:109-120) believes that ingenuity can only prosper with economic affluence, strong States, large-scale coalitions and -institutions, and social harmony, but not in poor countries or with 'narrow' coalitions within small groups. Consequently, he is sceptical of Boserup's argument that ingenuity can be generated endogenously by local land users (ibid: 115). His plea for vertical integration and large-scale coalitions might stem from the fact that his studies were commissioned by international and US political entities, who perceive treats to international political relations and to their own security from poor but independent groups 'lacking' the conditions for ingenuity.

As will become clear later, my comparative study of the Fon and Adja falsifies Homer-Dixon's thesis that without horizontal and vertical integration, 'scientific' knowledge and other external institutional support, and large scale coalitions, population pressure inevitably leads to environmental degradation. The Adja case rather provides support for Boserup and the 'indigenous knowledge' or 'local dynamics' approach. The Adja, who were organised in small groups, little integrated in larger entities, and received little 'scientific' knowledge or other external institutional support, were more inventive and better environmental managers than most Fon, who were vertically more integrated and more receptive to external institutions.

A flaw in Homer-Dixon's model is that it confounds economic poverty with the lack of access to natural resources. Poverty might depend on more than natural capital alone, as also the Fon and Adja cases will show. Even more problematic, in the light of environmental policies, are the links which Homer-Dixon and the Brundtland report assume between poverty and exploitation of natural resources on the one hand, and 'wealth' and sustainable management on the other hand. 'Wealth' includes economic development and for Homer-Dixon also ingenuity. However, environmental pollution and resource-'mining' by relatively affluent farm- and industrial enterprises has been sufficiently documented. Evidence does not support the hopes that economic and human capital will always be invested in environment-conserving practices. To the contrary, more resource-exhausting activities often require higher levels of investment, so that the poor are often incapable of engaging in these. Therefore, I find it problematic that Homer-Dixon (1999) and Blaikie & Brookfield (1987) associate migration to formerly avoided, ecologically fragile areas and ecological marginalisation only with the poor. There are enough examples of well-endowed pioneers migrating to ecologically fragile frontier areas, amongst others, farmers in Australia as Homer-Dixon admits himself (Hartmann 2001), tomato growers in Mexico (Torres 1994:18, 122-124), ranchers, miners, oil companies, loggers, large soybean and coffee farmers in the Brazilian and Ecuadorean Amazon who destroy the forest not only for their activities but also to secure property rights and to pave roads (Schmink & Wood 1987; Cleuren 2001:63-67, 78-87, 100-116), the international logging industry in eastern Cameroon (Cleuren 2001:136-141), and national and multinational pseudo-legal logging companies in Kalimantan, Indonesia (Casson & Obidzinski 2002). In West Papua it is precisely the lack of means of transportation which limits deforestation to narrow strips along rivers and contains over-fishing by small-scale fishers to inland watercourses (Visser 2001:81). In the 19th and 20th century South Bénin only rich and medium Fon and Adja farmers established fields in formerly

avoided or less favoured areas such as river floodplains or the savannah to the north of the plateaux, because the poor simply can not make the investments associated with migration, land clearance, construction of huts or houses, establishment of new social networks, gifts (mainly of drinks) to local chiefs of the land, gifts to local political leaders, etc., as the case studies in Chapter 8 will show. Whether pioneer activities are degrading depends on their management style. Sustainable shifting cultivation has been practised for many centuries, but if 'pioneers' lack the knowledge to manage their new ecological environment in a sustainable way, and/or migrate with a 'mining mentality' in order to grab what they can and then move on to the next frontier, the consequences can be rampant.

Homer-Dixon (1999) also argued that scarcity of natural resources, which includes in his definition unequal access to resources, encourages social conflict. This thesis was welcomed in policy circles, probably because of its simplicity and predictive power (see Scott 1998), but received academic criticism from Fairhead (2001), Hartmann (2001), Roba & Witsenburg (2004), Noorduyn (2005) and many others. I summarise some of the criticisms and add my own. First, Homer-Dixon's concept of scarcity is analytically problematic because it blurs environmental degradation, increased demand, and unequal access. The last category is inherently political and creates a too automatic link with conflict[31]. Second, his methodology is faulty because he only studied cases in which environmental scarcity and violence occur together. This implies amongst others that he disregards how resource abundance motivates aggression. The most violent conflicts in 20th century Africa have been about diamonds, gold, uranium, oil, gas, copper, niobium and rubidium, which is probably the reason why Homer-Dixon excludes non-renewable resources from his model. Nevertheless, the abundance of timber and other renewable resources has also triggered conflicts (Fairhead 2001). People are often more inclined to fight for wealth than for poverty. Third, Homer-Dixon neglects the possibility that violence is the cause rather than the effect of resource scarcity. Fourth, he fails to search for political and other ideological reasons for conflict which might exist even in situations of scarcity (Hartmann 2001, Fairhead 2001). Roba & Witsenburg (2004: 720-735) argue that Homer-Dixon makes the same mistake as Hardin (1968), namely to assume that common property resources are mostly open-access resources and hence open to individual over-exploitation or to violent appropriation unless a large formal institution regulates their use. In their ethnographic study of pastoralists in northern Kenya, where water is the most limiting natural resource, Roba & Witsenburg show that ethnic violence and conflicts about cattle are more frequent in wet than in dry periods. What is more, people prefer to negotiate, reach consensus and cooperate around waterholes. Conflicts occur in times of abundance of water and are rather about cattle, whose numbers are not limited but depend on the availability of water, and about national politics. In other words cattle, which is property and a less 'open access' resource than water holes is a greater source of conflict than these. According to pastoralists, conflicts and cattle raids in times of drought would be too costly and too great a risk to the livestock and its owners' survival. Furthermore, inter-ethnically accepted norms regarding rights in wells and proper reasons, times and forms for warfare – permitting revenge for cattle raids, prescribing reconciliation during religious ceremonies etc. – seemed to be well respected[32]. In her study of pastoralists and cultivators using the same agro-pastoral lands in North Cameroon, Noorduyn (2005) isolated many other reasons besides unequal distribution of land, why discontent sometimes escalates into violence and sometimes not. Those with the least access to land were rarely the most belligerent. She concludes that Homer-Dixon's thesis can draw attention to possible causes

of violence, but to prevent or manage conflicts in concrete cases a more detailed, multi-dimensional analysis of the situation is needed; it is dangerous to make a distant diagnosis based of Homer-Dixon's model alone.

South Bénin has a long history of violence and of high population densities, and suffers now from environmental degradation. Therefore Homer-Dixon's thesis appears an appropriate framework for the analysis of this case. However, South Bénin's historical violence was hardly ever caused by scarcity of natural resources as usually defined. One does not need to do field research to perceive this. The warrior Fon kingdom used violence against neighbouring groups to capture people, to establish political control, and to acquire weapons in exchange for captives, but rarely to acquire land except sometimes together with the people who lived on it. Rather, as an inhabitant of a village that was raided by king Kpengla (1774-1789) put it to me:

> "The king went everywhere to 'search' for young men and women and even animals to *increase* the population of the Abomey neighbourhood and to give them tasks. When some inhabitants of our village heard the soldiers coming, they hid in a *Lisɛ* (*Blighia sapida*) tree that was growing in the bush around the village, but they were discovered and deported."[33]

18th and 19th century observers agreed that the Fon plateau was more densely populated than its surroundings, especially until 1860 (see Chapter 8 and Manning 1982:31). Only during the era of palm oil exports of the second half of the 19th century, however, did some Fon invade the eastern Adja plateau to appropriate agricultural products and/or land and in doing so chased away some of the Adja. In recent decades many of these Fon lose their interest in agriculture and their access to unpaid (family) labour, return to their own degraded plateau, and abandon their Adja plateau fields to Adja farmers (see 6.3.2, 6.3.4, 8.1.2 and Wartena 2001:250). This raises the question of whether the violent Fon were poor or rich. They were on average poorer in natural capital than the Adja, especially in fertile land, but richer in supra-local political dominance and in non-agricultural economic assets. This will be described in Chapters 5 and 6.

Since colonisation however (1894) and especially since 1972, Bénin has been an oasis of peace and calm in Africa, in spite of the fact that its population density is now much higher than before (the population of the Fon plateau has multiplied by about 4 times and that of the Adja plateau by about 5 during the 20th century, see Chapter 8). Therefore, unless one includes *people* in the definition of natural resources for the pre-1860 period – but this would be a very unconventional and therefore not a helpful definition[34] –, Homer-Dixon's thesis that resource scarcity causes violence never held for South Bénin except perhaps for 1860-1894. It certainly does not apply for the colonial and post-colonial period.

### 2.2.3 Indigenous management of natural resources: getting local ecological history right

Until the 1990s, the different approaches to ecological change had four characteristics in common: They looked for global trends, they accepted the equilibrium model of the school of systems ecology, they predicted homogenous ecological outcomes under given climate and geological conditions and population densities, and they were based on theoretical deduction and some literature research, but never on holistic historical-ethnographic studies. Though Boserup (1965, 1980, 1981) and Homer-Dixon (1999) did some historical research on concrete societies, they limited themselves to written, secondary sources. They focused

on a few features taken out of context of a fairly large number of societies and were quick to draw universal conclusions. Though Blaikie & Brookfield did fieldwork in Nepal and Papua New Guinea, they hardly referred to these data in their 1987 publication and mainly used secondary sources. These literature studies do not give much insight in social processes of change into people's relationships with natural resources.

Since the early 1990s, a growing number of scholars have used a multi-methodological approach for a long-term historical-ethnographic study of ecological change in one or two societies. This I call the ethno-historical approach. Coming from various disciplinary backgrounds – history, geography, anthropology, botany, ecology, forestry, agronomy, landscape planning, and geographic information sciences etc. – they had very little in common except that they were more concerned with understanding local processes than with defining global trends. They largely ignored each others' work, often even that of the leading scholars among them (as I judge by their references and by my talks with some of them) and certainly had no common theoretical agenda except perhaps the 'postmodern' goal to turn away from universal models and from types of research that would support these. Besides using multiple research methodologies they drew insights from various disciplines. Those who studied African societies invariably combined ethnographic fieldwork and oral history methods with other sources such as archives, photographs, and various technical measurements. In spite of their different backgrounds they all came to remarkably similar conclusions: there was no linear relationship between population density and ecology, African ecologies (even so-called natural ones) were much more man-made than previously assumed, management of natural resources was embedded in socio-cultural practices, and human intervention often but not always increased biodiversity and carrying capacity of the land. They all developed a deep appreciation for the knowledge and the cultures of the people whom they studied, but whether this was the cause or effect of their approaches I cannot tell.

An early representative of these multi-methodological, ethno-historical case studies was that of Tiffen, Mortimore, Gichuki and England (1994) in Kenya which I discussed in section 2.2.2, two later ones are those of Mazzucato & Niemeijer (2001) and Lentz & Sturm (2001) (see 3.2.4). Other influential studies during the last decade are those of Fairhead and Leach. Together with Mearns, these two authors belong to a small group who tries to develop a broader paradigmatic framework for their case study findings. Because their research in many ways runs parallel to mine, I will concentrate my discussion on the work of these three authors, but will mention in passing some other Africanists and historians who used similar approaches. Then I will present some critical notes on the work of Fairhead, Leach and Mearns and their intellectual companions. Finally I indicate how the present study of the Fon and Adja sheds new light on the debate.

Fairhead, Leach, Millimouno & Kamano studied ecological changes from the mid-19$^{th}$ century in two areas around the forest-savannah border of South Guinea, namely the Ziama forest biosphere reserve and the forest-savannah mosaic zone of the *préfecture* Kissidougou. Their sources comprise ancient traveller accounts, oral accounts of the areas' inhabitants, linguistic evidence, colonial government reports, newspapers and maps in the colonial archives, air photographs and satellite images of the area taken at various dates between 1951 and 1992, and social anthropological methods to investigate how the inhabitants manipulate ecological processes, including their own observation of these processes. They found that in the presently inhabited zone, in spite of population growth, the forested area had not declined. Near villages it had even increased because settlers, through their work

of planting trees, creating fire protection, improving soil fertility, structure, and water conditions through early burning, tillage, grazing and scattering waste, encouraged secondary forest formation around them. Through settlement, they created forest islands in savannah areas and considered their landscape to be enriched. The Ziama forest 'reserve' in contrast, considered by 20th century conservationists as a relic of the Upper Guinean forest, was in reality densely populated and intensively cultivated in the second half of the 19th century until its population was decimated by warfare. (Leach, Fairhead, Millimouno & Kamano 1994; Fairhead & Leach 1994, 1995, 1996a, 1996b; Leach & Fairhead 2000). These findings ran counter to widely held views among ecologists, foresters, policy makers, donor agencies and the general public, and were met with disbelief or dismissed as uncommon exceptions. However, more and more historical studies of African savannah and forest-savannah areas revealed similar processes.

The historian Kreike (1996) uses a similar combination of research methods as Fairhead & Leach, but gains additional insights from comparing the Kwanyama and the Sen (Bushmen) in South Angola and North Namibia. In the 19th century, the Kwanyama lived in Angola in a park landscape of fields of millet, beans, melon and grazing land under fruit trees and palms of different sizes. The Sen lived in North Namibia in a landscape of thorn bushes, which the Kwanyama classified as wilderness (*ofuka*), meaning for them 'not cultivated, domain of wild animals' and contrasted with 'human settlement' (*oshilongo*, domain of palms, fruit trees and domestic animals). For the Sen however their own land was not wilderness but human settlement, a perspective which is common to hunter-gatherers according to Ingold (1996). From the late 19th century onwards, drought, warfare, cattle diseases and from 1915 also colonial labour recruitment and tax collection made the Kwanyama abandon their fields and flee to North Namibia. There they recreated their cherished park landscape by soil tillage, adding manure, planting (fruit) trees, constructing wells, etc. The total woody biomass probably increased compared to the former bush land. In the Kwanyama's eyes the landscape was enriched through settlement. At the same time their former fields in Angola turned to a bush-wilderness similar to what North Namibia had been before.

Mazzucato & Niemeijer (2001) challenged neo-Malthusian assumptions about the relationship between demography, intensity of cultivation and soil degradation though a local historical study in Burkina Faso. Comparing N, P, K and organic matter content of soils in Eastern Burkina Faso under varying intensities of cultivation and soils that had been uncultivated for at least 20 years but that local informants considered equally suitable for agriculture as the cultivated land, they found that all three nutrients showed higher values on cultivated than on long-term uncultivated land. Nutrient levels tended to increase with duration of cultivation and management intensity[35]. They found no relationship whatsoever between yield and population density; yields were mainly determined by average annual rainfall. What is more, cereal and groundnut yields increased significantly over the 1960-2000 period despite a doubling of the human population and a general downward rainfall trend[36]. Soil chemical fertility levels in Eastern Burkina Faso were remarkably similar in 1969 and 1996 despite a tripling of the regional population over this period[37].

Popular opinion, expressed by Ehrlich & Ehrlich (1970/1972:202) and by the pastor in the story in the introduction of this chapter, holds that human activity, in particular agriculture, logging and construction works, reduces biodiversity and destabilises and destroys ecosystems. This view is obviously based on the equilibrium model of the systems ecology school. The assumed relationship between species diversity and stability was first challenged

by the ecologist May in 1973 on the base both empirical studies and a foodweb theoretical model (Kwa 1984:32; Olff 1996:18). More and more, also empirical investigation shows that human activity often increases rather than reduces biodiversity. For example, hunting and gathering increases species diversity in the Congolese rainforest through the creation of forest clearances, discarded food waste etc. especially in camp sites and abandoned fields (Shikawa 1996:473-476).

Nikiema (2005) studied parkland species diversity in Burkina Faso. He compared parkland where people had their fields and fallows with protected 'forest'[38]. Much to the surprise of ecologists[39], he found that the biodiversity was higher in the cultivated zones than in the forest and that also many 'wild' trees and shrubs which were considered to belong to wetter areas grew in the fields and fallows, because soil tillage created a favourable environment for them, farmers protected them, and sometimes sowed them.

Fairhead, Leach and Mearns went one step further than merely presenting local histories of sustainable environmental management. Getting African ecological history right, they contend, has important scientific and policy implications. Therefore they go to great lengths to expose the roots of conventional assumptions or 'received wisdom on the African environment' as they call it. Leach & Mearns (1996) and Leach & Fairhead (2000) argue that the symbolism of neo-Malthusian images is deeply embedded in Western popular culture and religion, and that a small number of scientific ideas and theories have been pivotal in environmental debates, especially the notions of climax vegetation community, carrying capacity, equilibrium, causality between vegetation and rainfall, and the 'tragedy of the commons' argument[40]. These notions, combined with a strong Western emphasis on nature-culture opposition, makes environmentalists prefer tall trees (because closer to the climax) over smaller ones, and nature-without-humans over nature touched by man. Policymakers' preference for simplified models for analysis and intervention approaches, further nourishes conventional thought. Simplified models are easily grasped and communicated by common people, Westerners and Africans alike. Also conventional research methods produced 'received wisdom', because they mainly rely on snapshot, short-run and localised small-scale observations and extrapolate from these. Historical data, especially of longer time-series, were rarely used and often unavailable. Fairhead & Leach (1994, 1995, 1996a, 1996b) argue amongst others that French colonial images of West African forests were until 1909 based on deductive modelling and not on empirical observation, and that in 1909 an AOF-wide survey was conducted to describe the actual forests. However, my studies in the Dahomean colonial archives suggest that Fairhead & Leach have not yet been critical enough of colonial forestry research. Correspondence to and from various South Béninese *cercles* contained detailed information about the 1909 forestry reports that local administrators were asked to provide. The fact that early colonial administrators rarely left their residences, and if they did so, were carried along in hammocks and avoided narrow paths, combined with the speed and content of the reply of the *commandant* of Aplahoué on 25 April 1909 (Wartena 1988b:261-264), strongly suggests that he did not visit the forests but based his description on informants and on his own preconceived ideas[41].

Crisis narratives are a powerful tool for government and donor agencies to claim rights to control and manage natural resources, to mobilise funds to sponsor intervention, and to derive revenue from 'natural' reserves in the form of fines and sale of permits. Under the hegemony of such 'wisdom' received from powerful western scientists, politicians and rich

donors, most African scientists, policymakers, development practitioners, schoolteachers, and even many local villagers fail to perceive local environmental realities, and blindly or opportunistically reiterate the hegemonic discourses. The simplicity of the carrying capacity models, combined with the fact that degradation as a result of human use can sometimes be observed, further contributes to their local acceptance. The few local farmers and researchers who become aware of the contradictions between the internal and external perspectives deal with it in different ways. Many supplant the inside view; only some of them recognise after some time that they were blinded by the hegemonic discourse. Leach & Fairhead (2000: 38-39) describe the astonishment of the Ivorian historian Ekanza when he heard elders in the now forested Moronou region recounting how the territory had been open savannah when they occupied it in the 18th century. Leach herself (ibid:41-42) admits that, at the time of her 1987-1988 fieldwork in Sierra Leone she had accepted the hegemonic view that the Gola forest reserve was the last remnant of rain forest in the area. Since then, the study of historical sources had convinced her that the Gola just like the Ziama reserve had been inhabited and farmed in the 19th century.

In South Bénin, circles of trees and bush exist around all Adja villages, be it that oil palms more and more replace other woody species (Kerkdijk 1991:30-32). These circles are commonly regarded as remnants of a 'natural forest' that once would have covered the whole Adja plateau, even though Adja villagers can explain how they value and manage these strips of bush. Brouwers (1993:84-89), the Adja scholar Koudokpon (1994) and I (Wartena 1994b:77) initially accepted the hegemonic discourse and called this vegetation 'natural forest' in our publications. However, Fairhead & Leach's study of Kissidougou and the discovery of new oral and written historical accounts on South Bénin made Koudokpon and me reconsider the evidence, and made us understand that also many Adja forest islands were created by men. Only upon a visit of Fairhead to Wageningen, Koudokpon remembered that the first thing his parents did, when settling in the 1970s in a new village in the savannah, was to plant a circle of bush around the hamlet, and that the founders of neighbouring Adja hamlets did the same[42]. His reminiscences are supported by other evidence. According to a traveller's account from the 1880s, planting prickly plants as defence was a common practice of Adja living in the savannah just north of the plateaux (Burton 1893/1966 I: 15-17, 245-246; Herskovits 1938 II: 93-94). Myths of origin of several Adja villages refer to the creation of a prickly and/or woody defence (see 4.1.1). According to Fon narratives and the traveller Snelgrave (1734/1971:121) the 18th century Fon also managed forest islands not far from their villages. The *Blighia sapida* tree that grew in several of them is a semi-spontaneous fruit tree that rarely occurs in undisturbed vegetations. But in the 19th and 20th centuries the Fon developed a disapproving attitude towards (semi) spontaneous vegetation near their villages, labelling it 'dangerous' (because attracting snakes), 'dirty' and 'backward', and clearing it to 'make our village emerge from the bush' (see 5.4.2). Koudokpon's memories clearly show the degree to which rural people can 'forget' or mistrust their own experiences when they enter the scientific arena. Therefore, I agree with Leach & Fairhead (1996:25-228; 2000) that environmental discourses are not simply imposed by monolithic powers, as extreme interpretations of Foucauldian discourse theory would claim, but are products of 'argumentative interactions' and 'discourse coalitions' between various actors – concepts which they borrow from Hajer (1995:54, 65, 264) – and of the intellectual contents of the discourse itself.

### 2.2.4 Advantages and limitations of the ethno-historical approach for my research

Eco-pessimist thinkers mainly strike back by reiterating conventional macroscopic paradigms and research findings. Koning & Smaling (2002) accuse Fairhead & Leach of neglecting global economic relations and trends, of downplaying environmental problems, and of presenting only case studies instead of looking for global trends in environmental change. Some authors who tried to disprove soil degradation trends would have used faulty methodologies, for example Mazzucato & Niemeijer (2000) when they compared soil samples from 1969 and 1996 (ibid:7). Although Koning & Smaling (2002:5-6) agree with Amanor (1994), Tiffen et al. (1994), Mazzucato & Niemeijer (2000), and Fairhead, Leach and Mearns and other critical authors that farmers' knowledge and strategies have been neglected in conventional eco-pessimist research, they believe that this flaw is sufficiently overcome through the use of participatory research methodologies, including participatory soil evaluation and participatory rural appraisals. Such participatory appraisals, as well as long-term experiments, would show that under continuous cultivation with low external inputs, African soil fertility decreases rapidly and yields go down. They ignore that there is a wide gap in depth and reliability between participatory appraisals and multi-methodological ethnographic research. Much of what goes for participatory research neither deserves the label 'participation' nor the name 'research'.

Also Smaling & Toulmin (2000) search for global trends. Under the title: *The itinerary of soil nutrients in Africa: destination anywhere?* they review existing studies on soil nutrient flows. Such a title betrays a belief in a predetermined outcome of historical soil fertility management processes. They conclude that nutrient balances on most farms are negative and that soils overall are being depleted. In general, only cash crops in the proximity of markets which enable investment in soil fertility maintenance and cherished plots such as home gardens and Ethiopian *ensete* plots receive sufficient nutrients. Koning, Smaling and Toulmin's search for and belief in worldwide trends, historical as well as future ones, was apparently guided by conventional theoretical as well as policy thinking. Koning & Smaling (2002:8-10) show that they endorse conventional system notions such as 'world system', 'agricultural systems', 'vicious spirals', 'Malthusian maelstrom' and 'ecological equilibrium', and attribute a dominant role to world markets and prices. Smaling was, with Stoorvogel, in 1990 the author of the FAO commissioned 'Assessment of soil nutrient depletion in Sub-Saharan Africa: 1983-2000', which predicted continental trends (of degradation) for the next 10 years to come on the basis of, as Smaling & Toulmin (2000:195) admit themselves, a very reductionist analysis: They estimated values where data were lacking, dropped much detail where it was available, and assumed discrete ratings for variables that are normally represented by a continuum. As explained above, policy makers ask for simplified classifications of reality into a few (supposedly uniform) categories, for aggregated and averaged data, for predictive models, abhor complexity because it is difficult to deal with in policy, and as a result tend to be blind for it. Likewise, grand scientific paradigms of the causal-functional type disregard diversity and predict uniform trends and outcomes. Scoones & Toulmin (1998) explicitly tried to make policy recommendations in their DFID-commissioned publication 'Soil nutrient balances – what use for policy?', but present a more prudent and fine-grained view than Toulmin did with Smaling two years later, for they (1998) caution over the uncritical use of soil nutrient balances and particularly of aggregate studies for policy purposes, mainly because of the methodological difficulties involved in

understanding the diversity and complexity of these balances and the uncertainties within smallholder farming systems.

The facts that conventional discourses are mainly propelled by powerful actors (Western scientists, states, policymakers, well-endowed donors etc.) while counter-narratives stem from poor African farmers and a few populists intellectuals, do not suffice to invalidate the former. Neither are simple models or policy-commissioned reports necessarily wrong. The question whether there were global *historical* trends is without doubt a relevant topic for a huge research project, although the attempt to predict *future* trends is in my opinion too ambitious. Also the desire to inform policy with scientific insights is a legitimate concern. But these were not the ambitions of Fairhead & Leach, Tiffen et al., Mazzucato & Niemeijer and the other environmental ethno-historians. Koning & Smaling (2002) seem to misunderstand their opponents' intentions. The revisionist historians mainly wanted to highlight the so far neglected role of local cultures and people's practices on environmental change, but they did not intend to study global historical trends in ecology or economics nor did they want to predict the latter. Fairhead & Leach (1996; 2000) only considered worldwide flows of discourse, not of nutrients, commodities or money. Studying discourse on a universal scale and social ecology on a local scale is, I grant, a strange bias of their work.

The strength of local environmental research is that it can tap multiple historical sources and gain deeper insight, by including inside information and triangulation, than is possible with a one-dimensional macroscopic view. An analogy from air photography illustrates this point. One photo gives a crude flat image of various shapes and shades of grey tones. Two photos seen through a stereoscope reveal the landscape's relief but are still too crude to discern much of what the greys depict. Combined with ground observation these shades of grey acquire meaning and content. Until recently, almost all research in Bénin relied on survey questionnaires or on key informant interviews alone, which tended to produce biased information, as I will show in section 3.3. In recent years a greater number of historical sources on African landscape history have become available, including air photographs and satellite images and other time-series observations. Also awareness of the value of archives, oral sources, soil and pollen samples for African history, and the skills to analyse these have grown over the years. At the time of my research, classification of Bénin's colonial archives was in progress and photocopy services started to spread in town, which gradually facilitated archival research. With Gluckman (1967:xii, quoted in Ellen 1984:16) one might say that these new techniques of observation created a new discipline, in this case the discipline of environmental ethno-history.

Tapping these relatively new sources and combining them in new ways led in many cases to conclusions which radically differ from received wisdom on the African environment. The new ethno-historical approaches invariably reveal a greater, more socially embedded and often ecologically more sustainable impact of Africans on 'nature' than previously assumed. This should give food for thought. True, the new techniques of observation have so far 'only' been used for the study of a limited number of small locales and communities. These alone do not suffice to invalidate the findings from conventional research. But the fact that an important percentage of the ethno-historical environmental studies provide radically new and contrasting insights, strongly suggests that something has been overlooked by conventional methodological approaches.

The criticism that revisionist environmental ethno-historians have so far neglected supra-local relations and degrading practices and trends still stands. Emphasising their new findings of local land-improving practices, they pay little attention to farmers' socio-economic

environments and to possibly less sustainable management styles. In the present study of Fon and Adja history I take an intermediate position between the macroscopic conventional and the new micro-historical approaches. Using ethnographic methods for the study of two so far neglected local cultures and local histories, my study reaps the benefits of insider analysis. In addition, I also make extensive use of global historical sources on the local past, and explore so far rarely employed methods to the study of African environmental history. My research also reveals much local ecological ingenuity and several land-improving practices of farmers. However, the comparison of two cultures, two regions, networks and processes makes my study less 'micro' than those of most other ethno-historians, Kreike exempted. It allows for a degree of generalisation in my findings, but more importantly, it enables me to evaluate the quality of farmer's environmental management practices in a regional perspective. It shows that not all local styles in the same environment are equally sustainable. Some farmers are more knowledgeable than others[43], and some appear to be better natural resource managers than others. Therefore, farmers can learn much from each other, and not (only) from agronomists.

## 2.3 Homogenising impacts of markets, science and State

Most of the grand socio-economic theories pretend that markets exercise homogenising forces on socio-cultural values and human organisation. Many thinkers also assume that homogeneous production technologies spread through markets, aided by science and policy. The result is a worldwide homogenisation of culture, social relationships, technology etc., often glossed as 'globalisation'. Such convergence has been widely discussed and is largely taken for granted. Here I will only sketch briefly the major arguments of convergence models of cultural change under the impact of markets, science and policy. I will first present approaches to the impact of markets on society, in particular commoditisation theory and commercialisation theory. Although these two theories belong to the Marxist and the modernisation camps respectively, they both argue that the world market fundamentally transforms social and productive relations, which become increasingly shaped according to the logic of the market. Partly linked with markets and the globalisation of supply and demand chains are policy processes and the use of formal science. In the next section (2.3.2) I discuss perspectives on how scientific knowledge, bureaucratisation, and globalisation of supply and demand chains favour the standardisation of production techniques. Finally I will indicate how a network approach can overcome the limitations of these homogenisation models.

### 2.3.1 Commoditisation and commercialisation approaches

A commodity is a good or a service which can be 'sold'. This is because it has use value for others and because there is a market for it. In being sold it acquires exchange value[44]. Most commoditisation scholars, for example Bernstein (1977/1982:162), regard only those goods and services which are exchanged for general purpose money as commodities. Kopytoff (1986:69) takes another view, which holds that commodities may also be bartered for another commodity. He distinguishes commodities from other goods exchanged in that a commodity transaction is a discrete[45] transaction, whose purpose is primarily to obtain the counterpart, and not the establishment of social relationships to open the way for another transaction. I find this definition problematic, because a producers' primary purpose

is often difficult to discern[46], and will use the concept commodity in its traditional sense as a good sold for money, including cowry money (the currency of pre-colonial Bénin). A good or service becomes a commodity in my own and Kopytoff's (1986) usage of the term only at the moment that it is sold; whether this will happen is not always clear at the time of its production[47]. Also the reverse happens; intentions are not enough. The Fon and Adja sometimes produce with a desire to sell a surplus, but poor yields, storage losses or unexpected non-commercial needs intervene and prevent actual sale. At other times they intend to keep a good for themselves, but unexpected cash needs incite them to trade it. In the same way as a good or service becomes a commodity only at its sale, I label a production process as commodity production only after the product is sold. In a historical description such as mine there is no problem that this is often not yet known at the time of production. My definition differs in this regard from that of orthodox commoditisation scholars, who regard as commodity production any production process that is (partly) dependent on markets for its reproduction, even if, as is mostly the case, not all its products are sold. I find this definition problematic because, as I have argued elsewhere (Wartena 1988a), dependency on markets is rarely absolute. Subsistence goods, as I use the term here, are produced and consumed by the producer himself or 'exchanged' (including gift-giving) in a non-market relationship. Decisive in this case is also how the good is used, not with which intention it is produced. Likewise, I will speak of subsistence production if a product ends up to being used or exchanged in a non-commercial relationship by the producer himself. Subsistence production in my view does not exclude the possibility that the same producer also sells or purchases commodities. In this regard, my definition of subsistence differs from that of (neo)-Marxists and other evolutionists, who think that subsistence production is separate from the market and its logic[48]. Finally, I will occasionally use the term subsistence (without suffix) as a synonym for livelihood. The procurement of subsistence may also take place through markets.

Commoditisation is, in the orthodox Marxist sense, an increase in the frequency of market transactions. At the same time there is a decline of both the importance of production for one's own use and the importance of horizontal and vertical reciprocal relations to gain access to goods and services. Means of production and consumer goods are more and more acquired in the market rather than auto-produced or obtained through personal ties (Friedmann 1980: 167). In exchange for this, the one's own products have to be sold. This implies that both production and reproduction become embedded in market relations. Friedmann (1980:165-167) argues that the producer's relationships with others become more competitive.

Simple commodity production is a form of production whose production and reproduction depends at least in part on markets. While in capitalist production labour and the other factors of production are owned, according to Marxist theory, by two distinct classes, the simple commodity producer uses his own labour and his own means of production, although he might hire some additional labour (Friedmann 1980:163, 180 note 6; 1986a:187; Elwert 1983:115).

The difference between subsistence and commodity producers would reside in their valuation of labour. Subsistence producers, according to Marx (1867/1988:56-61), value work according to the time and effort invested. Commodity producers in contrast, even if they neither buy nor sell labour, apply exchange value calculations to their own work and compare their own labour to the opportunity wage (Friedmann 1986a:186, 188; Chevalier 1983:157-161).[49]

Commoditisation goes hand in hand with individualisation of property, enterprises, and people, so commoditisation scholars believe. Individual ownership of means of production by the producers themselves is a precondition for petty[50] commodity production according to Kahn (1978:113-114), while Friedmann (1986c:50, 53; 1986a:192) argues that private property becomes more important in the process of commoditisation. They base this idea on Kautsky (1899) and probably on Engels (1884/1985:196-199), who argued that private property emerged with the start of commoditisation[51]. Visser (1999) and many others have shown, and this thesis will show the same especially in Chapter 6, that collective ownership may well allow simple commodity production if the distribution of the produce from collective resources is regulated in one way or another. Friedmann believes that the underlying mechanism of the transition to commodity production is the individualisation of productive enterprises or households, defined as the process by which personal ties for the mobilisation of land, labour, means of production, and credit are replaced by market relations (1980: 167, 174). The household individualises when its communal and particularistic relations are transformed into competitive and universalistic ones. She (Friedmann 1986c:47) agrees with Bernstein (1986) that 'generalised commodity circulation individualises human beings'.

Several advantages of commoditisation theory over other neo-Marxist approaches are discussed in Long (1986a:1; 2001:102) and Wartena (1988a:11-12); here I mention only one that has largely gone unnoticed. Commoditisation theory uses the term *form of production* to indicate first the minimal unit of productive organisation, namely the household enterprise, second its specific social organisation, and third its technical organisation (Friedmann 1978a: 552-555; Bernstein 1977/1982:163). While the form of production unites social and productive organisation, the rest of Marxist thinking is based on an opposition between economy and family, between production and reproduction, between political economy and domestic economy (Whatmore 1991:2), and between public and private domain. The concept of 'form of production' therefore allows an analysis of the internal socio-economic relations of the household enterprise. Unfortunately, orthodox commoditisation scholars made little use of this possibility. Nor did they differentiate between different sizes, types of composition, organisational forms, and functions of households (Long 2001:103). By clinging to an overall dualistic Marxist conceptual framework, they fail to exploit the advantages of the concept of form of production to the full. Instead of studying the logic of concrete forms of production, they simply assume simple commodity producer's norms and values to be dominated or subsumed by capital[52]. Although the commoditisation theorists Goodman & Redclift (1985:243) summon their colleagues to study the ideology of family farming, they admit that they have neglected this study themselves. Most commoditisation scholars treat units of production as black boxes, even Friedmann (1986c:47) admits to have done so, and do not mention the existence of socio-economic relations within them at all[53]. Related to this, commoditisation studies also neglect the analysis of gender relations. Friedmann (1986a:192) suggests that means of production are always male property and women and children only unpaid labourers in the household enterprise, but has to admit that many female members of British family farms used to have a 'small commerce' of their own and extended these into fully developed enterprises in the context of the 'commercialisation of the domestic domain' (1986b:50). Interestingly, Friedmann uses commercialisation terminology when she speaks about women's own trades!

However, the triple meaning of the concept form of production makes it too ambiguous to embrace for my thesis. Especially the fact that it confounds the unit of production and

its productive organisation is problematic, since this unit is not clearly delimited in South Bénin. The extent and importance of productive relationships are variable according to activities and over time. I will use the more specific term *style* to describe the social and technical organisation of production, and I will indicate 'units' of production by various terms, depending on the situation.

The commercialisation of agriculture approach to Third World development emerged after the Second World War from the modernisation school, as a response to (neo)-Marxist approaches on the same theme, and was intended as a tool for development workers. It is based on the assumption that subsistence agriculture is static, technologically unproductive and economically irrational, and that subsistence societies are characterised by cultural attitudes – for example kinship loyalties and -safety nets, fatalism, and the image of the limited good – which dampen technological innovation, commercialisation and rational economic activity (Smelser 1963/1976:78-82; Parsons 1964; Rogers 1969:25). While the commodity concept is applied in hindsight after sales took place, cash crops and commercial production receive their labels when there is an intention for sale. Also in contrast to commoditisation theory, which stresses that terms of trade are often disadvantageous for agricultural commodity producers, commercialisation theory assumes that cash cropping is beneficial for agricultural producers, allowing them to make use of more productive technologies and to mobilise resources more efficiently through the market. (See for a critical summary Vandergeest 1988:8-13).

Commoditisation and commercialisation theories have much in common. Both are evolutionist and determinist and predict a linear shift from subsistence to market production (Long 1992:20). Both seem to assume that the only choice that producers face is between producing for own consumption or selling the commodities that the State and markets demand, which implies a convergence of commodity production choices by producers in the same political, economic and technological environment. Though more recently, some economists come to the insight that some producers in industrialised countries strategically diverge into niche markets, notions of strategic specialisation and divergence are absent from development oriented commoditisation and commercialisation theories. Both argue that what evolutionists call subsistence societies (called 'natural economies' in commoditisation and 'traditional societies' in commercialisation terminology) are relatively static and characterised by kinship loyalties, ascription, specific political loyalties, and religious value orientations etc. Both claim that market participation redirects the participants' (social) values and behaviour towards economic values (Long & Van der Ploeg 1988:30-31, 33), namely to economic rationality according to commercialisation theorists (Smelser 1963/1976:78-82; Parsons 1964; Rogers 1969:25) and to exchange value calculations according to commoditisation scholars (Chevalier 1983:161-162; Friedmann 1980:167, 174). These similar perspectives should not surprise us. They are based on the founding fathers of the modern social sciences. Engels (1884/1985), Tocqueville (1840), Durkheim (1893, 1897), Simmel (1900), Tönnies (1887) and Weber (1925:208-209) all perceived a historical evolution towards growing autonomy of individuals at the expense of shared socio-cultural values and of socio-economic cooperation. In Durkheim's (1897) analysis, egoism is stimulated by the individual's growing autonomy to choose his own norms, values and beliefs. For Marx, Engels and Simmel, the isolation of individuals is a result of monetisation and of competition in the capitalist market; the declining importance of group values would rather be a result of this economic autonomy. Weber (1925:208-209) argues that with the gradual shift from labour

intensive to capital intensive technologies, the growth of material affluence, the development of 'capitalism', and growing military and administrative centralisation, the size of the house community (*Hausgemeinschaft*) and of the house authority (*Hausgewalt*) declined. Also the structuralist Myrdal (1958, 1968:54-74; 1970) believes that market incorporation transforms people's attitudes toward life and work, and Wolf (1966:71-72) defends the point that productive and consumptive groups within which non-market relations prevail, in particular extended families, become smaller and turn into nuclear families when market production and wage labour gains importance[54].

In spite of their similarities, the terms commoditisation and commercialisation do not designate exactly the same thing. First and foremost, the two concepts cannot be separated from the theoretical frameworks or discourses in which they are embedded. Their use is burdened with assumptions drawn from these lines of thought. Second, care must be taken not to equate related concepts that appear similar but in reality are not. While the essence of commercialisation is production for *sale* in the market, commoditisation scholars emphasise that commodity producers *purchase* at least part of their factors of production in the market (Vandergeest 1988:10, 16), and as a result, commoditisation scholars have theorised more explicitly about reproduction, investment and consumption patterns than commercialisation scholars (Long 1997:244).

In summary, commoditisation theory, commercialisation approaches and the classical socio-economic thinkers predict a homogenisation of values, cultures and socio-economic practices under market incorporation. Socio-cultural values would everywhere become redirected towards market values. Similar market opportunities lead to the same production decisions. A critical stand is taken by the substantivist Polanyi (1944, 1957, 1968), who claims that societies successfully resist the homogenising force of markets through social institutions and social regulation. But even he believes that the market, if left to regulate itself, could be compared to a satanic mill that atomises and destroys (read: homogenises) man, nature and society[55]. Whether market exchange succeeded to atomise Fon and Adja culture will be a central theme of this thesis.

Some flaws of both commoditisation and commercialisation theories are their lack of attention for internal socio-economic relations in concrete commodity producing (family) enterprises, their neglect of commodity or cash crop producers' socio-cultural values, and their disregard for social institutions and regulation in market economies. Other weaknesses of commoditisation approaches are discussed in Long (1986a:3-4), Long & Van der Ploeg (1988:30), Wartena (1988a), Van der Ploeg (1992), Long (2001) and many others. Long (2001:115-131, 227-234) and my present thesis show that commodity networks are important arenas where commodity and non-commodity values are contested and transmitted. The same holds in my view for other social networks. The analysis of social institutions and social regulations at the level of society as a whole cannot explain how and why values and practices vary and change. Nor can the analysis of individual actors and enterprises always explain where their values come from. Social networks constitute an additional level of analysis which can elucidate these processes of value formation and change. I will come back to this at the end of this chapter in the section on networks and styles.

### 2.3.2 Homogenisation due to scientific knowledge and bureaucratisation of production?

Markets often operate in concert with knowledge and political powers to exercise homogenising forces on production technologies and -organisation. Market exchange not only tends to affect people's social values, also much technology travels through market networks, especially through the external acquisition of production factors and through consumers' demands. Second, as already explained in the introduction of this chapter, policy makers prefer homogeneous categories because they facilitate their work, and therefore actively create uniform blocs both in analysis and in socio-technological engineering (Scott 1998). Bureaucratic control typically implies standard legal measures. Both policy and trade standards often find support by reference to science.

Scientific knowledge is more general than the specific knowledge of farmers about their own enterprises, because science cannot quickly adapt to variation in space and time. Therefore institutional science too encourages homogenisation of production technologies. Agricultural science typically regards agricultural production as a technological process only, a process which obeys physical, chemical and biological laws, and disregards socio-cultural aspects. Scientification of production is defined as the application of scientific knowledge in decisions about production (Benvenuti 1975:50-51) or as the reorganisation of the labour process according to the model developed by science (Van der Ploeg 1987:111). Scientification goes hand in hand with standardisation of the organisation of production.

In the communication sciences the circulation of knowledge for socio-economic and technological development is typically portrayed as a one-dimensional process, whose only possible direction, if any, is towards a more homogeneous distribution of science. Until the 1970s the trickle-down extension model was dominant. According to this view, the gradual replacement of the various unscientific local knowledges by one bloc of universal scientific knowledge is only a matter of time. Later, more attention was paid to the ways in which so-called local, indigenous, popular or practitioners' knowledges may resist, creolise or hybridise with external scientific knowledge, see for example Richards (1996) and Long (2001:189-203). In other words, homogenisation through replacement of local knowledges may remain incomplete. Jansen et al. (2004:168, 178) stress that: 'local knowledge is in itself often differential and partial, and interweaves, hybridises, and creolises continuously with exogenous knowledge' and that successful innovations develop in a non-linear manner and depend on the integration of knowledge from various sources. They (ibid:176) and Latour (1999) call this 'collective experiments'.

However, the 'various sources' which are investigated until now are basically only two: local and scientific. Empirical studies of collective action around the creation of knowledge, also those presented by Jansen et al. (2004), focus on vertical interface relationships between local popular knowledge on the one hand and the knowledge of scientific experts and of formal institutions on the other. Also Homer-Dixon's (1999:109-120) assumption that vertical integration with educational and research institutions is required for environmental ingenuity (section 2.2.2) is symptomatic for the blindness for horizontal communication and creolisation between local actors among policymakers and in academic research. Conventional approaches suggest that the only exogenous knowledge which challenges and possibly impacts local ideas is universal science and 'western' thought. They create the impression that the flow of knowledge between local actors is non-existent or irrelevant. But by neglecting 'horizontal' knowledge interfaces between local actors, these approaches explain greater

or lesser degrees of dispersal of universal science, and more or less homogenisation, but no diversification of knowledge. In my view, all these black-box approaches to local knowledge enable value-laden stereotype images to persist, be they negative ('indigenous knowledge is superstition') or positive ('experiental knowledge is better than external knowledge' or 'the locals must be right because they are powerless'). In contradistinction to this, I will argue that conventional communication models fail to give an adequate understanding of diversification processes through the interweaving of several local knowledges into various new patterns. Horizontal knowledge flows did take place in South Béninese history, but not in any uniform way, otherwise convergence of local knowledges would have been the result. In Chapter 4 I analyse how and why the Fon learned more tillage techniques from their eastern than from their western neighbours, and the Adja the other way round. To understand how such processes of communication and non-communication, of horizontal knowledge differences, gaps and flows between different local actors contribute to a diversity of cognitive patterns horizontal social network ties need also to be investigated.

Benvenuti (1975) and Van der Ploeg (1987) underline that agricultural science is often used by policy and supply services (extension, credit institutions, development schemes, subsidy programs, land reform and resettlement schemes, cooperatives, farmer organisations etc.) and agribusiness to prescribe uniform production procedures. They call these institutions the technological and administrative task environment (TATE) of agricultural production, and argue that TATE succeeds in imposing its regime by claiming to be scientific and by its hegemonic position in the service and commodity supply chain (Benvenuti 1975:47-48; Van der Ploeg 1987:111, 116; Wartena 1988a:66-68). Benvenuti (1985) and Van der Ploeg (1986:35-36, 52; 1987) speak of 'externalisation' when farmers rely more and more on TATE's services, that is on external scientific knowledge and inputs instead of generating these themselves. Externalisation compels farmers to standardise their production procedures. Benvenuti (1975) thinks that the institutions that compose TATE coordinate and standardise their policies and grow into a quasi-organisation.

With globalisation, demand and supply chains tend to relate increasingly to markets, science and policy. Latour (1993) argues that modernity is accompanied by linkages and networks across divisions, which encourage hybridisation, stabilisation and homogenisation (Albertsen & Diken 2003:25-26, 42). Inputs which are purchased on the market usually support a specific production technology, they are carriers of technological messages. Chapter 4 will illustrate how the hoes that the Fon and Adja purchased predisposed them to particular tillage techniques. Inputs which are produced for sale on markets are more and more produced according to scientific insights, with all the standardisation that this entails. On the demand side, standard expectations of consumers and retailers may also encourage homogenisation of production. Trading companies often legitimise such standards by presenting them as safe and healthy according 'scientific' insights. Policy often supports such claims regarding inputs' and outputs' of scientific sophistication and technological or medical superiority, amongst others by laying down legislation regarding quality standards and labels of commodities. Several branches of modernisation and neo-Marxist theories also have a strong belief in the power of policy and legislation to bring about the desired 'economically rational' behaviour. This applies for example for the women-in-development perspective, which is an offshoot of the commercialisation school. It believes that colonial and post-colonial legislation, western education, agricultural extension etc. can bring freedom and economic profit for women[56]. Standard laws are therefore often imposed in an attempt to trigger development and modernisation.

### 2.3.3 From homogenising TATE to diverse socio-technical networks

Van der Ploeg (1987) initially agreed that TATE is a coherent quasi-organisation which succeeds to impose its standard regime on farmers. Later he discovered, and I agree with this latter position, that TATE is rarely so coherent that it leaves no room for choice by farmers. Van der Ploeg (1999, English version 2003) draws attention to the active role of farmers in establishing relationships with markets, services and technological options. He (1999: 122, 137-141; 2003:11, 125-130) adopts the term 'socio-technical networks' to design the networks that actors entertain with markets and technology.

Earlier, Callon & Law (1989:58, 72, 75-76) used the concept 'sociotechnical network' to describe the linkages between consumers, scientists, producers, animals that were being produced (in this case scallops), scientific models and approaches, and politico-economic institutions, arguing that these human and non-human entities are carriers of information. They contend that socio-technical networks are put in place by actors, that innovators draw resources from pre-existing networks to build novel networks, and that a network, once constructed, translates into a particular 'production function'[57]. Drawing on the same notion, Mango & Hebinck (2004) discuss how the existence of distinct socio-technical networks for different types of maize, or farmers' relationships with one network rather than the other, of farmers' cultural values and culinary tastes, of agronomic qualities of different maize varieties, and of the different performance of the institutional support chains of each type of maize, framed Kenyan Luo farmers' choice for one 'pattern of maize cultivation' or another, some growing both hybrid and local maize, others only local, and still others abandoning hybrids in favour of local varieties. Lamb & Davidson (2002) use the concept of socio-technical networks for the analysis of communication technology, in particular the internet. In their definition a socio-technical network consists in people, in the technologies that sustain human interaction, and in the technologies that people construct and use in collaboration. Following Latour's[58] (1987) notion that science and technology are co-constructed because scientists shape technology and are likewise shaped by the technologies they employ, they argue that technology shapes the way how social actors construct their self-identities through the internet.

Long (2001:178-181, 233-235) prefers the concepts 'interface[59] networks', 'knowledge networks' and 'social networks' to describe the diverse commodity chains that link producers and consumers into a series of actors involved in input and output service activities, including traders, state agencies, transnationals, supermarket businesses, agricultural input suppliers, research enterprises and consumers. He argues that there are various such networks, associated with diverse styles of consumption and production, rather than one monolithic TATE. In the examples he provides, diverse consumption styles interact often in a leading way in the reorganisation of labour processes, the introduction of new technologies vis-à-vis production, processing and transportation, new standards of quality assurance, new notions, new values and new policy regulations. These diverse networks are hence arenas were scientific and non-scientific ideas, technologies, and economic and non-economic values are contested and transmitted. Producers sometimes avoid commitment to outside institutions; hence enrolment in particular networks, for fear of loosing their autonomy or of jeopardising critical interests. Long (2001:228) rightly stresses that also local networks and organising practices may facilitate or constrain the production of particular commodities.

I will use the concept of socio-technical networks to describe the relationships of Fon and Adja with other social actors, markets, technologies, their physical environment, and with the information carried by these entities. My definition is closer to that of Callon & Law (1989), who also consider animals, than to than that of Lamb & Davidson (2002:2), because I include people's relationships with their ecological environment, which is not entirely man-made, yet is also a carrier of information. A socio-technical network consists of recurrent social ties between human actors and ties between social actors and material (technical) things. The fact that human productive organisation always involves both kinds of ties makes it useful to consider both ties in a single network. The concept also indicates that technology spreads through social networks, both physically and in the form of information. The socio-technical network is constructed and reconstructed by social actors, but technology influences the actor's choices. The network and its related organisational pattern have, once engaged, a certain inertia which gives them some internal and historical stability, because social and technological choices today pave pathways for future choices. The different patterns that relate to different socio-technical networks can be called styles. The concept of styles will be discussed in section 2.5.

When I speak of knowledge networks, trade networks or commodity chains I regard these as constituent parts of socio-technical networks. Knowledge is transmitted either by social actors or by technology. Trade networks and commodity chains are relationships between social actors (producers, traders, and consumers) and material and immaterial commodities, which are often carriers of technology. An advantage of the term socio-technical network over the more limited concepts social network, knowledge network, trade- and commodity network is that it draws attention to the importance of both social actors and technology for material production.

Socio-technical networks, as I see them, should not be confused with the actor-networks or actant-networks[60] of Law (1987, 1992), Callon (1987), Latour (1987, 1994, 2005) and Verschoor (1997). Socio-technical networks also differ from what Callon (1991, 1992) calls techno-economic networks or (1995:52) translation networks. Yet, a similarity between socio-technical network, actor-network and techno-economic network approaches is that they all draw attention to the important role of material things in shaping human activity, and argue that humans and non-humans must be analysed in combination.

An important difference between the above mentioned literature on socio-technical networks, on the one hand, and that on actor-networks or techno-economic networks on the other hand, is the perspective on agency. Following Giddens' (1984:9, 11, 90) and Long's (1992) notion of agency, I define social actors as knowledgeable and capable of taking decisions. They may be individual or collective persons, for example cultural groups, colonial administrators or agricultural extension services. The socio-technical network literature mentioned above agrees with this conventional definition of agency. Latour, however, attributes agency to anything that 'acts' in the sense of 'having influence', including things, money, knowledge, texts, concepts, statements, skills, institutions etc. Callon and Law agree on this point with Latour in their articles on actor-networks and techno-economic networks, though in their paper on socio-technical networks they only speak of human actors. In their actor-network and techno-economic network publications however, these three authors call non-human entities actants or sometimes also actors, agents or collectives[61] (the three latter categories also include human actors). Latour (1994:33) argues that

> 'agents can be human or (like the gun) non-human, and each can have goals (or functions, as engineers prefer to say). Since the word *agent* in the case of non-humans is uncommon, a better term is *actant*, a borrowing from semiotics that describes any entity that acts in a plot until the attribution of a figurative or nonfigurative role'. (Italics in original)

Callon (1992) defines an (animate and inanimate) actor as 'any entity able to associate with any of the other entities, define and construct the world, qualify other entities, set networks in motion', but also prefers to substitute the notion of an 'actor' with that of an 'actant', referring to any entity endowed with the ability to act (1995:53). So far, the confusion might stem in part from the fact that in Callon and Latour's mother tongue French the concept *agir* is used for human action as well as for the impact which things and ideas may exercise; it has, therefore, a wider meaning than the English 'to act'. Likewise, in French the word *agent* designates any active force. But Callon & Latour (1992:361) go one step further, and in my view one step too far, when they state that 'To claim that only the humans have meaning and intentionality and are able to renegotiate the rules indefinitely is an empty claim'. Latour (2005:109) repeats a similar argument. The term actor-network indicates that an actor is also, always, a network (Law 1992:384), or in other words an actor-network (Latour 2005: 46). Actors are regarded as intermediaries and actor-networks themselves because of their capacity to impact on networks by mobilising, translating, and interpreting them and giving them meaning (Callon 1987:93; 1991; 1992).

I distance myself from the notion of inanimate[62] actors or actants, from the notion of purposeful action and intentionality of things or 'collective' actor-networks (Long 2001: 57), and therefore also from the notions of actor-network, actant-network and techno-economic network. If every influencing factor is called actor or actant, the concepts of actor and agency become so inclusive that they become meaningless. I will restrict the notion of agency and the actor-concept for knowledgeable social beings, and agree in this regard with Collins & Yearly (1992:321) that the asocial operation of machines and other things is essentially different from human knowledge, which is socially constructed and, I would add, more creative than the artificial 'intelligence' of things. With this I don't want to say that all human agency emerges in a vacuum, is conscious and unconstrained, as Latour (2005: 22, 44, 216-217) thinks that the term implies, but only that the actor has some knowledge and intentions. In the context of my conventional definition of actors I also see no utility in equating them with networks.

The distinction between inanimate homogenising powers such as markets, institutional 'universal' science, bureaucracy, and ecological systems with a drive towards equilibrium and homeostasis on the one hand, and human agency on the other hand, remains useful. The notion of network ties between them can help to understand how they relate to and influence each other. For the sake of analytical clarity I prefer to distinguish conceptually between these influential entities and the (network) ties between them, rather than to blur them all into one concept. The third part of this chapter will focus on human agency and their networks in the creation of heterogeneity.

## PART 3: DIFFERENTIAL STYLES OF MAKING A LIVING

We saw that most scientific models predict a gradual homogenisation of ecological environments, of technology, and of (agri)cultural and socio-economic practices when the climate, geological circumstances, external markets, policies and information received from external

institutions are similar. Empirical research however has increasingly shown that the expected homogenisation did not always occur.[63]

Exploratory research on the Fon and Adja plateaux suggested that agricultural and other production techniques, occupational preferences, gender and generational division of labour, property regimes, management of labour, and many other practices differed greatly between the two cultural groups, between villages, and between enterprises (Pijnenburg 1987:2; Wartena 1988a:59-60, 1997:126, 137-139, 148; Verhagen & Wipfler 1992:62-64; Den Ouden 1995) and there was no trend towards homogenisation, in spite of similar circumstances and of mutual contacts between the actors. Most Fon and Adja explained that each group and each village did things in its own way. Members of the same village or cultural group however had much behaviour in common. Diversity was not completely erratic, but occurred in patterns which seemed to be related to residence, group membership, and possibly other factors which I planned to investigate.

Attempts in the behavioural sciences, ranging from psychology and economics to sociology, to understand diversity of practices have mostly focussed on the individual. Such approaches have rightly been blamed of overstating independent rational choice, as well as of methodological individualism. They can not explain patterns of behaviour if these are unrelated to external conditions. Therefore we need a framework that includes the actor and his choices in interaction with his context. Two recent attempts to do so are the livelihood approach and the styles approach. I will first discuss the strengths and weaknesses of their present uses. Then I will show how I intend to blend some insights and concepts from livelihood thinking into a styles approach and use it for this thesis.

## 2.4 Livelihoods and diversification

The livelihood concept and approach enjoy increasing popularity in development circles. The concept has a number of merits which make it a suitable tool for socio-economic and development-oriented research. One is that it allows for an analysis of *differential* livelihood strategies of individual actors. There are however, still ambiguities in the current definition and use of the concept. So far, livelihood research has also tended to neglect several important socio-cultural and methodological issues. Here I want to outline the development and content of livelihood concepts and approaches, show their strengths and weaknesses, and state how I will adapt the term and use it in combination with the notion of styles.

### 2.4.1 History of livelihood concepts and approaches

Since the late 1980s the concepts 'livelihood' and 'sustainable livelihood' have gained popularity among development scholars and practitioners of various disciplines, and became connected to the so-called 'livelihood approach'. Chambers' (1987) and Chambers and Conway's (1992) IDS papers were catalysts in this regard. They, Lipton & Ellis (1996), May (1996), the 1997 United Kingdom Government White Paper on International Development, and others promoted the concept as a way to focus on people's capabilities and strategies both in analysis and in development intervention. Further driving forces were dissatisfaction with structural, macroeconomic and top-down approaches to development, the desire for interdisciplinary cooperation, the search for a multi-level concept, the simplicity of DFID's sustainable livelihood model, and the approach's claim to foster endogenous development through building on people's assets. DFID's model became increasingly known as 'the'

approach to livelihood research. Closer examination however shows that there is not only one livelihood approach but many.

The concept is not new in the social sciences. It was used as a descriptive term in socio-economic, socio-geographic, and especially in anthropological case studies at least since Evans-Pritchard (1940/1960:57, 69, 90, 92 etc.). For him, livelihood was more or less a synonym to economy, which he considered to be embedded in and regulated by social relations. He described the 'modes of livelihood' or 'modes of life' of the Nuer as a mixed economy consisting in a combination of a sedentary or village life, a nomadic or camp life, a pastoral life or economy, a horticultural life or economy, fishing, and a strong cultural preference for pastoralism. Nuer modes of livelihood differed over the years, over the seasons of the year, and over different regions, depending on the relative importance of the different components.[64]

On a more theoretical level the social economist Karl Polanyi (1944, 1957, 1968, 1977) employed the concept of livelihood in his 'substantive' economic theory. Although many of the central ideas of substantive economic theory are still or again influential today, especially the argument that the production, circulation and administration of goods is embedded in and regulated by socio-economic and cultural institutions[65], the term livelihood did not become attached to substantivism.

Pearse (1975:39-44) argues that the concept *pursuit of livelihood* expresses most of peasant conduct, because it comprises the peasant's motivations and his socio-economic activities. Livelihood designates both the outcome of this pursuit, namely subsistence and a way of life, and its means. The latter comprise the peasant's socio-economic practices and the sum of material goods, services and facilities used during a lifetime. It follows that the peasant's way of life is both means and outcome of the pursuit. Pearse (1975:71) points out that the word livelihood (or, according to Chambers' dictionary, its synonyms livelod and livelood) is derived from the old English *liflád*, which means life-way or life-course (from *lif* = life, and *lád* = course), and that it eludes quantification. The livelihood goals of Latin American peasants are not only economic but related to their 'productive status', which includes their social role-sets and family situation. Therefore, a livelihood approach would make it possible to avoid the pitfalls in the arguments about whether peasants are 'economic men' and maximisers (ibid:39-43). Probably inspired by Pearse (1975), Smith & Cano (1978) and Alderson-Smith[66] (1984) adopt the concepts 'livelihood' and 'livelihood pursuit' in their case studies on Peru. Since the late 19th century, migration and diversification of economic activities were essential to the livelihoods of most people from the communities they studied. People either migrated or engaged in different occupations themselves at one time in their life, or had socio-economic ties with those who did. Alderson-Smith (1984:217-219, 223, 233) calls the latter 'confederations of households', shows how actors strategically developed such ties, and argues that this gave rise to particular patterns of livelihood.

Wallman (1984:4-9, 16, 41) links livelihood to local style and to neighbourhood identity. In her case study on a neighbourhood in South London, social processes of identity formation gave rise to what she calls a style of (local) livelihood. She shows that styles of local political organisation, sharing of resources and information, attitudes to status, and ways to distinguish between strangers and community members were fairly continuous since the early 20th century. Structural, cyclical or strategic household processes may however lead to new patterns of livelihood (1984:4-7, 21). She stresses that livelihood involves 'the production of moral as well as economic values', which she calls 'work' (others speak of

livelihood activities in this regard). It includes the circulation of information, the management of relationships, the affirmation of personal significance and group identity, etc. (Wallman et al. 1982:5 cited in Long 2001:54; Wallman 1984:22-23).

Since the late 1990s, anthropologists and sociologists re-embraced the livelihood concept in the orbit of its rising star in policy circles. Ingold (2000) adopts the term to describe how people make a living and how they relate to their environment technically as well as culturally in this process. Hunting, gathering, artistic depiction of prey animals, beliefs in and about animals, etc. all are livelihood generating activities. Long (2001:241) defines livelihoods as practices by which individuals and groups strive to make a living, meet their consumption necessities, cope with adversities and uncertainties, engage with new opportunities, protect existing or pursue new lifestyles and cultural identifications, and fulfil their social obligations. Bryceson (1999), Lin (2002), Arce & Fischer (2003) and many others use the term to describe people's income generating activities.

The elaboration of the livelihoods concept into an intervention tool boomed after the 1997 United Kingdom Government White Paper on International Development committed the Department for International Development (DFID) to promote sustainable livelihoods (Carney 1998:3). DFID spearheaded a 'sustainable rural livelihoods approach' that was in theory actor-oriented, but had a number of specific features. Goals of the approach were poverty reduction and environmental sustainability. DFID's livelihood approach became increasingly considered as the only one, for example on DFID's website and in Carney (1998). Most other organisations that state allegiance to livelihood thinking (for example CARE, EDIAIS and FAO) refer implicitly or explicitly to DFID's descriptions when they try to define their own approach. Even livelihood scholars who disagree with DFID apparently accept its intellectual ownership claim, for example Hebinck & Bourdillon (2001:5-6) and Arce (2003:204-207), who dismiss 'the' livelihoods approach out of dissatisfaction with DFID's framework.

DFID's livelihood approach has three features. First, DFID launched a definition of livelihood that became widely accepted among development scholars and practitioners (Carney 1998:4). It was a slightly extended version of Chambers & Conway's (1992) definition and reads as follows:

> 'A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base'. (Quoted as 'the' definition of livelihood in Carney 1998:4; Scoones 1998: 5; Hebinck & Bourdillon 2001:2)[67]

Second, DFID developed a framework for sustainable livelihood analysis, whose basic elements and pictorial representation became so generally regarded as part and parcel of 'the' livelihood approach that it can almost be considered the approach's logo[68]. In presentations to professionally mixed audiences, a powerpoint slide of the framework (frequently in the colours of DFID's website) is often (ab)used to 'explain' in two minutes what the livelihood approach is all about. This appears attractive when preparation and speaking times are as usually limited but may easily mask incomprehension by the audience or even by the speaker. The framework is widely adopted in development policy circles, for example by CARE (Drinkwater & Rusinow 1999:2; Frankenberger, Drinkwater & Maxwell 2000:5, 8), Oxfam (Neefjes 1999) and FAO (2000:2), and even among academic thinkers, with only slight modifications in some cases. The basic elements of the framework are (1) context,

(2) assets or resources of the people under study, (3) structures and processes, (4) livelihood strategies, and (5) livelihood outcomes. Assets are mostly subdivided into five types of 'capital' (namely natural, human, social, economic or financial, and physical capital) and presented in the shape of a pentagram. The motive for focussing on assets is to start from actors and what they have rather from what they lack. Lip-service to an actor-oriented approach and to a positive focus on possibilities rather than constraints is adopted by all livelihood scholars.

Using the framework is mandatory in any analysis of sustainable livelihoods according to Carney (1998:5-6) and Scoones (1998:3-4)[69]. Ellis (2000:28-30) more modestly proposes the framework as a tool that can be utilised for thinking through rural livelihoods, and recognises that such a two-dimensional representation of a process as complex and dynamic as rural livelihood formation has limitations. For critics such as Hebinck & Bourdillon (2001: 5-6) and Arce (2003:204-207) the DFID framework, and especially the notion of assets and capitals in it, is a reason to dismiss 'the' livelihood approach altogether; I will come to their criticism below. I agree with Kaag (2004:68-69) that such a framework may facilitate analysis because of its clear schemes and definitions but it risks diverting attention away from the real people and dynamics that livelihood scholars claim to centre on.

Third, DFID developed its intervention strategies on the basis of the livelihood concept and the sustainable livelihood framework. These strategies usually start from the assets that people have and they try to transform organisational structures and institutional processes that have an impact on people's livelihoods, in the hope of benefiting the poor.

One achievement of DFID's appropriation of the livelihoods concept was that it became much more generally known and used than before, primarily in donor and policy circles. Large development organisations such as CARE, EDIAIS, FAO, IIED, IISD, Oxfam, UNDP[70], etc. stated allegiance to a livelihood approach, as can be seen on their respective websites. But in academic circles, too, the term became more fashionable in the 1990s, also in disciplines where it was little used before, for example in the natural sciences and in economics.

Hence a second merit of the livelihoods concept in general and of DFID's popularised version of it was that it transcended both disciplinary and academic-policy divides, and encouraged scholars of various disciplines, policy makers and development practitioners to communicate with each other. Such cooperation is not self-evident as Visser (2004) shows. (Whether the users of the livelihood concept meant the same thing and understood each other is another question). I will come to this unifying quality and to some problematic implications below.

The image that there would be only one livelihoods approach, DFID's, is however misleading. An increasing number of social scientists use the new buzzword 'livelihood' but in its older meaning, as a descriptive term in case studies, without adhering to DFID's framework, definitions and policy goals. Examples of this descriptive use besides those already mentioned can be found in Brons (2002), Dekker (2002), Lakwoo (2002), Nijenhuis (2002), Schuren (2002), Witsenburg & Roba (2002) and many others.

Around the turn of the millennium the mushrooming of livelihood studies sparked an academic debate. A few scholars tried to develop the concept more theoretically, for example Bebbington (1999), Ellis (2000), De Haan (2000), Moser & Norton (2001), Niehof & Price (2001), Arce & Hebinck (2002), Arce (2003). It is noteworthy that in this case the academic debate partly follows policy practice. Practitioners in the policy and donor community are often 'accused' of appropriating the latest buzzwords from academia for their

own goals, but this time scholars embraced buzzwords of policy makers. A good 'state of the art' publication on the development and the different uses of the livelihoods concept is Kaag (2004). Nooteboom (2003:39-48) partly overlaps with it.

### 2.4.2 Strengths and weaknesses of current livelihood studies

Two strong points of the livelihoods concept are already mentioned: It is widely accepted in academic as well as development policy circles, and it is not linked to a particular discipline but used by scholars and practitioners of a great variety of disciplines. A third advantage is that it combines several levels of analysis, from the individual actor to his global economic, infrastructural, ecological and institutional environment. Besides its multi-level application, the integrating character of the livelihood concept relies on at least three qualities. First, it has an everyday meaning that is easily understood by everybody. Second, it refers to all assets and activities that people employ to make a living: financial, natural/physical, infrastructural, social, human, cultural, agricultural, industrial, commercial, medical, and many others, and so it pervades the domains of all disciplines and all economic and socio-cultural sectors. Third, livelihoods are understood holistically as the combination of all these assets and activities, so that specialists feel the need to combine their insights. I welcome these rare qualities (only few concepts have them) for the present study of the sustainability of Fon and Adja styles of farming because I address technological, economic, socio-cultural and other issues.

There is a growing awareness that many producers in African and other developing countries diversify their economic activities (Bryceson 1997:5, 8; 1999; 2000:310; Ellis 2000; Kaag 2001; Niehof & Price 2001; De Haan & Zoomers 2003; Niehof 2004; etc.)[71]. Also the Fon and Adja do. Their livelihoods depend indeed on a variety of sectors. In the past, activities were often studied in isolation, for example 'farming systems', 'wage labour migration', 'petty trade', 'women's income generating activities', but also 'styles of farming'. The livelihoods approach permits one to understand how the diverse activities of a particular producer, or even networks or 'confederations' of producers as already Evans-Pritchard (1940/1960), Smith & Cano (1978) and Alderson-Smith (1984) have shown, interrelate. This was probably one of the reasons why Bryceson (1999), Ellis (2000), Niehof (2004) and others chose the livelihood concept for their research on diversification strategies of 'households' and families. In any case it makes the concept useful to describe the Fon and Adja who live on more than one activity.

Its actor-oriented epistemology is a potential strength of the livelihood concept, but also a potential weakness if mediating structures and constraints are lost out of sight. In the next section I will argue that many livelihood researchers fall into this trap. Some livelihood studies, however, use units of analysis at such a high level of aggregation (Scoones 1998: 5) or research methods that are so quantitative (for example May 1996) that these studies can hardly be called actor-oriented anymore.

Livelihood approaches recognise the value of different research methods. Many livelihood studies combine various methodologies (Kaag 2004:68-69), which gives in my view the most reliable results. Others rely on one or a few methods only. This freedom to use the method(s) of ones' own choice is attractive to many researchers, but carries with it the dangers of methodological sloppiness, loss of conceptual and methodological clarity, and loss of comparability of research results, especially if the adopted methods are not accounted for.

Also the fact that livelihood research is not linked to a particular level of analysis but may focus on individuals, households, or larger units, enhances the quality of the research and accommodates a variety of approaches. In practice, however, much livelihood research neglects certain levels of analysis.

The livelihood concept still has some weaknesses that are mainly due to unclear definitions and to biases due to overemphasising (economic) agency. I will first deal with the ambiguities and then with other flaws in current approaches.

The popularity of the livelihood concept has led many to use it without understanding it very well. The term is used in various ways by various authors. But it is questionable whether these users always comprehend each other. Many are unaware that they mean different things. A first large group are those who more or less adhere to DFID's livelihood definitions, framework and approach. This group is strongly represented in policy circles. A second group uses livelihood as a descriptive term in case studies focussing on what people *do* to make a living; this group consists largely of anthropologists and sociologists[72]. A third group, following the 1995 World Summit for Social Development (Copenhagen) Declaration[73], used livelihood in the second half of the 1990s as another word for employment (for example Lipton & Ellis (1996) and the 1997 UK Government White Paper on International Development), but the equation of livelihood with work or employment seems to have gone out of use. Today most scholars accept that livelihoods may also be gained from assets and entitlements. A fourth group also employs livelihood as a descriptive concept, but focuses on the economic *outcome* of people's livelihood activities. This group, mainly constituted by economists[74], sees livelihood(s) as a synonym for income. In theory, most scholars agree that livelihood generating activities are not only economic but also socio-cultural, for example artistic expression, rituals, learning, networking, leisure, and so on, but many forget socio-cultural values and livelihood activities in their analysis. In my view all four narrow uses of 'livelihood' are misleading, for the concept stands for more than that.

The confusion between the second and the fourth group is inspired by the double meaning of the concept. The common sense meaning of livelihood refers both to what people do to gain a living, and the outcome of these activities. One can only speak of livelihood if the person who engages in it (in the sense of activities) can *live* or at least survive on it (in the sense of out- or income). This implies that livelihoods must be sustainable, in so far that they produce enough to survive, in order to deserve the label 'livelihood'. In other words, the concept livelihood comprises both activities and the 'income' gained from these activities.

This double meaning is reflected in Lipton & Ellis' (1996) use of the term. They (1996: ii) describe livelihood on the one hand as work, for they claim that they use the term livelihoods in the South African context 'rather than jobs, because most farmers and farm workers work in agriculture only seasonally.' On the other hand they use livelihood as a synonym for income, which must have a certain minimum level to deserve the label livelihood. For in their rough working definition they quantify livelihood as 'a 200 day working year, sufficient to produce enough income to keep a worker (plus dependants) out of poverty' (ibid: ii)[75]. That they equate livelihood with sufficient income becomes evident in some of their following statements (ibid:iv, ix)[76]. Also May (1996) in the same volume uses livelihood(s) as a synonym for income and employment, with an emphasis on the former. For him 'one livelihood' is the minimum acceptable income for a family of five, defined as the Household Subsistence Level and equated for rural KwaZulu-Natal with 750 Rand per month. In practice for him one livelihood is 750 Rand, and 175 000 livelihoods is 1.5 billion Rand per

annum (May 1996:25). His quantitative and statistical approach pays very little attention to individual goals and strategies, and his equation of one livelihood with 750 Rand per month is far removed from Pearse's (1975) and the old English definition of the concept as a way of life and as a term that eludes quantification. In the 1997 UK Government White Paper on International Development, which stimulated DFID to develop the sustainable livelihoods approach, livelihood also has the double meaning of people's incomes and employment opportunities (Carney 1998:3, 18). Hence the White Paper closely follows Lipton & Ellis (1996) rather economic definition a year earlier.

De Haan (2000:346-347), Niehof & Price (2001:9), Dekker (2002:5) and Niehof (2004) tried to resolve the problem of the double meaning of the everyday term livelihood by describing livelihood in terms of a system. Rather than of livelihood they speak of livelihood systems with various components. For De Haan a livelihood system is a 'complex ensemble of generically heterogeneous factors of various spatial levels of scale: natural and social, internal and external, historical and actual'[77]. My problem with the systems concept, as discussed earlier in this chapter, is that it presents a too harmonious and mechanical image of the way people make a living. It presupposes a goal and at least a (rational conscious or unconscious) attempt to reach an internal equilibrium and a degree of sustainability of the system. These might be missing from the ways in which people make a living, ways which often include un-intended or non-rational elements. I agree with Kaag (2004:54-55, 69) that in our rapidly changing world it is better to speak of livelihood processes than of livelihood systems. Livelihood processes refer to interactions between people and their environments and to changes in these over time.

I want to propose a more modest solution. To avoid confusion between livelihood activities and livelihood outcomes, I will speak of *making a living* rather than of livelihood whenever I refer to activities only. Making a living[78] is what people do to earn their livelihoods, and does not pretend to include the outcomes of these practices.

Besides these confusions regarding the meaning of the livelihood *concept*, also most of its current *uses* have some weaknesses. An encompassing flaw is the micro-economist bias of most livelihood research which neglects socio-cultural values. Furthermore, two major categories of shortcomings can be distinguished, first those related to DFID's approach and second a recurrent bias towards small units of analysis, including a reification of 'households'. I start with the second category of shortcomings.

In theory, livelihood studies are not linked to a particular unit of analysis and encourage the investigation of producers' assets and strategies as well as the contexts (physical, economic, socio-cultural, structural etc.) within which producers operate. In practice however emphasis has often been on individual and household strategies. There are several problems with this.

Many livelihood publications take the household as an analytical category, for example when it comes to the diversification of economic activities, but ignore the numerous problems which exist with the term household, see 2.1.3, Guyer (1981), Long (1984a:27-28), Wilk & Netting (1984:4), Guyer & Peters (1987), Hart (1992). Most livelihood scholars do not give any definition of household at all[79]. Ellis (2000), Hebinck & Bourdillon (2001:10), De Haan & Zoomers (2003) and Kaag (2004:64-65) are exceptions in that they (very) briefly discuss the household concept. But Ellis' solution to continue using the term household for 'the resident social unit, extended where applicable to include migrants and others who make intermittent or regular contributions to household welfare' (2000:18-21) is not very

satisfactory, for it does not overcome the other flaws of describing households as units. Many relevant activities such as production, redistribution, decision making etc. are undertaken by individuals, others take place in various overlapping and/or nesting social groupings with fluid boundaries, still others in volatile network relationships. Alderson-Smith's (1984) study of strategic diversification of livelihood portfolios within 'confederations of households' in Peru is a good example of how network ties affect livelihoods and their logics, though it is unclear to me why he retains the household concept. In general, any notion of household as a unit also diverts the attention away from the sometimes conflicting goals of and relations between people within these groups. I agree with De Haan & Zoomers (2003) and Kaag (2004:65, 68) that more attention should be paid to networks rather than to households. My attempts to do so include studying whole lineage branches in the context of their villages and considering network relations with matrikin, in-laws, colleagues, business partners, neighbours, friends, and cult associates within and beyond these.

Second, since most livelihood research aims to focus first and foremost on people's agency and on what they have rather than what they lack, external factors and structural constraints are easily disregarded. Albeit that DFID's framework for livelihood analysis includes the context, the transforming structures and the mediating processes within which these actors operate, the livelihood model does not provide clear conceptual or methodological tools to analyse the linkage between actors and context. In practice many livelihood studies downplay structures and processes. This easily produces a romantic image of the ways how (often poor) actors make a living.

Third, research on individual and household strategies is often limited and biased by economistic assumptions. Much of the livelihood literature portrays producers as *homo economicus* who strategically and rationally combines assets to reach economic goals. Non-economic goals, values and perceptions, for example cultural ones, are lost out of sight. The same holds for contextual factors such as culture and power relations that interfere with supposedly free and rational individual decision making. These authors fall exactly into the pit that a livelihood approach, according to Pearse (1975:39), makes possible to avoid. This is a pity, for the concept is suitable to transcend the individual level without reifying community or structure. I agree with Hebinck & Bourdillon (2001:7) and Arce & Hebinck (2002) that the concept of styles can provide a way out.

Though on the one hand livelihood studies claim to emphasise individual and household agency, on the other hand the real people themselves tend to be lost out of sight by the use of frameworks such as DFID's. Many believe that DFID's framework is an easy tool, a panacea that guarantees sound sociological analysis even in the hands of non-experts. This is probably one reason for its popularity. In reality, however, frameworks invite one to reduce research to the filling of boxes and divert attention away from the real dynamics. They could give the impression that livelihoods come about in a mechanical, impersonal manner and/or are static over time. Kaag (2004:54-55, 69) rightly argues that livelihoods should be viewed and studied as ongoing processes of people's interaction with their environment. It is not easy to find methods to study both actors' roles and historical processes involved in something as complex as livelihood generation. Kaag (ibid) proposes tracing life histories and livelihood trajectories to elucidate these processes and actors' roles and perceptions on them. I add to this multiple generation family histories in order to transcend the level of the individual. Frameworks also suggest simple, mechanical solutions to overcome poverty. They encourage practitioners in the belief that it is sufficient to change formal institutions, official

laws and policies, infrastructures etc. to improve livelihoods. Actors' real practices, however, for example bribery and other informal institutions, might render such formal structures ineffective.

Another danger with DFID's livelihood approach lies in reifying the notion of capital. Carney (1998:7-8), Scoones (1998:7-8) and Ellis (2000:31, 42-45) assume that one can estimate people's livelihood potentialities on the basis of a list of assets or resources. They see assets as capital that can be accumulated, in many cases exchanged, and sometimes even sold for cash. But a list of resources neither says much about their value nor about how they mutually interrelate. Assets might mutually reinforce or hinder each other. Besides this, such an economic metaphor obscures the non-economic values that assets have for those who own them (Hebinck & Bourdillon 2001:6; Arce 2003). To draw attention to non-economic factors in livelihood generation some authors propose to include political capital, cultural capital, historical capital, or symbolic capital into the framework (Scoones 1998:17). But even then the use of the metaphor of capital seems to imply the capitalist notion of the term as self-evident. It firstly conjures the image of a *homo economicus* who strategically and rationally combines assets. Secondly, though De Haan (2000:344) following Chambers & Conway (1992) states that the five capitals do not necessarily have to be seen as private property, Arce (2003:204-206) maintains that the term capital is only meaningful if privately owned in the sense that economists attach to the concept. Arce therefore prefers the term assets above capitals[80], while De Haan (ibid) prefers capitals because he thinks that this term includes assets. I will not here enter into a debate about the proper meaning of assets and capitals. Suffice to say that both concepts are at least ambiguous and encourage an economist way of thinking[81].

Both the emphasis on individuals and households as rational decision makers and DFID's framework thus encourage an economistic analysis which tends to disregard non-economic values. This is also evident in most research on livelihood diversification, which typically asks which economic assets are responsible for actors' choices either to diversify their livelihood portfolios, or to specialise in farming, or to concentrate on particular non-agricultural activities. However, my own research on styles indicates that non-economic considerations often play a dominant role in people's livelihood choices. Here again the concept of styles provides a way out because it draws more attention to socio-cultural values.

### 2.4.3 Styles of making a living

I will use the livelihood concept in its 'traditional' anthropological and sociological sense as a descriptive term for how people eke out a living. When I speak of livelihood I have no intervention strategy in mind, and my analysis is not guided by a framework such as DFID's. The utility of the livelihood concept for this thesis lies mainly in its holistic and trans-disciplinary character. My research is at the interface of various disciplines, for it addresses socio-economic as well as technological aspects of the ways in which Fon and Adja make a living. Holism is useful for my study first because insight into economic as well as socio-cultural values and activities are important to understand how the Fon and Adja make a living, and secondly because most Fon and Adja live from a combination of different economic activities, including agricultural and non-agricultural ones.

To overcome some flaws in current livelihood approaches I propose to develop the concept of styles of making a living. This concept first avoids the confusion between livelihood activities and livelihood outcomes. In contrast to livelihoods, *making a living* is only what

people do to earn their livelihoods and does not pretend to include the outcomes of these practices. I define 'making a living' as all practices that contribute in one way or the other to the satisfaction of wants, economic and non-economic[82]. Just like livelihood it not only refers to labour but includes consumption, cultural activities, artistic expression, rituals, learning, networking, leisure, and so on. The diverse economic and non-economic activities of a producer and their interactions are considered holistically. Making a living takes people's perceptions, capabilities and practices as an entry point; hence it is an actor-oriented concept.

Another danger of livelihood approaches is that they loose sight either of people or of historical dynamics or both, especially if the focus is on livelihood outcomes or if mechanical models such as livelihood systems or -frameworks are used to come to grips with complexity. A focus on *making a living* avoids these traps because it refers to the process rather than the outcome of livelihood activities, and because it does not pretend to include the whole context labelled as 'system' or 'framework' of livelihood generation. Making a living is therefore a more processual concept than livelihood.

A third weakness of most livelihood approaches is their individualistic and economistic bias, comprising the tendency to portray individuals and households as *homo economicus* who rationally pursue economic ends, the tendency to describe assets in economic terms only, and the neglect of non-economic values, -assets and constraints. There are several ways to redress this bias. One of these, already explored by Wallman (1984) and Nooteboom (2003)[83], is to conceptualise livelihoods or ways of making a living as *styles*. This approach is in my view particularly suitable in the Fon and Adja context. Styles are about non-economic values, about people's ways and motivations to pursue them, and have a material manifestation (Hebinck & Bourdillon 2001:7). As Long (2001:55) puts it: 'Livelihood therefore implies more than (…) economic strategies at household or inter-household levels. It encompasses ways and styles of life/living, and thus also value choice, status, and a sense of identity *vis-à-vis* other persons.' The concept of styles connects values and activities and draws attention to the role of the non-economic in material expression. In the next section I will discuss various uses of the styles concept in more detail.

Styles of making a living is a more suitable term to describe socio-economic practices than the popular concept of *lifestyles* as I understand it. In popular and much academic thinking, lifestyles are often associated with the domain of consumption and recreation only[84]. It is true that the sociologists Giddens (1991:81), Long (1968), Munters (1992:183) and Beekman (2001:27) define lifestyles as the whole set of practices that an individual embraces, in all domains of life[85]. But even Spaargaren & Van Vliet (1998:6) and Beekman (2001), who use Giddens' (1981) definition and emphasise with him that people express their identity through their lifestyle choices, discuss the sustainability of lifestyles mainly in terms of consumption. In order to avoid the popular association with consumption I prefer to speak of 'styles of making a living' rather than of 'lifestyles'. Styles of making a living too are about all human activities, including productive and consumption ones, but with the term *making* a living I intend to emphasise that people make or *produce* something in order to live. Without ignoring that production is embedded in patterns of consumption, the focus of my analysis will be on production.

### 2.5 Differential styles in common breeding grounds

The styles concept is used in popular and academic discourse to classify meaningful practices in a particular domain, for example music, painting, literature, fashion, farming, management etc. Several sociological definitions of style exist. An early, clear, concise and quite comprehensive definition of style is by Hofstee (1976:217): 'a way of acting that is accepted by a certain group over a fairly long time period as the right way, and has a more or less socially compulsory character, because this group sets, uses and maintains certain norms regarding these actions.' (Hofstee 1976:217; my translation). This definition reveals the dual character of styles:

- Styles reflect what people do ('a way of acting')
- Styles refer to people's opinions and have a normative character ('the right way').

More recently, styles have been defined as social typifications and metaphors (Van der Ploeg 1993a:56-57; 1993c:14; 1994:15), folk classifications (Whatmore 1994)[86], idioms and images (Den Ouden 1995), ideal types or parables (Vanclay, Mesiti & Howden 1998:91, 97)[87], or shared cultural repertoires about how things should be done (Long 1989a:224; Gerritsen 2002:63). These definitions limit styles in theory to their second characteristic, namely to what people say about them[88]. Vanclay, Mesiti & Howden (ibid) and Gerritsen (ibid) observe that farmers actions often deviate from what they say they (should) do or from what their neighbours say about them[89]. These authors then define as the 'real style' what people say not what they do, so that 'few farmers actually belong to a style'. Whatmore (ibid) is not interested in actions and observable features, and disregards possible tensions between them and folk classifications. In their case studies though not explicitly in their definitions, Van der Ploeg (1993a:55, 60; 1994:13; 1999:121) and Den Ouden (1995) consider practices to be part of styles, but they do not explain how they deal with tensions between words and deeds[90]. Van der Ploeg (ibid) claims that practices are informed and structured by the actors' cultural repertoires and strategic notions, and in their turn provide feedback to the cultural repertoire and possibly modify it, but thinks that styles as a whole are a unity of discourse and practice.

Two other issues which only Vanclay, Mesiti & Howden (1998) allude to are first that different and mutually conflicting folk classifications of styles often coexist, and second that the researcher cannot avoid adding his own cognitive model of styles which also differs from the folk models. In an attempt to develop a truly ethno-taxonomic or emic approach to styles research, they asked farmers to describe all the different types of farmers they knew in their region, without mentioning what kind of diversity that they as researchers were interested in. This produced great numbers of overlapping styles (27 in the case of broad- acre cropping), referring to various dimensions of diversity. In my view it does not make sense and is confusing to compare such overlapping categories if one does not bear in mind that these labels are based on different criteria for classification.

Inconsistencies between different typifications of styles, and between folk notions and observable features of styles led in the 1990s to heated academic debate and incited some scholars to dismiss the styles concept altogether. Volker (1993:88-92) for example argues that management styles research lacks validity and reliability, amongst others because (classifications of) styles often overlap each other, because farmers are not always consistent in what they say and do, and because most farmers when asked to apply to themselves

one of the style-labels which the researchers present to them recognise themselves only partially in these 'portraits'. These debates reveal confusion about what styles are meant to be. Volker's critique holds if styles are seen as exact representations of reality, and as clearly demarcated and exclusive categories into which all actors fit. But this does not seem to be the position of any of the styles researchers whom I review here, though none of them has accounted for the problem of conflicting (folk) classifications.

All definitions of styles describe them also as ideal types, idioms or metaphors, whether in combination with observable features or not. Seen in this way, the ideal typical styles or style-labels are exaggerations or end points on a continuum, and the behaviour of most people is situated somewhere in between. There may also be different continua, depending on the dimensions that the speaker is interested in and considers essential to characterise the style. Two positions are possible: Gerritsen (2002), Vanclay, Mesiti & Howden (1998), and probably also Whatmore (1994) identify styles with the ideal typical extremes alone. Wiskerke (1997:35-36)[91] and I myself consider styles not as the end points of continua alone but as wider entities with fluid boundaries: the style is broader than its ideal typical sketch and not every representative of it is an exact copy of the sketch. I prefer this last solution because in popular and most academic discourse the styles concept is used in this way. If a distinction must be made between the discursive extreme and the observable features somewhere in the middle, I will call the ideal types 'style-labels' or sketches of the broader style which is characterised by practices. The reason for this distinction is not only conceptual but also because my research interest lies in issues of practical socio-economic and ecological relevance rather than in discourse alone.

In my view different labels may be applied to the same style, but a sketch must be recognisable to be accepted. Representations tend to be coloured by value judgements or ignorance about real practices, and it is therefore crucial to identify the author of the sketch. Actors themselves may lack discursive consciousness or paint flattering images of their own styles, their 'neighbours' may ignore or despise the described person's practices and present a caricature instead[92], and researchers' descriptions of styles are biased in their own way. Since styles are meaningful practices, self-representation is useful to understand the logic of the style and of the meaning it has for its adherents, but it should be interpreted with care, by listening 'between the lines' and by comparison with observation. Representation by others may be helpful, but should never be the only source of judgement. In my view the researcher should consider several perspectives and the task to compare these is mainly his. It is the only way to avoid simplistic caricatures of styles which bear only little relationship to practice.

Hofstee's definition was limited in that he connected styles to groups and to social compulsion. This might have been true for Groningen styles of farming in the 19th and early 20th centuries. It was also true for styles of farming in Guiné-Bissau and Mexico according to Van der Ploeg (1980) and Gerritsen (1995). Since about 1980, many definitions of and approaches to styles attribute much more importance to individual choice, in particular those of Bourdieu (1979), Bennett (1980, 1982), Giddens (1991), and the Wageningen school of styles of farming during the 1990s. They all studied European and North American styles post 1960. A third position gains increased recognition and is taken by Long (1968), Den Ouden (1995), Van der Ploeg (1999), Van der Meulen (2000), Bank (2002), Nooteboom (2003) and myself (Wartena 2001). We consider the choice of style to be embedded in

social networks rather than individual affairs or imposed by static groups. Following Long, I explore the processes of style and social network formation in interaction with each other, rather than assuming either completely individual choice or group compulsion. Related to the definition of style that the researcher prefers are the units of analysis and research methods used. Those who identify styles primarily with people's opinions about them rely to a large extent on interviews with individuals whose possible mutual relations remain unexplored. Those who consider visible features an important characteristic of styles tend to include literature study, quantitative data, and their own observations. In the following will present the three different approaches to styles (as a group, an individual or a network phenomenon), and explore how they were products of the dominant paradigms of their times, and touch on some methodological biases in many of these approaches.

### 2.5.1 Group styles

Hofstee (1946; 1976; 1985), Van der Ploeg (1980:79) in his early work, and Gerritsen (1995) found farming styles dependent on social and residential group membership in Frisia and Groningen between the late 18th and the mid-20th century, Guiné-Bissau in the 1970s, and Mexico in the early 1990s respectively. They portrayed group membership as given by tribe in Guiné-Bissau, by residential region in Mexico, and by a combination of both in Frisia and Groningen, and not open to individual choice. Gerritsen (1995:7) calls the styles of farming in the neighbouring Mexican communities of Cuzalapa and of Ayotitlán that he studied[93] and also Hofstee's conceptualisation 'regional styles'. Hofstee himself however emphasises that group interaction is essential for the emergence and maintenance of the norms in which styles are rooted, region seems secondary. Therefore I prefer to speak of group styles. Group styles are close to (sub)-culture and leave little room for personal stylistic choice.

> 'In each more or less coherent group of farmers in a certain region a management style is formed, that is a by this group generally accepted way to arrange and manage one's enterprise. (…) A management style has – as every true style – a socially compulsory character. (…) Once a custom is established it obtains, more or less as a matter of course, a normative character. (…) Whoever deviates from the custom is corrected by the group in a gentle or less gentle manner. (…) The normative character of the management style brings as a matter of course that whoever follows the style not only avoids reactions of disapproval towards those who sin against it, but will reap the open or tacit approval of the group.' (Hofstee 1946:32; 1985:227-228; my translation)

Hofstee's research on late 18th and 19th century Frisia and Groningen (Netherlands) was one of the first styles of farming studies. Hofstee (1946:31, 35) lived in Groningen during a long period, and combined participant observation in 20th century Groningen with a detailed analysis of official 18th and 19th century land registry and statistics and other historical sources. He observed that 20th century Groningen farmers considered arable farming more prestigious than animal husbandry, and hypothesised on the basis of the (largely quantitative) historical data that arable farming had become prestigious in Groningen in the late 18th century and had remained so until his time. He (1946:31) regretted that 19th century writings about Groningen did not contain direct information about the social value of arable farming, and that in 1946 it was already too late to speak with the farmers themselves. Hence his classification of styles was based on his own observations of largely quantitative data and possibly on folk concepts of 20th century farmers, but not on 19th century farmers' own interpretations.

Box 2: Farming styles in Frisia and Groningen

Most soils of Groningen were intrinsically suitable as pasture but not for arable farming, but in the 19th century their farmers drained them, imported large amounts of compost from elsewhere and manually (!) dug up the more fertile deeper layers of the grassland to transform it into arable land. It appeared that the transformed Groningen soils brought a lower income than if they had remained grassland (Hofstee 1946:29-30). Nevertheless in the mid-20th century the crop farmers of Oldambt, a part of Groningen, protested violently against government proposals to return to animal husbandry. Hofstee (1946:22-23) hypothesised that the opening up of polder land in the 18th and early 19th century on the Groningen coast had made the prestige of arable farming rise, because the polder soils were initially only apt for arable farming and remained very suitable for this later on. Combined with the fact that the new polder land increased the size of coastal farms, farmers there became wealthy crop farmers, and this would have enhanced the status of crop farming also in the inland.

In the neighbouring province of Frisia in contrast, which had similar soil types as Groningen originally had, farmers derived their status from their horned cattle. But in spite of the fact that cattle farming was only economically viable on larger farms and that smaller farmers could have derived higher incomes from keeping pigs and poultry than from cattle, small farmers of Datumadeel, a part of Frisia, conformed to the style of their larger colleagues. They pretended that this was rational, but also admitted that they did so because their prestige in the group depended on this. (Hofstee 1976:221-222; 1985:228-229). Mainly on the basis of the Datumadeel example Hofstee (1985:228, 268-269) argued that people tend to follow the styles of those who enjoy already – for economic and other reasons – the esteem of the group.

Van der Ploeg (1980) describes styles of farming and cash crop production in Guiné-Bissau as overlapping more or less with ethnicity. His discussion of styles is a product of a structural analysis (the article is cast in a Marxist theoretical framework) and of the static view of culture, paradigms still influential in the early 1980s.

Hofstee's emphasis on the normative, more or less compulsory character of styles confers the impression that he too regards styles as static and homogeneous within a group. However, he also described historical changes in Dutch styles, the trendsetting role of big farmers in stylistic change (big in landholding, wealth and status), and tried to predict future trends. According to him, regional management styles were in decline, while national and multinational enterprises were spreading their styles over the globe, creating intra-regional management styles and homogenisation of group styles (Hofstee 1976:225-226). An important stimulus for stylistic change was what he calls the 'modern-dynamic culture pattern', the essence of which is a positive attitude towards change. In spite of the spread of this pattern in Dutch society in the 19th and 20th centuries, old management styles sometimes persisted because they gave farmers psychologically a feeling of security and because the infrastructure was geared to them (1985:227-230, 266-272). At the same time, the modern-dynamic culture pattern also encouraged subcultures, the divergence or frittering of a dominant group style into many small ones, and behaviour fashions[94].

### 2.5.2 Strategic styles

In the 1980s and 1990s, styles in the Western World were often conceptualised as individually and consciously chosen. Individual choice of lifestyles was already described by Long (1968: 37-38, 78-79, 209-210, 218, 231) and Bourdieu (1979), but Long links this choice partly to social networks and to religious conversions, and Bourdieu to social class. According to

Bourdieu, who defines styles as 'routinised practices', the modern individual adopts a style to distinguish himself from others and to enjoy a feeling of superiority. Each class judges its own style to be better than that of others, but the style of higher classes nevertheless forms a point of reference for the lower classes[95]. In this regard Bourdieu agrees with Hofstee, and also in South Bénin I found that the styles of elites (chiefs, wealthy traders, large farmers etc.) were a model for other members of their language group.

For Bennett (1980; 1982), Giddens (1991) and the Wageningen school of styles of farming in the 1990s, the choice of style is a matter of conscious and strategic individual choice. Bennett defines a management style in Canada as a behavioural strategy, namely 'an amalgam of such factors as the rate and number of innovations: economic performance variables, attitudes and practices in relation to uncertainty and risk, particular strategies of balancing prices and costs, sense of the future and its relationship to investment, and other factors' (Bennett 1980:209) and 'no automatic reflection of personality, but was for most people a behavioural strategy influenced by situational factors' (ibid:214). Giddens (1991: 80-81) argues that lifestyles in the modern world are more and more consciously chosen. He defines a lifestyle as 'a more or less integrated set of practices which an individual embraces, not only because such practices fulfil utilitarian needs, but because they give material form to a particular narrative of self-identity' (1991:81). The concept of lifestyle would make little sense in traditional cultures, where behaviour patterns were simply handed down, but modernity would confront the individual with a diversity of possible choices and so few norms to guide him that his self-identity is no longer self evident. He therefore needs to choose a lifestyle to construct his self-identity. The Wageningen studies on European styles of farming of the 1990s echoed Bennett's and Giddens notions of strategic style, used much of Giddens' style-related terminology, and adopted Bennett's research methods. Van der Ploeg, head of the Wageningen styles research team during those years, wrote that a 'Style of farming can be defined as a valid structure of relations between producers, objects of labour, and means. "Valid" means that at least those directly concerned consider the structure as an adequate means for making a living. (…) a particular style of farming is the product of a specific structuring of farm labour. A style of farming can rightly be defined as a "social construction", at least if its construction (the "construing moment") is located within the farm labour process' (1990:10-11). He considered farm labour to be 'a goal oriented and conscious activity' (ibid:259). Consequently instead of conceptualising styles of farming in terms of 'survival strategies', the different models should be envisaged primarily as future-oriented projects in which *intentionality* is a crucial element (Van der Ploeg 1992: 36; italics in original). His disciples Roep and De Bruin (1994:220) agree with the notion of strategic style. Although members of the Wageningen school[96] argue that strategically and intentionally chosen styles are not a completely individual matter, but 'inherently social. (…) Through comparison, intercommunication, negotiation, distancing or rapprochement, specific and differentiated responses emerge as socially constructed' (Van der Ploeg 1992: 27), their research methods and units of analysis did not allow them to elucidate how actors socially construct their styles. The methods of Bennett and the Wageningen School made styles appear to be personally chosen as I will show. Let's note in passing that Bourdieu, Bennett, Giddens and most Wageningen scholars[97] agreed that styles are a combination of practices and narratives.

Bennett (1980; 1982), ignorant of Hofstee's work[98], applied the concept of management style to family farm enterprises in western Canada in the 1960s and 1970s. An important

achievement was that he started his analysis from the conceptions of management style held by the farm operators themselves (1980:203). His methodology consisted in the following steps (ibid:216-217): First he asked each respondent to provide labels for all the farmers he knew best. He found very little disagreement between respondents on the labels applied to particular individuals. Next he tried to determine the criteria the respondents used to make their choice of labels. In the mean time he observed the farms in the neighbourhood. Then he classified the farms himself according to the determined criteria on the basis of his own observational and 'objective' data. Finally he compared his own classification with the folk labels, and found them in high agreement. Bennett (1980:223) discovered that several farmers in his sample changed from one style to the other between 1960 and 1970, mainly because of external economic changes or because of internal – often cyclical – changes in the farm household. This means that styles changed faster and appeared more consciously, and more personally and strategically chosen in 1960-1980 Canada than in 18th and 19th century Groningen. Bennett has been criticised for applying a rational choice model, and for neglecting the social networks of the farmers which he studied. In my view his reliance on farmers' judgements about their neighbours – rather than about themselves – is also problematic. A more sociological analysis of networks and of actors' interpretations of their own behaviour might have revealed non-'rational' reasons why a farmer chose one style rather than another.

From 1990 onwards most Wageningen scholars of styles of farming incorporated Bennett's (1980; 1982) methodology into their own work. During the first half of the 1990s the Wageningen School's methods consisted in the following steps, not always in the same order. They first determined, mostly with the help of key informants, which dimensions of diversity were 'most suited to map the existing diversity'. Suitability was obviously defined by their own and possibly their informants' research interests. In almost all case studies they chose two among the four dimensions scale, intensity, market integration and adoption of new technology. The second step was to plot individual farms in the area on these dimensions. This plotting always included the judgement of these farmers' neighbours, sometimes combined with statistical analysis of farm bookkeeping or of other farm surveys. The researchers showed individual local farmers the axes with dimensions, asked them to describe the differences between farms in their neighbourhood in their own words, and to locate each neighbour's farm on the axes[99]. Most farmers easily spoke about other people's farms, and tended to do so in negative terms, but found it more difficult to speak explicitly about their own farm. In this way a *repertory grid* or *social map* of styles of farming was established. The map or grid was called social and repertory because based on folk repertoires (conceptions). The repertory grid approach was originally developed by the psychologist Kelly (1955:105-110, 175-183), who assumes that people classify the world around them in dichotomous categories, but distinguishes himself from the French structuralists (section 2.1.3) in emphasising that each individual constructs his own personal classification which is only partly influenced by the group or the culture he belongs to. Kelly's technique consisted in presenting bi-polar categories and statements to his clients and asking them to classify persons, situations, attitudes etc. into these or other oppositional categories. His aim was to diagnose individual client's psyche in clinical situations. Other scholars adapted the technique to a variety of research intentions, and also, like the styles researchers, to detect shared life-worlds (Seur 1992:28-30). The next step of the styles scholars was to compare the individual maps and typologies given by the respondents with each other, and usually found them in

high agreement. On the base of these individual maps the researchers determined clusters of farms on the axes, and identified them as types or styles. An additional step in some studies was to identify clusters by statistical analysis of survey- or official data about the farms in the region. If this was done before the interviews, the farmer-respondents were asked to interpret the results of the statistical analysis during the interview. Next the researchers compared the results obtained from statistical analysis with those from social mapping, and it seems that they always found these different data sets to correlate well. After clustering, the researchers gave each cluster or style with the help of some informants a label in the local language. Finally they presented their report to some farmers and asked them if they recognised the styles and whether they recognised themselves in one of them.[100]

The Wageningen studies on European styles of farming in the 1990s identified in each region various styles and found that farmers had a shrewd awareness of the diversity of styles within a specific region and were able to give reasons for their own behaviour. This strengthened them in their opinion that management styles were no longer normative for a 'more or less coherent group of farmers in a certain region' as they had been for Hofstee (1985:227), but that they were now individually and strategically chosen.

Secondly they concluded that styles were no longer constructed in response to local eco-systems and local socio-economic relationships between town and countryside, as they had been in Hofstee's time, but had become farmers' intra-regional responses to technology and to markets (Van der Ploeg 1994:13; 1999:122-123). Intra-regional styles partly stemmed from the increasingly intra-regional, instead of local, character of (niche) markets and of gamut of technologies offered to farmers. Farmers can choose between this variety of markets and of technologies, but possible choices are increasingly the same across regions. A study on the development of several styles in response to as many niche markets is Van der Meulen (2000).

After some time Van der Ploeg et al. (1992:3) became aware that Bennett's (1980, 1982) methodology was not applicable in its pure form in all social situations because not all actors have discursive consciousness of styles. Research by Gerritsen (1995:73-74), Nooteboom (2003) and myself confirms this. Nevertheless, Van der Ploeg (1994:14) continued to call the actor's linking up with markets and with technology supplies 'a goal oriented activity subjected to the strategic reasoning of the farmers concerned'. I find it slightly misleading to speak of 'strategic reasoning' and 'conscious and strategic choice' for a particular style if the actor has no discursive consciousness of it.

The alleged differences in degree of personal choice between on the one hand Canada and Europe after 1960, and on the other hand Guiné-Bissau, Mexico and 19th century Groningen, might be partly a matter of appearance rather than of fact. Appearances triggered by the units of analysis and research methodologies used. If the units are individuals and the methods mainly interviews it is obvious that choices appear rational, conscious and individually taken, but if the units are whole societies or cultural groups and aggregate data for these groups are used, styles appear as being homogeneous within a static group and personal choices and processes are obscured. These limitations can be overcome by adding an intermediate level of analysis and a processual approach, for example social networks and their change in time.

### 2.5.3 Networks, styles and history

The perceptions of styles as either a monolithic group or a strategic affair fail to explain where styles come from, how they rise, decline, spread and transform. The first approach confers the impression that styles are dependent on static cultural values and on structural factors, the second that the 'strategic' choice for one style rather than another is fortuitous. Both approaches can be associated with the dominant paradigms of their times and their limitations. The first tends to reify structures and groups, the second individuals. Such approaches neglect historical processes, power relations and the social networks in which these groups and individuals were engaged. Bourdieu (1979) and Hofstee (1946, 1976, 1985) stand so far quite alone in underlining the trendsetting power of the styles of higher classes and wealthy farmers, but my research in Bénin supports them.

Bott (1957) studied how different types of division of gender roles within British nuclear families connect to their social networks, but she does not speak of styles. Through interviews with 20 married couples, she found that partners with close-knit social networks had a more segregated conjugal role-relationship than couples with loose-knit social networks, and attributes this mainly to the social control exercised by the network. In a similar study, Roberts (1982) found however that spouses who were both employed in the British textile industry mostly had a joint conjugal role-relationship even though their network was close-knit; here, most other network members also shared their household tasks and apparently regarded this as the right way to act. Neither Bott nor Roberts however interviewed other network members besides the key actors, which neither gave them much qualitative insight into the operation of the network nor into which values were actually communicated.

Long (1968:37-38, 78-79, 166-199, 209-210, 218, 231) was ahead of his time when he used network analysis and a historical approach in his research on styles in Zambia. He studied kinship, political and migratory networks, social relationships with Jehovah's Witnesses, conversion histories, and the parallel generation of urban versus rural and Jehovah's Witness versus non-Witness values and lifestyles, which sometimes led to clashes between adherents of different styles. When he observed a relation between an actor's style of making a living, participation in certain social networks, and religious group affiliation, he added other members of the network to his sample and focussed his interviews on actors' motivations so as to understand these differences. Later, Long (2001:132-166, especially 155) used a similar network analysis to study entrepreneurial styles and changes in these within a Peruvian family over four generations. While Hofstee had to speculate about the reasons for the change from the animal husbandry- to the arable farming style in Groningen, Long's inclusion of network analysis allows him to observe through actors' lenses how and why styles changed over time.

Several authors, including Gluckman (1940/1958), Mayer (1961) and Bank (2002) mention the persistent existence of two neatly distinct 'ways of life' among black South Africans, namely that of traditionalist pagan 'tribesmen' on the one hand and of educated, Christianised 'townsmen' on the other. In the Eastern Cape, these two are commonly called 'Red' and 'School'. Mayer (1961) and Bank (2002) describe them as distinct lifestyles and show how, until forced resettlement in villages in the (late) 1950s, there was little interaction between adherents of the two styles. School people clustered around churches and schools and avoided the Red people who lived on hills and mountain ridges. Bank (2002) shows that increased interaction after resettlement contributed both to reformulation of these styles and in many cases to increased polarisation between them, because their adherents now had

to compete for the same economic and socio-political resources and actively searched new self-identities. In other words, social ties may contribute to homogenisation by transmitting values and ways of doing within the network as predicted by Latour (1993), but they may also encourage differentiation into oppositional styles as expected by Bourdieu (1979).

From about 1995, several others recognised the importance of social networks for the choice of style, for example Den Ouden (1995), Van der Ploeg (1999:121), Van der Meulen (2000), Wartena (2001), and Nooteboom (2003:218). Also Mango & Hebinck (2004) and Wiskerke & Oerlemans (2004), who use the styles concept in other publications but now equate styles to 'patterns'[101] and 'ways of working', study these patterns and ways in the context of networks.

Den Ouden (1989; 1995:1, 4) interviewed members of a number of neighbouring families (descendants of the same paternal grandfather and their wives) about their own, their parents' and their neighbours' styles and strategies, and observed their practices. His approach covers the most important network relationships, namely people's relations in their families, their villages and their neighbourhoods, and reveals that many strategies were inspired by these networks, although some were more individually chosen (1995:7, 24-27). He concludes that styles are a combination of ethnic and geographical factors and of more personal strategies (1995:1, 7-8). Van der Meulen (2000) analyses social network relations within marketing chains, and found that they influenced Italian cattle farmers' and butchers' choice for one or another production style.

Van der Ploeg (1999:121, English version 2003) mentions strategic notions which several farmers share and 'socio-technical networks' in which these notions circulate, see 2.3.3. In the examples he provides, actors seem to constitute a particular socio-technical network mainly because it suits their style. In the Fon and Adja history that I discuss in Chapters 4 and 9 it rather seems to have been the other way round, tillage styles developed less consciously in the context of socio-technical (trade) networks.

As already mentioned in 2.3.3, Long (2001:233-235) prefers to speak of 'interface networks' which form part of complex food chains that link (agricultural) producers to a series of actors involved in various input and output service activities. These interface networks are also arenas were economic and non-economic values are contested and transmitted, and offer a better understanding of the heterogeneity of farming styles and economic practice.

Van der Ploeg (1999:138, 141-149) rightly stresses that an actor's market contracts and technological investments today constrain his style options in the future, sometimes for economic reasons, sometimes also because farm technologies transform the (soil) ecology or the infrastructure on the farm. Man-made landscapes in the Friese Wouden inhibited for example the development of the 'tractor-style' later on. My thesis illustrates how historical Fon and Adja styles transformed local ecology and landscapes and paved pathways for future style developments. In such cases, history has to be taken into account to understand style differences. I do not want to go as far as Callon (1986; 1991), who speaks of obligatory passage points, irreversibility and points of no return in techno-economic development. Deviation from the paved path may be difficult but not a priori impossible.

Network analysis is also one of the possible approaches for studying historical processes of style formation, if historical network ties are taken into account. Long (1968), Den Ouden (1989; 1995), Wartena (2001) and the present thesis do this mainly through genealogical analysis. Descent in formal and informal terms[102] illustrates how styles are sometimes inherited (see also Nooteboom 2003:218) from parents and tutors and sometimes change over the

years within one family, enterprise or individual actor's doing. Religious and business ties appear as other vehicles for transmitting styles. In combination with actors' explanations of their own and their network-partners' motives, this can give a good insight into the reasons why styles were chosen, maintained or changed. Such a network-life history analysis adds an extra dimension to the analysis of individual life histories, namely that of past social interactions.

Socio-technical-, trade- and migratory networks are other types of network through which technological (style) options are often transmitted. Mango & Hebinck (2004) (see 2.3.2) and my study give examples of how actors' stylistic choices relate to historical networks of these types. Tracing historical networks allowed me to go back to previous centuries for which no oral or written data on actors' motives could be found, and show correlations between trade networks and styles.

A historical analysis of the relationship between the styles and the social prestige and/or wealth of different members of society allowed Hofstee (1946, 1976, 1985), Bank (2002) and myself to show that styles of the elite were sometimes, but not always, adopted in a later stage by 'common' members of society. By studying adherents of particular styles neither as isolated individuals nor a priori as representative of a group but as actors within emerging social networks, I was sometimes able to see why and how which practices, values and styles were transmitted, and through which networks. In other cases I compared clusters of livelihood practices with historical socio-technical or trade networks, and tried to reconstruct historical values, goals and attitudes from scarce written historical sources and undertook interviews with actual members of Fon and Adja societies about past opportunities for social and economic achievement. I am aware that such interviews must be interpreted with care, but in many cases they helped me understand the origin of practices which I observed, which would otherwise appear rather meaningless and irrational in the present day situation. In this way it became plausible why some styles where adopted and others not. It was not always possible to decide with certainty what had influenced what, but I believe that my multi-methodological approach has given me a fairly good image of what happened.

## 2.6 Similar external trends, differential styles of making a living

The Fon and Adja plateaux shared their climate, geological conditions, trade opportunities, and cultural origins of their populations, and during most centuries with the exception of the 18th and 19th also their population density. Since 1894 they have belonged to the same nation State and are subject to the same socio-economic and environmental policies. What is more, changes in these external conditions followed similar trends: climate fluctuations, changes in trade- and technological opportunities, and population growth and changes in policy interventions after 1894 occurred simultaneously on both plateaux. This means that similar forces continued to impact both plateaux and both cultural groups.

Though this did not bring about the homogenisation that grand deterministic models predict, I do not deny that external conditions and trends may have influenced internal developments. The multi-levelled historical and comparative analysis that this study adopts seems capable of revealing where impact took place and where not. Essential to this is, I believe, the analysis of actors' interactions with and reaction to external forces such as markets, policy, and ecology. A historical socio-technical network analysis will show how

and why actors either linked up with markets, technology, political and economic powers, or distanced themselves from them. In such an approach structural models (in economics, sociology, agro-ecology, communication science etc.) are useful to raise questions about potential impact rather than to give answers or predict sure outcomes. They draw the observer's attention to critical points of intersection between local and universal forces and help him to discern their respective roles. Of particular interest for the Fon and Adja plateaux are models regarding demographic and agro-ecological change and models regarding market exchange, policies to regulate it, and social change.

Universal (structural, system, equilibrium, etc.) models, however, can neither predict historical contingencies nor how human actors respond to these, how people eke out their living, and which goals if any they pursue. Therefore the expected homogenisation often did not occur. Therefore we need a more historical and more actor-oriented approach. I have presented two promising approaches that attempt to integrate human agency with its wider social, economic, institutional, technological and physical environment: The livelihood approach and the styles approach. Their advantages are that they transcend the level of the individual and the notion of individual rational choice.

The livelihood approach appears capable of unite development practitioners and scholars from various disciplines. It offers a model for the analysis of complex social, economic, technological and ecological issues, such as the sustainability of Fon and Adja livelihoods and plateau ecologies. It aims to integrate all levels of analysis, from the individual or household actor to global structures and processes. The appearance of unity and integration is however deceptive. First the livelihood concepts and approaches of different categories of thinkers, classified roughly as practitioners, economists, and sociologists and anthropologists, differ considerably from each other. Second, the linkages between actors and structures remain under-explored and often the real actors themselves as well. Finally, most livelihood studies, especially those based on the notions of assets or capitals, are biased towards economic values and neglect cultural ones.

The concept of styles draws more attention to cultural aspects because it emphasises the meaning which people's practices have for them. Culture is not seen as homogeneous and static, but open to stylistic choice and change. A network approach to styles as well as to technology allows one to analyse how individual actors and their social, cultural and technological choices intersect with their existing social, economic, technological, institutional and physical environment.

With these qualities of a styles approach, why then do I still need livelihoods or 'making a living'? Styles are always styles of something, for example farming styles, consumption styles, musical styles, styles of soil fertility management etc., not only in popular discourse but also in meaningful research. For analytical purposes, classifications must be based on well defined dimensions in order to avoid misleading comparisons of unlimited numbers of overlapping styles, as Vanclay, Mesiti & Howden (1998) discovered when they failed to specify to their respondents, as well as for their own analysis, what kind of typology of farmers they were interested in. It is confusing to compare such overlapping categories if one does not bear in mind that these labels are based on different criteria of classification. To compare the Fon and Adja and their relationships with their plateau environments, we should consider all their meaningful practices. 'Styles of farming' do not meet this general purpose since most Fon and Adja live on more than farming. 'Socio-economic styles' is too vague. 'Styles of making a living' however refers to their whole range of livelihood generating activities and will be used at the appropriate places.

## Notes

1 Adapted from Patterson (1994:13).
2 Being mainly interested in the relative direction of historical movements, I define parallel development as transformation processes which take the same direction compared to external standards but do not move to or from each other. Some authors, for example Haverkort & Rist (2004:8) define 'parallel' more loosely as overt co-existence without interaction. For me parallel refers to the relative direction, irrespective of whether there is interaction or not, which indicates that there is no mutual influence except perhaps complementation, and that phenomena keep their own identity irrespective of mutual push or pull. Any parallel change of direction seems to be outside driven.
3 Hanken & Reuver (1973:49) distinguish between normative systems and descriptive systems; only the former would have a goal.
4 Nevertheless, as Glacken (1967:375-378, 518, 707) shows, the idea of final causes and teleology in nature flourished in western thought, science, philosophy, theology and literature until his time. The assumption of unity and order in nature was generally accepted. Debates only centred on the question whether or not there was a divine plan behind this order.
5 Von Bertalanffy guesses that internal system qualities might guide biological evolution and social change, but recognises the difficulty to explain these. Regarding the evolution of biological organisms, he states that 'there is no law in physics stating that their evolution, on the whole, would proceed in the direction of increasing organisation, i.e., improbability. (…) Further research will probably have to take into consideration irreversible thermodynamics, the accumulation of information in the genetic code and "organisational laws" in the latter. (…) I therefore believe that the presently generally accepted "synthetic theory of evolution" is at best a partial truth, not a complete theory.' (1968:153). Regarding social change he thinks that 'Spengler is certainly right, with his concept of culture as a dynamic and self-evolving entity' (ibid:202) but also believes that cultural diffusion was impressive (ibid:201). See also Kwa (1984:29).
6 Ehrlich & Raven discussed co-evolution already in 1964, but the concept became fashionable since the 1980s, see a.o. Whitmore (1990:66, 74), Haverkort & Rist (2004) and Geels (2005). Writing from a knowledge systems perspective, Haverkort & Rist (2004:6) define co-evolution of knowledges and sciences as a process in which each science involved evolves (develops and improves its methods and theories) based on its own dynamics as well as on the basis of interaction with other systems of knowing.
7 This was one of the reasons why Tylor's so-called 'cross-cultural comparative method' lost its appeal during the 1980s and 1990s (Mace and Pagel 1994:549).
8 I was sometimes openly or tacitly expected to rely on qualitative techniques of data collection and reflexive-interpretive methods of analysis only. But do such approaches suffice for a comparative study? Aren't they fundamentally at odds with the rationale behind comparing?
9 Van den Bosch (1980) applies this statement to all words, but I would exclude in the first place 'words' that have no meaning. Second, I would exclude from the point of view of the speaker, listener and/or reader also words whose meaning is unknown to him or her.
10 Being theory that societies evolve from primitive to more advanced forms. In particular, the historical (co)existence of different institutions and societies does not allow the conclusion that one is anterior to the other. He does however not reject the possibility that historical developments might be irreversible, and gives the development from the Roman Republic to 20th century Italian society as an example. But in his view ethnology would not study such irreversible developments, but only 'mechanical' laws of how particular (cultural) phenomena function (1958a:313-314).
11 Bonnell (1980:158), who calls herself a historical sociologist, shares in the anthropological definitions of deduction as reasoning that proceeds from a priori propositions to empirical evidence, and induction as reasoning from empirical evidence to the formulation of propositions. See also Ellen (1984:16-17).
12 McMichael (1990:391) speaks in this regard of mutually-conditioning moments of a self-forming whole.
13 Vertical incorporation is the primary concern of most of his examples, and also of the study which he published jointly with the commoditisation scholar Friedmann (1989).

14 I had commoditisation and trickle-down extension theories in mind when I started the research but these models proved of fairly little value during the observation and analysis of the empirical complexity, they played a marginal role in the actual comparison.

15 Hammel (1980); Bradley, Moore, Burton & White (1990); Guyer (1991:258); Mace & Pagel (1994: 549-550).

16 In Wartena (2001:237) I gave some examples of comparativists' erroneous functionalist explanations concerning sexual division of labour. Diffusionist comparativists' explanations often speculated that a trait was not developed locally but introduced from outside without knowing how this might have happened.

17 Hammel (1980:148). Since the 1970s some adherents of Tylor's method became convinced that holistic comparisons are more reliable than comparisons of isolated traits. Since then, several comparative studies combined the statistical analysis of Ethnographic Atlas data from large numbers of societies with a more qualitative analysis of some societies in order to understand the culture traits under investigation in at least some social contexts. Goody & Buckley (1973), Goody (1976), Sanday (1973) and Ember (1983) illustrated the statistical correlations that they found with examples from some monographs of other scholars. Goody (1976:43, 52, 57, 107, 109) used in addition examples from his own fieldwork in Northern Ghana; the others did not do fieldwork in any of the societies that they compared. But insofar as they took the monographs that they used seriously, and I have the impression that Goody did, they were able to fill in with concrete cases at least some of the gaps that had entered the statistical material in the process of labelling and encoding. They were also able to propose explanations for statistical adhesions which they observed on the base of their knowledge of concrete cases and not on speculation alone.

18 For brief explanations of idiographics and nomothetics see Van den Bosch (1980:13-14), Nooij (1993), De Bruin (1997:42).

19 He limits the term case study to research based in part on direct observation and on systematic interviews with eyewitnesses.

20 The term household is widely used by policy makers and development practitioners, also in Bénin. I followed their usage in my first study of the Adja plateau (Wartena 1987:55), but now see the limitations of the concept and will avoid it here. There are major difficulties in defining the household, as Long (1984a:27) points out. The term has been used variously to refer to co-residential domestic groups, income-pooling units, property units, labour-pooling units, or decision making units (ibid; Guyer 1981:97-102). The unitary model of the household is problematic first because its boundaries are often permeable and second because many 'households' are not unitary actors and -decision makers but have internal subdivisions, in particular in Africa (Guyer & Peters 1987:205, 207; Hart 1992). Membership of African 'households' is often fluctuating in the sense that people move from one 'household' to the other and often back again, there is very little pooling of income between West African husbands and wives, fathers' control over their wives' and children's labour is limited, and individuals can often take semi-autonomous decisions (Guyer 1981:98-102).

Most of the current definitions attribute several features to the same household unit simultaneously: residence, defence, production, consumption, property, investment, decision making etc. But there is no need to lump these together; people may be members of different units which may have overlapping or nesting memberships. It is more useful to ask what the significant units for each specific activity are, and what are the major flows and transfers of resources between individuals and units (Guyer & Peters 1987:205-208). Van den Breemer (1984:422, 433-435) found that the composition of the Ivorian Aouan's units of production is overlapping, variable over time, and variable between units as far as type of internal relations are concerned. Even for a single activity the Fon and Adja participate to various degrees in different units at different times; on one day they eat or work or live with one group, on the next day with another. Long (1984a:27-28) suggests that for developing a sounder definition of the household it would be worthwhile to explore Aijmer's (n.d.) proposal to 'analytically disaggregate the various task-oriented activities associated with the household and to identify instead constellations of people who take part in certain basic activities and express sentiments of belongingness. Hence one would, for example, talk about 'shelter', 'stove', 'eating', 'production' or 'resource-management' groups rather than use the ambiguous notion of household. These groups would (…) vary situationally within the same social context'. In a similar vein, Löfgren (1974:23, quoted in Wilk & Netting 1984:4) pleads for a shift from asking 'how do we place limits around

groups' to 'what types of primary groups fulfilled the basic functions of production, consumption, socialisation, etc. (…) in society'. Löfgren's (1974) proposal however disregards that activities are not necessarily restricted to a single group.

Many scholars argue that the matrifocal unit of a mother and her children is the most important unit in Africa. Ivens (1997:3) defines the matrifocal unit as the 'household' of the Ehwe-Adja. The Fon and Adja themselves however have no word for it, nor have the Avatime of Ghana (Brydon 1987: 258). Van der Heide & Keulemans (1984) propose for South Bénin the concept 'cooking unit', others suggest the term 'hearth-hold' for West Africa (Ekejuiba in Guyer & Peters 1987:207). But the Fon and Adja do not cook in static units.

Some authors focus on the heads rather than the boundaries of units. Van den Breemer (1984:422, 433-435) coins the term 'nucleus of production'. Each adult cultivator is such a nucleus, and receives assistance from various other people, who compose together a fluid unit of production. Like I do in my thesis, Van den Breemer (1984:423-427) focuses his analysis on the relationships between co-workers (the nucleus and his helpers) rather than on units of production as such. Biaou (1997:50-51) opts to keep the concept of household (ménage) for his study of the plateau Adja, but distinguishes three centres of decision making within it: the household head, each woman, and each adult individual. Each centre of decision making is the head of an enterprising unit. His definition is better than the unitary household model but does not rule out the problem of fluid boundaries.

21 Adja, Djedji and Arada indicate a mix of speakers of various Adja-related languages.

22 For example 'Do you know farms which are managed in another way than yours? Or use different farming practices? Or have different relationships with markets or extensionists?'

23 Rhoades (1985), Fresco (1986:27-37). This does not mean that the approach was entirely new; Oasa (1985:219-220) argues that it built on earlier holistic views such as community development and integrated rural development approaches, and Fresco (1986:28) shows that Pierre De Schlippe (1956, 1957) already combined agronomy and anthropology in what he called systems of agriculture.

24 It was probably no coincidence that Long (1989a) embraced around the same time the concept of interface to denote critical points of linkage between actors with different interests, knowledges, cultures, power, access to resources etc. Interface is a concept applied in cybernetics and in systems analysis to the linkages between system elements where feedback occurs. Though Long borrowed this concept from the then trendy systems paradigm, he dismissed other elements of systems thinking as non-sociological.

25 The second law of thermodynamics, called *entropy*, states that energy always is transformed from concentrated to more dispersed form; this process in time can never be reversed (Odum 1993:70).

26 A few years earlier, Glacken (1967:375, 377, 535-536) could still write that 'Ideas of final causes flourished with undiminished vigor in modern times' and 'These great names in science and philosophy [Cicero, Kepler, Newton, Boyle, Kant, Goethe etc.] kept alive the spirit of teleology and design in nature despite the criticisms that were made of it'.

27 Tiffen et al. (1994) later defined agricultural intensification as the application of increasing amounts of labour and capital per hectare to raise crop yields. They distinguish between area intensification which corresponds with Boserup's definition, labour intensification, and capital intensification, depending on which production factor is applied increasingly.

28 Multiple cropping is the cultivation of more than one crop per year on a given plot of land. Relais cropping occurs when a new crop is planted between a standing crop; after the harvest of the first crop(s) the second remains in the field.

29 Boserup (1965:59) quotes a Dutch observer who, possibly inspired by Malthus' publications a few years earlier, believed that Java's population in 1816 'far exeeded the cultivation' (sic), and argues that in 1965 Java was still almost self sufficient in food.

30 Saïdou et al.'s (2004:363) concise critique on Hardin is a rare exception.

31 Fairhead (2001:215). Boserup (1965:77-94) argued on the basis of her comparative study that differentiation in land use rights within a community and social stratification on the basis of access to land was the normal result of rural population growth, and that land use rights become more restricted and *sometimes* contested in this process. I will show that population growth did not lead to a more restricted access to Fon plateau land, see 6.5 and 10.

32 Homer-Dixon seems to ignore that even violence is embedded in and regulated by social norms and values, and that no society accepts warfare or violence for just any reason, by any means or in any

form – perhaps because such values or the willingness to submit to war-norms are underdeveloped in his society, the United States?

33 Own interview with Agbanon in Sodohome, 23-2-1989. Italics mine. 'Searching' is a euphemism for raiding.

34 Many would agree that labour is often the most limiting resource when it comes to exploiting natural resources, both in situations of scarcity of land (Boserup) and with natural resource abundance (Goody 1976). Fairhead (2001:222) proposes that the means to exploit or valorise natural resources, mainly labour, is often more decisive and a greater source of conflict than access to the resources themselves. While this is certainly true, it would be confusing to include labour into the concept of natural resources.

35 N and K values were highest in the most intensively cultivated and managed 'compound fields', P highest in the 'village fields' which averaged in duration of cultivation and management intensity between compound- and 'bush fields'. Neither were there significant differences in organic matter, total nitrogen, total phosphorus and available potassium in 1996 between soils of two villages with different population densities. Mazzucato & Niemeijer attributed this to indigenous soil fertility management practices.

36 To study historical yields, soil fertility, human and livestock population densities, and rainfall per province, they used government statistics from 1960 to 2000, a soil survey from 1969, and their own soil samples from 1996.

37 To assess soil degradation they compared soil chemical fertility data from 1969 Eastern Burkina Faso with their own samples taken in the same region in 1996.

38 Classification as forest meant 'uncultivated' and 'areas where nobody uses to farm', irrespective of tree density.

39 For example the tropical ecologist Prof. Cleef during Nikiema's PhD defense on 8 March 2005.

40 Hardin's (1968) 'tragedy of the commons' metaphor suggests that individual men tend to over-exploit common property resources, because the benefits accrue to them alone, while the cost of degradation is borne by all. The metaphor confuses common property with open access and disregards local institutions for the management of communal resources.

41 His report refers many times to interviews, and states for example about the desiccation of the Kpako river that *D'après les indigènes la raison de la disparition de cette rivière serait que les pluies seraient moins abondantes qu'autrefois. Cela peut être vrai, mais il y a certainement une autre raison. C'est toujours d'après les renseignements donnés par les indigènes, cette rivière a disparu du fur et à mesure qu'on a cultivé sur ses bords et par conséquent qu'on a déboisé.*

42 Personal communication December 1995. Unfortunately, Koudokpon passed away not long after this event.

43 My finding that farmers are knowledgeable but not always omniscient about their ecological environment, also makes me believe Smaling & Toulmin's (2000:199) statement that less visible benefits (from organic agriculture and manure management) are sometimes poorly understood by farmers.

44 In Marxist terminology, commodities are also called 'exchange values' (Marx 1867/1988:50-53, 75; Marx 1979:138 quoted in Long 1986a:9). Goods and services which are not sold are called 'use values'. Marxists acknowledge that commodities have use- as well as exchange value and that they are characterised by this double nature (Marx 1867/1988:56, 75; Kopytoff 1986:64), but quite paradoxically if they call a good or service 'a use value' they want to specify that it is not a commodity.

45 The transaction is discrete because it is essentially isolated from other transactions.

46 There may be many implicit and explicit and even unconscious purposes to an exchange, goals change over time and the actors may not always be able to tell what their primary aim was at the time of the exchange. Most traders hope that their transactions will not remain discrete or isolated. They attempt to establish trust and other types of social commitment with their customers and business partners (the concepts *custom*ers and business *partners* hint at the existence of 'personal' relationships!). Long & Villarreal (1998) bring examples of such attempts in Mexico and the US. European supermarkets issue client cards, all over the world traders give gifts in the hope to bind their clients, etc. Outside the domain of regular trade, 'gifts' are often given in return for an earlier 'gift' or in the hope and the expectation to receive another 'gift' at a later date. The problem becomes now how to define and distinguish gift and barter. Long (1997:233) points out that the problematic dichotomy between 'gift' and 'exchange' is a legacy of anthropological debates.

47 Kopytoff (1986) specifies that a good may also cease to be a commodity after its sale if it is 'singularised', that is if the owner comes to regard it as unique and refrains from selling it again. Though I agree with Kopytoff, I am less concerned with singularisation here.
48 Subsistence production in this evolutionist sense did not exit anymore on the Bight of Benin after 1600.
49 It remains unclear why commoditisation scholars believe that, on the one hand, the simple commodity producer's goal is reproduction, and on the other hand, does not valorise his labour according to the time and effort needed for its reproduction but according to its market value.
50 Kahn (1978) as well as Gibbon & Neocosmos (1985), Scott (1986), Smith (1986) and Long (1986c) prefer the concept 'petty commodity production' over 'simple commodity production' (used by Long 1986a:3 and 1986b:12, 17). Bernstein (1986:14) discusses the difference: Petty commodity producers, in Gibbon & Neocosmos' (1985:170) conceptualisation, rely on unpaid household labour alone, while a simple commodity producer may hire some labour as long as he also works on the enterprise himself. The literal translation of Marx' concept *einfache Warenproduktion* is simple commodity production. The word *einfach* (simple, simply, solely) indicates that according to Marx this form of production is characterised by *einfache Reproduktion*, which means that it remains at the same scale and does not expand (see above).
51 Engels (1884/1985:196-199) and Friedmann (1986c) regard also nuclear family property managed by one of the family members as private. In this view, petty commodity production cannot exist when the means of production are owned either by the community of producers or by a 'class of non-labourers'.
52 Exempted are scholars who blend commoditisation terminology with an actor oriented approach in a less orthodox way, for example Long (1986a:3), Van der Ploeg (1986:24) and Whatmore (1991:7-8), who call for a study of labour processes, including productive and reproductive activities, different labour relations, and ideological and experiental aspects. In Whatmore's view, the commoditisation process remains the main impetus for change in the structure of family farming and the wider agricultural industry, but petty commodity production would partly be shaped by social structures and processes other than class and capital accumulation which cannot be reduced to them, in particular gender relations. In the second part of her book she presents case studies of negotiation processes in six family farms in Britain about the gender division of labour and about women's right to produce commodities on their own account (1991:86-138).
53 Ethnographic studies by Kopytoff (1986), Long (1997:236; 2001), Long & Villarreal (1998:725-727) and many others show that values in production and exchange are not always dominated by capital, that commodities still have socio-cultural value, that values are often contested by people and groups, and that different values and identities are attached to the same (potential) commodity under different circumstances.
54 Wolf (1966:71-77) sees the development of the nuclear family rather as a result of market production than as its cause.
55 Polanyi (1944) describes the self-regulating market as the great culprit which would destroy man and nature and would like a satanic mill atomise society, unless social institutions to counter these effects exist or emerge. He believes that society is indeed able to protect itself against the devastating market. He writes: 'Our thesis is that the idea of the self-adjusting market implied a stark utopia. Such an institution could not exist for any length of time without annihilating the human and natural substance of society; it would have physically destroyed man and transformed his surroundings into a wilderness. Inevitably, society took measures to protect itself, but whatever measures it took impaired the self-regulation of the market, disorganised industrial life, and thus endangered society in yet another way' (Polanyi 1957:3).
56 They share these views with the 'liberal feminists' who discuss western women, in particular Betty Friedan (1963).
57 They acknowledge the advice of, amongst others, Arie Rip on drafts of their paper (ibid:79). Rip & Kemp (1998) later defined 'socio-technical regimes' as the 'grammar or rule set comprised in the coherent complex of scientific knowledge, engineering practices, production process technologies, product characteristics, skills and procedures, ways of handling relevant artefacts and persons, ways of defining problems – all of them embedded in institutions and infrastructures' (Quoted in Van der Ploeg, Bouma, Rip, Rijkenberg, Ventura and Wiskerke 2004:4). Van der Ploeg et al. (2004:4-5) equate

the socio-technical regime to styles of farming, and show how these regimes are linked to legal regulations, research and decision making centres at national and supra-national level. In 1999, Van der Ploeg included these links in the socio-technical network, and argued that the network itself was part of the style. Since I define a style, in short, as a combination of discourse and practice, I accept to call a style a regime, and agree that there different styles of network(ing). But not every style must necessarily be a network.

58 They do, however, neither adopt Latour's concept actor-network nor his notion of inanimate agency or actants, though they agree with him that scientists imbue high-profile technologies with human-like identities (Lamb & Davidson 2002:2).

59 The notion of interface between social actors remains problematic because prone to confusion. Interface is a term used in cybernetics, i.e. the science of command processes in robots and machines, and in systems analysis for the linkages between system elements where feedback occurs (see 2.2; Odum 1983; 1993). Socio-technical networks do not obey mechanical laws of cause and effect, even though they have an inherent inertia because social and technological choices today pave pathways for future choices. In attempts to give the interface concept a more sociological and less mechanical meaning, Röling (1988:43, 186-189; 1991:490-498) defines it as not simply a linkage mechanism but as a force field between two institutions, and Long (2001:243) describes it as a complex situation which is multiple in nature, where discontinuity rather than linkage occurs, where meaning is transformed rather than transmitted, and which is multi-layered, fragmentary and diffuse rather than unitary and systematised. I support Röling's and Longs's attempts to rid the interface concept of its mechanistic connotation, but their definitions involve so much mental acrobatics that they are probably poorly understood by the casual reader. To avoid confusion, I prefer to speak of socio-technical rather than interface networks.

60 Actor-network analysis in the sense of Callon, Latour, Law and Verschoor should not be confused, as Mahanty (2002) does, with a social network analysis from an actor-oriented perspective.

61 Verschoor (1997:26-27), following Latour (1994:46, 49, 53).

62 I do not exclude a priori the possibility of animal or spirit actors (this would be in line with hunter-gatherer, Fon and Adja worldviews, see above, sections 5.2, 5.3.2, 8.2, Chapter 10 and Ingold 1996). Animal and spirit agency will not be discussed here, but I find it inadmissible that Callon and Latour draw many of their examples to defend the agency of things from the animal- and magic world. This implies an unjustified extrapolation.

63 Many examples of persistent diversity of agricultural practices under similar circumstances could be given; Richards (1996) gives examples from Sierra Leone and Liberia and Van der Ploeg (1993a: 51-53; 1999:110, 113) lists a few from various other parts of the world.

64 See for other early examples Kaag (2004:51). De Haan & Zoomers (2003) claim that the concept *genre de vie* of the early 20th century geographer Vidal de la Blanche was synonymous to the conception of livelihood, they give a very limited explanation of the way how the *genre de vie* concept was used. Douma & Bouwman (1992) however translate *genre de vie* with lifestyles.

65 In his substantive economic theory, Polanyi criticised the economist and deductive bias and the rational choice model in what he called 'formal' economics. In his view, economics are not a set of laws of a self-regulating market based on people's profit maximising behaviour, but the empirical interactions between man, nature and society which have to do with the satisfaction of man's material wants. With its focus on people's productive and exchange activities and on socio-economic institutions, substantivism had much in common with the later livelihoods approach. A difference is that today livelihoods are considered to concern not only material wants, but also immaterial ones; not all scholars however seem to be aware of this or agree with this. Substantive economic theory is described in more detail in Chapter 5.1.2 of this book.

66 Gavin Smith is the same person as Gavin Alderson-Smith. He published under different names in different years.

67 Some older definitions were:

- 'A livelihood is the material means whereby one lives. Livelihood generation refers to the bundle of activities that people undertake to provide for their basic needs.'(World Commission on Environment and Development (WCED) 1989, quoted in Niehof & Price 2001:8);
- 'A livelihood comprises of people, their capabilities and their means of living, including food, income and assets. Tangible assets are resources and stores, and intangible assets are claims and

access. A livelihood is environmentally sustainable when it maintains or enhances the local and global assets in which livelihoods depend, and has net beneficial effects on other livelihoods. A livelihood is socially sustainable which can cope with and recover from stress and shocks, and provide for future generations.' (Chambers & Conway 1991 quoted on the DFID website accessed in September 2003);

– 'A livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living.' (Chambers & Conway 1992).

68 A recent version of the framework can be viewed on the DFID website www.livelihoods.org (accessed in September 2003 and July 2006).

69 Carney (1998:6) posits that it is vital that the framework is widely understood and widely accepted and that guidelines and methodologies for its use are developed since much of the sustainable rural livelihoods approach is based on it. According to Scoones (1998:3) a key question based on the framework has to be asked in any analysis of sustainable livelihoods.

70 Acronyms:
EDIAIS = Enterprise Development Impact Assessment Information Service
IIED = International Institute for Environment and Development
IISD = International Institute for Sustainable Development
UNDP = United Nations Development Program.

71 According to Ellis (2000) and De Haan & Zoomers (2003) modernisation encourages diversification. Hebinck (2003 personal communication) believes that diversity rather declines with modern policies which favour monocultures, contract farming, standardisation of input packages, quality standards of products, etc. Kaag (2001: 152) found that farmers in Senegal diversified their crops and varieties partly as a risk reduction strategy and partly because they could always lay hold on their preferred varieties, that is they would have preferred more standardisation than they were able to implement. Globally I agree with Scoones (1998:4) and Niehof (2004) that some producers diversify and others specialise, depending on their styles, their strategies, their assets and on local circumstances.

72 For example Ingold (2000:9), Hebinck & Bourdillon (2001), Lakwoo (2002), Lin (2002) and Arce (2003).

73 Commitment 3 of the Copenhagen Declaration: "Governments accept the responsibility for promoting full employment, as well as he attainment of sustainable livelihoods for all through productive employment and work."

74 For example Brons (2002). Though he defines livelihood as the way people make a living, he goes on to speak of incomes only, and concludes that West African livelihoods (in the sense of incomes) are stagnant in the long run. Also May (1996) fits best in this group.

75 This definition is adapted from Lipton (1993), who defines livelihood as 'approximately 200 days of work per year, receiving a reward that is at least sufficient to prevent household poverty'. (LIPTON, Michael (1993): Paper no 1: Aims and methods: suggested framework for papers. Paper presented at design workshop, Creating rural livelihoods in South Africa project, Cape Town; quoted in May 1996:1).

76 For example 'any given method of farming creates more half-livelihoods at realistic rates of reward than full livelihoods above market rates' (Lipton & Ellis 1996: ix) and 'this has depressed the capacity of agriculture to create livelihoods' (ibid :iv).

77 De Haan and Dekker seem to have different reasons for using the systems concept than Niehof and Price.

78 The concept making a living is also used, in a descriptive sense, by McAllister (2001:32-35) and Nijenhuis (2002). They do not discuss it conceptually or theoretically.

79 This even applies for Frankenberger, Drinkwater & Maxwell (2000) in whose article household is such an important concept. They seem to assume a very simplistic definition of the household as unit of production, consumption and decision making.

80 It may be obvious that especially social, natural, physical and – if included in the list – cultural, historical, symbolic and political capital is often collectively owned.

81 De Haan (2000:344) takes note of this critique but is not impressed, because he sees material gain as a very important aim in the pursuit of livelihood.

82 Hence I use the term in a wider sense than Long (2001:55), who describes making a living as economic strategies at household or inter-household levels.

83 He made a loose connection between styles, livelihoods and making a living, but neither defined their relationship nor the concept of making a living.

84 For example the sociologist Bauman (1992:50-52). According to Munters (1992:179-180) for many producers and employers (of sociological researchers) lifestyles are the kind of markers of the market segments or fashion groups whom they want to serve with their products and services. Much of the discourse on lifestyles might be nothing more than marketing rhetoric. The executive board of Wageningen University associates lifestyles primarily with health and non-productive animals, in general pets and riding horses (Wageningen International Student Paper 24 November 2005). According to Giddens (1991:81) 'The notion of lifestyle sounds somewhat trivial because it is so often thought of solely in terms of a superficial consumerism: lifestyles are suggested by glossy magazines and advertising images.'

85 Only then would one be entitled to speak of *life*styles rather than of styles of behaviour in a particular domain (such as farming, painting, management etc.) according to Munters 1992:183).

86 She has in mind the work of Van der Ploeg between 1990 and 1994 and of Ventura & Van der Meulen (1994). Styles of farming would be constructed on farmers' interpretations and representations, for example their self image, and could therefore be called an 'experiental' category, fitting into a hermeneutic epistemological framework. They differ from taxonomic categories (in the natural sciences), which classify according to morphological (measurable) features and are based on a positivist epistemological framework, and from relational categories which classify according to structural relations (for example extent of commoditisation) and are based on a realist epistemological framework.

87 According to Vanclay (personal communication 8-10-1998) the difference between ideal types and parables is this: For ideal types there must be real cases which approximate it. Parables are just a story, which may or may not have real proxies. Although earlier in 1998 he described styles as ideal types, in October he preferred to call them parables, because he felt that this was how the farmers whom he had studied used the concept. I am not convinced that Vanclay's definition of a parable as 'just a story' is right. A mathematical parable is a symmetrical figure. One side of the parable is exactly mirrored in the other. In literature, for example in the Bible, a parable is a story which illustrates a general principle, and although the people in the parable are not real people, the story is realistic enough to be recognisable as 'could have happened'.

88 Also Hebinck & Bourdillon (2001:7) link styles with cultural repertoires and values, but they do not explicitly exclude observable features.

89 Gerritsen attributes this to constraints that keep farmers from following their ideals.

90 Den Ouden (1995:3-4) is however aware that people's categorisation is too simple to reflect (observable) reality. Their idioms would nonetheless have 'an important impact on the styles and strategies they follow' (1995:3-4). Here Den Ouden suddenly uses 'styles' in the sense of practices and not in the sense of idioms. It seems to be very difficult to be consistent in treating styles only as metaphors or idioms and not as practice.

91 He (ibid) considers as styles both the discursive extremes and the real practices somewhere in the middle, and argues that styles should not be seen as homogenous categories with no 'grey zones' in between but as Weberian ideal types.

92 Roep, Van der Ploeg & Leeuwis (1991:8) and Howden, Vanclay, Lemerle & Kent (1998; Vanclay personal communication 9-10-1998) discovered that the descriptions which farmers made of other people's styles were often in negative terms. They also found that farmers were eager to label others but were reluctant to label themselves. When farmers were asked at the end of the research in which of the styles (with more or less derogatory labels) they recognised themselves, many were unable or unwilling to recognise themselves in any. Farmers wished to classify themselves in socially desirable categories and did not mind to classify their neighbours into socially undesirable ones.

93 He expected intra-regional styles to emerge in the future (1995:73).

94 Behaviour fashions are in his terminology rapidly changing styles, while real styles have an element of tradition (1976:227-229). What is 'rapid' remains unclear; Hofstee acknowledges that in arts styles often change quickly but he does not speak about fashion in this case (1976:221).

95 Bourdieu assumes the existence of unifying social values in the form of symbolic capital and cultural capital recognised as valuable by most or all groups in a society, in spite of social differentiation along horizontal as well as vertical lines (Albertsen & Diken 2003:5-6).

96 De Bruin & Van der Ploeg (1991:9), Van der Ploeg et al. (1992:2). Van der Ploeg (1993a:63) considers intentionality to be an essential and socially constructed, but not necessarily individual, phenomenon.

97 Roep & De Bruin (1994:220) define styles as 'specific combinations of farming practices', and Wiskerke (1997:35-36) defends that styles refer to practices not to intentions and discourse in themselves.

98 Hofstee wrote in Dutch. Some of his work was translated into German, but it has gone largely unnoticed by the Anglophone world.

99 Van der Ploeg (1991:67-68) argues that each style was related, by farmers, to some of the dimensions that were, in their opinion, crucial to characterising the main differences. But the description of the methodology makes clear that it was rather the dimensions which were crucial in the researchers' opinion. This is a methodological weakness to which I will come in my critique below.

100 Studies based on this approach are De Bruin & Van der Ploeg (1991:9-10), Roep, Van der Ploeg & Leeuwis (1991:4-5, 7-8), Van der Ploeg (1992:29, 1994:9-12; 1999:131; 2003), etc. Van der Ploeg & Roep (1990:3) used at least the first few steps.

101 Hebinck regards styles and patterns as synonyms and does not prefer one of these two concepts over the other (personal communication 2005).

102 Including matrikin among the patrilineal Fon and Adja, patrikin among the matrilineal Lala in Zambia, tutors and foster parents.

# 3

# Comparative methods in diverse breeding grounds

> Who is wise and understanding among you? Let him show it by his good life, by deeds done in the humility that comes from wisdom. But if you harbour bitter envy and selfish ambition in your hearts, do not boast about it or deny the truth. (The Holy Bible, James 3:13).

> Ahwlikponuwa is asked whether she goes to the market. She replies: "Do you fill your stomach with questioning people?" (*E kãbyo Ahwlikponuwà đò axì wɛ é xwè ají. E đò: nu kãbyó ó xò wɛ e no go nú we à?*) (Fon proverb)

This chapter will present the research methods and techniques that were used for this study. Their most distinctive features are, first, that it combines a considerable number of research methods from various social and technical disciplines, among which anthropological participant observation occupies a prominent place. Second, it applies these methods to long time periods of at least several decades and where feasible up to 500 years, and for the regions adjacent to the research plateaux sometimes even more. Third, it is a comparative study between two neighbouring cultural groups and regions. In short, it is a comparative multi-methodological ethno-historical case study.

This chapter will start with setting the methodological requirements for a comparative study. Next the different methods which I used will be exposed. This will be followed by a description of the research experiences of the Fon, the Adja, and myself. These experiences shaped expectations and attitudes of the different parties involved in my research encounters, and therefore set limits to the methods that were feasible to employ. This also had consequences for the consistency of my research procedures. Finally I will explain how my research methods and techniques worked out in practice, and how I sometimes transformed them in response to concrete research situations. Particular attention will be paid to innovative elements in my methodology, for example systematic comparative historical interviewing.

## 3.1 Preface

This section will present considerations regarding a number of choices made in early stages of the research: and implications of a comparative approach, my choice of interpreters, and the choice of research villages.

### 3.1.1 Comparative research methods

The logic of comparison (see 2.1.3) implies that the external circumstances, in other words all the factors not included in the comparison, should be broadly similar. Otherwise they must also be subjected to comparative analysis. Here I will argue that the requirement of conformity also pertains to the research methods, but that in the study of human actors the unfolding of research procedures depends on the reactions of these people. In sections 3.3 and 3.4 I will explain how my interaction with the Fon and Adja was related to our respec-

tive cultures and to their earlier experiences with outsiders, and how I tried to achieve a reasonable similarity of research procedures in spite of their differential reactions.

Basic data become more comparable if similar research procedures have been followed: if the researchers had similar (theoretical) perceptions, if they asked themselves and their respondents the same questions, if they took their field notes in comparable ways, and if they related to the people they observed in similar ways. This applies also for re-studies (Seur 1992:11).

Standardised observation techniques facilitate to some extent the application of homogenous procedures to the different phenomena to be compared, not least because they remind the researcher of his own intentions to collect in a systematic manner the same type of data on each of the phenomena. In my research this included various types of systematic observation of phenomena selected by the researcher, measurements, standard questionnaires, surveys, mapping, etc. It is also advisable that data on each of the equivalent traits to be compared are collected and presented by the same scholar in each of the cases under study, in order to minimise dissimilarities due to researcher bias. This, however, is impossible for comparative studies of large numbers of cases. A friction exists between standardised techniques and the anthropological and social constructivist ideal of observing, analysing and interpreting through the eyes of the people who are studied. In the strict sense, such social constructivist research implies letting the researched guide the research agenda and procedures and, in order to account for the researchers' role in the process, to include reflections on the research and interpretation process in the analysis.

Qualitative research methods present advantages over standardised ones for holistic insight into internal social relations, but not all qualitative procedures are equally suitable for comparative research. For the sake of comparability the researcher needs to steer his[1] observations and his interaction with the researched people to some extent in the attempt to obtain, as much as possible, equivalent data on the phenomena under study. He can neither limit his observation to what he comes across by chance nor let the 'other' alone define his research agenda, unless he is willing to limit his comparisons to whatever equivalent data he might have obtained in this way. Otherwise qualitative techniques, if used, must be structured to some extent.

Standardised methods alone, be they qualitative or quantitative, do not suffice to obtain comparable data. A relationship always involves two partners and the researcher cannot predict how the other will react. General communication patterns as well as attitudes towards research(ers) may differ between the groups under study. The personalities and moods of observed actors may result in very different encounters and hence in incomparable research outcomes within the framework of the same study project, on the same general topic, in the same region, within the same population, and occasionally even with the same individuals. Torres (1992:94-107) gives examples of the latter and concludes that 'This underlines the difficulty, if not impossibility, of applying homogeneous strategies, units of analysis and categories in the practice of research. Each researcher evolves her or his interactional initiatives in making relationships. This runs counter to the picture often given of the sociologist, who is said to orchestrate the social interaction in order to arrive at an enlightened analysis of the order of things. (…) [H]eterogeneity is also a property of the relationships that evolve between the researcher and the researched.' (ibid:107, 111). For this and other reasons complete consistency of research procedures cannot be achieved, but in my view in a comparative study the procedures should be as comparable as possible.

### 3.1.2 Choice of interpreters

Very few Fon and Adja villagers spoke French and my ability to speak the Fon and Adja languages remained restricted to basic survival such as shopping and household chores. Though my recognition of keywords and hence themes that people talked about improved gradually (the existence of a Fon dictionary and living with Fon (but not with Adja) families in the same compound helped in this process), but it was not enough for conducting interviews on complicated themes. Therefore I worked with interpreters during interviews. Needless to say that they also served as guides, especially in the beginning, and that they strongly influenced the research by their impact on me and the respondents. Socially desirable answers were probably given more often to please them than to please me. Therefore their personality needs to be made explicit here.

My principal Adja interpreter in 1985 was Brigitte Djatto, born in 1966 in the village where I lived, Atindehouhoué, and descending patrilineally from a daughter of the village founder. She had primary and two years secondary school in the region and was currently helping her parents on the farm and trading between local markets and sometimes Cotonou. The first week I had been working with the only secondary school leaver in Honsouhoué, my second research village. But then the elders of Atindehouhoué (mostly from the founders' lineage) selected Brigitte as my assistant, saying that: "Martin is good because he is an obedient boy but we don't want someone from another village to know everything about us, take Brigitte instead." The fact that the interpreters' modest salary became known to one of the elders' sons during the first week probably also played a role. Brigitte also interpreted most of my interviews in Honsouhoué and some neighbouring villages, but sometimes I walked around alone, communicating with hands and feet and through primary schoolchildren in the house. Occasionally this provided more confidential information, for example about the slave origin of Honsouhoué's founders. In 1985 Martin, Brigitte and two other school leavers in Atindehouhoué also did some surveys on land- and time allocation among their own close relatives without my presence, see below. In 1989 my research concentrated on the Fon plateau, and when I briefly visited the Adja I was sometimes interpreted by a primary schoolboy in the house I visited. That year I had a house in Honsouhoué[2].

In 1990 I returned to Atindehouhoué but Brigitte was no longer in the region. I selected Kwesivi Seboka, born 1966 in Atindehouhoué, whose research capacities had drawn my attention in 1985 while he was in the fourth year of secondary school: He enjoyed discussing my research, and was the only person in the village who willingly read and commented upon my first draft report. A case study of his family is presented in 8.2. In 1990-1991 he interpreted all my formal interviews on the Adja plateau, conducted surveys on his own, and also helped his father on the farm. He knew many people and villages, especially around Atindehouhoué, Klouékanme and Aplahoué where he had gone to school. When we interviewed people who did not know him, his introduction "We come from Atindehouhoué. I am a son of Hwehwe Seboka and she is a student from *Hollande*" was usually sufficient to obtain respondents' cooperation; the Ehwe-Adja apparently interpreted this as 'they belong to us and as students they are harmless'.

My principal Fon interpreter, Gustave Ayosso, was selected before my arrival by an Adja friend from Honsouhoué who was a schoolteacher near Bohicon. Gustave was born in 1958 in Whydah in a fisherman's family and had also experience as a teacher on the Fon plateau and as interpreter for, amongst others, a French NGO in Nigeria. His knowledge of a little English made it possible for me to read and discuss sections of Herskovits' (1938) with him.

During my research he lived with his wife and four children in Bohicon, and came to the research villages only during daytime while I lived there around the clock. His origin and residence outside the villages made him appear neutral but also ignorant, and had advantages as well as disadvantages among the Fon where shame and conflicts between families play such an important role. Though he did not know the villages, his background gave him much knowledge of Fon culture in general. When he was not there I engaged in non-verbal and limited Fon communication, alone or with the help of local Fon who spoke some French. In the two principal Fon research villages, Lissazounme and Aoundome, I employed a few (former) schoolchildren to conduct surveys in their own families of a similar type as on the Adja plateau in 1985. These and other children sometimes interpreted when I spoke with their relatives. Also more adult members of the Fon- than of the Adja research families spoke some French themselves, which is in line with the statistics on school attendance in Chapter 7.

Not only the interpreters' social status and personality traits, but also their own perceptions and motivations impacted on the research. In order to foster a shared understanding between Gustave Ayosso, Kwesivi Seboka and myself of what we were studying and comparing, the three of us spent ten days together visiting each other's research areas in Lissazounme, Sahè, Atindehouhoué and in some villages on the eastern Adja plateau, were Fon and Adja lived alongside each other. The interpreters' impressions of the other cultural group were very instructive not only for themselves but also for me, because it enabled them to make and voice their own comparisons, as shown in Chapter 1.

During interpreted interviews I usually had enough time to take written notes on what was being said while the assistant was translating. This did not seem to embarrass respondents more than the presence of the interpreter already did. A few interviews were tape recorded and transcribed later, but this appeared to provide too little extra information to justify the effort. When I observed and communicated alone I worked out my notes as soon as possible thereafter. A disadvantage of working with interpreters was that they could only translate my dialogues with respondents during interviews. They found it quite impossible to translate spontaneous conversations between two or more other persons if I was not involved. This was a serious constraint for the extended case study approach that I will describe in section 3.2.2.

### 3.1.3 Research villages

The first village, Atindehouhoué, was selected for my study by the Université Nationale du Bénin, and all the others by purposive stratified snowball sampling. The principal strata from which I drew villages are described in section 2.1.3. Three villages were chosen specifically for the presence of a sacred forest whose soil we wanted to analyse, and two villages because a 'historical calendar' was available for them from INSAE, but this calendar appeared of little value. The principal research villages on the Fon plateau were Lissazounme, Aoundome, Sahè, Gnidjazoun and Kana, and the principal villages on the Adja plateau Atindehouhoué, Honsouhoué, Lagbahome, Lokogba, Zaffi, Zouvou, and the mixed Fon-Adja villages Kplakatagon and Akwevɛadja.

## 3.2 Methods used

### 3.2.1 'Three' generation family histories

Important units of my analysis, as explained in 2.1.3, were families stretching over several generations. My methodology is adapted from Den Ouden's (1981:179-180; 1989:1-12) 'three generation approach', which implies a study of individual members of a kinship network, but I included in several cases four, five or more generations. Long uses similar approaches for the study of individuals in kinship based networks in Zambia and Peru, but calls his methods in the first case a diachronic case study approach (1968:39-70, 99-110, 218-225)[3] and in the second social network analysis of a family enterprise (2001:132-166). I will also design my approach as *family history*, which I regard as a type of life history approach in which the units of analysis are individuals linked by kinship (see Box 1 and Angrosino 2002:37 on different life history approaches).

The 'three' generation or family history approach is first a method for systematic sampling of related individuals, including the deceased and less accessible ones who might otherwise be overlooked. Second, the inclusion of older and sometimes past generations turns it into a case study approach with a historical dimension. For historical research, genealogical studies present advantages over other types of network analysis because kinship ties tend to be more permanent than many other social ties. Third, it allows an actor oriented study of fairly large samples and at the same time to cross-check information obtained from different network members. This is because it combines an individual and a network level of analysis, and invites the study of individual actors as well as the relations between them.

Following local perception of kinship ties, Den Ouden (1981; 1989) and I studied patrilineal networks in the first place. Sampling and research usually started by asking some lineage members for the names, the approximate ages and some other basic data on their parents, (great)-grandparents, siblings, spouses, children and other close kin, and to cross-check genealogical information obtained from several family members. Contrary to Den Ouden I did not limit my sampling to the patrilineage but combined this with snowball sampling of other network relationships which appeared to be important during the research. Hence in line with the Adja usage I also considered matrikin, wives, in-laws, people taken at charge, professional relationships, etc. This made some of the samples too large to study all the individuals with equal depth, in such cases I concentrated on one or a few branches of the lineage and their most important extra-lineage ties. Focus on qualitative aspects of relationships made the exact boundaries of families and networks irrelevant; I made no attempt to define these.

The sampled people were studied as much as possible through participant observation, interviews with them and other members of the network, and several of them were also included in samples for one or more surveys conducted by myself or my assistants. Information on some distant members, especially the dead and long-term migrants, could only be obtained through interviews with their relatives. Obtained data were hence richer at the 'core' than at the edges of the network – core in the sense of the people with whom I built, on purpose or by coincidence, a closer relationship. This does not need to constitute a problem when the different nature of the data is kept in mind and they are analysed accordingly.

The most extensive and qualitative studies were with families in the villages where I lived, namely Atindehouhoué, Honsouhoué, Lissazounme and Kana, as well as in Aoundome which was close to Kana. A special time allocation survey was carried out in all these villages

except Kana, see elsewhere in this chapter. The case studies in Chapter 8 and in Wartena 1997 and 2001 are based on this in depth research. But also in the other villages I studied individual actors as much as possible in the context of their descent groups.

Den Ouden and I also used these multiple generation networks as a basic sample for systematic and semi-structured interviewing, but I complemented this for some surveys with sampling outside the concerned families as I will explain below. Sampling of respondents which were familiar to each other and to me, created, I believe, conditions for more reliable answers to survey questions than is often the case. Studying several network members also gives more insight in interactive processes and therefore provides thicker description than most other approaches. On the base of such research, historical situations in which several network members participated may be described in great detail, switching constantly from the point of view of one actor to the other[4]

In some cases I interviewed individual informants on their personal experiences or on small sections of their social network, for example their deceased father or mother, without being able to interview other network members as well. Key informants were often selected for their special knowledge or their exceptional experiences, and respondents for semi-structured interviews on historical issues were also sampled outside the principal kinship networks under study as I will explain below. In such cases it seemed irrelevant and too onerous to interview and observe also large sections of their social networks.

Box 1: A typology of life history approaches

The term *life history* is commonly used to denote two things: on the one hand, data – which are often largely, but not always exclusively of an oral nature – about the life of one or more persons or things, and on the other hand a written biography based on (an interpretation of) such data. Other sources besides oral ones may be used as well, for example written sources and/or artifacts. What life histories have in common is their focus on the key actor or key thing, and follow him or it in the process of time. Spoken data are typically obtained to a large extent through interviews with the key actor, but conversations with people who met him may be included as well. Most biographers take the interviews themselves, but some (for example Carter 1974) use oral data which were collected and possibly edited by others. I used primarily my own interviews, but supplemented these with handwritten notes of interviews conducted by my interpreters, and also a few interviews carried out by Ensing, Kerkdijk and Meuleman. All these researchers kindly showed me their notes and clarified my questions about them. In several instances I conducted additional interviews myself with the same persons.

To the extent that life histories are based on oral sources I call them a type of oral history, namely stories with a narrow focus on the life of a person, a thing, a group or a network. Other oral histories may have an external or a more diffuse focus, on one or more issues that the speaker experienced but that were not necessarily central to his own life.

Social and medical scientists collect and analyze life history data for a variety of purposes. Four approaches can be discerned, which differ in their units of observation and analysis and consequently in the conclusions that they tend to draw. The first approach presents the *biography* of a single individual, either a 'typical' representative or an exemplary member of his culture, and is mainly found among ethnographers from Northern America, among journalists and in the psychological, medical and political sciences. The other three, which I will call the *survey approach*, the *informant-centered group approach* (for lack of a better term), and the *network approach*, feature collective portraits of portions of life experiences of linked individuals, and are mainly found among ethnographers from Europe (Angrosino (2002:37). The survey approach consists in interviews with randomly sampled members of a social group or category about their personal experiences and compares their responses, qualitatively and/or quantitatively, to the same historical circumstances and to the same interview questions. Such an approach often

allows one to cross-check oral information on external facts, which is particularly important if there are few if any written sources. In the informant-centered group approach, individuals are interviewed about their family (or group) life. The social relationships mentioned by the respondent obtain an essential place in the researcher's analysis, but he does not speak with other members of the respondent's social network to hear their points of view. Some studies combine the first and second approach by interviewing many isolated individuals about their family life. In the network approach the researcher speaks with several members of the same social network about their lives and their mutual relationships, which gives more insight into interactive processes, helps to triangulate information obtained from individuals, and therefore provides thicker description than the other approaches. On the basis of such interviews, historical situations in which several network members participated may be described in great detail, switching constantly from the point of view of one actor to the other.

I primarily used the network approach by interviewing and observing several members of the same kinship-based networks. To underline my deliberate choice to study linked actors and to avoid confusion with life historiography of isolated individuals, I prefer to identify the groups and networks under study and to speak of *family histories* or, where applicable, of lineage histories and village histories rather than of life histories.

Examples of research based on each of these types of life histories are given in the endnote 5.

### 3.2.2 Situational and extended case analysis of historical society and *mentalité*

The reader will notice that this book alternates my own analysis with descriptions of quite general or structural phenomena and with occasional descriptions of concrete situations, interactions, practices and events in which one village, one family, or some individuals were involved, mostly those whose kinship networks I studied by means of the three generation approach. This combination of levels of description and interpretation is deliberate, because it allows for the analysis of situations and events in their wider family-, village- and regional historical context.

Gluckmann (1940/1958) and Mitchell (1983:189, 193-194) call such an approach *situational analysis* if the events described take place in a relatively short time span, and an *extended case study* if it comprises a sequence of linked events over a longer period, where the same main actors are involved, are described and historical processes in them are considered in the analysis[6]. In the examples they provide, 'relatively short' is one or a few days, and 'longer' up to one decade. Van Velsen (1964: xxv) considers situational analysis and the extended-case method to be synonyms. Both approaches were developed by the Manchester School and distinguish themselves from other anthropological case studies by their focus on and importance attached to concrete events, situations and (inter)actions. Situational and extended case analysis combines two levels, namely concrete events and the wider context, but adopt quite different approaches for both levels. On the one hand, they reproduce some of the original field notes (recordings of the researcher's direct observations) in their publications, preferably without further editing (however, the eloquence with which these observations are often narrated, and the value placed by the school on rhetoric, cast doubt on claims about absence of editing). This should enable the reader to follow the researcher's reflexive process and to draw his own conclusions. On the other hand they describe the general structures of the wider context. But they fail to specify how this latter information was obtained or why it is believed to be general. By connecting the

two levels and analysing the described situations in the wider context, the studies show how actors make their choices within a wider normative framework (Gluckmann 1940/1958:9; Van Velsen 1964: xxv; Mitchell 1983:193). In doing so, they reveal general principles of social organisation by describing norms in conflict and by reference to abnormal situations. This two-level analysis should therefore provide insight into what is exceptional, what is an innovation, and what is a personal strategy (Long 1968:8), but in my view this only holds if the researcher's perception of the context as general structure is correct. Long (1989b: 251) introduced the analysis of social situations and extended case methods to Wageningen while I was in the field. The approach therefore did not guide my fieldwork, but in hindsight I found it useful for my presentation and analysis, to provide an inside view, to account for my reflexive process, and to allow the reader to draw his own conclusions.

Extended case and situational analysis in its original form strongly if not uniquely depends on direct participant observation of and casual conversation during the described events[7]. This is probably the reason why sociologists have limited its use to the study of time sequences of situations spanning less than 10 years, at least for the first and concrete level of analysis. The more remote past is only described in general structural terms on the second level of analysis. This extreme reliance on one's own observation and casual conversations is also very difficult to combine with the use of interpreters.

Some scholars have developed a kind of extended case approach for the study of longer time spans, by consulting various witnesses of historical situations. Breusers (1999:29-30) accepts interview data with as many as possible of the actors involved – and others – as sources of information on concrete situations, and calls his analysis extended case study approach. He used this approach to study social situations that occurred many years before he started his fieldwork. Stone (1979:17) coins the term 'history of *mentalité*' for a category of historical studies which are very similar to situational analysis in being rooted in "disillusionment with structural analysis" and having suffered from the great influence of anthropologists such as Evans-Pritchard, Clifford Geertz, Mary Douglas and Victor Turner (the latter himself a product of the Manchester School). Their studies are interested in the lives, feelings, behaviour, desires, ideas, beliefs and culture of (especially) common men and women. The term *mentalité* refers to an understanding of people's attitudes and cognition. The approach consists in the "circumstantial narration in great detail of one or more "happenings" based on the testimony of eyewitnesses and participants (…) to recapture something of the outward manifestations of the *mentalité* of the past" (idem), combined with an analysis of this story based on a systematic anthropological interpretation of culture. Like Manchester scholars, historians of *mentalité* value rhetorical eloquence in narrating (historical) situations, but these stories – of a person, a dramatic episode, a conflict, the diffusion of a single innovative idea, or whatever – are not told for their own sake but "in order to throw light upon the internal workings of a past culture and society" analysed to offer a coherent explanation of change in the past (ibid:14, 16-19). Since about 1970, an increasing number of the best-known historians[8] adopted a *mentalité* approach in studying the social history of European societies between the 14th and 18th centuries. They all zoomed in on a single socio-cultural phenomenon or event, for example a person's life or cosmology, a dramatic episode, a conflict, or the diffusion of an innovative idea, and used it to shed light on some main characteristics of the surrounding society. Hobsbawm (1980: 6-7), who is hailed by Stone (1979:18) as a trend-setter of the *mentalité* approach since 1959, adds that an analysis of historical situations – one that can establish systematic con-

nections between wider historical phenomena and contribute to a coherent explanation of change – requires that the historian has a good knowledge of historical structures and trends and hence of the achievements of structural historical analysis. Although Stone admits the influence of anthropologists on historians of *mentalité*, including Victor Turner from the Manchester School, he avoids terms such as analysis of historical situations or analysis of historical events, probably because historians since the late 1920s applied the concepts *histoire événementielle* and a history of events as pejorative labels to describe traditional narrative history, which they dismissed as unscientific because it neither applies (economically or demographically) determinist models of historical explanation nor uses quantifiable methods (Stone 1979:3; Hobsbawm 1980:6; Thompson 1981:304). In spite of its different name, in my view the *mentalité* approach only differs from that of the Manchester School by the lack of direct observation. According to Stone "we historians cannot, alas, actually be present, with notebooks, tape-recorders and cameras, at the events we describe, but now and again we can find a cloud of witnesses to tell us what it was like to be there" (Stone 1979: 13-14). The expression 'cloud of witnesses' stems from the Holy Bible (Hebrews 12:1)[9] and refers to the interweaving testimony of a myriad of witnesses who speak and act each from their own position and experience regarding the same situation. It implies that triangulation and the careful use of sources, which reflect inside experience, can make up for the lack of direct observation and yet still provide 'thick description' of a historical situation. Stone (ibid:19) accepts, for example, written transcripts of the full testimony of witnesses under interrogation and examination in (Roman) law procedures as sources for narrative history. Here *mentalité* methodologies shade into those of oral history, about which more below.

I agree with Stone (1979) and Breusers (1999) that well-informed internal sources on concrete situations, in particular witnesses who speak, write or act from own experience, may be used for historical extended case and situational research, especially if these data are triangulated. Socio-technical network studies provide excellent opportunities to obtain the testimony of different actors involved in the same events, to consider also the testimony of technology through the traces that it leaves behind, and so to draw upon a thick cloud of witnesses. In addition, network studies with a historical dimension such as the three generation approach, permit one to study connected situations and events in which the same sets of actors are involved. Therefore I deliberately narrate in the different chapters of this book several situations in which the same families, villages and individuals were involved at various historical times between 1600 and 1990, and analyze these situations in their social, economic, agro-ecological, family and/or other context. I invite the reader to make further connections between these related events himself and to draw his own conclusions. In this way I combine the *mentalité* and extended case approaches for the study of long time spans.

### 3.2.3 Simultaneous interviews and observations on the topic of the month

In order to oblige myself to make research procedures comparable I moved up and down every month between both plateaux during my fieldwork in 1989-1991. In 1989 I spent more days of the month on the Fon than on the Adja plateau, because I had studied the Adja alone in 1985, but gradually this bias was redressed. To obtain comparable information I could also not rely on unexpected observations and conversations alone, though these were welcome

and where possible included in the analysis. Each month I chose a 'topic of the month' and planned my interviews, observations, and sometimes a semi-standard questionnaire around it. Simultaneity and standard procedures helped to keep for each research topic the external circumstances (climate, commodity prices, political situations etc.) and my own state of mind as constant as possible. 'Topics of the month' included career histories of male and female respondents and their parents, marriages, bridewealth, labour for in laws and other work parties, female farming within respondents' families, crop rotations, fallow histories, weeds, manure and fertiliser histories on respondents' fields, labour time measurements, yield measurements, vegetation assessments, villagers' attitudes towards spontaneous vegetation and species, village myths of origin, action research by retailing fertiliser, and much more. Some data sets which were collected in a sufficiently systematic manner, which I could judge only in hindsight, were later submitted to simple quantitative analysis by means of either/or mental arithmetic, a pocket calculator, Excel, and SPSS.

Topics of the month also enabled my assistants to work simultaneously on the same themes in close collaboration with me. Each topic was first explored through some participant observation and informal interviews mostly with the help of my interpreters. In this process, issues surfaced on which we wanted specific information from a larger sample, and we learned how to phrase our questions on these issues in such a way that local people understood us and we understood their response. Gradually we developed an interview and/or observation guide which was (semi) structured enough to use it in more or less the same form on both plateaux. During the 'second half' of the month while I was away on the other plateau, my interpreter then used this guide to continue research on the topic of the month. Occasionally, especially for technical measurements such as yields and labour times, and for time allocation surveys, some French-speaking youth from the families under study assisted in data collection. The purpose of this youth' assistance was not only to obtain data but also to gain access and qualitative insight into their families; I will come to this below. On the second plateau the (semi) structured interview and observation guide was then tested and adapted if necessary. Some questions appeared irrelevant in the second culture or needed modification to be understood in the way that they were intended. Some important surveys (labour time allocation surveys, yield and labour time measurements, and agricultural input retail experiments) will be described below.

To use comparable procedures sometimes implied adapting questions differently for the two languages and cultures, for example those based on local measurement practices and units. Fon and Adja used different surface and cubic measures, and had different customs regarding measuring land[10]. It would have been useless to translate questions and observations on style- or culture-specific practices (for example, types of soil tillage, pruning, land rights, certain crops) literally; in such cases we focused on practices which fulfilled a similar function in both cultures. Some subjects were considered indecent in public discourse in one cultural group but less so in the other[11]. These issues could sometimes be addressed in a private encounter with the person most directly concerned.

Sometimes we noticed only in hindsight that a concept or question had been understood differently by the Fon and by the Adja, or that respondents replied freely to questions in ways which made sense to them. In such cases the research results were not always comparable but often gave a richer insight into the local situation. This means that exact similarity of research procedures is not possible, and that knowledge of cultural-linguistic contexts is required to achieve comparability.

### *Systematic surveys of career, field and vegetation histories*

Most 'topics of the month' had a historical dimension, in particular historical careers and livelihood activities, historical labour relations and bridewealth payments, fertiliser-, crop- and (semi) spontaneous vegetation-management histories on respondents' fields, and the latter also on the plateaux as wholes. I also paid some attention to historical changes in the infrastructure (buildings, paths, wells, market places, shrines etc.) of the village wards inhabited by the families whose histories I studied. To obtain systematic data which I could compare not only across time but also across styles and groups I developed what I call a survey approach to life histories of people and of things (see Box 1). I specify these life histories of things as *field histories, fallow histories, oil palm histories, crop rotation histories* etc.

Data collection methods consisted of *semi-structured historical interviews* with individual (but sometimes linked) respondents and – especially for larger sections of the plateaux – in the systematic observation of historical (vegetation) maps, aerial photographs, and ground observations during my fieldwork. The interviews mostly focused on the respondent's close relatives (parents, spouses, children, parents in law etc.) and about their fields. Observations were complemented by ancient traveller accounts and other texts in the colonial archives. In order to obtain time series data, I purposely re-visited in 1989-1991 the areas of which ancient vegetation maps and descriptions were made by the French army in 1892-1893 (on the central-eastern Fon plateau) and by De l'Albeca in 1889 (western Adja plateau), and I chose the same paths and the same dates of the year as my predecessors had done a century earlier.

(Semi)-structured interviews about past events are rarely used in social historical, ethno-historical and anthropological research, probably because the use of life and oral history interviews in the social and historical sciences was pioneered by cultural anthropologists. The life history interview was taken up by sociologists, social psychologists and oral historians (Benison 1971:288-289; Bertaux 1981; Angrosino 2002:37), especially since the renewed interest in micro history and the narrative from the late 1970s onwards (Stone 1979), but remained largely connected to qualitative approaches to data collection and analysis. Systematic, (semi)-structured life or oral history interviews remain rare except among some psychologists (for example Chauchat 1980) and economic historians (for example Okediji 1970 and Graham 1977). I consider this a missed opportunity because in (ethno)-historical research all available sources and data collection methods should be used to permit triangulation of information. Comparative research in particular needs systematic research procedures. However, it is absolutely essential to embed (semi) structured interviews in qualitative research, in order to avoid crude misunderstandings in interviewing and hence invalid analysis. To allow fruitful comparisons over time on the basis of oral data – and this holds for quantitative as well as qualitative analysis – it is necessary to rank these data chronologically. In the section on historical calendars I will discuss how I dated oral sources.

### *Sampling for semi-structured interviews and observations*

Sampling for the surveys and observations on 'topics of the month' was partly within the families whose histories I studied through the 'three' generation approach, and partly through stratified (snowball) sampling. Standard data obtained from people whom we knew already enhanced our understanding, allowed cross checks, and increased the reliability of the survey.

Two common reasons for the unreliability of survey data are, first, that the researcher knows too little about the situation to ask the right questions or to understand the answers, and second that respondents may easily fool a researcher whom they have never seen before and will never see again. These problems were minimised by sampling in partly familiar social networks. But families sometimes had particular styles, particular soil types, and the like. To obtain information on missing types and/or to make the samples slightly more representative, I defined strata that seemed relevant for the particular topic (for example age, gender, village, farmer or non-farmer, location of fields, crops, etc.), and set approximate numbers of respondents for each stratum[12]. Then the interpreters and I asked our acquaintances as well as strangers to name people in each category, or we went to places were we were likely to meet them, for example villages or fields in the respective stratum.

### 3.2.4 Oral traditions and other historical narratives

Many but not all the sources that I consulted as witnesses to the past were oral in nature. In most popular and much academic discourse, the terms oral history, life history, oral tradition etc. are conceptual ragbags, used often indiscriminately for various types of verbally transmitted narratives about the past as well as for historiography based on them. I used a variety of different oral sources and a variety of data collection methods, and thus need clearer definitions. Each type of source demands a different methodological and analytical approach. I will first elucidate my concepts and then the approaches I used.

A distinction is often made between oral history, on the one hand, and oral tradition, on the other. The first are testimonies about situations which the speaker claims to have experienced (at least partly) him or herself, the second are received messages which he transmits in one form or another. However, collective or indirect experiences – though strictly spoken are only partially based on direct eyewitness – play important roles in local-, village- and family narratives. In these cases, the boundary between 'oral history' and 'tradition' as I define them below is sometimes fluid.

Vansina (1985:27-28) defines *oral tradition* as messages which are reported by word of mouth from beyond the present generation; hence they must be transmitted over at least one generation. Oral tradition differs from oral history, as he describes it, in that the latter is generated and transmitted within the present generation only (see box). He speaks of oral tradition irrespective of the number of people that know or accept it. This is contrary to Henige (1982, quoted in Vansina 1985:28) who restricts the term 'oral tradition' to narratives that are common knowledge in a given culture, and calls what is not widely known a 'testimony'. Vansina (ibid:17-19, 78, 98-100, 107) distinguishes amongst others between official and private traditions, local traditions, and personal, family and group accounts, accounts which the speaker believes to have really happened and tales which he believes to be fiction, and argues that, most of the time, different types of narratives, often contradictory ones, coexist within a larger community. He furthermore shows that traditions undergo processes of selection, addition, structuring, embellishment and the like almost each time that they are told.

I agree in principle with Vansina's (1985) definition, but in my view the concept 'tradition' conveys a false image of consensus and of absence of change. Besides that, the term oral tradition is so broad, and used in so many different ways in popular as well as academic discourse by different authors, that it may easily lead to misunderstandings unless it is further specified. Therefore I will use this broad term only sparingly. Furthermore, I rarely

label as oral tradition that which an informant tells about events within or close to his own lifeworld but just before his birth, for example narratives about his parents' experiences or about family lands or houses a few years before he saw them himself. I prefer to call such narratives 'family histories', field histories, etc.

Box 2: The concept 'oral history'

The term oral history designs both the methodology of collecting people's experiences and the historiography based on such testimonies. Hoopes (1979:7) gives a conventional but narrow definition of oral history as the 'collecting of any individual's spoken memories of his life, of people he has known, and events he has witnessed or participated in.' Carter (1974) emphasises too that oral history uses primary rather than secondary accounts of people's experiences, but his definition of 'primary' and 'oral' is wider than that of Hoopes. He includes written testimonies as long as these are 'firsthand' written accounts of actor's experience. For him, oral historical sources are also ballads about ill-treatment of farm servants by their masters, which are composed by specialised poets on demand of these servants, and then spread over the countryside. Stone (1979) avoids the controversy about whether historiography based on firsthand written accounts is oral history or not by calling it narrative history and history of *mentalité* (see above). Vansina's (1985:12-13) definition is still broader in that he regards all oral sources (even if put into writing at a later stage) about contemporary events and situations as oral history, as long as they are based on eyewitness, visions, dreams and hallucinations, or hearsay about events which occurred during the informants' lifetime. He also calls this immediate history. Hearsay is, in my view, a problematic category because speakers tend to present it as factual experience while actually it is not. This is partly attenuated by the fact that historiography based on oral historical sources, according to Vansina, typically cross-checks by comparing several oral and/or written accounts. A cognate term is 'historical story', which Breusers (1999:24) describes as individual histories told in the first person, hence accounts of situations which the speakers claim to have participated in themselves. I agree to include into oral history the collective or indirect experiences of contemporary situations in which the speakers' group was involved and which, through observation or communication about group members' personal experiences, become shared experiences, even if the speaker did not witness all the details himself. An informant may accept his father's claim that he planted oil palms around the time of the son's birth because he saw the maturing palms in father's field. Speakers may come to regard shared experiences as their own experiences, and consequently narrate the story in the first person plural. Crucial is the fact that the situation occurs in the speaker's lifeworld, that he witnessed some parts of it or observed the direct consequences, that other parts were experienced by people with whom he was in close contact and whose testimony he is able to understand and evaluate, and that he was in principle capable of checking hearsay. If, however, a situation occurred far from the speakers' lifeworld and the story was transmitted to him through a chain of speakers, I label it oral tradition.

I will use the term *testimony* to refer either to the speakers' intention to convince or to implicit evidence in the narrative itself. From the narrator's point of view a fictive tale is not a testimony, though the tale may still unintentionally testify to its cultural origins. I will use the term testimony especially for accounts which the speaker presents as a true story and if I don't know how widely the account is known or accepted.

The distinction between official versus private accounts, be they about contemporary or about past events, is important in corporate groups like the Fon and Adja. *Official accounts*, also called *public accounts*, defend the status quo of the group and that of its rulers. Therefore they tend to comply with the group's dominant norms and values. They present the point of view of the leaders and are sometimes directly controlled by these, for example, when

only 'historians' who are connected to the authorities may transmit the chronicles, or when these are cast in a standardised form. The institution of the court narrator or *griot* is known in many African States. Other group members may and mostly do know the stories but fear to tell them in public. On the Fon plateau, I was often told, especially in early stages of my research, to "go and see Prince such and such if you want to hear our history. He knows much more details than I do." Nevertheless, most Fon knew many traditions about the kingdom in great detail, as I soon found out, narrated them in more or less private settings, and incorporated them into their own family accounts. Another feature of official accounts is that they highlight the elite's actions. As far as they present the court's point of view, I will speak of *dynastic accounts* or *dynastic traditions*. De Josselin de Jong (1980) uses the term *political myth* for stories which legitimise the governing position of first settlers by pointing to the rulers' excellence. Discrepancies between public and private accounts are also found in smaller groups, as when women say in public that their husband respects the norm to provide them 'food money' on every market day, while in private they admit that they have to provide it themselves most of the times. Fon women give such public accounts in order not to bring disgrace to their family as I argued in section 1.3.

*Private* or *personal accounts*, as follows from the last example, defend private interests, are less controlled by rulers and dominant norms, and are more open to personal creativity. Vansina (1985:18-19, 98-100) lumps them together with family accounts and traditions, but I prefer to regard the narratives from and about small groups within a larger society as separate categories. *Family, village* and *local accounts* are, in my terminology, those narratives about a Fon or Adja family, village or locality that the members of the group in question generally accept as their own stories. I sometimes call them *family-*, *village-* or *local traditions,* but most of these stories were presented to me as if they had really happened, including those of them that described supernatural events in a mythical past, for example that a lineage founder transformed himself into a river or hill and was henceforth worshipped as a divinity (see examples in 4.1.2 and 5.2.3). Vansina (1985:25, 78) thinks that people neatly classify their oral traditions into *tales* which they consider to be fiction, and *accounts* which they believe really to have happened in the past, but I am not convinced about this. Myths about ancestors transforming into rivers legitimised both the political and religious authority of those who claim descent from him, and taboos that prevent water pollution like the interdiction for pigs and menstruating women to approach the river. Later generations may loose insight into the first intended meanings and take the myth as an historical fact.

Depending on the degree of acceptance by the commoners of their society's dominant values and of their rulers' point of view, local, family and private narratives may either seek to conform or to contrast with the public or dynastic accounts. Fon commoners at the time of my research had a very ambivalent attitude towards Fon dynastic traditions. On the one hand, they were proud of descending from the famous Danhomɛ kingdom, reiterated (especially at a later stage of my research) official versions of well-known dynastic traditions and without asking me to interview a prince instead, and tried to connect their own local traditions with those of the court in order to share in the latter's glory (see also Vansina 1985:99-100, 107). When asked to speak about their family's history, many Fon commoners emphasised episodes about one of their ancestors' involvement in kingdom affairs, preferably in a heroic role. Many family narratives suggested ties of kinship or affinity between an ancestor and the royalty, or described how an ancestor rendered a service to the State and was honoured with an office in reward.

> One of my first interviews on the Fon plateau illustrates several commoner attitudes, mainly uncritical ones, to dynastic traditions. I asked my neighbour in Kana-Dodome, who was a trader in scrap iron, about the settlement history of his lineage and about the history of his own business. He started to narrate well-known settlement traditions of the royal lineage instead, first speaking of 'our ancestors', then said that his ancestors came from Tado with the royal clan, and finally admitted that his lineage was in Kana before the kings. Then "my ancestor gave his daughter in marriage to king Huffon of Whydah. So he became our king's agent in the slave trade between Kana and the coast, and my family obtained the name Houngan, which means chief of the boat." According to Fon dynastic tradition however, it was king Agaja (1708-1734) who gave his daughter in marriage to Huffon. She then sprinkled water on Huffon's gunpowder, which enabled Agaja to take Whydah on 7 February 1727 (Le Herrissé 1911:296-270). While I was wondering whether my neighbour descended from Agaja or not, the *délégué* of the village passed by and interrupted us:
>
> "Go and see Langanfin [the head of the royal family][13] if you want more information about the royalty. His house is here in Kana and his father was the secretary of Sagbaju, so he knows all the files. If you want sure information you must see him, others might tell you falsities. But you must pay him at least 2,000 F CFA[14]." (Interview with Daa François Houngan, Kana-Dodome 9-3-1989)

On the other hand, Fon and Adja commoners often voiced counter narratives to Fon dynastic traditions. All local narratives highlight the agency of commoners and not only of kings. Several stories in sections 5.2.2 and 5.3.2 expose royal weaknesses as compared to the heroic deeds of local ancestors or local gods[15]. Others emphasise how local ancestors suffered from the Fon elite's tyranny or exploitation. Still others question the morality of the Fon State's regime with statements like "the Abomean kings were cruel because they mixed their palace walls with human blood"[16], "the king appropriated my family's land and on top we had to thank them for this act"[17], "all kings on the Bight of Bénin sacrificed humans, but the numbers killed by our kings was beyond proportion", and "the human blood which was shed here in Kana has rendered our soils infertile". This ambivalent attitude towards Fon dignitaries' points of view was often found in the same person, as also the focus group interview that I will describe below will illustrate. Many Fon informants switched from pride on one occasion to criticism on the next, and told me (local or other) stories that conformed to dynastic traditions on one occasion, and local counter narratives on the next. The more I knew an informant the richer the second category of narratives became. This, I believe, is one of the added values of my research. Much has been written already about the Fon kingdom and its external relations from elite perspectives, very little from the perspectives of common Fon and Adja families.

Oral traditions and oral histories of groups (and individuals) typically paint flattering images of the group or its leaders (Lentz & Sturm 2001:143). They portray ideal types and ideal role models, and may be more useful to discern the groups' historical and present values than to discover historical facts. But this is not always the case. Occasionally, narratives describe traits or actions of the group or of its heroes that run counter to fashion. Accounts that admit that the hero sinned against a generally accepted cultural norm, or that the group was defeated by an enemy, are usually more trustworthy than the, more common, idealised stories (Vansina 1985:105-108). For this reason I grant a fair amount of credibility to those Fon dynastic traditions that tell of their early king's violence against the local chiefs of the land (sections 4.1.2, 5.2.2, 9.2).

Knowledge of an oral tradition's cultural context at the time that it originated as well as during the process of transmission is necessary to understand the narrators' intentions at each

point in time, and to guess how they might have adapted the message to meet their goals. Cultural values, stereotypes, symbols and their meanings, literary genres, socio-political relations, economic conditions etc. must be considered when interpreting the meaning of an oral message at each point in time. Biases and distortions are more likely where speakers' interests are at stake. The Fon and Adja's narratives (as in other African cultures) mostly served socio-political and cultural-political intentions in the wide sense. They legitimised claims to political and religious authority and to resources like water and land, but they did not intend to give a full description of past circumstances. Nevertheless they sometimes provided background information that did not directly serve the stakeholders' goals. I agree with Vansina (1985:91-93, 108, 193) that such unintended messages and unconscious testimonies are precious because they are even less likely to be purposely distorted than confessions about hero's defeats or sins against cultural norms.

Historical ecology and ecological changes on the Fon and Adja plateaux were important issues for which I drew amongst others on oral tradition, triangulated with scarce written sources and farmers' knowledge of ecological processes. Some accounts on ecology also served political purposes, for example general statements like 'this whole area was forested when our ancestors arrived'. These must be taken with caution because 'forested' can signify 'uncultivated and unclaimed, and therefore now rightly ours'. Others singled out plants which had a high cultural value, for example sacred trees, appreciated (wild) foods, or bush that served as shelter, and explained their roles in local ancestors' livelihoods (including religious practices, warfare and the like). If described with sufficient specificity for a particular locality, and stripped of political bias, I grant these accounts a fair degree of credibility. Etymological accounts often contained landscape information that served classificatory purposes, as when villages were named after a tree which grew there or fields were named after their soil or vegetation type. These landscape factors apparently lent their name because they were to some degree atypical rather than typical for the region or for the name-giving group, a family's only field with pebbles or *Imperata cylindrica* for example. Some landscape information was simply background scenery to socio-political myths, as when ecological environment played a role in the course of a particular battle. If such landscape scenery was unspectacularly presented as if it were common knowledge in the past, I consider it as an incidental, unintended message. If it was described with sufficient specificity for a particular locality, and if it played no role in socio-political claims, it was probably not consciously distorted. In my view, therefore, politically disinterested information can testify to past ecology if specific to a small locality, but this testimony is only valid for that locality. To reconstruct ecological change on the Fon and Adja plateaux as wholes I compared traditions of many neighbouring localities and triangulated these with non-oral sources.

### *Group interviews?*

In early stages of my research, informants were sometimes reluctant to speak on history in private, no matter whether it concerned oral tradition or interviews on contemporary issues, and proposed a group interview to which the eldest and most dignified members of the village should be invited as informants. They typically argued: "I don't know and remember everything, but as a group we can complement each other's memories, so that you receive more sure information." Wanting to accept respondents' conditions, I consented.

During these group interviews, a large audience from the village gathered around the invited interviewees, eager to hear historical narratives. Contrary to their 'promise' however, the seniors hardly complemented each other, but the person with the highest status spoke alone most of the time. Only occasionally, a naïve young or female person in the audience dared to interject, or the group subtly indicated without words that the dignified speaker overdid his boastings. The utility of these group interviews was therefore mainly to hear official narratives, to honour the local elite by listening to their opinion first, and to observe group interaction between villagers with different statuses. Afterwards I was free to interview individuals of all kinds of rank, which I gladly did. The observation below also exhibits an ambivalent attitude of Fon commoners towards Fon dynastic customs and traditions.

> When Ina Kerkdijk and I tried to interview elderly Lisanon men on changes in tools and tillage techniques during their youth (described in section 9.2) they proposed a group interview to which I should also invite two fellow villagers, prince Pierre Ahovi (Wartena 2001) and the head of Sakla lineage. The meeting was scheduled for 26 May 1989. Ina and I provided beer and lemonade for the five interviewees, and one of them, Kamille Lisanon, contributed *sodabi* from his distillery.
>
> Prince Pierre Ahovi, whom I had never met before, arrived with a colourful *pagne* wrapped in royal style around his shoulder; the others were more modestly dressed. He was the first to open his mouth and said: "I am APG, Ahovi Pierre Glele. My father Ahovi is a son of king Glele! I am born in 1910, and I saw cowries still being used as money." After this the four commoners introduced themselves simply with their names and years of birth, making themselves considerably younger than the prince: "Tafotan, born in 1923", "Daa Sakla, I am at least one year older than Tafotan", "Victor, born in 1924", and Kamille, 1930". Later I found out that Pierre was probably five years younger than he claimed, and Daa Sakla probably older than he.
>
> During the rest of the interview Pierre spoke 97% of the time, in spite of the fact that he had much less experience with agriculture than the others and knew very little about soil tillage. The others only briefly responded when we explicitly addressed them.
>
> After the interview the beer and *sodabi* where served to the invited guests, who also gave some of it to a few younger men among the spectators. Pierre started to make fun and said that he wants to marry Ina or me. Then he emphasised a second time: "I am a prince! I want one of you as my wife." Ina and I did not react.
>
> This was a signal for the other four to pick up the dynastic theme that Pierre introduced, and that Ina and I had 'failed' to address during the interview, to their obvious surprise and to especially Pierre's disappointment. The four men turned towards Pierre and started to sing a song and clap their hands in honour of the ancient kings, first timidly but with increasing joy when I approached and tried to record the song on my cassette player. When they finished the song, Pierre stood up and searched for minutes and with much show-off in all the pleats of his *pagne*, while the audience giggled and Pierre's face was turning red. Fon custom demands that a dignitary who is honoured with a song reciprocates with the gift of money. Finally Pierre produced a piece of 25 FCFA from his clothes, gave it to the singers, and quickly left the scene. 25 FCFA is a very small amount, worth in those days about 300 grams of maize, half a glass of beer, or one gin-glass full of *sodabi*. Later I found out that Pierre, in spite of his royal pride, was a very poor man (Wartena 2001). The four men certainly knew of his poverty, and consciously humbled him with their act in response to his boasting, even though they were not supposed to contradict him verbally during the interview.

### 3.2.5 Historical calendars

A problem connected in particular to oral sources, but also to some written ones, is the dating of the situations that they refer to. If narratives are to be used in historical research, the dates and duration of events, intervals between them, and how they relate in time to the

testimonies of other speakers or to external historical circumstances, are important. This applies to oral tradition about pre-contemporary events as well as to oral history.

Many Fon and Adja family- or village traditions connect local events to a dynastic event or to a king or dignitary of their own or of a neighbouring kingdom. The dates of the reigns of South Béninese kings are reasonably well known from traveller accounts, especially of those kings who engaged in the transatlantic slave trade, with margins of some years in some cases. The same goes for some events in the slave trading kingdoms. The fact that also the Adja, on whom nothing was written by eyewitnesses prior to 1889, referred to these better known kingdoms, was of great help in situating their traditions. Correct local knowledge of rulers' names should, however, not be taken for granted. Several local traditions that were narrated to me situated local events in the time of the most famous kings, sometimes to share in this ruler's glory and sometimes because the narrator ignored the names of the lesser kings. Some narrators also insisted that a local event happened under the rule of the Fon king 'whose name was Dada' or 'called Hweshino', but these 'names' are generic Fon respectively Adja concepts for king or ruler. The use of generic titles or of famous names was more common in groups that were but little involved in affairs of the monarchy they referred to; the speakers apparently did not know better. Such contexts were therefore reasons for caution. Elsewhere, I sometimes encountered different versions of the same local tradition, some situating an event in the time of King X, others situating it in the time of his son. In all these cases, connections between the local and other well-known external events or between these and the local family's genealogy could sometimes clarify which king was probably meant.

In narrating their own experiences, speakers sometimes connected these to contemporary events whose calendar dates I was able to trace from archival sources, from INSAE, from the publications of historians, or from extensive cross-checking between large numbers of interview data; the latter applied especially for events of purely local importance. Reliable dating was only possible for impressive and sufficiently unique events; recurrent events tend to be fused in people's memories (Vansina 1985:178). For example, the Fon and Adja only remembered the famine-year of 1977 with accuracy because it had been very severe and because it immediately followed the 'Marxist' revolution and the local administrative reforms of 1975, the witch hunts of 1976, and the restrictions placed on *vodun* initiation and religious practices from the same year. These had affected many local political and religious leaders, friends and relatives of my informants were accused of witchcraft and imprisoned, sacred trees on the plateaux were cut down, etc. Other famines, earthquakes, and locust invasions were too frequent or too mild to serve as general reference. All Fon and Adja born before the early 1940s however claimed to remember the eclipse of the sun of May 1947 and which events happened before and after.

Some other events that fairly large numbers of Fon and/or Adja were able to connect in time to their personal experiences were, amongst others, the reigns of some local *chefs* in the colonial or post-colonial regime, the compulsory recruitment of Fon and Adja soldiers and Adja's revolt during the First World War, the repatriation of king Gbɛhanzin's remains and their burial in Abomey in 1928, the construction of the first well or the first school in the speakers' village, the export quota and hardships during the Second World War, the end of colonial rule, and the (first) coming to power of Kérékou. Biaou (1995:3) found that also farmers in Ouémé province remembered the latter two events.

Colonial *chefs de village* and *de canton* were rarely known beyond their area of authority, and even there many subjects, especially Adja women, ignored the chief's name. They were often succeed in office by a son, which enhanced confusion about the dates of their reigns, especially if the father's personal name became his son's family name as was often the case. Also the fact that the colonial government sometimes deposed *chefs*, especially among the Adja, gave rise to confusion because the chief or his people often behaved as if little or nothing had changed (see on *chefs* also section 7.1.1 and Wartena 1988b:14-15). Documents in the colonial archives provide reliable information on the names and official dates of service of many *chefs de canton* but on only a few *chefs de village* and *chefs de région*. The 'historical calendars' of INSAE (1979) in contrast contain data on all kinds of chiefs but only those on *chefs de canton* turned out to be trustworthy. For the dates of service of *chefs de village*, INSAE's researchers based their information on one focus group interview per village[18]. In the context of the 'three generation' family histories that I described above, I interviewed many individuals on their relationships with local *chefs*, also in some of INSAE's villages. The information obtained varied, mostly deviated considerably from that of INSAE, but nevertheless allowed me, through careful comparison with genealogical data, to reconstruct the most likely dates of service of several chiefs.

While virtually all villagers remembered independence (1960), the coup d'état by Kérékou (1972), and the 'revolution' and destitution of all *chefs de village* and their replacement by *délégués* – which implied in almost all cases that local leadership was given to a different person (1975), hardly anyone knew the exact dates of service of the many different heads of State between 1960 and 1972. The majority of my Fon respondents labelled this whole interval as 'the time that Ahomadegbe was President'; Justin Ahomadegbe was during this period most Fon's favourite politician, but occupied in reality the presidential seat only during two years.

Under normal circumstances, events in the natural or political environment should only be used in dating local narratives if speakers mention them by themselves, because asking invites speculation (Vansina 1985:180). In early stages of my research however I sometimes triggered the discussion by asking a respondent whether he remembered a particular event and whether he could relate it in time to his personal experiences. It soon became clear which external events most Fon and Adja remembered with reasonable accuracy and which ones not. Henceforth I only referred to the well-known events and to personal genealogies.

Systematic surveys on career, field and vegetation histories often required systematic dating. We achieved this by referring to well-known external events and to respondents' genealogies.

Genealogies were of great help in dating events, because many of my informants belonged to the same (kinship) networks. The genealogical information they provided and the events they narrated to me often overlapped, which allowed me to cross-check information and dates. This juxtaposition of multiple connected genealogies was necessary but useful to obtain fairly reliable calendars (Lentz & Sturm 2001:155). It helped to detect cases where informants raised the age of elderly dignitaries or of themselves in comparison to commoners of similar biological age for reasons of social seniority (sections 5.1.1 and 5.3.3, Wartena 1987:43-44), as also happened during the group interview that I described above. It allowed discerning whether school children were made younger by themselves or by their parents because the State only offered scholarships up to a certain age. It permitted to detect if men after 1960 changed their age in order to avoid the poll tax (Mondjannagni 1977:109). It

helped to unravel confusion about biological paternity in cases of widow inheritance. A great advantage of date-setting on the base of local genealogies was that most people remembered family events very well; most women in particular easily recalled whether they were married, to whom, and how many children they had at the time of certain external events. In Adja families, planting oil palms on a particular field, the start of palms' fruit bearing age, abandoning them to 'oil palm fallow', and felling the palms, were also events that most family members remembered with accuracy.

To situate oral traditions in time I used as much as possible a combination of written sources, dynastic events, and genealogical information. In some cases however, especially among the Adja, genealogies were the only available sources. I agree with Vansina (1985: 183-187) that the reliability of genealogies and of chronologies based on them declines with the number of elapsed generations because genealogies are often manipulated when social relationships change, that this reliability is greater for 'bushy' genealogies than for linear ones and usually reasonable for the last 100-150 years, and that triangulation with other sources is necessary beyond that. I therefore tried to obtain bushy kinship information on past generations if I was interested in calendar dates, for example by asking not only for the respondent's father, grandfather etc. in the paternal line but also for the order of marriage of these ancestor's wives and for the order of birth of each wife's children[19]. Depending on the bushiness of the obtained information and on possibilities to triangulate, large or small probability margins were applied to the estimated dates.

### 3.2.6 Archives

Four Archives were consulted for this study, namely the Archives Nationales du Bénin in Porto-Novo (ANB), the Archives d'Outre-Mer in Aix-en-Provence (AOM), the Archives d'Abomey, and the Archives d'Aplahoué. The first two are relatively well-known among researchers, but the Archives d'Abomey and d'Aplahoué have not received much attention from historians. Therefore, my emphasis in this section will be on describing the situation in these two local archives. At the time of my research these two were stored in the headquarters of the administration of the district d'Abomey and the district d'Aplahoué respectively (The two old, colonial style buildings were obviously the former *résidences* of administrators of the *Cercle* d'Abomey and the *Subdivision* d'Aplahoué).

To judge by the thick layer of dust, tractor wheels, mice droppings and groundnut peels (left behind by the mice) in 1989-1991 before and on top of the piles of paper that constituted the Archives d'Abomey, I might well have been the first researcher visiting these archives since 1966, the date of the youngest document that I found there. The piles filled a room and several shelves and were hence quite ample but hardly classified. The Archives d'Abomey contain(ed) mainly periodical reports (*rapports mensuels, sémestriels* and *annuels*) of various governmental services for the *Cercle* d'Abomey for many years between 1903 and 1966, and – especially for the 1940s and 1950s – also some national reports. Furthermore they contain part of the official correspondence of the *cercle*'s administration, and many files on special topics. Those which I explored were *rapports agricoles, rapports économiques, rapports d'ensemble,* and the files *Affaires économiques, Chefs de canton, Disette, Eaux et forêts (palmiers à huile, feux de brousse), Huilerie IRHO, Monographie groupes scolaires Abomey, Problème de la dot, Procès-verbal de la réunion du CAFRA, Recensements population, Remises aux chefs de village, Statistiques production du cercle*, and *Traite de produits arachides*.

The Archives d'Aplahoué were smaller, cleaner, and also unexplored. They contain mainly documents from the 1950s, classified in a large number of fairly small files. I studied the following ones: *Action rurale, Agri[culture], Arachides, Café, Canton Aplahoué Nord, Canton Aplahoué Sud, Cartes, Chefs, Conseillers, Coton, Domaines, Douanes, IRHO Palmiers, Maïs, Mutuelle Houédogli, Organico, Recensements, Tabac*, and *Traitement ricin par SP 1954-1958*. The files in the Archives d'Abomey and d'Aplahoué which I did not study are given in Appendix 3. Unfortunately, the colonial Archives of Athiémé were lost in a fire.

The ANB and AOM contain periodical reports and correspondence of the Dahomean government and its ministries and services at national level, and the ANB also at the level of the *cercles*. Most national reports however also contain some locality-specific information. The ANB have monthly, trimester, semester and annual reports, AOM has economic trimester reports and mainly annual reports for most other topics. The ANB and the AOM also contain some letters, short reports and maps on the last pre-colonial years, mainly relating to political and military activities. Of these, ecological descriptions of the (potential) battlefields were of interest to me. Carson (1968:68-71) lists the documents on Dahomey between 1889 and 1918 in AOM's *serie géographique*; Ndiaye (s.d., 1975) catalogues all the periodical reports of Dahomey's colonial government between 1895 and 1960 which the AOM has on microfilm (copies on paper are at the Archives in Dakar, and for many years also in Porto-Novo). The ANB in Porto-Novo also contain some files with small documents (letters, reports, forms, journal articles etc.) on local political, commercial, social etc. issues and events, many volumes of several Béninese journals, some reports of the post-colonial agricultural service, masters' theses (*mémoires de maîtrise*) of students of the history department of Bénin's University, etc. The ANB were in the process of classification when I visited them in 1985 and 1989-1990; some documents were not yet accessible. Partly as a result of this, none of the four archives had complete series of periodical reports for all colonial yeas (see also units of analysis in section 2.1.3). My passport and letters from my supervisors at Wageningen University and from the Doyen of the UNB, which identified me as a researcher affiliated to these Universities, sufficed to give access to the four archives.

### 3.2.7 Aerial photographs

Changes in vegetation pattern between the mid-1950s and the earlier 1980s were also assessed with the help of aerial photographs. Both plateaux were photographed in these two periods. I studied the photographs towards the end of my research period, which allowed me to interpret them in the light of my earlier ground observations. The photographs showed clear demarcations between palm groves of different densities, open fields, low fallow consisting in herbs and shrubs, dense forest (at long rivers and small patches near houses), roads, and houses.

The photographs that I studied[20] were

- Fon plateau 1954, scale 1:50.000, mission AOF 54-55, NB31-XX-XXI, photos 70, 71, 106, 107 and 108 (region Abomey-Bohicon-Lissazounme-Kana).
- Fon plateau 1982, 1:50.000, Dahomey feuille NB31, photos 443-445.
- Fon plateau 19 January 1982, 1:15.000, 82 BEN15, photos 7 to 9 and 14 to 18 (region Lissazounme-Kana).
- Adja plateau 1956 or 1957, 1:50.000, NB-311-XIII-XV, photos 777, 779 and 780.
- Adja plateau 1986 (region Aplahoué-Azové-Lokogba-Houégame)

### 3.2.8 Pedological analysis

A small number of soil samples from the two plateaux were submitted to physical and chemical analysis to obtain a general impression of the degree of similarity of the soil types of the plateaux and of degradation processes under the impact of various cultivation practices. Given the range of soil subtypes on each plateau and the even greater diversity of local land use histories, a large number of soil samples would have been required to draw statistically significant conclusions. This was however impossible, due to time and financial constraints.

In cooperation with some soil scientists and agronomists of IITA Cotonou, the UNB, the CENAP[21] at Godomey, and Wageningen University I analysed, between 1989 and 1991, soils in five sacred forests, six fallows, one oil palm 'fallow', and six fields divided over the two plateaux. Profiles of 2 m depth were sampled and described in three sacred forests and three intensively cultivated fields near these forests, namely in Lissazounme on the Fon plateau and in Lokogba (near Azové and Aplahoué) and Zaffi (between Klouékanme and Toviklin) on the Adja plateau. The analysis of the deeper layers, where human influence is less than in topsoil, especially in soils under forest cover, indicated that the red soils of the two plateaux were of the same category.

The other samples (in fields at Zaffi and Lissazounme and in sacred forests at Avégame and Dogbo-Ahome on the Adja plateau) were of the topsoil only. The profiles in Lissazounme and Zaffi were described by the soil scientist Ina Kerkdijk (Wageningen University) and those in Lokogba by Thomas Gayser (IITA Cotonou) according to FAO's directives (1977) and the Munsell Soil Color Charts of 1975. All soil samples were analysed chemically and physically in the laboratory of the CENAP according to methods described in Kerkdijk (1991:12). The results are given in Appendix 9.

### 3.2.9 Some important surveys

The most frequently taken and most standardised surveys deserve a short explanation in this section. The questionnaires are given in Appendix 3.

#### *Time allocation surveys*

A major survey that I conducted in 1985 on the Adja and in 1990-1991 on the Fon plateau was meant to assess on a daily base which activities some sampled individuals engaged in and how much time they spent on each of these. The individuals were observed and interviewed at intervals of 1-4 days, in the Adja villages during 6 months and in the Fon villages during 12 months. The individuals were sampled in those families which I studied through the 'three' generations approach; and spouses were usually sampled (but not interviewed) together. Therefore, the survey was a useful complement to my own interviews and observations in the same families.

From mid-February to mid-August 1985 we conducted a time allocation survey among 35 related adults in three lineages[22] in the Adja villages Atindehouhoué and in Honsouhoué[23]. Assistants for this survey were first three and later only two young members of the lineage branches under study. The assistants had to ask the 35 respondents once in four days what they had done on each of the previous days, how long that activity lasted in half hours, for whom they worked, what they had sold, purchased, given and received, and to or from whom,

see questionnaire in Appendix 3. The four day interval was chosen in accordance with the local week but appeared to be rather long for the respondents to remember well what they had done. (See also Wartena 1987:17-22, 294-300).

From April 1990 to March 1991 I carried out a similar time allocation survey in several branches of four Fon lineages[24], three in Lissazounme and one in Aoundome near Kana. The Fon survey differed a little from the Adja one mainly to accommodate some earlier shortcomings and also because circumstances in the Fon families differed slightly. A major change was that I appointed one Fon assistant in each compound instead of only one or two per village. The Fon assistants were French speaking family members who lived in the compound. They had to record activities daily (instead of every four days) and were encouraged to observe as much as they could and not only ask about activities. I visited each compound regularly, observed, discussed the assistant's work with them, and interviewed on other topics.

My job relationship with the Fon assistants was in many cases an essential excuse to enter compounds whose inhabitants were reluctant to let me in on other grounds. The latter was much more often the case among the Fon than among the Adja as I will explain in section 3.4. Reluctant respondents were also more willing to answer when asked by close relatives than by strangers, and the fact that I had given a small paid job to one of 'their' children helped to create goodwill.

Earlier questions about gifts and about commodities purchased were omitted in 1990 because they had appeared to be less relevant and the answers to them unreliable[25]. They were replaced by questions about from whom what kind of help was received and made sure to record the names of helpers or people being helped, which gave additional insight into (labour) relations between people, and revealed who obtained much labour assistance from others and who little. The 1985 survey only monitored assistance given by the respondents and to what kind of relative[26], but did not ask for names. This obscured the important labour contributions of not interviewed people, especially children, and deprived us of a possibility to cross-check (if a wife said that she planted for her husband, did he also mention it?). Another difference was that the Fon sample was slightly larger and more gender balanced than the Adja's, it contained 21 Fon men and 20 Fon women. Last but not least, the Fon were observed for a whole year, the Adja during six months only. Reasons for not prolonging my Adja survey to a whole agricultural cycle were my lack of time to supervise assistants, financial[27], and the fact that researchers of the FSA-UNB did a fairly similar time allocation survey in three other Adja villages during three complete years in 1986, 1987 and 1988, and were so kind to give me access to these data. The UNB's Adja survey also contained data about help received.

### *Labour time measurements*

In the light of the systems approaches to agriculture, land use intensification, and population growth which I discussed in section 2.2.2, it was important to know labour efforts per hectare and per cultivation task. Boserup (1965:28-34) and others drew attention to relationships between labour inputs per unit of land, population growth, agro-technological innovation, growth of farm output, and labour productivity. Were the differences between Fon and Adja styles of farming a matter of different Boserupian stages of agricultural intensification? Many believe that Fon styles of farming are more labour intensive than the Adja's, but there are

also different views as I will argue in Chapter 9, and nobody really knew how much work the Fon and Adja farming techniques were; only Kersten (1988) had measured a few Adja field tasks[28]. To unravel these controversies I had to measure the labour requirements per hectare of the Fon and other Adja techniques myself. Of interest were also the techniques that changed in history, and labour time differences between gender- and age groups.

To answer these questions we measured how many minutes per surface unit individual workers in different gender- and age groups needed to perform each major field task. From April to December 1990 my assistants and I measured Fon and Adja labour times in the same way as Kersten had done. We copied her research techniques as faithfully as possible, in view of comparing her data with ours during the analysis. I felt capable and justified to do so because her thesis gives a detailed description of her procedures and because her supervisors at the UNB gave me additional information on her methods.

To measure labour times, the assistants or I informed farmers in the village were we lived which farm tasks we desired to observe, and asked them to invite us to their field when they planned to perform this task. Then we accompanied the worker with a stopwatch, a measuring tape and a compass, or a measuring stick *abo* (2 m). If several people worked together in the same field we asked them to work on separate plots – most Adja already did so by themselves because they turned group work into sporting-like contests, but most Fon had to be requested to work separately. We clocked the time that each worker started and finished the work and then measured the area that (s)he achieved. When we walked around in the fields we sometimes also measured the labour of workers whom we met by chance, in those cases a boundary line was drawn between the work achieved before and after our arrival.

We usually stayed in the field during most or a large part of that day's work, which gave good opportunities to observe and to engage in casual and semi-structured conversation about the things that we saw. We interviewed each worker, following a standard questionnaire (see Appendix 3) to obtain basic data on him or her self, social labour relations, and agro-ecological properties of the field. The interviews and observations gave much additional insight into who performed which field tasks and for whom. Revealing was also to meet among the workers some Fon who had previously told me, or their close kin had said about them, that they never farmed because this was below their standing[29]. My interpreters and some literate youth in the villages Atindehouhoué, Sahè and Aoundome assisted with this survey, first together with me and after some pilots also alone, each in his own village.

The sample size for each task, culture, gender and age group depended on the frequency with which each social category performs each task in the major Fon and Adja styles of farming. If this frequency was high the sample was deliberately larger than if it was low, because I wanted more precision for usual field practices[30].

Measurements in farmers' fields, of labour times or yields as I will describe below, contributed greatly to observe what people were really doing and growing there[31], and to forge relations with farmers, especially with the Fon, of whom many hesitated initially to speak with us when we visited them at home. The expensive and sophisticated technology (largely provided by the UNB) we used for measuring, and the 'exotic' rucksack in which we carried it, increased the status of ourselves and our research, especially in Fon eyes. Gustave Ayosso, my Fon interpreter, therefore treasured the rucksack and equipment carefully, kept them cleaner and in better repair than the things in his own house, sewed the bag when it was torn, and sighed with relief that:

> "Since I come with this outfit the people accept us more readily. Now they see that we really come to do research, that we are not just wasting their time with chatting. I hope that we can continue these measurements for a long time!"

### *Yield measurements*

Not a single publication existed at the time of my research that gave measurements of yields in Fon and Adja plateau farmers' fields. Local extensionists whom I asked about yield levels did not know of any measurements, neither recent ones nor long ago. True, some annual reports of the agricultural service state average yield levels on plateau fields, but extensionists explain that these figures were never based on measurements: "We always guess on the base on the levels stated in last year's report".

A comparison of annual reports since early colonial times shows that the same averages are given every year and mostly also for all the different regions of Dahomey/Bénin. Only some reports of the 1980s give slightly higher figures for the Adja- than for the Fon plateau for some crops, but also these reports do not refer to concrete measurements. Some yield levels that official publications give are quite surprising, for example the often repeated written statement that indigenous oil palms yield on average 1 ton fruit per hectare in farmers' fields throughout South Benin. Popular opinion holds in contrast that Adja palm groves yield less fruit and more wine that Fon groves, but also that palms on impoverished Fon plateau soils yield less than elsewhere. The lack of yield measurements in Fon and Adja oil palms is a major flaw given the importance and different management of this crop in Fon and Adja styles of making a living. Farmers' declarations and my qualitative observations also indicate that yields of all crops vary greatly with the location and land use history of each field, so that any notion of average yield – even if it was correct – does not say much. To obtain better insight into yields from different types of land I had to measure them myself.

I assessed the yields of the principal annual crop (maize, groundnuts, cowpeas, sorghum, pearl millet, or yam) in 184 Fon plateau fields[32] in the villages Aoundome, Gnidjazoun, Lissazounme and Sahè, and in 36 Adja fields (maize, groundnuts, cowpeas, tomato and cotton)[33] around Atindehouhoué and Lagbahome, aided by assistants. The Adja sample was smaller because since 1986 the UNB started to measure yields on the Adja plateau, but not on the Fon plateau. To obtain insight into oil palm fruit yield levels of the different styles I monitored harvests in 20 Fon and 22 Adja oil palm groves. The plantations were sampled in the villages Aoundome, Gnidjazoun, Lissazounme, Sahè, Atindehouhoué, Lagbahome and Zaffi in such a way that the major soil types and oil palm management styles were represented.

We measured 167 yields of annual crops with the help of weighing scales[34]. For the remaining 53 annual crop yields we combined two surveys: we first measured harvesting labour time as described above, and then the assistants and/or the farmers themselves assessed the harvested volume in local standard measures (basins, *sogo* or *tohungolo*). I weighed the contents, in various field products, of these measures on several occasions and found the variations within such small ranges that I felt justified to use these measures as standards for the purpose of my survey. Errors due to the equally limited precision of our other measuring tools, the variable degree of humidity of the harvested products, and the small sample size were probably in the same ranges.

The oil palms in all but one grove were, as customary, exploited by their owners[35]; the last grove belonged to a long term migrant who entrusted the management to his wife. Fon and Adja farmers pick their palm fruit as it ripens, the Fon mostly three times a year during the long dry season[36], the Adja about ten times during the dry season and if appropriate one or two more times during the rains[37]. All Fon and Adja oil palm owners whom we asked on the matter, before the start of the dry season 1990-91, claimed that they usually measure in local *sogo* or *tohungolo* all the fruit that they pick from their palms, and that if a woman in the house picks a bunch for cooking dinner she informs the owner. Harvested palm fruit is processed within a few days to prevent fermentation. On the base of this information, we judged that we could do with periodical interviews with the oil palm managers instead of measurements. We interviewed each of them about weekly during the dry season 1990-91 and bi-monthly thereafter until the end of the year, asking each time how much palm fruit they harvested since the last interview[38]. Analysis of the recorded palm fruit yields showed that these were very variable, all of them lower than 1 t per hectare[39], and that a much larger sample would be needed for statistically significant results. I did not measure palm wine yields partly because Adjinacou (1987) and Quenum (1988:142) did some research on this[40].

In all cases, we assessed which other crops and spontaneous plants grew in the field, measured the planting density of each crop separately, and measured the harvested areas, on the Adja plateau with the local measuring stick *abo* (200 cm), and on the Fon plateau with a measuring tape or stick and with a compass[41].

### *Vegetation histories*

A number of surveys were designed to assess historical cropping and spontaneous vegetation patterns on field level from year to year since respondent's childhood. These gave insight into crops and their associations, rotations, interaction processes between farming practices and semi-spontaneous vegetation, and changes in these during the 20th century. Exploratory open interviews showed that Fon and Adja farmers found it difficult to speak in general terms about the crops or vegetation of their plateau or region, but spoke with confidence and consistency about the same on their own fields. After all, they had watched these plants closely, bent over to the ground, for many, many hours while weeding, sowing or harvesting them. To study long term processes, mainly but not only elderly farmers who had known a same field for many years were sampled for these surveys. The fact that most Fon and Adja farmed at least some inherited land was helpful in this regard. In a few cases I interviewed consecutive holders of the same plot. We found it most rewarding first to establish, with the farmers' help, the historical periods that the field had been cultivated, that it laid fallow, and the planting and felling dates of oil palms in the plot. Also clearing frequency of spontaneous vegetation between oil palms was assessed. Then we asked for the names of the wild species at the beginning and end of each of the cropping and fallowing intervals, for the crops grown year after year, etc. The questionnaire about fallow periods and wild species is given in Appendix 3.

All respondents gave the plant names in the local language and sometimes showed or described the species to me. A few informants in mixed Fon-Adja villages gave for many species both the Fon and the Adja name. I identified the scientific names with the help of De Souza (1988), ESYCTRA (Floquet et al.) (1988), Adjanohoun (1989), Akobundu & Agykwa (1987), Dangbégnon & Brouwers (1991), Brouwers (1993), Adomou (2005:115-131) and

the Herbarium Vadense of Wageningen University[42]. The botanists Ebenezer Ewèdje and Aristide Adomou (UNB) and the agronomist Anne Floquet helped with identifying some fresh or dried samples. With this intensive triangulation between different determination methods I believe to have established most plants' scientific names with reasonable accuracy, even though the transcription of some Fon and Adja plant names in the literature differed slightly from the pronunciation of my respondents[43]. In cases of uncertainty I give the local names.

### 3.2.10 Action research: fertiliser and hybrid maize retail experiments

Fon and Adja farmers and agronomists agree that Fon and Adja farmers use too little fertiliser to counter soil degradation on the two plateaux. Agronomists also accept that Fon plateau soils are generally more degraded than Adja plateau soils, that Fon plateau farmers use far less chemical fertiliser than Adja farmers. Two possible reasons, also advanced by some farmers, were, first that fertiliser was only sold in bulky packages of 50 kg, and second that it was until 1985 only available for cotton growers and cooperatives, and after 1986 for others only available in district headquarters and for cash payment. 50 kg were too expensive and to heavy to carry to their village they argued, but they would be willing to experiment with smaller volumes. Would these statements match with actual behaviour if fertiliser was made available in farmer's villages at any quantity and for any crop?

One of the principal 'themes to extend to farmers' of the agricultural services were that farmers should grow hybrid maize. According to official statistics the areas sown with hybrids were in no year more than 1% of Fon and Adja plateau fields, but many farmers in Atindehouhoué and Honsouhoué initially told me that they had sown it and would be willing to sow it again. Was this true? I decided to put these claims to the test by engaging in fertiliser and hybrid maize retail trade myself, checking in the process whether the farmers recognised in the typically shaped hybrids the seeds which they had sown before.

To test the readiness of villagers to buy hybrid maize and small quantities of chemical fertiliser I sold maize per *tohungolo* (a local cubic measure, containing 1 kg maize) in Atindehouhoué and Honsouhoué in April 1985 and fertiliser per *sogo* (containing 3 kg fertiliser)[44] in the first village only from 28 April to end September 1985. In the first rainy season of 1990 I repeated the fertiliser retail experiment on a larger scale on both plateaux, but not the hybrid maize retail experiment because it was already evident that hybrid maize was poorly adapted to local cultivation and conservation practices as and tastes and that hardly any farmers recognised the seeds or wanted to sow them. The experiment of 1990 was carried out in two Fon villages, Lissazounme on red and Aoundome on grey soils and soils with pebbles, and in two new Adja villages on red soils, Gbeko and Tchankada. Atindehouhoué's soils were also grey. Besides my desire to cover the major soil types on both plateaux, I felt the need to repeat the experiment also among the Adja because of the impact of climate fluctuations from year to year and of the season (the first season being generally preferred for other crops than cotton) on farmers' decisions to apply fertiliser, and because since 1986 also sold fertiliser cash to non-cotton cultivators.

Because of the greater number of villages in 1990 I could no longer sell all the fertiliser myself but had to entrust it to one retailer in each village, one male and one female on each plateau. Sales advertisements were spread by various channels, as much as possible the same mix on each plateau. In Atindehouhoué and Aoundome the town-crier announced the news, and in the other villages the retailers did so themselves[45]. The retailers, including myself

in 1985, sold in their homes in the local measures *tohungolo* (1kg) and *sogo* (3kg) and recorded on a short questionnaire the name, gender and purchased quantity of each customer, as well as any experiences with fertiliser that he shared informally. Engaging in petty trade myself also gave me insight into villagers' financial practices, because it revealed some of their ways to raise money to pay my commodities. The results of the retail experiments are discussed in Chapter 9 and in Wartena (1987:23-24, 126-127, 146-148).

### 3.3 Effects of previous experiences and cultures on research processes

A comparative study requires consistency of research procedures as I argued above. But to my surprise, the Fon reacted very differently to the same research methods which I had used among the Adja in 1985 and which had worked smoothly there. In this section I will discuss how these differential research processes related to different earlier experiences with researchers and other outsiders, to different cultural values and practices, and to different verbal and non-verbal communication styles of the Fon, the Adja, and myself. In doing so, I will paint stereotype images of Fon, Adja and my own culture to make my points clearer. Obviously, not all Fon, Adja and Dutch practices correspond to these ideal typical extremes.

Before I started my fieldwork, the inland Fon were already visited by many anthropologists, sociologists, historians, not to mention tourists and pre-colonial travellers. They received much attention in national and international discourses and were well represented at the Béninese State. The Adja in contrast were neglected by researchers, tourists, the national State, external development organisations, or other 'strangers'. As a result, the inhabitants of the Fon and Adja plateaux had very different images of researchers in general and of me in particular, which translated into different attitudes towards my research.

#### 3.3.1 Fon in the role of paid informant: Give us money like the Americans did!

The behaviour of the social science researchers on the Fon plateau until 1990 had much in common and shaped Fon expectations towards me and my research. A first common practice was that all anthropologists, sociologists and historians until then based their studies almost exclusively on interviews with key informants, of whom the large majority where male members of the Fon elite living mostly in Abomey town. This applied amongst others for Herskovits (fieldwork 1931, publication 1938), Le Herissé (research 1904-1908, publication 1911), Mercier (research 1950)[46], Elwert (1973), Bay (fieldwork 1972 and 1984, publications a.o. 1984, 1987, 1995), Garcia (fieldwork 1971-1975, publication 1988), Oké (1984) and Avolonto (1990). An analysis of their informant-lists (the list is given in Appendix 3) also reveals that many of them interviewed the same informants as their predecessors. Apparently the 'Boas tradition', which was popular among American anthropologists from the 1930s to the 1950s and implies relying on one key informant plus a number of specialist informants, survived in Bénin well into the 1980s (Morton-Williams 1993:102). I will argue that in a socially stratified and conflict ridden society with a sense of honour like the Fon's, this 'Boas method' does not greatly help to discover what was and is actually going on, and does not reveal differences in opinion and practice inside society. The fact that all anthropologists interviewed mainly the same small group of upper class townsmen

biased the information they obtained and prevented them from discovering the errors of their predecessors. Their methods also created expectations among the Fon and hence had repercussions on my work.

Le Herissé (1911:4, 271-273) was the head of the French colonial administration of the *Cercle* d'Abomey from 1904 to 1908[47]. His principal informant was the prince and *chef de canton* Agbidinoukoun, son of king Glele (1858-1889), and his eleven secondary informants were all '*chefs et notables du cercle*'[48]. The Herskovitses spent only 2½ months on the Fon plateau, followed by four weeks in Allada, Whydah and Cotonou[49] (Herskovits 1938 I:iv; Preston Blier 1989:4-6). They hardly left Abomey town[50], and conducted most interviews in the privacy of the second storey of their house near the central market place (Herskovits 1938 I:iv-v). Although Herskovits (ibid) claims that they were able to observe life 'as it drifted past their door' and in the courtyard 'beneath our windows', this did not give them much insight into the life of common Fon and certainly not of rural Fon. Their fieldnotes reveal that they did not observe much besides ten ceremonies in the compounds of chiefs (Herskovits 1938 I:vi; Preston Blier 1989:9-10). Their translator and main informant was Prince René Aho, son of the late *chef de canton* Aho (1900-1925) who was a son of King Glele (Ahanhanzo Glele 1974:25; Manning 1982:328; Preston Blier 1989:7). René accompanied his elder brother Justin Aho, who was *chef de canton* from 1929 to at least 1950, on state occasions[51]. Justin Aho was the most powerful of all Dahomean *chefs de canton* of his time and controlled the Fon royal family as if he were king according to Manning (1982) and Bay (1995)[52].

Herskovits (1938:v) states that he had twenty-six informants in Abomey, 'in addition to numerous persons whose names I do not know', but his fieldnotes give the names of only ten and suggest that René Aho provided two thirds of all the information (Preston Blier 1989: 8-9). Though Herskovits (1938 I: vi) claims that his informants comprised of two groups, specialists and commoners, and that 'wherever possible' the points of view and attitudes of priests, devotees, laymen, chiefly families, commoners and descendants of slaves were gathered, his descriptions and fieldnotes indicate that most information was obtained from high-ranking specialists and members of chiefly families. He mentions that 'practically all branches of the family of Glele were visited. Ceremonies were witnessed at the compounds of most of these chiefs'. The social position of their translator and principal informant also makes it unlikely that counter narratives reached their ears. This is illustrated by Herskovits' and Aho's visit to a former slave village, where Herskovits (1938 I: 103) observed fear and reverence of the inhabitants towards 'those descendants of the royal family who were present'. Consequently, Herskovits mentions only few concrete instances were he encountered differences in behaviour, point of view or opinion. Rather he tried to present the 'general framework of traditions'[53]. But neither the Fon commoners whom I met nor Maupoil and his co-readers (Argyle 1966) recognised themselves very much in the general framework of traditions that Herskovits described. Maupoil & Co reacted emotionally, and my interpreter Gustave Ayosso, reading Herskovits, commented: "*ils lui ont raconté des coups*'" (they fooled him). Unfortunately, few elderly Fon commoners whom I knew on the plateau were able to read socio-anthropological or historical texts about Fon society well enough to comment upon them, let alone in English, so that I could not repeat Seur's (1992: 33-36) method of reading and discussing texts with farmers[54], but even without this many elderly Fon, of various social strata, portrayed to me many different and less harmonious 'traditions' in the early 1930s than those described by Herskovits (1938).

Also the respondent-lists of Elwert (1973), Manning (1982), Oké (1984), Garcia (1988), Bay (1995) and Avolonto (1990) show that each of them relied on a small number of high-ranking male informants and interviewed them in Abomey town. But Abomey stood and stands out on the Fon plateau by its smaller involvement in and greater disdain of farming, its stronger attachment to pre-colonial customs and (religious, dynastic etc.) traditions, and its high proportion of families attached to the pre-colonial elite. This interrelates with Abomean respect for customary land tenure practices, which inhibit the sale of lineage land (*hɛnuaïkungban*) and hence the installation of strangers in this town (section 9.4; URBANOR 1984; Wartena 1994, 1999). Only in her later study among smiths and weavers Bay (1987) included commoners with knowledge of those crafts from Abomey, Bohicon and one smaller Fon plateau village, but still mainly male and upper class.

A small number of princes, including René Aho, Sagbaju Glele[55], Agodéka Béhanzin and Daa Agoliagbo[56], were informants to many scholars as the informants list in Appendix 3 shows. René Aho had a strong influence on the historiography and sociography of Fon society, because he not only served as a guide and informant for scholars and film-makers for some 40 years, but also produced several articles on Fon social structures himself until his death in May 1977 (Bay 1995:9). Apparently he concluded, after his experience with the Herskovitses, that guiding anthropologists was a rewarding occupation. His voice in the international discourse remained largely uncontested, but this was not the case in Dahomean intellectual circles. Prince Maurice Ahanhanzo Glélé (1974:25, 83) published his own description of the Fon kingdom and accused René Aho of distorting Fon history to reinforce the position of himself and of his own family. The internationally most influential historians of Fon society were however people like Agbidinoukoun, René Aho, Sagbaju, Agodéka Béhanzin, Daa Agoliagbo and other princes and high-ranking men in Abomey town rather than Le Herissé, Herskovits, Elwert, Garcia and Edna Bay.

A second practice which many earlier researchers on the Fon plateau engaged in was to pay their informants. The Herskovitses' budget for 'gifts' (1,500 F) during their fieldwork was twice their budget for the salaries of their interpreter (250 F), their cooks (200 F), their boy (100 F) and the rent of their house (200 F) taken together (Preston Blier 1989:6), which means that their gifts were huge. In my research budget in contrast, salaries for interpreters and assistants were by far the largest cost. Herskovits (1938 I: v) himself speaks in this regard of 'little kindnesses' which led to friendships with the families of their household staff which opened doors into city life; most likely these kindnesses where material ones. Paying informants was indeed commonplace among American anthropologists, and also among American oral historians when conducting life history interviews, whose ideal often is to give as much as the research budget allows. The level of these gifts typically depends on the status or fame of the informant (Ritchie 2003:109). American anthropologists who did research on the Fon plateau in the mid-1980s also paid their informants according to their guide and to some of their informants. Constant Lègonou[57] told me in Cotonou:

> "During two years I was the guide and interpreter of a team of American researchers, led by a woman whose name I ignore. We observed many rituals and interviewed numerous renowned priests and lineage heads. Each time we gave them a gift: thousand francs here, two thousand francs there. We did not stay in one particular village for a prolonged time." (Constant Lègonou, Cotonou 13-2-1989)

Lègonou gave me the names of some of their informants on agricultural matters. Soon after arriving on the Fon plateau I visited four of them, all in villages about 3-4 km from

Abomey or Bohicon. They all confirmed to have been interviewed by Americans and to have received monetary gifts.

> One of them, a very old man, came stumbling with a stick and opened the conversation with hinting at a gift: "I just come from cutting palm leaves on my field, because the poor man is never old". I ignored the hint and asked some questions on soil fertility, yam varieties and rights to land. But he soon brought the interview to an end with the following remark: "I have to leave now, because I must lead a ritual for a newborn child. I am willing to reply if you come another time, but I hope that you will give me money like the Americans did. Good bye!" (Azogan, Dokon 24-2-1989)
>
> After Azogan's departure his neighbour Awosɛ continued: "You should make and appointment for an interview with my old father, but you must bring money. Daddy is the successor of Awɛsu [one of the greatest chiefs of the land of the 'Gedevi' plateau, see 4.1.2]. I advise you to call a gathering of several old men, so that the information they give is verified by many." At this point father Awosɛ arrived on the scene and advertised himself as a perfect informant by pretending to be old and well informed on dynastic issues: "I was alive during the war between Dodds and Béhanzin [1893-1894], I know the time of king Agoli-Agbo [1894-1900] well, and was already father when king Béhanzin's remains where repatriated and buried in Abomey [1928]. I know of Béhanzin's son who married a white woman against our people's will, and can tell you all these stories if you come in time." (Awosɛ and his father, Dokon 24-3-1989)
>
> Also Daa Gbese in Gnidjazoun tried to present himself as old, trustworthy, well informed on kingdom issues, and from a family that was historically befriended to the first Fon king Dako, apparently in the hope of receiving many paid orders for interviews: "I am born in the year of [*chef de canton*] Aho Doba's death [1925] who was the father of Justin Aho[58], and I saw king Agoli-Agbo many times. Come to me; I narrate only what my father and grandfather told me! Other old men in the village may tell you about history, but their information is not sure, sometimes they just tell you stories." (Daa Gbese, Gnidjazoun-Dakpa 23-2-1989)

Also the inhabitants of Lissazounme initially expected that I wanted to hear dynastic and other ancient traditions and practices, preferably from the mouth of princes, and that I would pay for these stories. One of the first acts there was to question Adrien Ahovi about land preparation techniques in his youth. He was visibly bored by the subject and changed it after half an hour:

> "My father is a son of king Glele! I want to go out now, but am willing to speak about history another time. I heard the stories about the ancient kings with my own ears; I am the right person to narrate them to you! But I expect a gift; my child is sick and I have no money and my brother's son Gaston [a schoolteacher] could not give anything to me." (Lissazounme 4-5-1989)

The practices of the earlier field workers had apparently created the image among the plateau Fon that researchers give money for interviews, and that the size of the gift depends on the age and status of the informant, on his close relation with the Fon elite, and on his capability to narrate traditions and practices of this elite. They had developed a shrewd awareness which type of stories most visitors liked to hear and could hence be 'sold' at the best price. Ina Kerkdijk and Erna Meuleman, two Dutch students who arrived with me on the Fon plateau and faced the same financial expectations in their own research villages. Several Fon bluntly told us or our interpreter that we would have to pay, sometimes even fixing prices. The advice that I received in Kana to interrogate Langanfin and pay him 2,000 FCFA, and in Lissazounme to unite the village dignitaries for a group interview (section 3.2.4) must be seen in this light. Also Pierre Ahovi's behaviour during this interview – underlining his royal blood and his experience with cowries – can be understood as an attempt to recommend himself as an informant on historical and dynastic issues. Given his age it is very unlikely that

he saw any more than extremely marginal use of cowries as currency, because these shells were abandoned on Fon markets by 1900 and on Adja markets by 1920 (section 6.4.6). But even during this group interview Ina and I had to explain at length that as 'poor students' we could not afford more than a few bottles of beer and lemonade as gift to them.

I never paid a single franc for an interview, was very modest with gifts in kind, and never gave anything at a first encounter. Reasons for this were more than only budgetary. First, paying interviewees is not customary among Wageningen development sociologists, I was therefore not prepared for it and quite surprised that so many Fon regarded paying normal practice. Second and more important, it was obvious that gifts greatly encouraged informants to present themselves and the stories they told me in ways that they believed would yield more money. I did not want to hear only best-selling stories and reinvented traditions, or complicate research situations by breeding ulterior motives for interview participation. This would only multiply the sources of bias and hence complicate analysis; therefore I decided not to pay. In my view, scholars who think that gift-giving should only depend on the available budget recognise insufficiently the impact that this practice can have on the data they obtain.

### 3.3.2 Adja waiting for attention, standard questionnaires and development support

Very little social field research was done among the Ehwe-Adja before my arrival, and almost none by distant strangers. The Ewe-speaking oral historian Pazzi (1979) collected some oral traditions from the mouths of Adja, the Dogbo-Adja speaking social anthropologist Agbo (1991:25-26) interviewed the Adja's chiefs of the land in Tado and Dogbo-Ahome, and some Béninese students did short *stages* (fieldwork practice) in, amongst others, Adja villages[59]. I was probably the first white researcher who lived in a Béninese Adja village[60], followed from 1986 by several other Dutch and Béninese scholars doing socio-economic field research among the Adja (see section 1.2), but until the end of my fieldwork none of other nationalities. This lack of social science research was symptomatic for post-colonial Dahomey and Bénin as also Bierschenk & Mongbo (2000) have shown.

The scholars among the Adja stood in Dutch and Dahomean-Béninese methodological traditions, which neither included a strong reliance on key informants nor paying for interviews. Standard questionnaires and directive interviews, taken by enumerators and junior local scholars under the distant supervision of a senior researcher in town, where the principal methods in social science research in Bénin since at least the 1960s, some studies among the Fon exempted. Also most senior western researchers 'cooperated' with Béninese 'counterparts' – a better term would be interviewers or informants – in that way (Bierschenk & Mongbo 2000). Dutch and Béninese students did live in Adja villages, but they too were strongly guided by seniors in town. Dutch communication styles in general are known to be very direct and verbal; we Dutch tend to ask direct questions, be direct in our critique, give straightforward replies, and are not good in non-verbal communication and listening between the lines. Directive interviewing obviously fits well into this style.

These top-down research traditions affected the Adja's attitudes to scholars. Most Adja accepted the role of passive respondent. When interviewed they politely answered questions but showed little initiative in speaking of themselves. With my Dutch cultural background and this Adja scholarly environment being my first research experience, I came to regard

directive interviewing as normal and feasible in Bénin. Consequently I was quite surprised that, three years later, so many Fon did not politely answer all my queries but set conditions or kept quiet.

However, no Adja whom I met sincerely expected money in exchange for information, certainly not at a first encounter as so many Fon did. Not even the Adja dignitaries whom I interviewed (former *chefs de canton*, chief-priests of the land in Tado and Aïssanhoué, etc.) asked for a gift, even though some of them had hosted earlier researchers. The chief of Tado's condition for an interview was that my interpreter and I bare our head and feet, not that I come with money. *Vodunon* Tofa of Aïssanhoué ordered drinks for us when we arrived on 27 April 1990 instead of expecting gifts from me. Among the Adja, only some individuals whom we interviewed many times finally lamented "what do you give me for all this time I give to you", but these feelings were inspired by their personal interview burden and not by socio-cultural expectations; and even they did not really expect to be paid[61].

I was aware that some respondents, especially the participants in the time allocation surveys (see 3.2.9), gave indeed much time to my research. All the Fon and Adja participants in this survey therefore received small gifts in kind (tools or a portrait photo of themselves in a frame) towards the end of the survey. Likewise, I was a bit liberal in assisting Fon and Adja who had become part of my own social network (members of long standing case study families, friends, neighbours and assistants), but slow with gifts to strangers.

Extremely few external organisations were active on the Adja plateau before 1989. The Adja had less educational and research institutes, health services, less manufacturing industries, no railroad, no agricultural research station, no agricultural development service from abroad, while the Fon plateau and most other regions of Bénin were since long better provided in this regard[62] (see section 7.1.3 and Dèdèhouanou 1993:4-5, 10-11, 18-19; 2003:100). Most Adja were convinced that this was because 'the authorities of the country' directed projects to their own villages. Positions in Dahomey's, later Bénin's, bureaucracy and public service and contacts with international organisations were mainly held by Fon, Gun, 'Brazilians' and since the seventies also by Northerners; hardly any Adja were found there (sections 1.1, 7.1.2 and 8.1), and this, they believed, had kept projects away from them.

*Chef de canton* Alofa's son Pierre and *vodunon* Tofa of Aïssanhoué, for their part, lamented bitterly about insufficient recognition for their own and their father's socio-political and (in Tofa's case) also religious authority in Adja society from the side of the colonial and post-colonial administrators, who chose at certain points in history other men as *chefs de canton* instead. Alofa narrated, supported by a handwritten version of his family history, about his ancestors' pre-colonial and early colonial positions as chiefs (see section 5.3). Tofa communicated in similar ways about occasions where he, his father and his gods had successfully produced rain and destroyed pests in crops, and were honoured for this by a few French administrators and by most *chefs de canton* and *chefs de district*[63] of the Adja plateau, all mentioned by name. The document he handed me was a carbon copy of a plea for recognition, addressed in September 1976 to the 'Marxist' government which engaged in witch-hunts and felling sacred trees during that year[64]. Also the *nyigbafio* of Tado told me of his successes in producing rain, and both priests complained about declining contributions for rain-sacrifices from the Ehwe-Adja[65]. It was obvious that the three dignitaries felt forgotten by ungrateful Béninese political authorities and by the Ehwe-Adja and hoped that Kwessivi and I could bring a change in this.

Common Adja villagers were more interested in infrastructural and socio-economic support than in socio-political recognition in itself. Agronomic and social science research in Dahomey and Bénin, Fon society exempted, was mostly development oriented (Bierschenk & Mongbo 2000). Mongbo (2001:2, 8) rightly points out that Béninese popular opinion credits any achievements in socio-economic and medical development and any successful services in these domains to foreign donors rather than to their own State, and associate researchers of western origin with development projects of the countries they come from. Consequently, Adja frequently pleaded me:

> "If a development project arrives, please make sure that it comes to our village! Otherwise the authorities in this country will direct all the aid to their own villages."

Not only my skin colour, also the socio-economic topics of my queries and my introduction as a 'student in rural development sociology' allowed the villagers to make this connection. These factors apparently convinced the Adja that as a European rural sociologist I would surely be able to represent them in the international development 'lobby', if not today then definitely after my graduation – after all, graduates of the agronomic faculty of Bénin's University were until then guaranteed government employment as soon as they had their degrees (see section 7.1.2). Among the Fon in contrast, no-one seemed to be interested in my potential future role as development worker or as lobbyist in development organisations[66]; they had enough lobbyists themselves and were not interested in agricultural projects.

### 3.3.3 Being 'unimportant' among humble Adja and proud Fon

Doing fieldwork, I believed, meant to adopt as much as possible the lifestyle of the people one intends to study. This, I thought, could be reached by eating what they eat, wearing local clothes, residing in midst the people a typical village-style house, furnishing it as modestly as possible[67], engaging in almost all types of work that the villagers also did, using inconspicuous means of locomotion, and leaving my computer behind in town[68]. Furthermore I thought to gain trust by associating as little as possible with formal organisations and vested external interests[69]. In each village, local dignitaries were visited first, but after that I related with people of all kinds of social standing. This was no sacrifice for me; I always loved camping and have a strong stomach and unpretentious character.

Soon I was nicknamed 'Madame Peugeot' because of my small Peugeot BBCT moped, the smallest and most common auto-cycle available in Bénin. I chose it for reasons of modesty and because spare parts and skills to repair it were widely spread in Fon and Adja plateau villages (see pencil drawing in Appendix 1). On the question why this nickname, Fon in Lissazounme explained that it meant 'humble woman, you do not like to blow yourself up'; this in contradistinction to the wealthy market women of West Africa known locally as 'Mama Benz'.

Among the Adja I fared well with this unpretentious lifestyle, but most Fon reacted with little enthusiasm to this in their eyes strange behaviour. During my 3 years in Bénin many Adja but hardly any Fon gave positive judgements such as 'we are happy that you don't blow yourself up as other whites do', 'we like the way you live with our people', 'we are glad that you are not complicated' (a 'complicated' person in Fon and Adja terminology is a person who uses treachery, witchcraft and so on to achieve his goals), 'nice that you stay

with us in the weekends instead of going to Cotonou', 'we are happy that you do like us', and commended me for eating local food and wearing local clothes. This was not because the Adja would like to flatter and the Fon would not. Rather, it related to differences in Fon and Adja values.

Due to their pre-colonial histories, the Adja themselves were more egalitarian than the Fon and prized inconspicuous lifestyles more than these. In Fon society it was honourable to live up to your standing, to go decently dressed, bear titles with self-esteem and pride, to strive for profit and prestige and to show your success in these. Decency in Adja culture was and is to avoid open display of wealth and status, because display attracted raids and neighbours' claims; Chapter 5 will elaborate on this. Therefore, my lifestyle was 'just right' for most Adja, but rather strange in Fon eyes. Many Fon would have preferred a researcher of greater 'importance'. Not all Fon though; less successful Fon in particular opened up more than to previous researchers of 'importance' and granted me an inside perspective into the less glamorous elements of Fon society which the 'important' ones could not perceive; see also section 1.3 and Chambers (1981, 1983) on being unimportant to avoid bias in research. Nevertheless, the consistent life and communication style which I adopted on both plateaux resulted in some differential research relationships, depending on the cultures and communication styles of the people I tried to relate to.

### 3.3.4 Styles of glamour and modesty and differential gaps between public and private accounts

The greater appreciation in Fon than in Adja culture for outward display of wealth and status went with a stronger sense of shame and fear to be recognised as poor or unsuccessful by outsiders, and implied a greater reluctance to let nosy parkers gaze behind the scenes. I also resulted in often larger gaps between public and private accounts of Fon compared to Adja speakers, not only when it came to oral traditions as section 3.2.4 alluded to, but also about contemporary events. It implied that some Fon preferred to keep quiet rather than to speak when questioned, others bragged without being asked about their status or success. Many first gave heroic public accounts during early stages of my research and later more gloomy private ones; or said boastful things which differed from what their deeds that I observed later. Large gaps between public and private Fon accounts were not only found at the level of the State but also of families, because group loyalty and Fon decency demand not to bring your kin and in-laws into public disgrace (section 1.3 and 3.2.4). Public accounts also tended to deviate more from private ones the more outsiders were present, so that I often obtained better insight when I went alone than when I went with my interpreter. The existence of a Fon-French dictionary and the fact that more Fon than Adja families had schoolchildren who could translate a little were helpful in this regard.

Most Adja in contrast politely answered questions, were quite consistent in what they said and did during various stages of my research, but rarely spoke without being asked. Any inconsistencies between an Adja's first words and what he said or did later were more often due to my vague or ambiguous first questions, combined with the Adja's opinion that research means filling questionnaires even if you don't know the answer, than to gaps between public and private accounts[70].

In consequence, it took generally longer to find out about bad luck and socio-economic decline of Fon than about Adja families and individuals, especially if the impoverished family

was of noble descent. I could quote numerous examples of Fon who, initially, described their enterprises as more successful than they really were, exaggerated about their own socio-cultural influence or the value of their titles in actual practice, blew up the number of their wives and children or did not want to mention their close relatives at all, but only few of Adja who did the same. These Fon-Adja differences were not only perceived by me but also by my interpreters and by Kerkdijk (1991) during her comparative study of land use in some Fon and Adja plateau villages in 1989.

Some Fon also explained their own fears of being spied by traumatic past experiences. Fon oral traditions about kingdom times were full of stories about treachery, intrigue, spying and violence by Fon not only against strangers but also against neighbours and kin, and similar Fon stories circulated about contemporary times. More Fon than Adja told us how they themselves or their close relatives were painfully deceived, robbed, poisoned, accused of witchcraft, used destructive magic themselves to discipline their kin, or advanced fear of poisoning as a reason for not accepting food from kin or neighbours and for saying 'no thanks I have eaten already' (see 1.3) when invited for a meal. Though Adja oral traditions also mention violence against them (see 5.3 and 6.3) these were possibly less widely known and less frequently narrated; in any case I met more suspicious Fon than I met Adja.

### 3.3.5 Comparable research procedures?

Absolute conformity of research procedures in comparative study of two different language groups and cultures is an illusion because, as the above account and Torres (1992:107, 111) point out, heterogeneity is also a property of the relationships that evolve between the researcher and the researched. I have shown how differences in language, culture, communication styles, and earlier experiences sometimes triggered different Fon and Adja reactions to the same questions, the same methods, the same non-verbal ways of relating to them, and the same behaviour from my side. Translating standard questionnaires into two languages is full of pitfalls because the same word or issue might have in different connotations the two cultures and will be understood differently in each, or some themes might be irrelevant or culturally inappropriate (tabooed, dishonourable, confidential, or despised) in one of them, as examples in section 3.2.3 illustrate. Second, verbal and non-verbal communication patterns regarding certain research topics may differ between cultures, including directness in speech, appropriate social contexts for addressing each issue, or social rights to speak about them. Fon and Adja differ in who can say what in public in a straightforward way without being indecent. Both researcher and researched interpret each other's styles of behaviour in the light of their own personal or collective experiences and their own cultural understanding, and all this affects the relationships that evolve between researchers and researched. Working with different interpreters in each language group, who have their own personality, also affects research procedures.

In several instances it was impossible or unwise to use the same techniques, and better to make research procedures dissimilar by adapting them to different local situations in order to reach the same goal in each locality. Comparability of methods, I want to contend, implies translation to the language, culture and situations where techniques will be used. Therefore, the researcher needs to understand the relevant linguistic issues, communication styles, and historical experiences of the researched people in order to communicate in a comparable way. In spite of these challenges, comparative studies can greatly contribute to understanding processes in interaction with their wider context.

## Notes:

1 'His' and 'he' is meant to include female researchers in this whole section.
2 Shared during 5 months with the Dutch student Ina Kerkdijk, see section 1.2.
3 In contrast with what the name 'diachronic' would make us believe, Long (1968) did not only study beginnings and end points but also the processes in between.
4 Such a narrative style resembles that which the Nigerian authors Chinua Achebe (1958) and Buchi Emecheta (1974, 1979), the former a historian and the latter a sociologist by training, use in their ethno-historical three-generation novels about Ibo families from the late 19th to the third quarter of the 20th century. Both authors incorporate their own experiences with Ibo society into their novels, including autobiography, paint vivid images of socio-cultural changes, and won several literary prizes. Socio-anthropological three generation studies however differ from these novels in that they do not include fiction but only systematic research.
5 Many examples of different life history approaches could be given. Studies that focus on individuals, and give at best superficial attention to members of the individual's social network, are those of Gamio (1931), Dollard (1949), Mintz (1960), and those given as examples in Benison's (1971) and Ritchie's (2003) publications on methodology. Also the studies of Elégoët (1978), Léon (1979), Robineau (1979), Denez (1979), Le Duc (1979), Muzellec (1979) and Brunel (1982), all published in *Tud ha Bro, Sociétés Bretonnes* and reviewed by Kuter (1984) seem to fall into this category. The interviews with politicians, musicians and famous scientists that Ritchie mentions seem to fulfil politicological, journalistic or antiquarian purposes, Dollard presents socio-psychological analyses, the other works mentioned above are social anthropological studies. Representatives of the survey approach to are the socio-economic research of Okediji (1970), and the study of Thompson (1975), who did 500 interviews with members of the Edwardian community, selected on the basis of a quota sample designed to make them representative (discussed in Thompson 1981:291-292). A good example of an informant-centred group approach is Smith's (1954) biography of a Hausa woman. Also the socio-psychologists Angrosino (2002) and Chauchat (1980) study individuals in their social environment, but there is no indication that they interviewed others than the key actors. A combination of the survey- and the informant-centred group approach is used by Thompson (1975, discussed in 1981) who presents 14 Edwardian family histories on the base of, if I understand him right, interviews with one member per family only. Likewise, Roberts (1982) interviewed 161 elderly people who lived in three British towns but were apparently unrelated with each other, about their own and their parents' work and family life before the First World War. Henderson & Rannels (1988) did the same with 27 farm women in Wisconsin. Examples of a network approach are found in Moore (1974) and Friedlander (1975, both discussed in Thompson 1981), Van der Schenk (1988), Den Ouden (1995), Long (1968, 2001), Wartena (1997, 2001).
6 The structural positions of actors in extended cases must continually be re-specified and the flow of actors through different social positions specified (Mitchell 1983:194).
7 The Manchester school seems to assume (and to require) that all case studies in this school should rely at least in part on direct observation, although they may include some interviews and other sources. Gluckmann's (1940/1958) analysis of a social situation in 'modern' Zululand depends almost entirely on his own participant observation. Van Velsen's (1964:xvii, 1, 9) situational analysis or extended case study of conflicts among the Tonga of Nyasaland combines direct observation with some interviews with key informants and others, genealogical inquiries, and a study of administrators' reports. Mitchell's (1984:194) extended case study in Malawi includes direct as well as non-direct observation of events which occurred up to 8 eight years before his arrival in the field.
8 Stone discusses works by Jordan (1979), Duby (1973), Ginzburg (1976), Le Roy Ladurie (1976, 1979), Cipolla (1979), Hobsbawm (1959, 1969), Thompson (1975), Darnton (1979), Davis (still forthcoming at the time of Stone's publication) and himself (1977). I would add, among many others, Latour's (1988) case study on Louis Pasteur and how it sheds light on the interplay between society and technological innovation.
9 Hebrews 12:1 (Since we are surrounded by such a great cloud of witnesses, let us throw off everything that hinders and the sin that so easily entangles, and let us run with perseverance the race marked out for us) refers to the large number of actors (as witnesses) whose individual experiences with God are narrated in Hebrews 11, and possibly also to contemporary witnesses whom the readers knew.

10 Examples: Adja farmers typically knew the surface of their fields or of their day's labour in *abowo* (but not in hectares), most Fon knew only the number of ridges or amount of seed needed for a particular field. This means that we had to convert some Fon measures to surface units and do more measuring ourselves on the Fon plateau.
11 We could not speak in public about bridewealth paid or the date of a girl's menarche among the Adja, while many Fon mentioned these subjects by their own initiative. The Fon on the other hand tended to be much more embarrassed to speak about cases of land transactions or 'market money' given to wives than most Adja were.
12 For some strata, respondents were more easily and rapidly found than for others. Due to time limitations we therefore set the targeted sample sizes in approximate rather than absolute numbers.
13 Langanfin was at that time the *président du Conseil Administratif de la Famille Royale d'Abomey*, a title coined to avoid the term 'king'. His predecessor was Sagbaju Glele.
14 Agricultural wage labourers earned about 400-500 FCFA per day's work in the informal sector (clearing or tilling an area of one *abowo* or one *kantin*, a task which adult males could achieve in 3-4 hours; some strong labourers did the double amount per day). Primary schoolteachers earned 20,000 -30,000 FCFA per month.
15 For example about the Gedevi-*vodun* Hlan and his priests in Atchia and Aoundome, the Adja-*vodun* Tchigohla and his worshippers, and the Adja Asu who killed Fon until their king Glele gave him nine people (slaves).
16 My landlord in Kana while showing me the ruins of Agaja's palace.
17 Interview in Sohodome, 23 March 1989.
18 Personal communication INSAE 1989. Purpose of these calendars was to estimate respondents' ages during the census of 1979.
19 Of help was the knowledge that the Fon and Adja disapproved of girls marrying before they were full-grown, arguing that a bride must be able to till a field or to earn a living in trade. According to my observations this norm was still respected most of the time, and marriages before the age of 17-18 were rare. Most women married around the age of 18-20. Until recently, women's children appeared to be spaced 3 or more years. Only in the youngest generation some women gave birth after 2 years already.
20 The photos of the 1950s were obtained from the Institut National de Cartographie in Cotonou and studied in Wageningen, the photos of 1982 were obtained at the Centre National de Télédetection et de Surveillance de Couvert Forestier in Cotonou, and the photos of 1986 were studied at SERHAU Cotonou.
21 Centre National d'Agro-Pédologie.
22 Lineages as perceived by the members themselves. Some generally accepted lineage members knew that they were in reality descendants of lineage daughters or of slaves. As customary among the Fon and Adja, wives were considered to be temporary lineage members.
23 In Atindehouhoué: seven adult men of whom three were grandsons (SS) of the village founder Atindehu, one his SSS, one married to his SSSD, and two brothers from a younger lineage in the village, ten wives of these seven men, and the 19 years old unmarried daughter of one of these couples (she was my principal assistant for this survey). In Honsouhoué: six adult men of whom three were SS of the village founder's third son Nini, two were Nini's SSS, and one a daughter's son of the founder's first son Loko, a wife of this respondent's deceased father (too old to bear children and hence to be inherited in levirate marriage, but her co-wife's son nevertheless took care of her as if she were his wife), and ten wives of these six men.
24 As in the Adja sample, wives were included as temporary members. Lineage membership was defined by the members themselves. In Aoundome, some members could not explain how they were genealogically related, while in Lissazounme some knew that they were descendants of lineage daughters or of slaves, nevertheless the lineages accepted them as members.
25 Adja respondents found it difficult to answer these questions, they obviously forgot many gifts and commodities and sometimes gave socially desirable answers. Their answers gave me some insight into the qualitative nature of transactions, but did not have any quantitative value. In the Fon survey we kept only one question about own field products sold, but even this question was only partly answered. Farmers often sold their harvest in small portions: vegetables when they matured, other products depending on cash needs during the year. At the end of the year many made up, for themselves, a

balance of how much of their harvest they had sold, and also declared this total volume to me when asked. The total volume declared was mostly larger than the sum of the periodical sales recorded by the assistants. Apparently, the assistants either failed to ask for some sales which they had not observed spontaneously or the farmers forgot to declare them.

26 Mostly indicated by my assistants as 'a brother', 'a co-wife', 'an uncle' (often it remained unclear whether this was father's brother, mother's brother, or still someone else), 'a friend', etc.

27 Salaries to assistants constituted my second largest research cost (other major costs were interpreters' salaries and fuel for my moped). Survey assistants were paid per completed survey, but the level of payment depended on the quality of their work, judged on the base of internal consistency and of my own observations.

28 Her fieldwork period finished before the harvest of the first season and did not cover the second.

29 Nazaire for example had claimed that he does not farm but works on the American embassy. When I came to measure labour times of his neighbour's children, I saw Nazaire coming with a scythe and in dirty clothes from the direction of the field of his brother Clauthaire and himself. Nazaire reacted with embarrassment to the fact that I saw him in work attire and with a farm tool. He tried to avoid my look and to hide his scythe behind his back.

30 On the Fon plateau I measured slashing fallow- or dry season vegetation with the scythe and with the cutlass, ridging the modern way, ridging the ancient way (without prior slashing, abandoned since the 1930s), sowing maize, groundnut, cowpea and sorghum, planting cassava, weeding maize, groundnut, cowpea, sorghum and okra, harvesting maize, groundnut, cowpea, sorghum and yam. On the Adja plateau we clocked times needed for clearing in the first and in the second season, opening plant holes for maize, cowpea, groundnut, cotton, and for fertiliser (plant holes were usually opened with the hoe, only in a few cases with a stick), sowing maize, cowpea, groundnut, cotton, applying fertiliser to maize, cotton and capsicum pepper, irrigating tomato and capsicum pepper, making mounds for tomato and for capsicum pepper, transplanting tomato, capsicum pepper and oil palm, placing palm branches to shade tomato, planting cassava, weeding maize, cowpea, groundnut, tomato, capsicum pepper, cassava, cotton, applying insecticide to cotton and to cowpea with the sprayer and to cowpea also with a leafy branch, harvesting maize, cowpea, groundnut, cotton and tomatoes.

31 Pierre Ahovi in Lissazounme had been boasting about the large size of his groundnut fields. "Please call me when you harvest them, I would like to measure the yield" I asked. His child took me to a plot where people were harvesting. We measured and talked with the labourers, who explained that it was their own field. "Where then are your father's groundnut fields?" I asked the boy. "We have not sown groundnuts this year" he replied.

32 69 Maize crops, 63 groundnut crops, 35 cowpea crops, 15 sorghum crops, 1 pearl millet crop and 1 yam crop. We recorded the presence of other crops and measured their number of plants per hectare, but not their yield. 99 of these crops were harvested in the first season (32 maize, 51 groundnut, 15 cowpea, and the pearl millet) and the remaining 85 in the second season of 1990 (37 maize, 22 groundnut, 20 cowpea, 15 sorghum, and the yam crop).

33 12 Maize crops, 3 groundnut crops, 5 cowpea crops, 6 tomato crops, of which 4 maize in the first season of 1985 and all others in the first season of 1990, and 10 cotton crops in the second season of 1990. Farmers picked tomatoes, cowpea and cotton in several rounds as they ripened. In some cases (6 of the tomato, 2 of the cowpea and 8 of the cotton harvests) our attempts to measure all the pickings from the same field were unsuccessful, so that we measured only part of the yields. We asked cowpea and cotton growers to keep everything they harvested from the sample plot or (in Fon fields) from the sample ridges separate until the end of the harvest in view of summing up and measuring the total, but some of them admitted that while waiting for us to return someone in the house ate from the sample or mixed it by mistake with the rest of the harvest. I suspect that this might have happened more often than declared. For cotton yields we therefore relied mainly on the official data of the cotton marketing board, to which farmers used to sell their entire harvest.

34 Though farmers usually store the bulk of their maize in cobs and groundnuts and cowpeas in pods, most of them were willing to peel our sample. If so, the assistants weighed the sample first in pods or cobs with husks, then in cobs without husks, and then in grains. From these data I was able to calculate conversion rates for those few samples which we had to weigh unpeeled. A more serious problem was that some crops, especially groundnuts and part of the cowpeas, were still more or less humid when harvested. It would take several weeks or months to dry them at the open air, and very

few farmers appeared to be willing to keep our sample separate for such a long time. We neither had the means to dry the samples artificially, nor the space to keep them separate until they were air-dried. The best we could do was to indicate whether the harvest was weighed 'dry', 'fresh' (this applied for most groundnuts) or 'half-dry', but how humid was 'fresh' or 'half-dry' we don't know.

35 Land under palms is sometimes given in various tenancy arrangements to others, and in some (quite exceptional) Adja tenancy agreements the tenant acquires right to the trunks (and the wine) of the palms. But palm owners always maintain the right to the palm fruit for themselves.

36 Each time the harvester climbs into those trees in which he spots a more or less mature bunch from the ground.

37 Adja oil palms are small enough to be harvested from the ground, which facilitates more frequent harvesting.

38 My fieldwork period finished in March 1991, but the interpreters continued this survey after my departure.

39 This was partly expected because of the rather low rainfall in 1989 and 1990, the poverty of Fon plateau soils, and the 'too' great density of Adja plantations for optimal fruit yields. However, some of the declared yields were so low that I wonder whether some farmers failed to mention some bunches either due to forgetfulness or to theft.

40 Unfortunately they did only few measurements and interviews on wine yields, and did not take into account oil palm planting densities. More research on wine yields would be needed.

41 We found that Adja farmers knew very accurately how many *abowo* (= ten *abo* to the square) and *abonyi* (= eight *abo* to the square) a plot had. My assistants or I checked it many times, especially in early stages of the research, and found only small differences between our measurements and the cultivator's declaration (up to 10%, which I attribute to measuring errors from both the farmer's and our side), therefore towards the end of the research we sometimes relied on the farmer's word alone. Fon farmers however rarely 'knew' the area of their fields or of their day's labour, neither in their local measure kantin nor in any other surface unit, except on the south-western edge of the plateau around Sahè. Many Fon farmers counted their day's labour in numbers ridges, but ignored the length of these ridges. The distances between Fon ridges was quite standard 70 cm, but the ridges' length varied considerably, according to our many measurements.

42 ESYCTRA (1988) gives plant names in Fon; Dangbégnon & Brouwers (1991) and Brouwers (1993) give names in Adja; De Souza (1988) and Adjanohoun (1989) give many names in Fon and somewhat less in Adja. Akobundu & Agykwa (1987) have photographs, Adjanohoun (1989) drawings, and the Herbarium Vadense dried samples of plants with the corresponding scientific names. For the sake of comparison I sampled and dried many plants on the Fon and Adja plateaux and took them to Wageningen.

43 Pronunciation sometimes varies between villages and between individual speakers, different speakers sometimes gave different names to the same plant, and others gave the same local name to different plants.

44 If filled with maize a *sogo* contains 3.3 kg (Fanou 1994:107).

45 The retailer of Tchankada communicated the news from door to door and reported to me to whom he spoke. The retailer in Lissazounme already had a booth at home where she sold foods and medicaments and now informed her customers that she also sold fertiliser (her customers were mainly from Lissazounme and from her grandmother's native village Sahè). The retailer of Gbeko, a predominantly Christian village, made an announcement in church and counted the male and female presence that day (about 50-65 men and 90-100 women from Gbeko and ±10 young men and 10 young women from neighbouring villages who had come to be baptised that day).

46 Mentioned in Morton-Williams 1993:103.

47 He was *Commandant du Cercle d'Abomey* from 9 April 1904 to 7 July 1906 and from 7 Mai 1907 to 15 December 1908, and also worked some years in a similar position among the Adja (Rapport annuel de 1912 du Cercle d'Abomey (Carton Cercle d'Abomey - Rapports sur la structure territoriale du cercle 1905-1922), ANB Porto-Novo).

48 Le Herissé (1911:4) mentions Glele's sons Aho, Degan, Zodeougan and Ouanilo, king Béhanzin's son Ahouagbe, his 'dignitary' Fiogbe, his warlord (*ahwangan*) Tokoudagba, his 'servants' Pélipézè and Zempé, and the '*miliciens*' (probably *ahwangan* or colonial *gardes de cercle*) Houn-Ouanou and Dosou. Archival sources show that the six princes and Fiogbe (who had been 'minister of Mahi and

Nago affairs' under Gbɛhanzin; Garcia 1988:21, 247) were *chefs de canton* and that Tokoudagba and Dosu-Huan were *chefs de quartier* in Abomey. I did not find external sources on the three other informants but they might have been important chiefs as well. See also section 7.1.1 on colonial *chefs*.

49 In Cotonou they had at least two interviews with their Abomey cook who had travelled with them.

50 Herskovits (1938 I:103) mentions one visit to 'Dan, formerly a slave village not far from Abomey', shows photographs from the large village Djidja and of ridging and sowing one field (1938 vol. I plates 1-3 and 27b, vol. II plate 82), but almost all the other photographs and examples in the text seem to depict urban and/or upper class life.

51 René stood on the left of the *Haut Commissaire* while Justin was facing him during the decoration of the *chef de canton* Essou in 1950. (Dossier *Chefs de canton*, Archives Abomey).

52 Aho was *chef* of the canton Oumbegame until his death in 1925. Justin became *chef* of the same canton in 1929 and was still in office in 1950. Manning (1982:269-270) calls Justin Aho 'the greatest and most controversial of these chiefs (i.e. *chefs de canton*): a leading descendant of Glélé, educated, fluent in French, and with military service (…). With his office and with administrative support, he took on several administrative titles, gained control of much of the remaining machinery of the royal Fon family (later claiming to be, in effect, king), and established title to large land holdings, including lands confiscated from the Fon state at the time of the French conquest'. At the time of Herskovits' fieldwork Justin Aho had been accused of performing human sacrifice to strengthen his own position (Bay 1995:5) (similar accusations against ambitious or powerful rulers are common in South Bénin; I heard several in 1989). Sources on *chefs de canton*: Fiches signalétiques et notes sur les chefs indigènes 1919-1932 Abomey E chefs, ANB Porto-Novo (Fiche signalétique du chef de canton Dadaglo; Arrêtés & décisions du Lieutenant-Gouverneur 1929 n° 782; Année 1937 Cercle d'Abomey n° 174 Notes des chefs de canton); Chefs de canton 1950, Archives Abomey; Manning (1982:274, 312-313 note 6).

53 This in spite of Herskovits (1938 I: iv) statement that 'Agreement on all points … was by no means invariably found, but soundness of method in the study of culture must recognise that there are no 'correct' answers to the study of custom; and that the acceptance of the fact of individual differences of behaviour and point of view within the general framework of a given set of traditions is the only valid approach to the realities of human civilisation.'

54 Since mine was not a restudy like Seur's (1992), I did not go at length to translate texts to Fon commoners.

55 Sagbaju Glele was the *président du Conseil Administratif de la Famille Royale d'Abomey* (CAFRA), a title coined by the French to avoid the term 'king'. The plateau Fon accept the president of the CAFRA as their head in most religious and many ceremonial matters and as the head of all the branches of the royal family. At Sagbaju's death, Langanfin Glele succeeded him. In spite of the advice of my neighbours in Kana (see section 3.2.4) I never interviewed Langanfin partly because many interviewed him before me already, but I observed him installing a *daa* of a branch of the royal family in Abomey on 22 January 1989 (the *daa* and his family prostrated before him in a side room of the royal palace Singboji). And when Sakla lineage in Lissazounme, of commoner descent, enthroned their new *daa* in April 1990 they went the next day to 'give Langanfin in Abomey an account of the ceremonies', which meant to give him money (observations and interviews Lissazounme 10 and 11 April 1990). According to a *daa* of a priestly family in Kana-Dodome all important priests have to 'render account' of each ritual they perform to Langanfin by sending him a proportion of the money received for that ritual.

56 The head of the lineage of the last king Agoli-Agbo.

57 Brother of my Fon language teacher.

58 His unsolicited mention of the Aho's supports the impression that he was familiar with their roles in earlier anthropological research and in Fon upper class society. He continued to narrate about a rivalry between Aho Doba and king Agoli-Agbo, in which Aho tried to poison the king. Agoli-Agbo, warned in a vision, cursed Aho so that the latter turned mad.

59 *Stages de monographie villageoise* (of ±8 weeks each in 1983) and *stages d'apprentissage des pratiques culturales* by 2nd year students of the FSA of the UNB.

60 Dutch and Beninese staff of the *Faculté des Sciences Agronomiques* (FSA) in Cotonou did a one-day survey in twelve Adja villages in 1984, and during 5 months in 1984 the Dutch student of anthropology

Sabine Luning lived in a Fon village on the eastern Adja plateau and did a comparative study between Fon and Adja (Luning 1986).

61 The most insistent Adja lamentation which I came across was that of the owner of a field in Zaffi where we had taken soil samples in 1989, and apparently believed that we had mined his land. He replied patiently to Ina and my questions, but once told the interpreter when he came alone: "Why do you do research without giving me anything? Ina has searched in my field and found many treasures there, but nobody gave me a gift. Now I will neither reply to your questions nor allow you to dig in the soil of my field unless you buy me *sodabi* or give me money. One does not work without being paid, and with me nothing is free" (F.A., Zaffi Kplogodohoue 14-6-1990). According to the interpreter he was the only Adja respondent who said such a thing, but even he continued to reply freely though he was not paid.

62 Several medical, agricultural and agro-industrial projects existed in and around Abomey and Bohicon, and many of them had white employees at some points in time. Among the external projects at the time of my research were a French farming systems research and development project (RD-Zou), a Russian project on the Kana-Abomey road (associated with the Kana airport?), and a literacy project by an American Baptist church in Abomey. Earlier, the French SATEC had provided agricultural services in the Zou.

63 Administrative heads of districts under the military government of 1975-1990.

64 Arguments used to gain this recognition were successes in producing rain and signs of earlier administrators' recognition for his father's role as Adja chief and priest. With pride he added orally how *chef de district* Gaston Aho of Aplahoué (probably from the princely Fon family Aho), after an unsuccessful attempt to obtain rain from Tado, finally paid Tofa for a sacrifice which was followed by rain and resulted in other *chefs de district* also turning to Tofa. Similar stories about *chefs de district* and agricultural extensionists who ordered rain-sacrifices from the Dogbo-Adja priest of the land, were told by two farmers in Lokogba (Lokogba 2-6-1990).

65 Interviews 27-4-1990 and 6-10-1990.

66 Several Fon and Adja knew that the University's motivations for my research in 1985 were, amongst others, to prepare the way for a Dutch development organisation to intervene in the Mono province. Between then and my arrival among the Fon in 1989, two Dutch organisations (KIT and SNV) started indeed projects on the Adja plateau, one of them also to Atindehouhoué. Occasionally, I told some Fon that I studied two Adja villages, that as a result a Dutch agricultural development project had started there, and that maybe the same could happen in their village. But this neither seemed to impress nor to interest them.

67 All houses except in Kana were mud houses with 2-3 rooms, a corrugated iron roof, and a cement floor in the sitting-room at least. All except in Kana and Honsouhoué had painted walls. Furniture consisted in tables, chairs, mattress, water filter, bookshelf made from wood or palm branches, kerosene lamps and -stove (gas stove in 1985), local cooking utensils from aluminium and email, and a mosquito net when malaria became too frequent.

68 Besides that, especially in 1985 I did not have much because I decided to stay a whole year on an allowance meant for six months only.

69 I was briefly introduced to the first research village by the extension service and by my (Dutch) supervisor from the UNB, but all other research contacts were established informally. I was introduced to the village Honsouhoué by a farmer of the first village, and met representatives of the CARDER and of the University only occasionally. On the Fon plateau in 1989 I came even more informally, with authorisation letters of the UNB, but selected the first villages with the help of friends from 1985 not with the help of the CARDER or the UNB this time. A Fon and an Adja schoolteacher whom I knew from the Adja plateau introduced me to the first two Fon research villages. Upon moving in to Kana-Dodome the two Dutch students and I informed the CARDER and the *Chef de District* of our intended research. In Lissazounme and Lokogba, chosen because they were on the red soil type and had a sacred forest, we first went to the village *délégués* and to the priests of the sacred forests, then to the CARDER and the *Chef* of the district of Lissazounme and asked them for permission to do research. We were directed to Sahè-Abigo, Lagbahomé, Zaffi, Zouvou, Akwewɛadja and Kplakatagon by inhabitants of the other research villages, who knew people there through kinship or friendship ties, tenancy arrangements, or neighbourly relations.

70 Occasionally, these gaps were also found, but much less frequently than among Fon.

# 4

# Setting the stage: ecological, social and technological similarities of the Fon- and Adja plateaux before ca. 1625

> The neighbouring king Kpon-Kpon threatened Sado [Tado]. Adimola transformed the Adja camp into a dense forest which hid the whole population. After nine days of useless siege and without seeing anyone, Kpon-Kpon retired. (Adja tradition, Palau Marti 1964:98-99)[1]

This chapter will set the stage for the comparison of the Fon and the Adja on the plateaux of Abomey and of Aplahoué respectively. It will do so both in the chronological and in the analytical sense. Chronologically it will consider the Fon and Adja's ancestors who populated their plateaux before ca. 1625. This is before the major socio-political and economic developments, which led to the present differences between the plateaux, took place. Of primary importance is the question: how similar were the plateaux before human presence started to have a serious impact? Analytically it is important to understand the similarities, the common ground, before any fruitful comparison can be made (section 2.1.).

In this chapter the Fon and Adja plateaux before ca. 1625 will be described: the peoples who settled on them, the natural ecology of the plateaux, and the technologies which the settlers used. The settlement histories of the Fon and Adja plateaux put into perspective a fairly dense pattern of early migratory flows and of trade relationships between the plateaux and other West African regions. These patterns of migration, which sometimes went back and forth, and early trade relationships, suggest that social ties between individuals and groups on and around the Fon and Adja plateaux existed. Socio-cultural identities and socio-technical styles were shaped along these (sometimes long-distance) lines. We will see that the principal trade and knowledge networks of the Fon and Adja extended into different directions: that of the Adja to the north-west and that of the Fon to the north-east. These different networks, which I will call socio-technical networks as explained in section 2.3.3, had an impact on the Fon's and Adja's access to tools, on the shape of these tools, and on their forging and agricultural knowledge.

In section 1 of this chapter I will analyse human settlement histories of the Adja- and the Fon plateaux, based on historical narratives gathered by myself and my assistants, narratives recorded in the literature, plastic arts, linguistics, and on some archaeological evidence. In doing so, some early socio-economic relationships between the settlers, between them and their regions of origin, and between them and their trade partners will be shown.

Section 2 tries to reconstruct the ecological situation of the plateaux at the time they were settled, based on oral traditions, soil analysis, and botanical knowledge about the habitats of species mentioned in historical narratives. In several instances I had to reinterpret either local traditions or opinions of ecologists.

Section 3 discusses how the ancestors of the Fon and Adja made a living before 1625. It analyses the importance of hunting, fishing, gathering and cultivation on and around the plateaux and discusses briefly the production techniques which were used and the major crops which were grown.

### 4.1 Origins of the plateau people and of their tools

The Ehwe-Adja and the Fon as we know them today have basically the same ancestry. Both the Ehwe-Adja and the Fon descend from a mixture of Adja-related peoples and of Yoruba peoples. In the pool of ancestors of both groups the Adja-related peoples constitute the majority. This is supported by oral traditions of common as well as princely Fon and Adja families[2], by archaeology, and by linguistic evidence.

The oldest traces of human settlement in South Bénin were, so far, found on the Coast. Radiometric analysis of ashes has proven the presence of humans sometime between 724 BC and 120 BC at Cocotomey (near Cotonou) and, on the westernmost part of the Bight of Benin, at Asokrochona near Accra between 2250 BC and 1850 BC (Adandé 1993:78). Several plateaux on the Bight of Benin, as well as the town of Tado, were inhabited before the onset of the Iron Age. The Fon- and Adja plateaux themselves are still awaiting radiometric ($^{14}C$) analysis (Adandé 1993:69), but such analysis has dated a burial ground of human skulls near the Yoruba town Ife at 560 (?130) AD, and traces of human presence at Allada somewhere between 75 AD and 870 AD[3] (Adandé 1993:85). In Tado and on the plateaux of Kétou, Allada, Notsé and Danyi, stone tools and -sculptures, polishing utensils were found, which suggests human settlement before the Iron Age (De Lespinay 1991: 143; Gayibor 1996:22-23). This means that Tado and several plateaux of South Bénin were inhabited long before the foundation of the Fon and Adja 'kingdoms'.[4]

Tado is considered to be the cradle of Adja civilisation. The majority of the Ehwe-Adja clans and many Fon clans claim descent from it. The same applies for the other peoples of the Ewe-Adja[5] linguistic group on the Bight of Benin. Tado is generally believed to have been the oldest 'kingdom' of South Bénin. Dynastic accounts of all the other Ewe-Adja speaking kingdoms relate their own royal families by patrilineal descent to the Tado kings (in one case to a daughter of a Tado king) (Akinjogbin 1967:12, 15; Palau Marti 1964:103-104, 115-117).

De Lespinay (1991:124, 133, 140-142) estimated that Adja-Tado turned from an acephalous group into a 'kingdom' (under the leadership of its present dynasty) somewhere between the 10th and the 14th century AD. He arrived at this conclusion by comparing some reasonably trustworthy oral traditions about dynastic relationships between Tado, Ife and Notsé with $^{14}C$ analysis in the latter two localities. One reason for Tado to become the first centralised polity of South Bénin was that at that time it was the only centre of iron smelting and forging of the area. I will come to this below.

Before the foundation of the Tado 'kingdom'[6] the following peoples seem to have lived in South Bénin: On the coast the Hweđa and the Hwla. Europeans called the first group Peda and the second Pla or Popo. They were fishermen and salt-makers (Pazzi 1979:87; Adandé 1993:73) and seem to have been related to the Adja (Gayibor 1996:67, 73) and partly to the Yoruba (De Lespinay 1991:125, 133-134, 141). The Hwla dominated the coast from the river Volta to Badagri according to Palau Marti (1964:97) and Pazzi (1979:88).

On the Allada plateau lived the Ayizo. They were presumably related to peoples who became later known as Adja (De Lespinay 1991:125, 135) and perhaps also to the Hweđa or Yoruba (Merlo & Vidaud 1984:281, 301 quoted in De Lespinay 1991:133, 135).

In Tado before 1400 settled in the first place the Alu, who were blacksmiths and would have been the first inhabitants, in the second place the Za or Aza, in the third place Adja related groups, and in the fourth place Yoruba related groups (Pazzi 1979:51, 149-151; Agbo 1991:40; De Lespinay 1991:133, 141; Gayibor 1993:250-253; 1996:52, 56, 68-69).

The name Adja seems to have been given after Tado became a 'kingdom'[7]. The origins of the Alu and the Aza will be discussed in 4.1.1.

The Wemɛnu, who were a mixture of Adja- and Yoruba related groups, were found in the valley of the river Ouémè and on the plateaux of Kétou, Zagnanado, and the south-eastern slopes of the Abomey plateau (own interviews; Herskovits 1938 I:179; De Lespinay 1991: 125, 135)[8]; they seem to have subsisted mainly on fishing and gathering. Groups of Adja-related fishermen occupied the valley of the river Mono and the shore of Lake Aheme.

From the 16th century several groups separated from the broad category of Adja-related groups, amongst others the Ehwe-Adja on whom this thesis focuses, and the Ewe. From about the same time the population of the Fon plateau adopted the name 'Gedevi'. I will discuss these 16th century processes in sections 4.1.1 and 4.1.2.

### 4.1.1 The Adja

#### *Adja-Tado: centre of iron smelting before 1500*

The town of Tado is situated in the savannah just north of the more forested plateau area. It was the most ancient centre of iron smelting and forging in South Bénin. Tado was built strategically on top of a hill in the otherwise rather flat savannah. Today the river Mono runs 10 km south of Tado[9]. Already before the foundation of the Tado 'kingdom', Tado must have been influential due to its iron smelting and forging technologies.

The Alu extracted and smelted their own iron. A furnace was excavated in Tado and its inhabitants know the location of the iron mines (Pazzi 1979:150, see also 46, 50, 56n14). Several large slag-heaps are still visible in the countryside around Tado, especially at Ahwétougbé (Gayibor 1996:52). The ancient Tado-Adja would have smelted in underground furnaces (Pazzi 1976:76 in Iroko 1989:10). An iron mine was discovered south of Tado, near Aplahoué (Bertho 1945:9-10; Adandé 1993:80). The forging tools and techniques of the Alu would have been the same as those used in the 19th century in the Grassfields of Cameroon and in North Togo by the Bassar and Kabiyé (Pazzi 1979:150; Warnier & Fowler 1979; de Barros 1986; Dugast 1986). Gayibor (1996:24) thinks that Tado smelted since the 10th century AD. Avolonto (1990:20) and Pazzi (1979:138, 151) believe that the Alu were related to the Akpafu, who lived originally on the river Danyi (southwest Togo). The Akpafu were known for their ancient iron smelting (Clerck 1891 quoted in Seige & Liedtke 1990: 75; Reynolds 1974:23; Pazzi 1979:138, 151; Gayibor 1996:51-52)[10].

Tado was probably the only centre of iron smelting on the Bight of Bénin until about 1500 AD. Table 4.1 in Appendix 4 shows the nearest centres of iron smelting and forging before 1500 beyond the Bight as attested by radiocarbon analysis. Tado had probably the richest iron ores within 300 km from the coast between the rivers Volta and Niger. The only two islands of Ferrisols[11] or Ferralsols[12] on the Bight of Bénin between the Ghana-Togo border and the river Niger were at Tado and a hamlet 20 km west of it[13]. In general, iron ores in Southern West Africa, in any case those at the mouth of the river Volta and around Tado, were of a lower quality than those found in the North around Bassar (de Barros 1986: 167; Goucher 1988). These factors certainly discouraged the development of Beninese iron mining at other places than Tado.

Later in history iron was also smelted on a small scale in other parts of South Bénin. Remnants of an iron smelting industry were discovered in Pobè[14], on the Zagnanado plateau (Agonli), on the eastern Abomey plateau[15], and further north in Ouesse (Savalou)[16]. These

industries probably emerged only briefly before or after the arrival of European iron on the coast, in any case they remained a small scale local activity, while Tado smelted for large parts of South Bénin. The Zagnanado and eastern Abomey smelters seem to have used more rudimentary technologies than Tado[17]. I will come to the eastern Abomey smelters in section 4.1.2.

The socio-technical knowledge network regarding blacksmithing, tools and tillage of the first Tado settlers seems to have stretched to the west and north-west rather than to the east. Forging technologies in Tado, Bassar and Kabiyé were the same (see above). Adja hoes were and are similar to the principal hoes of the inhabitants of Keta[18] and of other Ewe-Adja peoples with the exception of the Fon, and also to Bassar women's hoes (Martinelli 1984: 495, 498-499)[19]. Avolonto (1990:21) hypothesises that the Alu learned iron smelting and forging from the Akpafu of southwest Togo. The Alu did not share their knowledge with smiths and smelters to the east. The smelting procedures on the eastern Abomey plateau differed from the Alu's; I will come to this in 4.1.2 (own interviews on the Fon plateau; Iroko 1989:10).

According to their own oral tradition the Alu already knew how to work iron when they settled in Tado. Their ancestor Eyrù would have come 'from heaven' or from a hilltop with hammer and anvil and with the knowledge of iron smelting techniques. This ancestor is still worshipped in Tado as the *vodun* of the forge under the name of Gangli ('iron-smith') (Pazzi 1979:150-151, 156; Gayibor 1993:252). In summary, Tado was until about 1500 the principal and probably the only centre of iron mining, smelting and forging between the river Volta and the river Ogun. The blacksmithing knowledge network of Tado smiths extended to the west, not to the east and north-east.

### *Centralisation processes in the Tado 'kingdom' ca. 1000-1500 AD*

It is generally accepted that some time after the Alu developed forging in Tado, but before the foundation of the Tado 'kingdom', they were joined by the Za or Aza[20]. Today the Za in Tado believe that they came from the north (Gayibor 1996:69). Also Adja-Ewe traditions hold that some of the Adja's ancestors came from fortified towns on the Niger bend[21]. Pazzi (1979:51, 140, 149) thinks that the Za left the kingdom Za or Dia[22] 'between Djenné and Tombouctou' as a reaction to the Almoravid Berbers' expansion to the bend of the Niger in the 11th century AD[23]. Agbo (1991:40) more or less agrees with him.

Under the leadership of the Za, Tado seems to have entered a first stage of political centralisation. The Za or Azanu clan is now the 'royal' clan of Tado (Pazzi 1979:150; Gayibor 1996:56) and claims descent from the first ruler of Tado (Gayibor 1993:250). Nevertheless, oral tradition does not credit the Aza but the later arrived Togbui-Anyi with the foundation of both the 'kingdom' and the dynasty of Tado. According to persistent oral traditions, Tado became a 'kingdom' with the arrival of a group from Oyo under the leadership of Togbui-Anyi[24]. The Oyo probably had metalworkers by that time (see Table 4.1 in Appendix 4; Pazzi 1979:134-136)[25]. The following migratory myth indicates that they knew what forging was since they recognised its sound, and suggests that there were no blacksmiths between Oyo, Kétou and Tado, for the Oyo did not meet any on their journey westward until they reached Tado. They probably also crossed the Abomey plateau. Adja traditions, recorded in fairly similar versions by Pazzi (1979:151) and Gayibor (1996:68-69), relate that the Ayo (Oyo) fled Oyo land because of a war. They wandered, with a stop at Kétou, without finding a pleasant place until they came near Tado. On approaching Tado, which was hidden by forest,

they heard from a distance the sound of the blacksmiths' hammers striking their anvils by day and by night. Impressed by the ironworkers' industry and by their long working hours, the Ayo decided to find out, by simulating a dispute and wife-beating in their own camp, whether the people of Tado were peaceful and trustworthy and if so, to stay with them. The inhabitants of Tado passed this test because they hurried into the Ayo camp to settle the 'dispute'[26].

Tado's leadership apparently obtained a new and stronger character under Togbui-Anyi. He would have been the first *nyigbafio* (chief of the land) of Tado and the founder of the Adja-Tado dynasty. His mythical name, Togbui-Anyi, means 'ancestor land' in Adja. Some Ewe-related groups call him Togbui-Nyigblɛn ('ancestor blacksmith of the land')[27]. Most Ewe-Adja speaking groups believe today that he was a Yoruba (Pazzi 1979:150-151), but the present *nyigbafio* Adjakanumabu claims that Togbui-Anyi was an Aza who went to Ayo and returned to Tado with Ayo followers (Pazzi 1979:157). An Alu tradition adds that Togbui-Anyi's mother was from the Alu clan[28]. Even though the *nyigbafio* (the Tado dynasty) are held to descend from Togbui-Anyi, the members of his ruling council were and are chosen in the Aza clans (Gayibor 1993:250-252; 1996:69-72). Be this as it may, in any case the Alu, the Aza and the Ayo mixed and formed the Tado kingdom and became known as the Adja people (Karl 1974:331-336; Agbo 1991:39-41)[29].

The centralisation of the Tado 'kingdom' probably took place more or less gradually between the 11th and the 14th century (De Lespinay 1991:140-142) with the arrival of Za/Aza/Dia and Ayo groups. Until roughly 1500 Tado was to remain the most powerful 'kingdom' of South Bénin, a fact which was certainly related to its iron technology. After that it remained recognised as the 'father kingdom'.

### *Tado's chief of the land (nyigbafio)*

The 'king' of Tado was called *nyigbafio*, literally 'chief of the land'. The *nyigbafio*'s power was based on cultivation and on forging. In this regard he seems to have differed from the 'Gedevi' chiefs of the land. The *nyigbafio* was in the first place a priest of agriculture[30]. During at least some historical periods he also received 'tribute' (conceptualised now as contribution for agricultural rituals)[31], levied toll at toll-gates[32], redistributed land and held jurisdiction. But today he has only religious tasks, while the political leadership of Tado is assumed by his councillors, the *tasinon*[33]. Oral and written accounts state that the influence of Tado and its *nyigbafio* stretched from the river Volta to Porto-Novo[34], but this influence seems to have been more socio-cultural than political. The mythical names of the first *nyigbafio*, Togbui-Anyi (ancestor land) or Togbui-Nyigblɛn (ancestor blacksmith of the land) testify to the importance of forging and farming for his position of authority.

The *nyigbafio's* authority was founded on the belief that he had a pact with the gods of the land. Having this relationship with the gods he was held to have the power to provide or to withhold, depending on his choice, the products and the productivity of the soil. Mondjannagni (1977:162-163) says about chiefs of the land in South Bénin:

> '*C'est ce chef de terre qui a noué le premier pacte avec la divinité terre et qui a installé sur cette terre les divinités de son groupe. (…) C'est à ce chef de terre que s'adresse l'étranger qui vient isolément s'installer dans la région. Avant qu'il ne lui donne des terres à cultiver en accord avec les membres influents du groupe, cet étranger vit, en attendant son installation définitive, dans la case ou dans la concession du chef de terre. Au nom de la divinité terre, celui-ci doit lui procurer ses premiers moyens d'existence, surtout la nourriture.*'

Later in history Togbui-Anyi/Nyigblɛn was himself worshipped as a god of forging, of rainfall and of (soil) fertility. Sacrifices and prayers to Togbui-Anyi/Nyigblɛn must guarantee good harvests and the normal repetition of the climatic cycle of the year[35]. Togbui-Anyi receives every year in August the first fruits of yams, goats and cows at the occasion of the *gbogbuezan* festival in Tado since at least 1900 if not before[36].

At present as apparently also in the past the Adja believe that rainfall, soil fertility, plant health and the absence of pests depend on the health of the *nyigbafio*, on rituals led by him, by the *tasinon* and by some members of the Aza and Zafi clans in Tado, and on peace and consensus between the *nyigbafio* and his court[37]. At the beginning of each farm season the *nyigbafio* 'unties the heavens' by sowing the first grains and performing a blacksmiths' ritual[38]. His spiritual power over rain and plant diseases[39] is symbolised and supported by his stick *(e)dòci* (disease tree) and his magic stone *fiokpe* (chief's stone) which would attract rain[40]. In addition the Adja believe that a group of stars called *Aza* or *Eza*, presumably the Pleiades, influence rainfall and plant diseases (Brouwers 1993:118-120)[41]. The *Eza/Aza* stars are the symbol of the Aza clan (Pazzi 1979:49)[42].

Several elderly Ehwe-Adja men on the central and western Adja plateau remember:

> "In cases of drought our village used to send some young men to Tado. I also went one time. We gave the *nyigbafio* some bags of maize or other agricultural products from the village, and liquors or a goat. A prayer was said and the drinks or goat sacrificed in Tado's sacred forest. The *nyigbafio* blessed the grains which we brought, saying that it would rain. He gave us some of the blessed grains[43] and told us to mix them with others and sow them to produce a good harvest. We promised 'If we have indeed a good harvest we will bring you part of it' and went home.
>
> Nowadays not every drought leads us to sacrifice at Tado – and if we sacrifice we rather send money than maize – but the villages near Tado[44] give more field products and other things for the *gbogbu* and to thank for a good harvest than 20 years ago."[45]

During a visit to the *nyigbafio* Adjakanumabu in his palace in Tado on 6 October 1990 I observed preparations for a rain ritual. A young man came in with a bottle of alcohol and asked for a sacrifice for rain. Adjakanumabu sent the visitor and a young man of his household to the sacred forest to bring the sacrifice, but stayed behind himself to talk with us (see also section 3.3.2).

The socio-religious authority of Tado's 'king' was mainly based on agriculture. This, together with the presence of an iron industry in Tado, makes it plausible that agriculture was important for the Adja's livelihood during the high-days of their kingdom, which was between the 14th and the 16th centuries. I will come in the next subsection and section 4.3 to the Adja's tools and production technologies during those centuries. In section 4.1.2 I will show that the 'Gedevi', who lived from at least the 16th century on and around the Abomey plateau, had several local chiefs of the land instead of a single one, and that these chiefs' role in agricultural rituals was less accentuated in Fon oral and ritual tradition than that of the Adja's *nyigbafio*. This makes it plausible that agriculture was either unimportant for the 'Gedevi' when they settled on and around the Abomey plateau or too unimportant for the Fon to preserve agricultural traditions relating to the *aïnon*.

### *Alu and Adja tools and production technologies*

What did the Alu forge during the high-days of the Adja-Tado kingdom? According to narratives from several sources in the first place they forged cutlasses *akadrakpu* with a curved blade, which they bartered in the wide surroundings (Gayibor 1996:69), and further

axes[46], hoes, knives, bells[47], arrows and lances. Cutlasses and lances were used for practical and ritual purposes[48]. The existence of hoes and cutlasses in ancient Tado is supported by a memorial cloth depicting the symbols of the *nyigbafio*. Tognon, one of the more ancient *nyigbafio* in Tado's king-list, chose as his symbol a hoe and a cutlass[49]. In spite of their privileged access to iron, the Alu do not seem to have forged many weapons such as arrows and lances. Tado never had a strong army and never seems to have been a centre of great military power. The Adja mythology quoted in the introduction of this chapter not only testifies to the non-offensive attitude of Adja-Tado, but also to the Adja's relationship to 'bush' and their strategy to surround their villages by it. They continued this attitude and strategy until the 20th century. I will come to this again in Chapters 5 and 9.

The emphasis on cutlasses in Adja narratives and rituals, ahead of other tools, probably had a reason. Cutlasses necessitate far more iron than arrows and lances, but are more useful in slash and burn agriculture than these. Arrows and lances in contrast are mainly suitable for hunting and for warfare in open landscapes. Emphasis on the ritual and commodity value of cutlasses supports that agriculture was important for the ancient Adja's livelihoods, while hunting and warfare in savannah were relatively unimportant. Hence I conclude that during the high-days of Tado's rule, from the 14th to the 16th century, the Adja probably farmed around Tado, and supplemented this with hunting.

The Adja believe that their ancestors' principal crop was yam and that it was always grown on mounds, made with hoes of the same type as they have today. However, the indigenous yam species *Dioscorea abyssinica* and *D. praehensilis* are often planted in deep holes on flat land by the N'tcha of Banté and the Bariba, this can be done with a knife or digging stick (Tostain et al. 2003:45; personal communication Florent Okry 2004). The Adja might also have done so. The Asian yam *D. alata* which needs mounding was introduced in the 16th century and soon became South Bénin's leading yam species (Wigboldus 1986:327, 349; Alpern 1992:21). But whatever the yam planting technique before 1600, it seems plausible that the Adja of that time had the same hoes as today, hoes with a straight wooden handle into which a pinned iron blade is stabbed (Figure 2 in Appendix 2). The hoe in *nyigbafio* Tognon's symbol on the memorial cloth looks like this modern Adja hoe, and there is no indication that the Adja hoe type ever changed. These Adja hoes are suitable for mounding and for flat cultivation, but not for ridging. We will see in 4.1.2 that the Fon forged a different type of hoe, suitable for ridging.

During the 15th century, perhaps earlier[50], the Ehwe-Adja seem to have lived and farmed in the plains around the Tado hill, for their name means 'Adja of the plains'[51]. Only after some time, starting not later than the 16th century, some of them migrated to the Ehwe-Adja plateau, still maintaining their name 'Ehwe-Adja'. It is these Ehwe-Adja on the plateau who will be the subject of this book. What was the reason for their out-migration? This question will be discussed in the remainder of this section.

### *Dispersal of Adja-Tado's people and power after ca. 1500*

The 16th century witnessed important out-migrations of Adja from Tado. This coincided with the arrival of European traders and their iron on the West African coast from 1482 onwards. The appearance of cheap European iron must have led to a decline in Tado's commercial and religious power but also to a greater availability of iron to Adja farmers. It enabled them to extend their fields, amongst others to the Ehwe-Adja plateau. A few Adja might also have seized the new socio-political and economic opportunities which the (slave[52]) trade with

Europeans offered. All this contributed to a loss of control of Adja-Tado's rulers over their subjects, who could obtain iron and make a fortune somewhere else. Simultaneously the *nyigbafio*'s position became more and more contested by other members of the Tado elite. South Béninese traditions relate about several conflicts within Tado's royal family during the 16th century, all resulting in the out-migration of one of the conflicting parties. The best known of these is the conflict between the *nyigbafio* and his daughter's son Agasu, who became the founder of the Allada, Abomey and Porto-Novo dynasties (see 5.2.1). Others are about a coup by Sodji against his father *nyigbafio* Gbaja[53], and about competition for the throne between the sons of the *nyigbafio* Asimađi (whose name means 'languishing market')[54].

Not later than the 16th century Ehwe-Adja farmers started to settle permanently on the Aplahoué plateau. Table 5.2 shows the oldest plateau villages[55]. One of the first villages on the Ehwe-Adja plateau was Adjahonme (Womí) on the north-eastern part of the plateau, near the source of an affluent of the river Sahoua and overlooking the Couffo River. It was founded slightly before or in the 16th century[56], presumably by a brother of a *nyigbafio* of Tado[57]. It is not clear how forested the area of Womí (Adjahonme) was at the time of its foundation. Some of its actual inhabitants believe that it was forested[58]. Local traditions also hold that, because of Womí's strategic position, its founder magically grew a circle of cactus around the village to hide and protect it (Olou 1986:20; Pazzi 1979:85). This suggests an open landscape, but also repeats the motif of Adja habitations hiding behind a strip of vegetation, of which I gave some other examples in section 2.2.3. During the 16th, 17th and 18th centuries more and more common Adja and other southern Béninese settled on the Ehwe-Adja- and the western 'Gedevi' plateaux[59]; I will discuss this in section 5.3.1.

The first settlers on the Ehwe-Adja plateau seem to have come mainly from the surroundings of Tado[60]. Later they were joined by small groups of Ana (Yoruba) from the Atakpame area, Waci from the Comè area, Adja-Sahwè from the Bopa area, Fon slaves of various origins, etc. These strangers, though they still know their origins[61], adopted the Ehwe-Adja language and identity. With the time the Ehwe-Adja's relations with Tado became looser. The Ehwe-Adja dialect came to differ slightly from the Adja-Tado dialect. Nevertheless the Ehwe-Adja, in contrast with the Fon and most other Ewe-Adja groups, never choose their own chief of the land nor founded their own kingdom, but continued to accept the *nyigbafio* of Tado as their principal priest of agriculture[62]. From the 18th century onwards events on the Ehwe-Adja plateau were strongly influenced by the Fon kingdom.

### 4.1.2 The Fon

The population of the Fon plateau before ca. 1700 is usually called Gedevi[63], which means 'children of Gede'. Not all of those who go under this name, however, are real descendants of Gede. In some cases the original identity of other groups on the plateau (Wemɛnu, Za, Adja, etc.) was and is specified. I will first try to establish the origins of the different groups on the Fon or Gedevi plateau, in order to compare these origins with those of the Ehwe-Adja. In the next subsection I will reconstruct, on the basis of local traditions from my research villages and some dynastic traditions, the social organisation of the 'Gedevi' and in particular the chieftaincy of their land, and compare it with that of the Adja. Finally I will discuss the production technologies of the 'Gedevi', in particular those relating to forging and agriculture. In order to distinguish between Gede's patrilineal descendants and between

others who accepted the name 'Gedevi', I will write Gedevi if I refer to Gede's descendants alone and 'Gedevi' if I speak about the whole pre-1700 Abomey plateau population.

### *Population of the 'Gedevi' plateau before ca. 1625*

The 'Gedevi' plateau was inhabited by a mixture of peoples, whose ancestors seem to have been mainly Adja-related and to a smaller extent Yoruba-related. In the beginning most people lived on the eastern slopes of the plateau. Not later than the 16th century many 'Gedevi' started to settle on the plateau itself. This migratory movement seems to have been triggered off with the arrival of some Yoruba headed by Gede. Around the same time the role of iron and agriculture seem to have increased among the 'Gedevi', I will come to this below.

By the 14th century the Wemɛnu or Jigbe-Wemɛnu lived on the south-eastern slopes of the plateau, which is intersected by rivers. They were of mixed Adja-Yoruba origin (De Lespinay 1991:125, 135) and subsisted probably to a large extent on fishing, hunting and gathering. Many Fon clans today claim descent from 'Jigbe-Wemɛ'[64].

Not later than the 16th century also the Za, the Jinu (or 'Mahi'), some Ayizo, the Dasa and some Nago (a Yoruba group) made a living on the eastern slopes, alongside the Wemenu (Le Herissé 1911:277-278). Simultaneously some Ehwe-Adja existed on the western- 'Gedevi' plateau[65] and some descendants of Gede around Kana and on the central 'Gedevi' plateau. The Za lived in the region of Zado ('hole of Za') on the south-eastern slopes and around Za-Kpota ('Za on the hill') in the higher north-east. Some traditions relate Zado to Jigbe-Wemɛ and claim that their language was close to Adja, Ayizo and modern Fon[66]; others believe that the Za on the eastern 'Gedevi' plateau were related to the Za of Tado[67]. In any case they were an Adja-related group[68]. The myth of origin of Aoundome (see 4.1.2) suggests that also some Ayizo settled among the Za before 1600. The Jinu seem to have been an Adja-related group with some Yoruba inputs: Ederveen (1990:28) thinks that they were Ayizo, but De Lespinay (1991:134-135) argues that they were a mixture of Adja, Hweđa, Wemɛnu and Yoruba. In the late 17th or early 18th century they fled northwards and established themselves on and around the Savalou hills, where they took the name 'Mahi' (people of the hill) (Adédirán 1984:74). Some Nago (Yoruba) groups were found by 1600 on the eastern and northern slopes of the plateau (Le Herissé 1911:277-278, 285; Oké 1984:65). The Dasa lived on the northern shore of an affluent of the river Hlan 'near Kana' (Le Herissé 1911:277); their ethnic affiliation remains unclear. In the early 18th century they also fled northwards, where they mixed with Yoruba- and Adja-Popo[69] groups on the Dassa hills and founded the Yoruba kingdom of Dassa (Adédirán 1984:78; Mongbo 1995:149). By 1600 the western 'Gedevi' plateau was inhabited by Ehwe-Adja (4.1.1 and Table 5.2). In the 18th century some of these Adja were replaced by Fon (see 5.2; Le Herissé 1911:46, 274, 293; Pazzi 1979:84, 86; Gléle, Béhanzin & Adjademe 1984:3).

It is generally believed that Gede came from Ife or Oyo (Burton 1893/1966:121; Le Herissé 1911; Pazzi 1979:152; Oké 1984:60; Yélouassi 1987:27; De Lespinay 1991:133-134). He settled in Kana[70], near the source of the river Hlan and on the borderline between the red plateau soils and the south-eastern slopes. Kana traditions stress that their village was from ancient times the major trade centre of the 'Gedevi' plateau. According to some accounts the village was founded by Yoruba traders[71]. An eastern trade route linked Kana to Oyo, a northern one linked it to Djougou, Nikki, Salaga, and to Hausa cloth traders from Kano (Pazzi 1979:153). The Kana market remained until the 19th century the principal Fon plateau market; tradition ascribes its creation to Gede's wife Mɛenyon, after whom the market is

called 'Mignonhi'. She would have sold *akpan* (a snack from pearl millet) to women who came to fetch water in the river Hlan[72]. Gede's descendants, the Gedevi (children of Gede) disseminated to the west and settled on the arid centre of the plateau (own interviews; Le Herissé 1911:278). Together with the real Gedevi more and more Ayizo, Wemɛnu, and probably also Za, Jinu and Dasa migrated from the eastern slopes to the centre of the plateau[73], where they adopted the name 'Gedevi'.

In summary, towards the end of the 16th century the 'Gedevi' plateau population was distributed as follows: On the western plateau the Ehwe-Adja, around Kana and on the rest of the plateau the 'Gedevi', and on the eastern slopes the Wemenu, Za, Jinu, Ayizo, Dasa and Nago (Le Herissé 1911:277-278).

The first to settle on the arid plateau were the Adja and the 'Gedevi' (apparently people who were led by the descendants of Gede)[74]. The only advantage of living there was that the red plateau soils were more suitable for agriculture than the rather sandy and at places gravely soils of the south-eastern slopes. Probably the Adja and the Gedevi subsisted more on cultivating the soil than the Wemenu, Za, Jinu and Dasa, though all also hunted. I believe that the Adja and the Gedevi, through their contacts with Tado and with Oyo, had more access to iron and possibly also more agricultural knowledge than the south-eastern groups. I will come back to this below.

By 1600 this mixture of Wemenu, Za, 'Mahi', Dasa, Yoruba, Adja and Gedevi spoke a common language which was related to Ayizo and Fon[75]. That the 'Gedevi' spoke an Ayizo dialect is also supported by that the *vodunsi* of the most ancient 'Gedevi' *vodun*[76] are still called Ayizonu and have Ayizo as their ritual language[77]. The inhabitants of the 16th century Fon plateau do not seem to have spoken Yoruba dialects. This suggests that the Wemenu and probably also (some of) the other Adja-Ayizo related groups (Ehwe-Adja, Za, Jinu, Ayizo, maybe the Dasa) were well established on the plateau and its eastern slopes before the arrival of Yoruba groups (Gede, Nago, maybe the Dasa).

Nevertheless, by 1600 the whole plateau population accepted the head of the Gedevi in Kana as their principal chief of the land and adopted the name 'Gedevi' for themselves. One reason for the real Gedevi's socio-political dominance was probably their relationship with Oyo, which was in the 16th century economically more developed and more centrally organised than the Adja and Ayizo groups of South Bénin, perhaps with the exception of Tado. Another reason might have been Gede's control over the Kana river source. A third reason, related to the first, was probably that Gede came with technologies which the Wemenu, Za and Jinu population before them did not have.

In summary, the population of the Abomey plateau before 1600 was of mixed Adja-Yoruba origin. Linguistic evidence and the analysis of available myths of origin suggest that the Adja-Ayizo groups were the most ancient and probably numerically dominant. By 1600 however the Yoruba groups had become socio-politically dominant. With the arrival of the Ehwe-Adja and of the Yoruba followers of Gede the population seems to have moved increasingly from the eastern slopes to the red plateau soils.

### *The chiefs of the land (aïnon)*

By 1600 the different groups on the 'Gedevi' plateau and on its eastern slopes were each headed by a chief whom they called *aïnon* (priest or chief of the land[78]) (Herskovits 1938; Avolonto 1990). Many 'Gedevi' *aïnon* were not only priest of the surrounding land but also priest of a nearby river source. Each river on the slopes of the 'Gedevi' plateau had its own

*aïnon*. Fon dynastic and local traditions as well as present day ritual practice suggest that the priesthood and chieftainship of rivers was at least as important as that of land, in any case on the slopes. The *aïnon* also played important roles as local socio-political leaders.

The *aïnon* were at least in theory the oldest living male of their group, had a pact with the gods of the land, and distributed territory to their own people and to newcomers. But before a newcomer received land he had to live in the compound of the *aïnon* and was fed by him (see quotation Mondjannagni 1977:162-163 in 4.1.1). During this period the newcomer worked for the *aïnon*.

The myths of origin of some ancient villages on the Fon plateau as well as Fon dynastic traditions illustrate the role of the *aïnon*. As examples I give myths of origin from my three most ancient research villages, Aoundome on the south-eastern fringes of the plateau, Gnidjazoun on the plateau centre, and Kana in between the two. The histories of these villages are intertwined with well-known dynastic accounts.

> "Aoundome was founded long before 1600 by a group of Ayizo from Akpè (20 km north of Allada). The migrants from Akpè first settled in Akplakpa near Zokpotota[79]. Because many of them died there they moved to Gansuhotin[80], but also there many people died. Hence they moved on to Mahua, and finally to Aoundome, 2 km from Gansuhotin. The name Aoundome derives from the tree *awundo* or *ajisɛ*[81] with fruits 'like the guava' which grew there." (Own interview in Aoundome, 1989)

Aoundome is not far from the source of the river Hlan, the most important river on the eastern slope of the Abomey plateau. The *aïnon* of the village became the priest of the river under the name Hlanhosu (king/ruler of Hlan). Therefore the village is also called Hlanhosugon. The Hlanhosu seems to have enjoyed great influence on the plateau[82]. One of the first Fon kings tried to give the priesthood of Hlan to his own brother[83], but king Tegbesu (1732-1774) had to give it back to the original inhabitants of Aoundome and had to grant the Hlanhosu royal privileges such as human sacrifice and royal insignia[84].

Fon traditions generally accept that Agidi was the ritual name of the *aïnon* of Kana-Kpota since at least the 16th century. According to the present lineage head of the family Agidi and several other dignitaries in Kana

> "Agidi was the name of the founder of Kana[85]. When he died he transformed himself into a river which took its rise at Kana and was henceforth worshipped as a *vodun*."[86]
> "*Aïnon* Agidi was the priest of the river here and the chief of the land from Kana-Kpota into the direction north-east."[87]

In the 16th century the Gbese family hunted, gathered, and cultivated a little by minimum tillage in a Jigbe-Wemɛ village under the leadership of their own *aïnon*. The Gbese narrate about their ancestors' livelihood in Jigbe-Wemɛ:

> "According to the stories of the grandfathers, the people gathered yams when we lived in Jigbe-Wemɛ. The women cultivated pearl millet, cowpeas and sorghum on the land close to the village and the men hunted in the bush which surrounded it. The soil was very fertile and they did not make ridges. The village had its own *aïnon*."

Other *aïnon* around 1600 were the Gedevi Wo in Kana-Gbangname, Kpahè in Kana-Kpahè[88], and Awisu in Dokon[89]. Also the village Gnidjazoun had its own *aïnon*[90]. A Nago (Yoruba) *aïnon* was Di or Zanhuanu, who controlled the source Dido on the northern edge of the 'Gedevi' plateau[91]. The *aïnon* of the village Kotokpa was the priest of the river Koto on the eastern slopes[92]. Whether (all the) *aïnon* were believed to have power over rain and crop

productivity is unclear. Awisu would have had this power, but the *aïnon* of Gnidjazoun not, according to present-day inhabitants of their villages[93]. The account of the Agasuvi's migration from Allada to the Abomey plateau between 1600 and 1625 will be discussed in 5.2.1. While the Agasuvi transited in Sèhouè, around 1600-1610, they were joined by the Agbaja family. Together they moved to the 'Gedevi' plateau and first received some land from Agidi at Kana-Tota. When their numbers grew and the land did not suffice them anymore they asked the *aïnon* Wo and/or Kpahè for more land, and were invited to settle under some *Parkia biglobosa* trees at Houawe[94]. Around 1630 the Gbese family from Jigbe-Wemɛ joined them in Houawe. Dynastic tradition claims that Kpahè sold burial grounds to the 'Gedevi' for 300 cowries and two chickens, which was more than most people could afford in those days, with the result that most dead were not buried but thrown into the forest. Therefore the 'Gedevi' would have been glad when the Agasuvi killed Kpahè (Herskovits 1938:I:16; Oké 1984:61-65; Le Herissé 1911:281).

Around the second quarter of the 17th century Agbaja and some members of the Gbese family moved on to Gnidjazoun with the intention to hunt there. They received land from the *aïnon* of Gnidjazoun. According to the head of the Gbese family:

> "The *aïnon* of Gnidjazoun welcomed our ancestors because in those days there were only few people. The village was surrounded by bush in which dangerous animals lived. Our ancestors did not make gifts to the *aïnon*, not even for agricultural rituals; no *aïnon* had power over the rains. Our ancestors exchanged women with the *aïnon*'s family and so became like one big family. They immediately planted oil palms on their land to indicate that it was theirs, since this was usually done. But they continued to send every year one calabash with pearl millet and smoked meat to Dako-Donu (1625-1650) in Houawe."
>
> Another family head added: "The people of Gnidjazoun had a *vodun* represented by a heap of soil (*zuún*) to whom they sacrificed annually the first fruits of pearl millet mixed with palm oil, capsicum pepper and salt. This sacrifice was called *amijađu*, from which the name Gnidjazoun is derived."[95]

Compared to the Adja's chief of the land, the 'Gedevi' *aïnon*'s authority over agricultural matters is but little emphasised in myths and rituals. Fon narratives[96] speak more of the *aïnon*'s social and spiritual authority over rivers or other water sources on the slopes of the plateau. When it comes to land, *aïnon* Kpahè's authority over burial grounds is more emphasised than his authority over farmland. Until the mid-17th century most 'Gedevi' would have thrown their dead into the bush rather than burying them[97]. Whether (all) the *aïnon* had spiritual authority over rain and crop productivity remains uncertain, the Fon today give diverging accounts for particular 17th century *aïnon*. The Fon *aïnon* today[98] play no role whatsoever in agricultural rituals. In kingdom- and post-kingdom times rites for rain and crop productivity were and are performed by the king and by heads and *vodunon* of individual lineages[99]. The facts that few traditions and rites regarding *aïnon*'s agricultural roles were preserved suggest that such roles were either non-existent or became un-esteemed. They also suggest that agriculture was either unimportant for the 'Gedevi' or not esteemed by them or the later Fon[100].

### *Iron use by the 'Gedevi'*

This section discusses the production technologies of the 'Gedevi' until the 17th century. It deals in particular with the questions whether they had iron tools and if so, how they obtained and used them. On the base of ecological, linguistic, ritual and archaeological

evidence, narratives, arts, and evidence based on the shape of tools, I will argue that iron was scarce on the 'Gedevi' plateau, that the ancient 'Gedevi' did not smelt themselves but obtained their iron and iron tools from the east and north-east rather than the west, and that their socio-technical network was mainly oriented to the (north)-east.

I stated above that the first inhabitants of the Abomey plateau, the Wemenu, Za and Jinu, settled on the eastern slopes rather than on the plateau itself. Only after the arrival of Gede more and more people settled on the central plateau, and since the 18th or 19th century the slopes are only sparsely populated compared to the plateau. The red plateau soils are more suitable for agriculture than those of the slopes, but the latter have rivers while the plateau is arid. This supports that the Wemenu, Za and Jinu on the slopes did not cultivate much and mainly subsisted on fishing, hunting and gathering. The 'Jigbe-Wemɛ' myth quoted above which argues that the 'grandfathers' lived from hunting, gathering yams and some minimum tillage cultivation, makes it plausible that they hardly used iron tools. Several Fon blacksmiths' narrated traditions that are even more specific, defending that the 'Gedevi' hunted, gathered, and practised no-tillage agriculture without iron tools in pre-Portuguese times:

> "Before the arrival of the Portuguese on the coast, the ancient 'Gedevi' used weapons and tools made from stones from the Dassa hills, and made projectiles from clay. With their stone tools they could clear only small plots. They uprooted shrubs and small trees but did not till the soil, they cultivated on the flat. Weeds were pulled up by hand. The soil was fertile and the small plots produced an abundant harvest, which was supplemented by hunting and gathering."[101]

After the arrival of Yoruba groups, people moved to the plateau and agriculture seems to have become more important. Section 4.1.1 and Table 4.1 have shown that the Yoruba smelted long before the 13th century AD, which makes it plausible that Gede and/or other Yoruba migrants arrived with iron tools and with knowledge how to use them. Nevertheless, iron remained scarce on the 'Gedevi' plateau in pre-Portuguese times. Fon blacksmiths in Kana, Zado and Bohicon today believe that the first iron instruments on the Abomey plateau came from Oyo[102]. The Oyo would have continued to sell knives, cutlasses, lances and hoes on the Abomey plateau until the reign of king Agaja (1708-1734). Some blacksmiths add that additional iron tools came from the Bariba of Nikki, and that the ancestors of the Bariba smiths came from Bussa[103] in northwest Nigeria. Tado was not a source of iron for the 'Gedevi' according to the Fon blacksmiths whom we interviewed[104].

The 'Gedevi' apparently learned iron smelting and forging from the Oyo, not from the Adja. Linguistic, ritual and archaeological evidence and the shape of Fon tools supports this. First, still today blacksmiths on the Fon plateau are complimented by calling them Ayonu gbɛdɛ, which means 'blacksmith from Oyo' (Pazzi 1979:142). Second, the only god of iron and of forging whom the Fon worship is the Yoruba god Gu[105]. They do not recognise the Adja *vodun* of the forge, Gangli[106] and Nyigblɛn[107]. At present as in the past the apprentices of Fon blacksmiths are initiated to the cult of their master's forge[108], therefore it seems likely to assume continuity of worship from master to apprentice.

The third evidence is provided by the shape of hoes in the area. Fon hoes belonged to a particular type, the 'hooked wooden handle with pinned iron blade' type[109] (Figure 3 in Appendix 2), which is found in North Togo, North Bénin, Nigeria, South Cameroon, and east of Kinshasa. It is used by the Yoruba, Bariba, Nupe, Hausa, Edo, Ibo, Pila-Pila, Kabye, Bassar[110], by the 'Gedevi' and Fon until the 1930s, and possibly (in the past) in Burkina Faso and Sudan[111]. But nowhere outside the Sahel-Nigeria-Central African belt this hoe seems

to have been used[112]. In any case it neither existed in South Togo, nor in South Ghana, nor among the Adja, Ayizo, Waci, Sahwè, Mina and Ewe of South Bénin, nor among important groups of North Ghana-Togo such as the Kotokoli and Konkomba[113]. The Adja, Ayizo, Waci, Sahwè, Mina and Ewe use and always seem to have used a hoe with a straight handle and a pinned blade (Figure 2 in Appendix 2). Therefore it is likely that the 'Gedevi' learned forging from the Yoruba, or possibly from other north-eastern neighbours, but not from their western or southern neighbours[114].

Finally, archaeological evidence suggests that the 'Gedevi' learned iron smelting not from Adja-Tado but somewhere else. The 'Gedevi' seem to have started smelting rather late in history and abandoned it soon again. Their smelting technologies differed from those in Tado. Oral testimonies and archaeology indicate that around the 16th and 17th centuries iron smelters and blacksmiths worked in the villages Sefunwuyanta and Koklofɛnta[115] on the eastern Abomey plateau.

> "In the time of Gede's wife Mɛenyon, before the time of Hwegbaja (ca. 1650-1685), there were blacksmiths in the village Koklofɛnta, 6 km to the north-east of Kana. They came to the Kana market to buy our foodstuffs and they made hoes and cutlasses for us to cultivate. Today the blacksmiths of Koklofɛnta are no longer there. After them other blacksmiths came, for example Zunzonli". (Own interview with members of the families Ahinon[116], Aguidi and Guedenon[117] in Kana-Mignonhito 27-6-1989)

Iroko (1989:6-12) was told a similar story in the village Lise-Sodohome[118]:

> 'A group called Mèdasaénu mined iron ore in the forest Zogbozun[119] and smelted and forged it in a place called Sefunwuyanta[120] 'long before the foundation of Abomey'. They continued to do so under the Fon kings until European iron became abundant. The Mèdasaénu disappeared long ago'[121] (Iroko 1989:2, 4, 6, 12, my translation)

At Sefunwuyanta, slag[122], blow-pipes and two man-made hills of 5 and 2-3 m high were still visible in the 1980s (Iroko 1989:2, 5). The Mèdasaénu do not seem to have used the underground furnaces which were used in Tado (ibid:8), which indicates that they did not learn smelting from the Adja. When Iroko visited Lise-Sodohome in 1980 the Mèdasaénu had already left the area several generations ago[123], but a rain-god 'of the type of Dan'[124] called Sefunwuyan was still worshipped there in times of drought (ibid:12, 14-15). The findings in Sefunwuyanta and Zogbozun suggest that the quantities of iron produced there were small.

The 'Gedevi' before ca. 1650 seem to have relied to a large extent on wooden, clay and stone instruments. One of their principal instruments was a hooked wooden stick of the shape of the handle of the modern Fon hoe, with a long end of about 60 cm, a short end of 20 cm and an angle of 50-80° (Figure 4 in Appendix 2). It seems likely that the first 'Gedevi' hoes were derived from this stick. Evidence from linguistics, oral tradition and plastic arts supports this.

*Kpò* ('knee') is the normal Fon word for a wooden stick, *kpògɛ* ('long knee') the word to specify that a stick is straight and not hooked. Hooked wooden sticks *kpò* were multi-purpose instruments. They were used as weapons by the 'Gedevi' under the name *mákpò* (rage-stick) or *kpòtà* (head-stick)[125] and also, according to Adandé's (1962:21) informant, as entirely wooden hoes. A Fon narrative relates that they became weapons when Fon farmers in the time of Hwegbaja (ca. 1650-1680) were attacked in the field, removed the iron blades from their hoes, and chased the enemies with the handles (Adandé 1962:14). However, *mákpò* are already depicted on a memorial appliqué cloth of king Dako-Donu (1620-1650), on

which the 'Gedevi' fight with hooked sticks against Aladahonu intruders who are equipped with straight clubs and cutlasses[126]. The image correctly reflects that the Ayizo of the Allada plateau always had straight handled rather than hooked handled hoes. A hooked wooden stick is exhibited in the museum in the royal palace in Abomey under the name '*casse-tête*' and with the explanation that such sticks were used as clubs, as seats, and as hoe-handles. Similar instruments with a carved shorter end were and are used as sceptre or wand of office (*àxósúkpò* = ruler's stick) by 'Gedevi' and Fon chiefs; according to Palau Marti (1964:137) and explanations in the Abomean palace these sceptres were derived from *mákpò*. Adandé (1962:14) adds that hard woods such as *kake*, iroko, *caïcédrat* and *péti*[127] were preferred for these sticks. Hooked wooden sticks were probably also used to farm. Oral tradition (Pazzi 1979:198) upholds that the 'Gedevi' cultivated with hoes which were entirely made from wood[128]. Some 'Gedevi' attached a stone blade (see the blacksmiths' account quoted at the beginning of this section), or an iron one if they could afford it, to their wooden *kpò* when they went to farm. Among the Fon, stone axes remained a symbol of the god of thunder and lightening, and carved hooked sticks became status symbols used by thunder-priests and dancers (Adandé 1962:19). Given the historical importance of hooked sticks among the 'Gedevi', and given the similarity between these sticks and 20th century Fon hoe handles, it seems likely that 'Gedevi' hoes always had hooked handles.

The 'Gedevi' around 1600 were also reputed for their use of bow and arrow[129]. In this regard they differed from the Adja, who were more known for their iron cutlasses (see 4.1.1). This supports that hunting and/or warfare in open landscapes were important 'Gedevi' activities. Other non-iron instruments of the 'Gedevi' were clubs and clay projectiles, according to Fon dynastic- as well as blacksmiths' traditions and to plastic arts. King Kpɛngla (1774-1789) said, in the presence of the English fort director Lionel Abson, about the times of king Hwegbaja (ca. 1650-1680):

> "Had we not clubs, and bows, and arrows, before we knew white men? Did you not see me make custom for Weebaigah, the third King of Dahomy? And did you not observe, on the day such ceremony was performing, that I carried a bow in my hand, and a quiver filled with arrows, on my back? These were emblems of the times, when, with such weapons, that brave ancestor fought and conquered all his neighbours". (Dalzel 1967:219)

The 'Gedevi' also lacked cotton on their plateau. They made clothes from the bark of the *Antiaris africana* tree, enveloped their death in the bark of the kapok tree (*Ceiba pentandra* or *Bombax spp.*), and purchased some cotton cloth from Hausa traders from Kano[130].

In summary, iron tools seem to have been rare on the Abomey plateau and its eastern slopes until the arrival of Yoruba groups. With Gede, many Wemenu, Za and Jinu seem to have moved from the slopes to the plateau and started to farm. The first iron tools on the 'Gedevi' plateau must have come from Oyo. After some time inhabitants of the 'Gedevi' plateau also learned smelting and forging from their (north) eastern neighbours. They always forged hoes of the Yoruba-Bariba hooked-handle type, never of the Adja's straight-handle type. Iron tools remained scarce until the (later) 17th century.

### 4.1.3 Summary and comparison

The inhabitants of the Fon and Adja plateaux have the same pool of ancestors. For both plateaux these were largely Adja-related and to a smaller extent Yoruba-related peoples. The Adja descend largely from the Alu, an Adja-speaking group, which was joined first by a

small group of Za aristocrats (possibly from the Niger bend) and later by a group of Yoruba. Together they established the Tado kingdom, probably around the 14th century. The Fon, formerly called 'Gedevi', were a mixture of the Adja-related Wemenu, Za, Jinu ('Mahi'), Ayizo, and Ehwe-Adja, of the Yoruba-related Gede and Nago, and of the Dasa.

Both the 'Gedevi' and the Ehwe-Adja moved from the surroundings of their present plateaux to the plateaux themselves from about the 16th century onwards, the 'Gedevi' possibly a bit earlier than the Adja. A difference was that before their move the 'Gedevi' seem to have subsisted largely on fishing, hunting and gathering, and the Adja largely on farming.

In pre-Portuguese times the Adja's capital Tado was the principal (and maybe only) centre of iron smelting of South Bénin. The Adja forged their own agricultural instruments, especially cutlasses and hoes, apparently always straight-handled ones. The ancestors of the Fon lived first on the eastern slopes of the plateau. After the arrival of Gede, not later than the 16th century, they started to import iron tools from the Yoruba and Bariba and to farm with these new tools on the plateau itself. The 'Gedevi'-Fon always used hoes of the Yoruba-Bariba hooked-handle type.

The Adja submitted socio-religiously to one chief of the land, the *nyigbafio* in Tado, who was in the first place a priest of agriculture. The different 'Gedevi' groups each had their own chief of the land *aïnon*, whose authority was in local politics and over river sources but possibly less pronounced in agricultural rituals.

### 4.2 Early ecology of the Fon and Adja plateaux

The Fon and Adja plateaux belong to a chain of plateaux, only divided by rivers, whose process of soil formation and whose climate was the same: namely from west to east the plateaux of Tsévé, Tabligbo, Aplahoué, Abomey, Zagnanado, Kétou etc. All soil maps, whether based on FAO's or on ORSTOM's categories, classify the soils of these plateaux as belonging to the same soil categories. Therefore it is striking that the Fon plateau has now poorer soils and more grassland than the Adja plateau.

Some people, scientists as well as local farmers, hypothesise that the Fon plateau had savannah vegetation and the Adja plateau forest vegetation before human occupation, and that the Fon soils were poorer than the Adja soils at the arrival of the first settlers. Although these hypothesises are not very likely, given the geological and climate circumstances under which these plateau soils were formed, we will have to consider them in this chapter.

I (re)considered the available data and looked for new sources on the historical ecology of South Bénin. I found these new sources mainly in the local knowledge of the Fon and Adja. Local sources reveal a great ecological diversity within each plateau, but the combination of old and new data does not support the hypothesis that the Fon plateau as a whole has been less forested than the Adja plateau as a whole. Rather, settlement histories and other narratives on both plateaux mention mainly wooded spots and some savannah spots on both plateaux.

Local knowledge which was useful for reconstructing the past vegetation included oral traditions, ethno-classification, and farmers' knowledge of technological and ecological processes and the relationships between them. These different sources were triangulated with each other and with pedological analysis of plateau soils, and studies based on pollen analysis in neighbouring regions. Understanding the historical ecological process was an

important factor in the reflexive process of interpreting oral and other sources. Within the frame of the external possibilities, oral tradition gave information about historical variation at local level.

Many Fon and even more Adja accounts about the past, for example myths of origin of villages, cults, political institutions and etymological accounts, referred to the landscape elements of the immediate environment. In section 3.2.4 I explained how I interpreted these stories. When I asked a Fon or an Adja to speak about the past ecology of the whole plateau or to make comparisons between the plateaux, accounts by different people tended to become very conflicting; they were obviously products of the speakers' imagination. Very local accounts were quite consistent between speakers and seemed useful if stripped of socio-political intentions.

### 4.2.1 Soils

The soils of both the Adja- and the Fon plateau are identified as Nitisols[131] according to the FAO soil classification. The FAO soil classification is based on visible and measurable features in the deeper soil layers (it is morphogenetic). Nitisols are characterised by steadily increasing clay content from the surface to a depth of 150 cm. This clay content attains more than 30% before it reaches a depth of 125 cm.

The French ORSTOM is more concerned with the geological origin of soils than FAO, but also ORSTOM's criteria attribute the soils of each plateau to the same strata. According to ORSTOM, the soils of the upper parts of the Fon- and Adja plateaux are called *Sols ferralitiques faiblement désaturés appauvris modaux sur sédiment meuble argilo-sableux*. On both plateaux, the lower areas are covered by *Sols ferralitiques faiblement désaturés appauvris modaux sur matériau argilo-sableux rémanié et grès sur sédiment crétace*. Both FAO and ORSTOM hence classify the soils of both plateaux as belonging to the same scientific classes.

Our pedological research near Lissazounme and Abomey on the Fon plateau and near Zaffi and in Lokogba on the Adja plateau in 1989 and 1990 confirmed that the soils there are very similar. The texture of these soils is similar except in the upper 30 cm, in particular in the cultivated soils. This should not surprise us since the upper layer is subject to climate and human influences. In all these soils the clay content reaches more than 30% at a depth of roughly 50-70 cm. The chemical properties of these soils (C, N, organic matter, PH, CEC etc.) are very similar from a depth of 10-15 cm downwards, only the contents of some minor nutrients (for example $Ca^{++}$ and $K^{+}$) are variable (Tables 9.22 to 9.32 in Appendix 9; Kerkdijk 1991). The differences in the upper soil layers are (also) due to climatic or human influences. These influences will be studied in Chapter 9.

The Fon and Adja's own soil classifications, which are more refined and more based on characteristics of the upper layers, do not disagree with the ORSTOM distinction in two classes but further subdivide them. The soils of the first class of ORSTOM are in general called 'red soils' (*kovovo* in Fon, *nyigbajun* in Adja). ORSTOM's second soil class, found on the lower parts of the relief, is mainly subdivided in 'soils with pebbles' (*kɛn* in Fon, *keji* in Adja) and 'black' or 'ash soils' (*kowiwi* in Fon, *nyigbanfunfun* in Adja). They have a lower water retention capacity than the soils of ORSTOM's first class. The Adja's category *zohuji* (savannah), which I will discuss in 4.2.3 and the Adja case study in section 8.3, is found in all these classes.

In summary, the soils on the Fon and Adja plateaux have the same origin. Within each plateau there are different soil classes, but most of these correspond to soil classes on the other plateau.

Nitisols belong to the best tropical soils. In many areas this led to early colonisation and intensive agriculture. The Fon- and Adja plateaux became densely populated as soon as there was enough iron to cultivate them. In the 1940s the Adja plateau attained the same population density as the Fon plateau. The fertility of Nitisols depends on organic matter and clay content, and they are very vulnerable to soil degradation and to compaction (Sombroek in Kerkdijk 1991).

Since at least the early 20th century the Fon plateau soils are poorer than the Adja plateau soils. Early colonial French agronomists, basing their opinion on indicators such as crop yields and natural vegetation, classified the Abomey plateau soils as poorer than the on the Adja plateau soils (Savariau 1906; ANB Porto-Novo). Elderly Fon farmers who cultivated in the 1910s on both plateaux are also of the opinion that the Fon plateau was already poorer around that time, and even that it was already poorer than the Adja plateau when their parents acquired their Adja plateau fields in the second half of the 19th century (see sections 6.3.2, 6.3.4 and 6.4.1). Pedological studies from the 1960s onwards confirm that the cultivated layers of on the central Fon plateau soils are particularly poor in clay and organic matter content, nitrogen, phosphorus and exchangeable K, compared to the other plateaux of South Bénin and South Togo including the Adja plateau (Raunet 1971:1063-1064; Kerkdijk 1991; Tables 9.22-9.23 and 9.29-9.32 in Appendix 9).

### 4.2.2 Climate

The Fon and Adja plateaux have the same climate. Average annual rainfall on the Adja plateau is 1113 mm and on the Fon plateau 1051-1165 mm (SATEC 1970; FAO n.d. in Kerkdijk 1991). On both plateaux, the first rainy season lasts from April to July and the second rainy season from September to November. Average annual temperature is 27°C. These data are based on observations from the beginning of this century until 1990. Since the 1970s the major dry season seems to become longer but whether this trend will continue remains to be seen.

Rainfall fluctuated in past centuries. Nicholson (1981) argues on the basis of travellers' reports and of archeological research that South Bénin was drier than today from ca. 1738 to 1756 and ca. 1895 to 1920, and slightly wetter than today from ca. 1870 to 1895. Likewise, Salzmann & Hoelzmann's (2005) pollen analysis in Lac Sélé, about 45 km east of Abomey, has shown that South Bénin was wetter and more forested than today between ca. 8400 and 4500 BP, dryer between ca. 4500 and 3320 BP during which period savannah grasses, *Cyperaceae* (small 'grasses'), oil palm (*Elaeis guineensis*) and the pioneer shrub *Mallotus sp*. encroached, and wetter again from 3320 to 1050 BP which let patches of semi-evergreen forest return but without quenching oil palm and *Mallotus* nor all savannah patches, resulting in a forest-savannah mosaic with oil palms. Pollen analysis in several other sites confirms that oil palms expanded between 3000 and 2000 BP (Maley 2001:79). From 1050 BP (i.e. 950 AD) onwards, dryer conditions and more savannah vegetation returned again until the present. Adomou's (2005:53-67) analysis of 176 vegetation relevés in Béninese forests supports Salzmann & Hoelzmann's (2005) findings, though he thinks that the last dry period might have started earlier than 950. Section 4.1 suggests that the Fon and Adja's ancestors

settled on the plateaux during the dryer period after 950 AD, when oil palms were already well established.

### 4.2.3 Vegetation

All botanical descriptions classify the vegetation of the Fon and Adja plateaux as originally the same. Yet studies in the historical botany of South Bénin are not very detailed and debates are still going on. It is often assumed that the plateaux of South Bénin were covered with dense tropical forests when the first settlers arrived, and that these forests disappeared under human influence. This view is expressed both in popular discourse and in scientific literature. Gayibor (1986:16) thinks that 'dense inhospitable forest' extended as far as 150-200 km from the coast at the arrival of the first Europeans. Aubreville (1937 and 1949 quoted in Adjanohoun 1989:23-25) speaks of 'anciennes formations littorales de forêt dense' up to the latitude of Aplahoué, about 80 km from the coast.

On the other hand it is sometimes assumed that the Fon plateau, which is now far less woody than the Adja plateau, might have already been less woody in its original state. A third assumption, made by all scholars of South Béninese ecology no matter how much they disagree with each other, is that the vegetation was homogenous within each plateau.

In this paragraph I will combine Fon and Adja farmer's local knowledge with external evidence to shed new light on the vegetation history of the plateaux. I will show that the three assumptions are erroneous, and will argue that both the Fon and the Adja plateaux were covered with a mosaic of sub-Sudanese savannah and sub-Sudanese clear forest, and that the Fon plateau was as forested as the Adja plateau.

Gayibor (1986:13-41) and Aubreville (1937, 1949) exaggerated in all probability South Bénin's forest cover during the last 900 pre-colonial years. Their opinion seems to have been based on four errors: an inexact translation of the local words for woodland (see below), the prejudice that indigenous African agriculture has always caused massive forest destruction and should therefore be 'modernised' and held in check by the creation of forest reserves, the assumption that the whole West African coast was ecologically homogenous in its pristine state, and the belief that the vegetation of sacred forests is representative for the original vegetation.

Oral traditions relate that some parts of the plateaux were savannah with mainly grasses and almost no trees even before human settlement, but that most parts were covered with shrubs and some large trees. Traditions about savannah are at least as important on the Adja as on the Fon plateau. Botanical studies such as those of Adjanohoun (1989) and Blanc-Pamard & Peltre (1987) show that the plateaux were not covered with 'dense' but at most with clear forest. Blanc-Pamard & Peltre (1987:420), who criticise Gayibor, classify the 'natural' plateau vegetation as a mixture of sub-Sudanese savannah and sub-Sudanese clear forest (sub-Sudanese clear forest means that the crowns of trees touched or almost touched each other and trees were under grown by Sudanese grasses). Adjanohoun (1989:26-34) and his team of botanists classify the vegetation of the Béninese plateaux in the 1980s as dry semi-deciduous forest and derived savannas. They believe that without human influence the plateau vegetation would be 'forêt semi-caducifoliée', and that the 'dense forest' which Aubreville described never reached farther than the swampy areas up to 15-20 km from the coast (ibid:29). According to Salzmann & Hoelzmann's (2005) pollen analysis in Lac Sélé about 90 km from the Béninese coast, a mosaic of semi-evergreen forest and savannah existed in the plateau zone until 950 AD but gave way to savannah after that date. But

even Blanc-Pamard & Peltre (1987), Adjanohoun (1989), Adomou (2005) and Salzmann & Hoelzmann (2005) take the plateau zone as a homogenous unit.

Only local knowledge can give more detailed information about historical vegetation on micro level. Local narratives describe thickets of shrubs and small trees intersected by some large trees, as well as the savannah patches which were already mentioned. This corresponds with Adjanohoun's (1989:26-34), Blanc-Pamard & Peltre's (1987:420), Adomou's (2005) and Salzmann & Hoelzmann's (2005) general classification of the plateaux. Many village foundation histories and some other ancient traditions give more details about the species which the settlers encountered. Large trees which the first inhabitants saw on both plateaux, according to village foundation mythologies collected by us, were *Antiaris africana* (false iroko), *Chlorophora excelsa* (iroko), *Adansonia digitata* (baobab), *Daniella oliveri*, *Parkia biglobosa, Triplochiton scleroxyllon*, kapok trees (*Ceiba pentandra* and *Bombax spp*.) and probably *Diospyros mespiliformis* (West African ebony or 'forest guava') (see Table 6.10 in Appendix 6 for the names in Fon and Adja). The existence of such a tree at a certain place was exceptional enough to call a village which was established there after this tree.

The Ehwe-Adja still design the soils of those spots on their plateau which they believe were never forested with the name *zohuji* or 'on the fire'. These were areas where tree density was too low to prevent bush fires in the dry season. The vegetation type of these areas was called *zogbe* (fire-herb) in Adja (Pazzi 1979:39). Such areas also existed on the southern (Dogbo-Adja) part of the plateau, where such soils are called *zohayaji* (Den Ouden 1986: 72). The soils which are indicated with this term are of various colours and textures, but mostly they are grey or red with a rather sandy upper horizon. Hence, soils that are called *zohuji* often also have other names in the Adja (and Fon) soil classification based on colour and texture. The soils of less than one quarter of the fields of my Adja respondents were referred to as *zohuji*[132], these fields were found just south of Houéganme, from Lagbahome northward in the direction of Djotto, locally between Djikpame and the river Mono, near Yéhouime at the source of the river Kpako, and between Klouékanme and the river Couffo[133]. It would be interesting to carry out a systematic survey to map all the *zohuji* soils of the Adja plateau.

The Fon subdivide vegetation types that are prone to bush fires into *gbe* (herbs) and *nukan* or *nukanmε* (bush fallow). The latter is not virgin vegetation since in its literal meaning it only grows on land which has been cultivated before. The suffix *kan(mε)* (literally 'in the cord' or 'that which has been measured') is normally only used for land which has been planted with (potentially) perennial crops[134]. *Gbehanzò* and *gbejizò* are the normal Fon words for bush fire[135]. Originally the Fon plateau vegetation seems to have consisted in a mixture of herbaceous *gbe* and forest which was too dense to burn.

On both plateaux, some villages were established on virgin grassland according to their foundation histories. This was explicitly the case of the Ehwe-Adja villages Yéhouime, Zohoudji, Yénawa, Bétoume and Houégame and of the Fon villages Sékidjato, Akpeho-Séme and Fandji.

On the Adja plateau, Yéhouime was founded between 1550 and 1700 at 1.5 km from the source of the river Kpako as one of the first villages in the region, it received its name because of the *Sorghum arundinaceum* (*yehwi* in Adja) which grew there. *Sorghum arundinaceum* is a tall grass that likes fresh soils on river- and roadsides (Adjanohoun 1989:439). The soils of the area were classified as *zohuji,* and a satellite village of Yéhouime also received the

name Zohoudji. *Sorghum arundinaceum* grew also at the place where the Ehwe-Adja village Yenawa (near Djotto, a *zohuji* area) was installed in the early 19th century (Mondjannagni 1977:548; Monographie villageoise FSA 1984). Bétoume ('place were *Imperata cylindrica* grows') was founded in the 18th century at 2 km to the east of Azové, but in this case human influence is possible since Azové is older. Houéganme was founded around 1850 among *azwi* (*Rottboellia cochinchinensis*) grasses, but also in this case the settlers seem to have cultivated there for some time already (own interview in Titongon 8-11-1990).

Table 4.2: Species found on the plateaux by first occupants according to oral tradition

| Scientific name | Adja name | Fon name | Ecological zone, form | Use* |
|---|---|---|---|---|
| *Andropogon gayanus* | – | *fan* | Savannah grass | None |
| *Adansonia digitata* | *lagba* | *kpasa, zunzon* | Savannah tree | Indicator February |
| *Antiaris africana* | *gbexo* | *guxo* | Giant forest margin tree | Bark (cloth 'Gedevi') |
| *Bombax buonopozense* | | *sehùn* | Forest, kapok tree | |
| *Bombax costatum* | *ehùn* | *hùn* | Savannah, red kapok tree | Indicator February, ship-building |
| *Ceiba pentandra* | *atinka, hiona* | *geđehùnsu* | Giant white kapok tree | Indicator March |
| *Chlorophora excelsa* | *loko* | *loko* | Giant forest margin tree | Indicator January |
| *Daniella oliveri* | *za* | *za* | Savannah tree | |
| *Diospyros mespiliformis* | *aje* | *jɛtin, kɛn* | Savannah-forest tree | Edible fruit |
| *Elaeis guineensis* | *de* | *de* | Forest-savannah mosaic | Edible fruit |
| *Imperata cylindrical* | *ebe* | *sɛ* | Grass | Thatching roofs |
| *Indigofera tinctoria* | *zuzu* | *doho, aho, agonje* | Shrub | Dying cloth |
| *Parkia biglobosa* | *ewa* | *ahwa* | Savannah tree | Spice, indicator March |
| *Sorghum arundinaceum* | *yehwi* | | Grass | |
| *Tragia laminularis* or *T. senegalensis* | *azosi, azoshu* | *azo* | Itching shrub | |
| *Triplochiton scleroxyllon* | *ciwu* | *xwetin* | Forest margin tree | |
| *Uvaria chamae* | *gbanna* | *ayadah* | Small tree | |

* Species indicating the beginning of some months are mentioned by Adja respondents; I lack such information for the Fon. Species were identified as explained in section 3.2.9.

Sources: own interviews. Agbo (1991:73-75, 85-86) provides information on the uses of some species.

On the Fon plateau, Fandji ('on *Andropogon gayanus*') is a place near Sahè which according to the present-day inhabitants was never forested. The same is said (by inhabitants of Lissazounme) about the Fon villages Sékidjato ('meagre *Imperata cylindrica*') and Akpeho-Séme ('among *Imperata cylindrica*'), two villages between Lissazounme and Zounzonme. These three names conflict with the claim of another inhabitant of Lissazounme that before Tegbesu (1732-1774) the whole area between the Couffo and Zounzonme was forested[136], but the latter was probably a crude generalisation. Just north of Zounzonme would have existed in the early 18th century a savannah spot according to oral traditions from Lissazounme[137]. The name Zounzonme suggests the presence of baobabs, trees which thrive in open grassland.

The reason for the naming of Yéhouime, Bétoume and Yénawa was explained by groups of male descendants of the first settlers of these places and the interpretation of Sékidjato, Akpeho-Séme, Fandji and Zohoudji was given spontaneously by residents of neighbouring villages. The names of the Adja villages Yéhouhoué ('house of *Sorghum arundinaceum*', situated near Yénawa), Zogbedjigan ('on fire-herb', near Aplahoué) and Béotchi, Bédjame and Houn-Bézame (all three near Djakotome), and of the mixed Fon-Adja village Gbefandji ('on *Andropogon gayanus* herbs', near Tchikpè on the Adja plateau) also suggest the presence

of grasses, but this is my own interpretation. All the villages mentioned above are situated on the typical red plateau soil. We may conclude from the Fon and Adja's own explanation of the names of some of their villages that almost certainly on the Adja plateau but probably also on the Fon plateau spots of grassland existed before human occupation.

Those parts of the plateaux which were not covered *gbe* and *zogbe* (herbs which burn) had a woody vegetation dense enough to resist bush fire. This should not surprise since the plateau soils and the climate were able to support more than grasses. This denser woody vegetation is called *zùn* in Fon and *ave* in Adja. The mistake which is often made is to translate oral traditions about *zùn* and *ave* into 'dense forest'. But *zùn* and *ave* do not mean that the woody vegetation has to be very high or dense, only that it has to be (semi) spontaneous and dense enough to resist bush fires. *Zùn* and *ave* indicate the absence of *zogbe* and *gbe*. Today, some Fon use the word *zùnkanmɛ* (and sometimes even *zùn*) for all kinds of bush of various wood densities. Most of them know that this is linguistically incorrect. Perhaps this is a confusion of *zùn* and *nukan*. To specify dense forest the Fon also say *zùngbo* (great forest). Today, the opposite of *zùn*, *ave*, *gbe* and *zogbe* is also cultivated land and fallow (see Table 4.3). In an even more figurative sense, *zùn*, *ave*, *gbe* and *nukan* are the opposite of *tò* (village, town). As such they are used by townspeople to speak slightingly about rural areas. *Avemɛtowe* and *nukanmɛnu* are derogatory labels for rural people (see 5.4).

Table 4.3: Local classification of vegetation types

| Vegetation class | Adja | Fon |
|---|---|---|
| Forest (too dense to burn) | *Ave* | *zùn* |
| Savannah | *Zogbe* | *gbe* |
| Cultivated land | *Agble, boji* | *gle* |
| - plantation or bush fallow | *- kanmɛ* | *- kanmɛ* |
| Oil palm plantation/bush | *Dekanmɛ* | *dekanmɛ* |
| Bush fallow | *ekpon, nyama* | *nukanmɛ* |
| *Panicum maximum* fallow | *Klogbu* | – |
| *Imperata cylindrica* fallow | *Ebe* | *sɛ* |
| *Andropogon gayanus* fallow | (*wushiki*)* | *fan* |
| Short herb fallow | *Degbezuï* | *ajagu* |

* This name, which is also used for *Pennisetum violaceum* and means 'dog tail', is only known to a few Adja, since the herb is rare on their plateau. The other Adja have no name for *Andropogon gayanus*.
Source: Own interviews; Kerkdijk 1991:33, 53, bijlage 1.

On the Ehwe-Adja plateau, Bozinkpe was founded in the 16th, 17th or 18th century near an *Antiaris africana*[138], Loko-Atui was built in the 18th century and Lokogba emerged before 1800 between some irokos (*loko*), Lagbahome was installed before 1800 and Lagbakada in the early 19th century near some baobab (*lagba*) (see 4.1.1 and Wartena 1987:40), Zaffi was built in the first half of the 19th century at a place were a *Daniella oliveri* tree was felled and burnt (*za fi* = ash of *Daniella oliveri*, Kerkdijk 1991:27). Gbannavé near Dogbo was founded in the late 18th century in a (small) forest of *Uvaria chamae* (*gbanna*) (Fanou 1994:56).

On the Fon plateau, according to a story recorded by Herskovits (1938 I:172) long before 1600 the founders of Agblome at the place were Abomey is now came 'from the sky' into a region which was a 'great forest' and had no inhabitants. Also before 1600 Aoundome was installed at a place were the 'forest guava' *awundo* or *ajisɛ*, (probably *Diospyros mespiliformis*) grew, and Gnidjazoun was founded in a forested area, according to several

inhabitants of these villages[139]. The future Fon kings settled around 1625 in the shade of *Parkia biglobosa* trees (*ehwa*), apparently the largest trees at that place, and called their village Houawe ('white *Parkia biglobosa*') (dynastic accounts). These two village names were explained by members of the founder's lineage (see 4.1.2 and 5.2.1).

Until the first half of the 18th century the south-eastern Abomey plateau was inhabited by Adja[140], and today's Fon inhabitants of the area in Lissazounme and Agbangnizoun believe that this whole Adja-region from the Couffo to the village Zounzonme was covered with forest *zùn*, which contained big trees here and there, and became especially dense towards the river (see below for separate interviews with five descendants of the founder of Lissazounme, and 5.2.2 for an interview with Daa Zontin in Agbangnizoun). At the same time the Fon villages Gnizinta, Tangoudo and Kinta (on greyish soils) and the region to the north of the Fon village Zounzonme would have been savannah (Victor Lisanon, Lissazounme 1991), therefore the Adja-region was given the name Adjazunge, which means forest of the Adja (Hwèto Lisanon, Lissazounme 1991).

The Fon under kings Akaba (1685-1708), Agaja (1708-1732) and Tegbesu (1732-1774) submitted some Adja on the south-eastern Abomey plateau and chased the others behind the Couffo and occupied their land[141]. The new Fon occupants established amongst others Lissazounme in the mid-18th century at a place where two large *Antiaris africana* grew between lianas (see 5.2.2). Victor Lisanon, descendant of the founder, thinks that around the same time the Fon villages Zoungbotossota, Zoungbozounme ('in the large forest'), Houawe ('white *Parkia biglobosa*'), and Zounzonme ('among baobabs') were situated in forest "as their name indicates". His explanation makes sense for the first two villages, but the names of the latter two rather suggest isolated trees. According to Hunon (see section 8.2) after the Adja had been chased from Adjazunge the place was first abandoned to the bush, but the Fon Bovi went to hunt there with his son:

> "One day while Bovi and his son were hunting in a thicket of shrubs, thorn bushes, and two *guxo* trees (*Antiaris africana*) at the place where the Adja had lived, Bovi hit a tree and a wild animal came out and devoured his son and two other people. Bovi went to tell the king, because the kings had the power to speak to animals. Then the king ordered him to re-establish the cult of Lisa. Tohiyo Lisa was the name of one of the former Adja inhabitants; he had installed the *vodun* Lisa in Hungeme. King Tegbesu appointed Bovi as priest of Lisa in Hungeme-Lissazounme and gave him the name Lisanon. Bovi settled in Lissazounme and farmed for king Tegbesu" (Lissazounme 14-4-1989). Tafotan Lisanon confirms: "King Tegbesu placed Bovi here to farm. The whole environment was forest, all this has been cleared. If someone cuts down the sacred forest of Lisa he will die". (Lissazounme 5-5-1989). Hwèto Lisanon gave the following account of the death of Bovi's son and the discovery of the *vodun* Lisa: "In the time of Bovi the whole area from Zounzonme to the Couffo River was forest (*zùn*). The closer one came to the forest the thicker became the forest (*zùngbo* = big forest). There were many wild animals in that forest. The story goes that the son of Bovi was killed by a wild animal at Vijinavo, around the area where Théophile Segbeji's field is now. To find the beast the whole forest was gone through with a fine tooth-comb by emissaries of the king, and so they found the *vodun* Lisa."[142]

Victor Lisanon added that when Lissazounme was founded in the 18th century, savannah was only found in the region to the north of Zounzonme (which has the same red soil as at Lissazounme), and in the regions of Gnizinta, Tangoudo and Kinta (which have red soil with pebbles). Also the Fon plateau village names Tranzoume ('much forest') and Tindji (on the tree), both founded before 1625, Avokanzoun ('cotton forest'), founded 1625-1650 (Le Herissé 1911:279, 283), Zogbozoun ('forest where the bush fire stopped'), founded before 1650 (Iroko 1989), Ahwakanme ('*Parkia biglobosa* bush'), founded around 1700 at a place

were Adja had lived before (Cornevin 1981; Ederveen 1990:28), Lokokanme and Zakanme ('iroko bush' and '*Daniella oliveri* bush'), both founded before 1780 (Mondjannagni 1977: 558-559), suggest the presence of trees, but this is my own interpretation.

The 'Gedevi' and Adja worshipped some large trees as *vodun*, in particular the iroko's, false iroko's (*Antiaris africana*), some baobabs and some kapok trees, and protected although not planted them[143]. The bark of false iroko's and of kapok trees was made by the 'Gedevi' and perhaps also by the Adja into cloth. The 'Gedevi' prepared a strong smelling spice called *afitin* from the seeds of *Parkia biglobosa* which was disdained by the Adja, who preferred to prepare a similar spice from the grains of *Prosopis africana*, called *kakɛ* in Fon and Adja (see Chapter 1 and sections 5.3 and 8.3). This tree is a hard-wooded guineo-sudanese savannah and clear forest tree and one of the few suitable species for making charcoal for iron smelting, perhaps another reason why the Adja appreciated it. In any case, *Parkia biglobosa* was protected by the 'Gedevi' but not by the Adja, and is now more abundant on the Fon plateau than on the Adja plateau.

It may be noted that the trees on the Fon and Adja plateaux were either forest trees which are able to grow as isolated trees, notably *Chlorophora excelsa* and *Ceiba pentandra*, or trees which prefer a forest-savannah mosaic vegetation, for example *Elaeis guineensis* (oil palm), or savannah trees which thrive under dry conditions and on grassland as well as in shrub land, in particular *Adansonia digitata, Daniella oliveri, Parkia biglobosa* and *Bombax costatum*. The latter must have been the most common kapok tree on the plateaux because it bears the simple name *hùn* while the other kapok species have derived names[144].

Between these large trees where savannah was not the plateaux were covered with a thicket of shrubs and small trees. Also many oil palms (*Elaeis guineensis*) grew in this thicket. The Adja village Azové was founded in a wood of itching shrubs *azo* (*Tragia sp.*), which was (or became?) surrounded by a more forested area; 1 km east of Azové sprang up the village Avégodui (behind the forest) and 1 km west of Azové the village Avétuime (in the forest). Also Aplahoué on the other side of the Kpako river was founded 'in plain forest' (Pazzi 1979:84) but 2 km to the north-west forest was no more, at least not when the village Avégodo (behind the forest) was founded there.

Before 1600 the 'Gedevi' plateau villages were surrounded by thorn bushes according to Fon dynastic oral tradition (Le Herissé 1911:278). Sahè-Abigo was founded in a big forest *zukanguku* if we may trust the account of an actual inhabitant, probably a descendant of the original Adja founders (see 4.1.2). Around 1630 the surroundings of Gnidjazoun were wooded according to descendants of the first Ayizo settlers. At the same time the region of Kana and Houawe was only little forested, but this was probably the core region of the real Gedevi hunters, since Gede, presumably the first settler on the plateau, lived in Kana. The main trees there were baobabs and *Parkia biglobosa*'s. A place between Kana and Bohicon 'about six km north of Bohicon' (sic)[145] was called Gbojɛtinsa in 1610-20, which means 'under the tree of rest' (Oké 1984:60-61). But to the south of Houawe and the west of Kana was a more forested area: two villages which were founded there were called Zounme (in the forest) and Zoungbo (great forest; the interpretation of these names was given by inhabitants of Kana).

According to 18th century writers and to Fon oral tradition, in 1728 and in the 1740s the Abomey plateau was still wooded enough for the Fon to hide in the 'Woods and Thickets' every time that the Oyo army invaded Abomey (Snelgrave 1734/1971:121). In the 1740s the English fort director met the king in his secret hideout (Dalzel 1967:52, 74; Akinjogbin 1967:

82-88, 111, 123)[146]. To avoid further Oyo invasions, Danhomɛ accepted to become tributary to Oyo, probably first in 1730 and definitively from 1748 onwards. Although several 18th century Fon kings tried to refuse the tribute to Oyo, it was only Gezo who was able to free Danhomɛ from its obligations (Akinjogbin 1967:90-91, 123-124). Section 2.2.2 presents a narrative from the Fon plateau village Sodohome about how its inhabitants hid in a forest island close to the village when king Kpengla (1774-1787) tried to raid them. The central plateau village Gnidjazoun has a similar myth about the later 18th century:

> "Danhomɛ had to send an annual tribute *nujo* of 41 men and 41 women to Ayo. If we did not pay in time, the Ayo king sent his troops to raid our country. When the Ayo arrived we all went into hiding. The king hid in Gnassata [5 km north of Abomey], and my ancestor Tutujason fled into a little forest behind his house. When he heard the Ayo coming he hid in a *Blighia sapida* tree. The Ayo warriors continued, but their 'king' sat down under the *Blighia sapida* and fell asleep. Tutujason stretched out his hand, took the Ayo king's sword, and cut off his head. Knowing the hiding place of our king, Tutujason enveloped the Ayo king's head in the king's gown and took it to Gnassata. The king made Tutujason *toxosu* over the region and gave him the name Gnaglagla ('the courageous')." (Own interview in Gnidjazoun 22-12-1990)

Although we cannot exclude human influence on the presence of bush and of *Blighia sapida* trees, which have edible fruits, around existing 'Gedevi' villages, in any case there was enough bush on the 18th century Fon plateau for the who population to hide when the Oyo arrived.

A final remark about the natural vegetation on the vertisol areas (called *ko* in Fon and Adja) just south of the plateaux. These were described by travellers in the 18th century as the most forested areas of South Bénin (Dalzel 1967:117-118, 171). When some Ehwe-Adja and Fon settled in these areas in the 19th century, they found these areas more forested than the plateaux where they used to live. For example the region of Gnizoume on the south-eastern border of the plateau would have been densely forested according to one of its inhabitants; its name means 'the buffalo in the forest'[147]. Many other villages on the edge of the plateau and in the vertisols bear names composed of zou or zoun, which probably refers to the presence of natural forest[148], for example Zountokpa, Zoundjame, Zounhomey, Zoukou, Zoukoutoudja, Djidjozoun, Tozoume etc. (Wartena 1988a:50a-b).

In summary, oral tradition speaks of heterogeneous vegetation on the Fon and Adja plateaux when first settled. The vegetation types mentioned are within the margins of what was ecologically possible. There is no indication that the Fon plateau as a whole would have been less woody than the Adja plateau. The internal diversity in vegetation types on each plateau was in any case much greater than any eventual difference between the plateaux. The Fon plateau was certainly not mainly covered by *Andropogon gayanus* as it is now. This historical triangulation of colonial documents, local people's narratives, and ecological principles, provide another example of what Leach & Mearns (1996) have called 'the lie of the land'.

### 4.3 Hunting, gathering, crop domestication and cultivation

Agriculture on the Fon and Adja plateaux was closely linked to the spread of iron. Early evolutionary anthropologists speak of horticulture in cases like the hoe cultivation practices of the Fon and Adja. I prefer to call all types of hoe cultivation 'agriculture', including superficial tillage, ridge tillage, and mounding with the hoe[149]. Only in the case of vegetable

cultivation I will occasionally speak of horticulture, for example in section 9.3. I argued in 4.1.1 and 4.1.2 that before 1625 the Adja probably had more iron and cultivated more than the 'Gedevi', who subsisted more on hunting and gathering. In this section I will present more linguistic, ritual and oral evidence for this.

In Adja, the term cultivating (*agblɛn*) is derived from the word for blacksmith (*gblɛn*). This suggests that the use of iron was an essential feature of Adja agriculture from ancient times. Neither the Fon's word for cultivating (*lɛ gle*, doing the field) nor the Fon words for different field tasks are related to iron or forging.

The hypothesis that already before 1600 agriculture was more important for the Adja than hunting and gathering is supported by the fact that the principal chief of the Adja, the ruler of Tado, was primarily an agricultural priest. The founder of the dynasty, who lived between 1100 and 1500 (see 4.1.1), is called Togbui Anyi ('ancestor land') by Adja tradition, and his successors had and have the title chief of the land (*nyigbafio*). Their domains of spiritual authority were rainfall, pests and crop diseases, which would have made no sense if the Adja had subsisted principally on hunting and gathering. The authority of the Fon chiefs of the land (the *aïnon*s and the king) over the rain is today much less pronounced than that of the *nyigbafio*. Fon oral tradition emphasises for the ancient 'Gedevi' hunting, trading (in Kana) and also gathering, but not agriculture (own interviews; Herskovits 1938 I:40-44)[150].

Debates about agricultural history often centre around the dates at which particular crops were introduced or domesticated in a certain region. The South Béninese case however shows that introduction or domestication can be gradual processes. For the Fon and Adja's livelihoods the relative importance of particular crops and production technologies was more interesting than the date that a crop was first cultivated. Whether a crop was cultivated or not was often a matter of degrees and depended not only on the crop's existence in the area but also on the productivity of different sources of livelihood including other crops, of technologies, and on production styles. To understand South Béninese livelihoods as wholes I will therefore consider dates of introduction of individual crops, other available foods, and how they fitted into styles of making a living.

The controversy between Manning (1982) and Wigboldus (1986) regarding the importance of pearl millet and yam cultivation prior to the spread of maize has never been resolved. Therefore I want to present my findings to contribute to this topic. It will be seen that in all probability the staples of the Adja and the 'Gedevi' before 1625 were the same. These staples seem to have been yams, palm oil, cowpea, pearl millet and sorghum. Their names in Fon and Adja are the same and very short, which is an indicator of their age. The 'Gedevi' possibly also cultivated *gusi* melon.

Table 4.4: Names of ancient staples of the Fon and Adja

| English | Latin | Adja | Fon[151] |
|---|---|---|---|
| Yam | *Dioscorea spp.* | *Te* | *Te* |
| Oil palm | *Elaeis guineensis* | *De* | *De* |
| Cowpea | *Vigna unguiculata* | *Ayu* | *Ayi* |
| Pearl millet | *Pennisetum americanum* | *Eli* | *Li* |
| Sorghum | *Sorghum bicolor* | *Abò* | *Abò* |

Until 1600 hunting, fishing and gathering were important in the livelihood portfolios of the Adja and probably even more so of the 'Gedevi', who had less iron then. Local Fon narra-

tives about pre-kingdom times support this, for example that of Gbese quoted in 4.1.2 and also the following account:

> "We were told that in the very beginning here the men hunted and the women cultivated pearl millet, sorghum and other crops. But this did not last a long time because soon there was not enough game anymore". (Danon Azonhunme and his wife, Gnidjazoun 3-9-1990)

From travellers' descriptions and from Fon and Adja mythology we know that elephants, buffalos and antelopes were hunted by Adja, 'Gedevi' and Fon men before and during the time of the Fon kingdom (Polanyi 1966; Le Herissé 1911:96'; Herskovits 1938 I:42-44, II:341 and plates 7 and 91). Traditions and present day experiences indicate that women gathered oil palm fruit, green leaves, spices and firewood and men gathered wild yams, especially during hunting expeditions and in lean seasons (Tostain 2003:39, 49). Adandé (1993:76) thinks that the 'Dahomey gap' was the centre of domestication of the African yam species *Dioscorea rotundata* and *D. cayenensis* and of oil palms as early as 3000 BC. When land was cleared for annual crops this created a favourable environment for oil palms to grow and increase in number. Nevertheless, the Fon started to plant oil palms systematically only after 1840 and the northern Adja only after 1920, as I will discuss in Chapter 6.

### 4.3.1 Yam gathering and domestication

At present as in the past, people of Southern Bénin and Togo gather more or less occasionally *Dioscorea abyssinica, D. burkiliana, D. dumetorum, D. praehensilis* and *D. preussii,* and time and again some gatherers plant wild tubers into their fields[152]. Adjanohoun (1989: 226-231) describes, besides *D. burkiliana,* also *D. bulbifera* as wild species which were (in the 1980s) sometimes cultivated in Bénin and correspond to the ecological niche of the plateaux[153]. The savannah species *D. dumetorum* would have been introduced after 1500 and spread spontaneously. Pazzi (1979:164) thinks that Tado was a centre of yam cultivation as early as 1400, but whatever its start, in any case domestication of wild yams is still going on. Throughout the 20th century and probably in the past, southern Béninese ate wild yams during prolonged hunting expeditions, in hungry seasons, and planted them for their particular agronomic qualities or to experiment or when lacking seed yams from domesticated varieties. Since several centuries, Adja, Ewe, Fon and Yoruba beliefs prohibit the consumption of cultivated yams before the ritual sacrifice of their first fruits called *teđuđu* (yam eating) which usually takes place between August and October[154], but this interdiction did not hold for wild yams. At present as in the past, chiefs of the land and priests of lineage *vodun* sacrifice on behalf of their communities, and Fon and Adja who have undergone initiation to a *vodun* cult or to *Fá* also have to sacrifice individually (own interviews and observations; Agbo 1991: 168-170; 1995:19). The Adja-related Ho-Ewe in the Volta region[155] ate in the early 20th century much wild yam in July and August and still gather it today, and the Fon around Djidja and the Yoruba-related N'tcha of Banté still consume *D. abyssinica* from July-August and *D. praehensilis* from the dry season, but none of them likes to talk about it because yam gathering has a low status (Spieth 1906:326-329; verbal communication Faustine Afeku 1998; Tostain et al. 2003:39, 43-44, 49). The N'tcha and Bariba plant *D. abyssinica* and *D. praehensilis* at times in mounds and at times on flat land after digging a hole to the desired depth of the tuber (an obstacle is often inserted into the hole to prevent the tuber from growing deeper) and let the vines climb on living trees (Florent Okry personal communication 2004; Tostain et al. 2003:45). Since mounding was not needed for wild yam species, they

might well have been planted with digging sticks or knives alone in olden days when iron was scarce. Inhabitants of some ancient Fon and Adja plateau villages told me that their ancestors also gathered wild yams[156], but with the decline of bush land wild yams became rare on the plateaux. Spieth (1906:326-329) described the gathering and domestication of *hlo*, probably *D. praehensilis*, in German and Ewe. I give an English translation here:

> '*Hlo* was first found in the forest and then planted in the field; today it is still found in the forests. People like it because it may already be planted in the dry season. In the fifth month[157] nobody is yet allowed to carry home any other yam variety, but is permitted to bring the *hlo* home.
>
> *Hlo* grows well on fertile land and in forests because it is a forest plant. It has a lot of small thorns, both on its thick red vines and on its many roots. These thorns wound the farmer's hands when he digs for the *hlo*. The cultivated *hlo* plant has many side-tubers; the wild one in the forest has even more. When the tubers in the soil get larger, the leaves turn dark. These rather small leaves soon become dry and fall off. The wild *hlo* in the forest becomes very big. When it rots in the soil it forms new shoots. But when the forest is burnt down repeatedly it dies.
>
> The flesh of the *hlo* consists of strong fibres. First it is yellow, but when it matures it turns white. It tastes very good both when it is boiled and when it is pounded after boiling. But the water in which it was boiled does not taste well if used for soup, not even with a lot of meat.
>
> If the *hlo* from the forest is cultivated in the field for a long time, it gradually looses its thorns, the roots get less numerous, and even its boiling water becomes suitable for soup. After prolonged cultivation its flesh turns white. The uprooted *hlo* can be stored for almost one year. People like to eat and to buy it because it is the first yam which matures, therefore it is sold even when there are other yams. But if somebody plants only *hlo*, his field will be derided.' (Spieth 1906:326-329; translation by Faustine Afeku and me)

The Asian yam *Dioscorea alata* arrived in West Africa between about 1500 and 1591, and soon became the leading yam species of South Bénin because of its higher yields (Wigboldus 1986:327, 349; Alpern 1992:21). The Fon and Adja gave *D. alata* the general yam name *te,* to *D. bulbifera* the derived name *jite sɛnde* ('yam which bears fruit on high'), and *D. dumetorum* was called g*bote* (goat's yam) by the Adja and *lefe* by the Fon. The fact that wild yams were exempted from being sacrificed as first fruits suggests that the *teđuđu* rite was only adopted after the introduction of *D. alata*. This does however not prove that yam cultivation would have been marginal before the 16th century. In the early 20th century the Adja grew more yams than the Fon. In kingdom times the Fon also cultivated much pearl millet; it is unclear how important yams were for them and the Adja before 1600.

### 4.3.2 Cowpea

An ancient crop of the Adja and the 'Gedevi' was cowpea (*Vigna unguiculata*). It is called *ayi* or *ayikun* in Fon, *ayi* in Ewe and Gen and *ayu* in Adja. Oral tradition of the Ho-Ewe and the Gen recalls that their ancestors cultivated only beans on their journey from their common centre of origin to where they live now (Spieth 1906:55-56). The traditional importance of cowpea is underlined by the fact that one cowpea variety, mixed with palm oil, enters into virtually all Fon and Adja sacrifices to the *vodun*. This variety has medium-sized, reddish, non-shiny grains and is called *janikpo*[158] by the Ehwe-Adja.

### 4.3.3 Pearl millet

Pearl millet (*Pennisetum americanum*) was an important crop in the Fon kingdom and continued to be cultivated by the Fon until the 1960s. But there remain many questions about

pearl millet in Bénin. Two of these, the arrival date of pearl millet in South Bénin and its relative importance compared to yam cultivation before 1600, have been subject of a debate between Manning (1982) and Wigboldus (1986). Wigboldus (1986:318, 342) argued on the base of written sources including a list of overseas exports from Allada's sea port in 1574, which mentioned yams but no cereals (see 5.2.1), that no cereals were grown then on the Slave Coast because iron was scarce. He believes that pearl millet was introduced around 1590 by the Portuguese or by Angolan slaves of the Portuguese. I will argue that this might have been true for the coast but not necessarily further inland around Tado which smelted its own iron. While there is no doubt that the Fon grew pearl millet between 1700 and 1960, the following questions still need to be resolved:

- Was pearl millet ever cultivated by the Ehwe-Adja, who do not cultivate it today?
- When did the Fon and – if they ever cultivated it – the Adja start to cultivate pearl millet?
- How important was Fon and Adja pearl millet cultivation before the 17th century?

I will argue on the base of linguistic, ritual, mythological and other evidence that both the Fon and the Adja cultivated some but probably not very much pearl millet before 1600. Though pearl millet is virtually absent from the Fon plateau since the early 1960s[159] and from the rest of South Benin since long before 1900, it still occupies such a prominent place in the languages, calendars, rites, and plastic and oral arts of both the Fon and the Adja that it must once have been an important crop for both ethnic groups.

The memory of millet is conserved in several words in the Adja and Fon languages. The Adja call the first rainy season *elimɛ* ('in the pearl millet') or *eli* (own interviews; Agbo 1991:63-73; Brouwers 1993:149). Pearl millet in South Bénin was never planted in the second rainy season according to Labarthe (1883:154) and to the Fon today. The Adja name for the first season cannot have been borrowed from the Fon because the latter call the first season *xweji* ('year of rain').

The Fon name several months of the year after pearl millet, for example *lidusun* for the month of sowing millet, *liasun* for the month of harvesting millet (Meuleman 1990: annex B). These calendar names suggest that millet was during a prolonged historical period the principal crop specifically cultivated in the first season, not only by the Fon but also by the Adja. This does not exclude that yams might have been more important than millet, because yams occupied both seasons.

The name of millet extended to other cereals. Rice is called *molikun* in Fon and *molu* in Adja. *Liha* ('millet drink') was the name for millet beer in Adja and in Fon but has become the name for maize beer and other beverages made from maize as well.

The Ehwe-Adja and the Adja-Sahwè (around Bopa) have a myth that describes pearl millet cultivation as antecedent to the introduction of maize. The Ehwe-Adja and the Sahwè mythologies conform in relating how an ancestor discovered maize 'in the forest' and how maize replaced millet because of its higher yield. It is well known that maize was introduced in the 16th century to the Gold Coast (De Marees 1602/1987:40, 63, 110-113) and to Bénin (Nago 1997:10). It spread very fast on the coast and was a staple around Whydah by the end of the 17th century (Bosman 1704/1967: 339, 391; Alpern 1992:25; Juhé-Beaulaton 1990). Unless the Ehwe-Adja and/or the Adja-Sahwè adopted the myth of origin of maize from each other or from elsewhere it suggests that they cultivated pearl millet before 1600. I give the Ehwe-Adja version from Atindehouhoué:

> "Our ancestors here were hunters and cultivated pearl millet *eli*. Therefore we call the first rainy season *elimɛ*. One day our ancestors found maize while they hunted in the bush[160]. They discovered that it produced more than pearl millet, consequently they abandoned millet. They called maize *ba fo ɛ*, which means searched and found". (Own interview in Atindehouhoué 5-10-1990; for the Sahwè version see Mondjannagni 1977:204-205)

The Ehwe-Adja and the Ewe also had rituals in which pearl millet is an important component. The practice of these rites would have been difficult without pearl millet cultivation, and those that also the Ewe practised suggest though they cannot prove that pearl millet was important[161]. The first, a rite for new-born twins, consisted in throwing pearl millet flour into the bush and was still practised in my Adja research villages in 1990[162]. The second, the sacrifice of millet beer *liha* to ancestors, had probably gone out of use among the Adja but not among the Ewe[163]. Around 1900-1910, Ewe groups at Misahöhe (Kpalime) and mount Agu cultivated pearl millet; priests of the latter performed a rite with it before sowing (Fies 1901 and Gruner 1910 in Seige & Liedtke 1990:159-160, 278). According to Spieth (1906:28, 56) millet beer *liha* occupied a prominent position in sacrifices to the Ewe's oldest gods, but according to Anonymous (1891, reviewed in Seige & Liedtke 1990:75) they also sacrificed palm wine and more and more imported liquors to their *tro* (spirits, gods).

Archeological research and $^{14}C$ analysis in the Méma region (80 km north of Dia[164]) between Jenné and Timbuktu on the Niger bend proved that *Pennisetum* millet grew there since at least 342-442 AD (Togola 1996:105-106). In 4.1 I presented the widely accepted theories that some of the Adja's ancestors came from the bend of the river Niger between Jenné and Timbuktu between the 11$^{th}$ and the 14$^{th}$ century, and that the 'Gedevi' had trade contacts with Salaga, Nikki and Kano from the time that they settled on their present plateau (Pazzi 1979:153). The existence of such trade- and migratory networks makes it likely that the Adja and 'Gedevi' knew pearl millet before 1500.

Modern Fon are convinced that pearl millet was cultivated on the Abomey plateau as well as on the Allada plateau before 1600 and support this by mythology and ritual evidence. Some Fon think that pearl millet was the principal crop, ahead of yams, on the Allada plateau as well as on the Abomey plateau around 1600. Descendants of those Ayizo who joined Dako-Donu around 1600 in migrating from Sèhouè on the northern Allada to the Abomey plateau believe that pearl millet was their principal crop before their departure:

> "In Sèhouè, where we lived in Dako-Donu's youth, we cultivated in the first place pearl millet. We also had yams and cowpeas, but no other cereals". (Daa Ajalala Atinhwede, Gnidjazoun 22-12-90)

Local myths and *akò*-specific rites of some 'Gedevi' clans who arrived on the Abomey plateau before 1600 give a more prominent place to pearl millet than to any other annual crop. Section 4.1.2 presented a myth from Kana-Mignonhito, and two others and a rite from Gnidjazoun. Herskovits (1938 I:178) recorded a similar myth:

> 'The *akò* Javi Gbangbwenu, who migrated from the Allada- to the eastern Abomey plateau before 1600[165], derives its name from a hunter's dish called *ja*, consisting of raw pearl millet, raw palm nuts and water. The story goes that a Javi Gbangbwenu woman gave birth while her husband was away hunting and survived on *ja*.'

Finally, while the sudden introduction of cotton, maize and European iron to South Bénin is reflected in Fon and Adja plastic and oral arts (in myths, village names, rulers' name-symbols, etc.), I did not encounter any traditions of origin of pearl millet. The absence of

these suggests that millet was introduced too gradually to be remarked or so long ago that myths were forgotten.

The combination of linguistic, ritual, mythological and other evidence strongly suggests that pearl millet was known and cultivated by the Adja, Sahwè, Ayizo and 'Gedevi' of South Bénin before 1600 and before the introduction of maize, and that pearl millet was the principal cereal in South Bénin during a considerable period. Nevertheless, pearl millet cultivation was probably limited by the low availability of iron before 1600, especially among the 'Gedevi'.

In the 17th century however Allada was reported to grow large amounts of pearl millet. It seems to me that the introduction of European iron caused a 'pearl millet revolution', an expansion of millet cultivation in South Bénin from about 1600. I feel supported by a myth which glorifies pearl millet as the crop which saved the first Fon king from starvation and a Ewe myth which links pearl millet to political events around 1600. According to oral tradition in a village on the northern Allada plateau

> 'When the founders of the Fon dynasty, the Agasuvi, migrated from Allada to the Abomey plateau around 1600 they were almost starving when they paused in our village. We saved them from starvation by giving them pearl millet to eat.' (Personal communication by Constant Lègonou, who did the interview in the late 1980s)

Generally accepted traditions hold that many Ewe groups started to disperse from their ancient town Notsé around the 1600. According to a Ewe account collected by Pazzi (1979: 191-192, 195):

> 'Those who stayed behind concentrated their houses at a place called Avízùhà and renamed it *Alinù*, which means 'opposite the millet field'[166]

### 4.3.4 Sorghum, gusi melon and bambara groundnut

The date of introduction of sorghum (*Sorghum bicolor*) to South Bénin is unclear, but the crop was never appreciated by the Fon and Adja and probably cultivated only marginally in the past. The Fon- and Adja sorghum name, *abò*, suggests that it is ancient. In 17th century coastal Bénin and in Allada sorghum was mainly grown for beer but rarely eaten (Dapper 1676:116; Wigboldus 1986:344-346). According to Fon myths about pearl millet which I quoted above, sorghum did not exist on the Allada plateau before 1600 but it did on the Abomey plateau. Sorghum also enters a Fon magic charm (Herskovits 1938 II:267) and the Ehwe-Adja twin ritual which I mentioned above. After the introduction of maize, sorghum remained a minor crop of the Fon and Ewe[167] but was not grown (anymore) by the Adja. Only in the second half of the 20th century sorghum cultivation expanded on the Fon plateau because it grows on poorer soils than maize.

The Fon and Adja also grew and grow several native African *Cucurbitacea* with edible seeds. If grown primarily for the seeds they are called *gusi* in Fon and *egusi* in Yoruba. The Fon, Yoruba and northern Béninese use the seeds extensively in sauces, but not the Adja. Some common species in the 20th century which probably existed before 1600 were *Cucumeropsis edulis* (white seeds), *C. mannii* (Alpern 1992:28; De Souza 1988:125), *Colocynthus citrullus* or *C. vulgaris* (De Souza 1988:271; Pfeiffer 1988:19), *Citrullus lanatus* (yellow seeds), and *Lagenaria siceria*, a calabash also called *ka* in Fon and *ekle* in Adja (De Souza 1988:319).

Some Fon and Adja from very old plateau villages believe that bambara groundnut (*Voandzeia subterranea*) was an ancient crop of theirs, grown on both plateaux since at least the 17th century[168]. Bambara groundnut is used, alongside other crops, in the Ehwe-Adja twin ritual which I mentioned above. The genetic origin of bambara groundnut is West Africa (Westphal 1985; Alpern 1992:26), probably the Jos plateau in Nigeria[169], and it is possible that the Fon and Adja knew it from early times. But it is questionable whether they grew (much) bambara groundnut before 1600. First because it is difficult to harvest the crop without iron tools. Second, the Fon and Adja names for bambara groundnut, *azingokui* and *azingodui,* are derived from the ordinary groundnut, *azin* in Fon and Adja (*Arachis hypogea*). Ordinary groundnut was introduced to West Africa by the Portuguese in the 16th (Pazzi 1979:187) or 17th (Bosman 1704/1967:301; Alpern 1992:26) century. Therefore it seems more likely that bambara only gained importance as Fon and Adja crop after ordinary groundnut[170].

### 4.4 Conclusion

This chapter studied the similarities between the Adja and the 'Gedevi' (the ancestors of the Fon) and between their plateaux before 1625. The analysis showed that it was likely that the plateaux and their peoples were similar. The Adja and the 'Gedevi''s ancestry was made up by the same mixture of peoples. The plateaux on which they lived had a similar climate, a similar mix of soil types, and were both covered between ca. 1000 and 1600 with a similar forest-savannah mosaic. The Adja and 'Gedevi' had the same sources of livelihood: both groups hunted elephants and antelopes, gathered palm fruit and yams, and cultivated yams, cowpeas, pearl millet, probably some sorghum, and possibly bambara groundnut.

The principal difference between Adja and 'Gedevi' before 1625 was their different access to iron. There is archeological evidence that the Adja mined and smelted iron, but the 'Gedevi' had no sources of iron ore on their plateau. They imported (sporadically) some iron tools from Oyo and from Nikki. The hoes which they imported had a different shape than those of the Adja. Together with the hoes the 'Gedevi' imported a different tillage technique. Agriculture was probably slightly more developed among the Adja than among the 'Gedevi', who subsisted more on hunting, gathering and trade.

## Notes

1 My translation. Adimola was the Adja king's son in law, of Yoruba origin. Oké (1984:53) gives a shortened version of this myth.

2 In studying the origins of the Fon and Adja and of their settlement histories on the plateaux, we have to distinguish between the common population on the one hand and the 'royal' families on the other hand. Many authors, by relying primarily on dynastic oral traditions, erroneously took the origins and the dates of first arrival of the Fon and Adja 'royal' families to be those of the Fon and Adja peoples as a whole.

3 And around 880 AD at Sehomi on the shore of Lake Aheme.

4 More to the west and north-west, $^{14}C$ analysis has also revealed that the Yoruba towns of Ife existed as an agglomeration in the 9th or 10th century AD and Old Oyo in the 11th century AD (De Lespinay 1991:123, 131, 142).

5 The Ewe-Adja linguistic group includes the Ewe, Tado-Adja, Ehwe-Adja, Dogbo-Adja, Tchikpè-Adja, Sahwè, Waci, Hwla (Popo), Hweđa (Peda), Ayizo, Gun, Fon and Mahi, who all claim descent from Tado. The Gen (Mina), who also speak an Ewe-Adja language, are an exception to the rule, for their (patrilineal) ancestors came to the Bight of Benin from Accra. (Pazzi 1979; 1984:13; Capo 1984).

6 That is, if De Lespinay (1991:140) is right, not later than the 14th century AD.

7 It is possible that the name Adja is a deformation of Aza, since the sounds 'z' and 'dj' are close to each other in South Bénin. According to one tradition, the ancient (A)za were also called Dia (Meyerowitz 1966:4 quoted in Pazzi 1979:140). However, although the name of the peoples who were called Adja after the foundation of the Tado 'kingdom' might have been derived from Aza, this does not mean that all the peoples which I call 'related to the Adja' before the foundation of the Tado 'kingdom' would have descended from the Za, but only that these peoples had a common ancestry with the Adja of the 'kingdom'.

8 On the plateaux of Kétou and Zagnanado and perhaps on the eastern Abomey plateau also lived the Agonli, who were according to some authors related to the Yoruba (Iroko 1989:8) and according others to the Adja (De Lespinay 1991:125-126, 134-135, 141) or would have been a mixture of Adja and Yoruba or more precisely of Ayizo and 'Mahi', who would be composed of Hweđa, Adja, Wemenu and Yoruba (Pazzi 1979:122; De Lespinay 1991:134-135). Ederveen (1990:28) however thinks that the Mahi were of Ayizo descent and came to the Abomey plateau in the 16th century.

9 According to oral tradition the river first passed at the foot of the Tado hill and changed its position later on (Pazzi 1979:91-92).

10 The Akpafu would have moved around in the area in their search for iron mines; in the 19th century they lived in Ghana (Gayibor 1996:51). In the 1890s and early 1900s many Akpafu lived between the rivers Danji and Volta and seem to have been the only people of German Togo besides the Bassar and some Banyawo and Ewe at the Gemi hill in Avatime who mined and smelted iron (Spieth 1889, Clerk 1891, Bürgi 1897, Hupfeld 1899, and Pfisterer 1904 reviewed in Seige & Liedtke 1990:68, 75, 125, 143, 199-200). Pazzi (1979:151) believes, on the base of de Surgy (1974:7) that the iron industry descended from the savannah peoples at long the river Volta, first to the mouth of the river Volta and then to the coast of Benin.

11 D'Hoore (ed), *Soils map of Africa* sheet 5, Commission de Coopération Technique en Afrique CCTA, Institut géographique militaire, Bruxelles 1963.

12 FAO-Unesco-ISRIC soil classification (Driessen & Dudal 1989:148; Pape & Legger 1995 appendix D page 8). The plateau soils of South Bénin are Nitisols, the soils in the depressions between the plateaux mostly Vertisols.

13 Ferralsols have a ferralic B horizon and are rich in iron oxides (Driessen & Dudal 1989:148-150; Pape & Legger 1995 appendix E page 3-4).

14 Bertho (1945:9-10).

15 Iroko (1976 and 1989:8).

16 Attested by observation: Skertchly (1874:316) and Duncan (1847); by archaeology: Adandé 1988 (personal communication); by oral tradition: Ederveen (1990:72-73).

17 Iroko (1989:10).

18 Faustine Afeku from Keta, personal communication.

19 Bassar also produced hoes of the Adja model for export to Atakpame and possibly to Tado (Martinelli 1984:495, 498). In the 17th and 18th century Tado also imported iron from Bassar, this was of a better quality than its own iron (de Barros 1986:164-166; Goucher 1988; Martinelli 1984:498).

20 Gayibor (1993:250-253; 1996:52, 56). The Za or Azanu (= people of Aza) clan in Tado believes that another Za-branch became the royal clan of the Ashanti in Kumasi. The Za of Tado might also be related to the Za on the eastern Abomey plateau (4.1.2; Gayibor 1996:56). Today there are two 'Za' clans in Tado, the Za or Azanu (= people of Aza) and the Zafi, the first claiming descent from Aza and the second from Ayissan. Both claim to have been in Tado before the foundation of the Tado 'kingdom' (Gayibor 1993:252-253). The Zafi's name however suggests that they are a branch of the Aza clan.

21 Spieth (1906:53); De Lespinay (1991:124).

22 The town Dia is situated 50 km north-west of Jenné (Mali). Togola (1996:107) believes, on the base of oral tradition and archeological evidence, that Dia was founded around 250 BC by Nono blacksmiths from Méma (100 km further north) just after the introduction of iron technology to the area.

23 In the 11th century the Almoravid Berbers expanded to the Niger bend (Ajayi & Crowder 1985:23-24). Contemporary written sources confirm that the Niger bend passed through an unstable period in the second half of the 11th century. Arab geographers who wrote around 1150 reported that the Almoravid Berbers intervened in the kingdom of Ghana (just west of Djenne) in 1076, and in Tadmakka and in 'Kawkaw' just east of Timbuktu in 1083. 'Kawkaw' according to Ajayi and Crowder (1985:24),

who consulted local oral sources, must have been the 'Za' kingdom of Gao on the river Niger. Pazzi (1979:140) seems to have based his argument mainly on an account by Meyerowitz (1966:4, in Ghana notes and queries no 9) about the Dia or Za from the Niger bend who would have founded several southern kingdoms, including Akan. He quotes from Meyerowitz (1966:4): '*L'aristocratie actuelle des Akan serait constituée par les descendants des Dia ou Za (qui eurent leur origine en Abissinie ou en Arabie méridionale), des Berbères libyens et des Gara (de cep Koushite) de l'oasis de Djado dans la région du Tibesti, qui émigrèrent quand les arabes conquirent l'Afrique du Nord et fondèrent le royaume Dia sur le Niger entre Djenne et Tombouctou*'. Today the town Dia is situated 50 km north-west of Djenné, and the (family) name 'Dia' is still common on the Niger bend (Togola 1996: 93). Pazzi (1979:149) argues that the Berbers defeated the Za kingdom on the Niger 'between Djenné and Tombouctou' in 1010. If Ajayi & Crowder's (1985:24) Za kingdom of Gao was indeed 'Kawkaw' and was the same as Meyerowitz' kingdom of Za or Dia, in spite of the slight difference in location which these authors give fore the kingdom(s), the defeat was 73 years later. Since 'Za' is synonym to 'Dia' in the traditions recorded by Meyerowitz (1966:4), it does not seem unlikely that 'Dia' became 'Adja' in Tado, if indeed some Za/Dia migrated to South Bénin.

24 Pazzi (1979:151, 157); Agbo (1991:39-41); Gayibor (1996:68).

25 Pazzi (1979:156) thinks that Togbui-Anyi came from ancient Oyo, which preceded the new Oyo which was founded roughly around the 13th or 14th century by Oranyan (Law 1977b:30-33; De Lespinay 1991: 140), because of language differences between Tado and modern Oyo, and probably also because he believed that the Tado kingdom was founded in the 11th or 12th century already. Ancient Oyo would have been a town full of blacksmiths, weavers, farmers and traders; its trade contacts were with Djenné, Timbuktu and Gao on the Niger and with the Blu on the Amugan (Pazzi 1979:134-136). I think that the language difference is not a good argument for his thesis. The newcomers probably adapted to the local language of Tado.

26 The latter part of the tradition is only given by Pazzi (1979:151). The newcomers tested the blacksmiths' peacefulness in the following way: at night, the Ayo women yelled while the Ayo men were beating animal skins. If the natives came to settle the dispute they were considered to be trustworthy. I heard a similar local tradition in Etonhoué on the Ehwe-Adja plateau: a group of newcomers who wanted to settle in this village in the 18th century used the same test to find out whether it was a peaceful place. These stories emphasise the importance which the Adja attribute to peacefulness and trustworthiness.

27 Among others the Néglékpé of Afanyan and the Ewe of Anlogan and around Bè and Togoville (Pazzi 1979:51; Gayibor 1996:72, 143)

28 Gayibor (1993:253). For this reason the Alu are the only inhabitants of Tado (or its royal ward) who don't need to prostrate before the *nyigbafio* (Gayibor 1996:71).

29 Pazzi (1979:51) thinks that the Adja adopted circumcision from the Ayo, and shared the five-legged form of their chief's stool with the Blu whom he also believes to have descended from the Aza. Adja cultivation and forging techniques however remained the Alu's.

30 Own research; Gayibor (1996:71).

31 *Nyigbafio* Adjakanumabu supports the view that the royal family was and is able to extract a surplus. He admitted that he did not sacrifice all the gifts which he received but distributed part of them to other priests and members of his family:

"We distribute the food which the people give to us among the old men in the village who don't cultivate anymore. Formerly the people gave us so much food that we even had to throw some of it away because there was no market for it. Now we distribute it in the village, at least in the Adjatché quarter which is inhabited by our family. We even give to members of our family who have gone to live somewhere else." (*Nyigbafio* Adjakanumabu, Tado 6-10-1990).

Though contributions for Tado's rituals were 'voluntary' for the Ehwe-Adja, at least during the 20th century, they knew which amounts were required to give if they visited the *nyigbafio*, see section 5.3.2. In the 17th and 18th century the Ehwe-Adja would also have rendered palm oil as a tribute to the *nyigbafio* (Tado lacked oil palms in its own savannah environment), but these palm oil gifts declined after some time. An account from Tado: 'The palm oil which the Ehwe-Adja gave as tribute was mixed with clay and used to build a town wall around Tado. But the Ehwe-Adja's oil gifts diminished and hence there remained openings in the wall' (Pazzi 1979:91). According to Gayibor (1996:70) Tado's town wall was built in the 17th and 18th centuries.

32 In the early 18th century the *nyigbafio* Adja-Kpégblé would have installed a toll-gate at Xévé near Tohoun (30 km south of Tado), on the crossroads between the salt-market Tetetou (Sagada), Abomey and the coast, where he levied tax on salt and on slaves (Pazzi 1979:230). In the second half of the 19th century, *nyigbafio* Kpoyizun was able to create a toll-gate at Togodo further south on the river Mono, with the result that part of the traders passed through the market of Tohoun instead of through Tetetou; in those days Tohoun was controlled by Kpoyizun and Tetetou by some members of his guard, the *siko*, who had rebelled against him and created their own 'kingdom' at Tetetou. Kpoyizun also had a toll-gate at Couffota at the northern edge of the Ehwe-Adja area. (Pazzi 1979:83).

33 These are elected among the descendants of the Aza and can be male or female (everywhere else in Adja and Fon society the *tashinon* or *tanyinon* are females, see section 5.2.3). Gayibor (1996:69, 71) believes that the political and religious tasks at the court of Tado were always divided like this.

34 Gayibor (1996:70) quotes three travellers' accounts (by Alonzo de Sandoval (1627), Norris (1789/1968: 139-140) and Robertson (1817) which describe Tado as a 'powerful kingdom', a 'large town', and 'the largest kingdom' of the Ewe. These accounts are probably based on hearsay, it is unlikely that the travellers visited Tado town. 'Large' must probably be interpreted as 'prestigious'.

35 Pazzi (1979:51-52); De Surgy (1990:96, 101, 106, 112). Oral tradition tells that the first *nyigbafio* transformed in old age into a heap of soil (Palau Marti 1964:99); most *vodun* are represented by heaps of soil.

36 According to own interviews with several Ehwe-Adja and with *nyigbafio* Adjakanumabu, the Adja, including the Ehwe-Adja, used to send agricultural products and (since about 1945) money for these sacrifices on a voluntary base. Some elderly Ehwe-Adja from my research villages remember how they assisted at the *gbogbuezan* festival. But since 1982 the Togolese government levies a tax of 300 FCFA from every man and 200 FCFA from every woman in the region for *gbogbuezan* (Adjakanumabu, Tado 6-9-1990; Agbo 1991:168-170). The sacrifices are led by the present *nyigbafio* and by his *tasinon*.

37 Own interviews; Gayibor (1993:151, 153). See Lentz & Storm (2001:158) for similar institutions in Burkina Faso.

38 Pazzi (1979:46).

39 More of this power enters the *nyigbafio* when he is consecrated by the *siko* (members of the royal guard and of the Aza clan). He is enthroned on the ancestral stool, is clothed with the royal insignia, and has air blown on his head. Then as a sign of his power over diseases he stabs the stick *dòci* (disease tree) into the soil. The new *nyigbafio* is initiated during sixteen days in the sacred forest to obtain the secret power of rainfall, which is called *afa jisa* (oracle of binding heaven) (Pazzi 1979:46-50, 55, 284; Pazzi 1984:18).

40 Agbo (1991:141, 144); Gayibor (1996:71).

41 Also for the Ewe of Bè in Lomé (another group claiming descent from Tado) the Pleiades play an important role in agriculture. Their appearance marks the beginning of the agricultural year and determines the appropriate day for the consecration of the priest (*fiaga*) of Nyigble, the god of forging, of rainfall and of fertility (De Surgy 1990:94, 96, 101, 106). Nyigble or Togbui Nyigblɛn is the deified Togbui-Anyi, the mythical founder of the Tado dynasty (Pazzi 1979:51-52).

42 They might have been named after each other. Pazzi (1979:49-50, 55, 151) takes the Aza clan's relationship with the *Eza* stars as further proof for the northern origin of the Aza clan: First, the *Eza* stars are situated in the north (he argues that the Adja give the name *Ayo* to Venus as well as to the Yoruba, who are both situated in the east). Second, also other peoples of the Niger bend count the months and seasons of the year according to the position of the Pleiades.

43 According to Adjakanumabu the *nyigbafio* returned all the grains to the villagers, but according to several informants in the Azové area he returned only part of them.

44 'Villages near Tado' include villages on the north-western Ehwe-Adja plateau (Bozinkpé, Gnonfinhoué, Kaïteme, Dekandji, Satohoué) and villages in Togo, but not the villages around Atindehouhoué, according to testimonies in those villages.

45 More or less the same testimony was given, independent of each other, by Tossa and his son (Bozinkpé 25-9-1990), Fandegla (Gnonfinhoué 25-9-1990), Yohosu Cuna (Gnonfinhoué 4-10-1990), Hundé Joto (Atindehouhoué 5-10-1990), Ada Sosu from Atindehouhoué (Tado 6-10-1990), Gigi & Kandé Joto (Atindehouhoué 18-4-1990), and confirmed by *nyigbafio* Adjakanumabu (Tado 6-10-1990). See also Agbo (1991:141).

46 The axe must have been an ancient Tado instrument. A decorated axe is the symbol of the ancient thunder-*vodun* So (Hevioso, Jiso etc.), which all Adja-related groups worship (Le Herissé 1911:112b, 115-118; Herskovits 1938 II plates 67-68).

47 Used as musical instruments and as means of communication.

48 The only Adja instruments which went out of common use were decorated ritual cutlasses (*gubasa*) and ritual lances. According to an Allada oral tradition recorded by Oké (1984:55), two decorated cutlasses *gubasa* were among the symbols of the *nyigbafio*'s authority. His daughter's son Agasu (the founder of the Allada and Abomey dynasties, see 5.1.1) would have had two sacred lances. The *gubasa* were used for executions (Ségurola 1988:195). Later the Allada prince Yegu would have taken the two *gubasa* and the sacred lances to Allada, where he founded the kingdom of the same name. Later, the Allada prince Dogbagri would have taken one of the *gubasa* to the Fon plateau (see 5.1.1; Oké 1984:55, 57, 59). In the Fon kingdom the *gubasa* became the symbol of the *migan* (executioner), of warriors and of blacksmiths (Ségurola 1988:195).

The kings of Benin also had ceremonial cutlasses, called *ada*, which symbolised their right to take human life. According to Ben Amos (1980:13-15) the iron *ada* was part of the furnishings of the Benin ancestral altar from at least the 13th century.

49 Tognon was the fifth *nyigbafio* according to the memorial cloth (Figure 6 in Appendix 2) exposed in Tado's royal palace and would have reigned from 1538 to 1567. Gayibor (1996:75) gives a slightly different king-list. Tognon was probably one of the more ancient *nyigbafio*. The dates on the cloth in Tado's palace are crude approximations, and those of the two last *nyigbafio* are obviously incorrect.

50 Pazzi (1979:162) and Abotchi (1995:453) believe, on the base of shallow evidence that the Ehwe-Adja started to migrate from Tado to the plains as early as the 12th century.

51 Pazzi (1979:84).

52 After the 1570s (Polanyi 1966:18; Elwert 1973:20; Pazzi 1979:192).

53 A *nyigbafio* called Gbaja was deposed by the *tasinon* and replaced by his son Sodji, which means 'tomorrow the king will be replaced'. Gbaja fled to the east, planted his ritual staff *asɛn* into the soil and changed into a source (Pazzi 1979:160).

The creek Badjame, an affluent of the Lahouigan river which runs from Lonkli to the Mono river, still exists on the Béninese side of the Togo-Bénin border, and is worshipped by the Adja as a *vodun* (ANB Porto-Novo). According to the memorial cloth of the Tado dynasty (Figure 6 in Appendix 2), the *nyigbafio* Badja was the successor of Tognon, had as his symbol a ritual staff *asɛn* or *aja*, and reigned around 1567-1585 (Agbo 1991: appendix). The name of his rival Sodji however is not known in other Tado traditions (Pazzi 1979:167), probably this was not his real name.

54 Obviously a nickname referring symbolically to a decline in Tado's commercial power; this name does not occur on the memorial cloth of the Tado dynasty. A well-known Ewe account also testifies to a decline in Tado's religious power; I summarise the main points of versions given by Pazzi (1979: 179-180, 191-192); Spieth (1906:54) and Gayibor (1984:26-27):

There was a *nyigbafio* in Tado who was called Asimàđi, which means 'languishing market'. At his death, his son Sri competed for the throne, but when another one was chosen, Sri fled to his matrikin in Notsé. He secretly took with him the five-legged royal stool of the royal Aza clan and as a consequence, the *nyigbafio* lost part of their power over the rains. Later, Sri allied himself with the Dogbo on the south of the Adja plateau, with whom his mother was also related. He or his son led the Dogbo in a conflict against king Agokoli of Notsé (now Togo), which finally resulted in the well known out migration of the Ewe from Notsé around 1600.

55 We collected almost 50 myths of origin, or fragments of these, through interviews in different Ehwe-Adja villages (most of the interviews were done by my interpreter and me, some others by Béninese and Dutch students). Since we asked in our interviews where the founder of the village came from and why he left, this often gave indirect information about other villages already present on the plateau). We estimated the age of villages on the base of genealogical information. I supplemented this with information from the literature (Le Herissé 1911; Mondjannagni 1977; Pazzi 1979) about more than 35 (other) villages. The 80 villages represent a sample of large villages from all over the plateau. Table 4.5 presents the oldest villages. It does not contain many of the villages presented by Mondjannagni (1977:547-548), both because he classifies most villages as 'young' and because his data on Adja villages must be taken with caution for they are too Fon-oriented: he tries to relate the foundation of Adja villages to the reigns of Fon kings and claims in many cases that the village has been founded

by Fon. More detailed research shows that many of these villages are older than he thinks and were founded by Adja. In some cases Fon settlers joined the Adja later (for example in Klouékanme), at the date given as 'foundation date' by Mondjannagni.

56 Genealogical information which we collected in villages founded by people from Adjahonme indicate that the Womí/Adjahonme was founded not later than the early 16th century. Pazzi (1979:85, 93 note 10; 162-164) on the base of oral traditions from Tado and from Adjahonme believes that the first villages on the Ehwe-Adja plateau (Womí and Houégame) were founded under the reign of Togbui-Anyi's successor, which was, according to him, in the 12th century. Evidence for this date is quite shallow: First, Togbui-Anyi's reign cannot (yet) be dated more precisely than 'somewhere between the 11th and the 14th century' (see 4.1.1). Second, myths about Togbui-Anyi's successor might well have skipped a few generations.

57 Pazzi (1979:162).

58 During the 20th century the village was surrounded by a circle of bush (remnants of it are still there); some inhabitants believe that this is a remnant of the original vegetation (Damaze Djotto written communication).

59 Fon dynastic tradition upholds that the Adja founded the villages Sahè, Sinhoué, Gboli, Zansa, Allomankanme and ancient Lissazounme on the western 'Gedevi' plateau around the time of Adjahuto's migration in the early 16th century (Le Herissé 1911:274, 293). Adja accounts (Pazzi 1979:84, 86) and local Fon traditions from Sahè and Lissazounme (own research) confirm that the Adja lived on the western 'Gedevi' plateau at the time of the foundation of the Fon kingdom; narratives from various sources describe conflicts between them and the first Fon kings (see also 5.1.1). Inhabitants of Lissazounme believe that the whole area between the Couffo and the village Zounzonme was inhabited by Adja and called *Adjazunge* ('forest of the Adja' in Fon), while their own village was called *Hungeme* in the time of the Adja (Ahodo Sakla, Lissazoume 1-9-1989).

60 A noteworthy exception where the Ewe migrants from Bè (Lomé), who settled very early in Avégame and later also in Aïssanhoué, Loko-Atuï, Kissahouédji, Ahouhoué, Etonhoué and Fogbadja. (Own research in Avégame, Aïssanhoué (27-4-1990), Loko-Atuï and Etonhoué).

61 Each Ehwe-Adja knows the myth of origin of his own family and knows the name of his own *akò* (patriclan). The *akò*-names reveal the origin. The most important Ehwe-Adja *akò* in my research villages are:

Honmi (or Womí) from Womí (Adjahonme)
Adjavi from the region of Tado
Ana from the region of Atakpame
Waci from the region of Come and/or Fon slaves of various origins (waci also means slave in Adja).
Hwɛno from the region of Bè (Lomé)
Hwani
Gbofoli

62 The Ewe from Bè who settled in Avégame, Aïssanhoué and other villages with their own priest of agriculture, were an exception. They sacrificed for rain and crop productivity to their own mythical founder, Hwɛnhwe, and to a number of other *vodun* (but not to Nyigblɛn!) in the sacred forest of Avégame, and do not seem to have depended on Tado for agricultural rituals. At the time of my research even some 'real' some Ehwe-Adja from the Azové area joined them in the rain-offerings to Hwɛnhwe. (Own interviews and observations in Avégame 18-4-1990 and 26-4-1990 and in Aïssanhoué 27-4-1990).

63 Avolonto (1990:23, 26) thinks that the 'Gedevi' were already called Fon before 1600, but this is not very likely.

64 Own interviews; Herskovits (1938 I: 179); Mondjannagni (1977:557-560).

65 See 4.1.1; Le Herissé (1911:274, 293); Pazzi (1979:84, 86).

66 See foundation history of Aoundome below; Herskovits (1938 I: 181).

67 Gayibor (1996:56). The Za of Tado are discussed in 4.1.1.

68 Pazzi (1979:122) thinks that the Za were related to the Gedevi because they saved the shrine of ancestor Gede from falling into the Agasuvi's hands, but he does not specify whether the Za considered Gede to be their ancestor or whether they had only accepted him as their leader.

69 That is the Adja-related Hwla, see 4.1.

70 Gede's sacred forest in Kana-Kpota still exists (own research).
71 Jules Gnavo and Jérome Sessinou from Kana-Dodome in Cotonou 29-8-1989; Burton 1893/1966: 121.
72 Own interview with members of the families Guedenon, Aguidi (descendants of Gede) and Ahinon (descendants of the market priests) in Kana-Mignonhito 27-6-1989.
73 Myths of origin of Gnidjazoun suggests this (own interviews).
74 Kana was the only place on the (border of the) plateau which had a river source.
75 According to Prince Agbidinoukoun Glélé in Le Herissé (1911:46, 278) and Avolonto (1990:22). The Ayizo language of the 17th century is close to modern Ayizo, Gun and Fon, as the 1658-1660 translation of a catechism in 'Egun, the language of Allada' proves (see Labouret and Rivet 1929 in Akinjogbin 1967:28). The modern 'dialects' Fon (from Abomey), Gun and Wemɛ are classified together as Fon languages. Ayizo is also very close to Fon according to Ayizo and Fon speakers, but is classified as an Hwla-Hweđa or Phla-Phera language (Capo 1984:168-169; Wittman-Fréchet 1994:27-28).
76 In particular the *vodun* Loko and the *tohwiyo*, who are the deified founders of 'Gedevi' clans.
77 The *vodun*s on the Fon and Adja plateaux have as their ritual language the dialect of their own region of origin (see 5.1.3; Herskovits 1938 II:188).
78 *Aï* = land; *non* = mother, priest, owner, chief. All *aïnon* were males.
79 Probably this should be Zakpotota. I might have misunderstood the speaker.
80 Probably derived from *ganhotin* ('wood for beating the iron bell') = *Lecaniodiscus cupanioides*, a small tree of humid forests which was common in South Bénin (Floquet et al. 1988:99; pers. comm. Aristide Adomou 2000).
81 Probably the 'forest guava' (*Diospyros mespiliformis*), which is called *jɛ* or *ajie* in Adja and Gun (De Souza 1988). Gun is very close to Ayizo, the language of the settlers. In Fon however both *Diospyros mespiliformis* and the real guava are called *kɛn*.
82 According to Herskovits' (1938 I:118-119) informant the chief-priest of the river 'Halan' was feared to such an extent that he could obtain, for the sake of state taxation, a census of the livestock of the whole kingdom of Danhomɛ. The claim that anyone counted Danhomɛ's livestock and population was a concoction meant to glorify the power of the state. But the account also testifies unintentionally to the power of the priest of Hlan, and this information is probably trustworthy precisely because it was unintended (see Vansina 1985 about the value of unintended messages in oral traditions).
83 According to local accounts from the village Atchia, Agaja or one of his predecessors installed his own brother Gawu as *Hlanhosu* in Atchia at the source of the river Hlan, and adopted the custom to pray to Hlan before every military campaign and to sacrifice some captives to him after every victory. The population of the Atchia-region were even permitted to bring the tribute in kind *nujo*, which other Fon had to bring to Abomey, to the king's *Hlanhosu* in Atchia instead (own interview in Atchia 8-8-1989). That the king used to bring thank-offerings to the *vodun* in and around Kana and to make gifts to the *vodunon* there after military campaigns is confirmed by Forbes (1851/1966 I:17).
84 Under Tegbesu (1734-1778), according to dynastic tradition, the *vodun* Hlan caused great harm to the Danhomeans and expressed his envy of the king's position. As a result Tegbesu reinstalled the priest of Hlan (whom his predecessor Agaja had dismissed) and gave him the right to royal status symbols, namely sandals, an umbrella and a hammock, and to wear them even in the presence of the king (Le Herissé 1911:112-113). Today the high priest of Hlan is a descendant of the *aïnon* of Aoundome. He is the only Danhomean allowed to wear shoes and cover his head in the presence of the head of the royal family; the head of the royal family should even uncover his own head in the *Hlanhosu's* presence! The present *Hlanhosu* showed me his royal status symbols and told me that he was consecrated as priest by Sagbaju (the present head of the royal family): "Sagbaju put the priestly cloth on my head and immediately left the village. Ever since Sagbaju avoids coming near Aoundome, to avoid a situation in which he would have to uncover his own head in reverence to me. But I also avoid going to large villages and towns where I might meet Sagbaju, Zogbodome for example." (Own observation and interview with *Hlanhosu* Daa Dededji in Aoundome 22-11-1990).
85 Probably a transformation of the name Gede.
86 Own interview with the actual *aïnon*, Daa Aguidi, in the presence of several other members of his family and of the family Guedenon and a few others in Kana-Mignonhito 27-6-1989: Gbese, Bodohwe François and Assonsi Aguidi, Philomène Amoukpo born Aguidi, Toussaint, Antoine and Felicien

Guedenon, Daa Ahinon, Nakissenon Danon, Germain Capo Chichi, Raymond Agota, Severin Djedji, Casimir Denankpon.

87 The authority of *aïnon* Agidi would have extended to Sodohome, 'even as far as Tindji and Covè', according to François Daa Houngan in Kana-Dodome (own interview 9-3-1989).

88 Also Wo gave at his death his name to a river, the river Ouo or Houo on the north-eastern slope of the plateau. Own research in Kana; Yélouassi 1987:27; Le Herissé 1911:278-280; Oké 1984:61-64.

89 Awisu was the name of the mythical founder of the village. In the early 17th century *aïnon* Awisu gave his daughter Akpatɛwu in marriage to king Dako-Donu, she became the mother of king Hwegbaja (1650-1685) (Azogan, Dokon 24-2-1989). Awisu (or one of his successors, bearing the same name) was, after Kpahè, the greatest *aïnon* of the plateau (Le Herissé 1911:289; Oké 1984:64; Avolonto 1990:25-26).

90 Gbese, Gnidjazoun 23-2-1989.

91 Di is the same person as Zanhuanu in a dynastic account on how Hwegbaja killed him on the grounds that he would have demanded money for water, and replaced him by a man of his own choice (Le Herissé 1911:285; Oké 1984:65).

92 This river, too, would have originated when the founder of Kotokpa died and turned into a source (Alidou, Dagba & Soukessi 1983). See also 5.2.3.

93 If these different testimonies about the two *aïnon* reflect indeed a difference in their religious roles this can be explained by that Awisu seems to have been a big *aïnon* (his name occurs in many dynastic accounts) and the *aïnon* of Gnidjazoun only a small one. But the different testimonies might also show that traditions about agricultural rituals were weak and the informants not well informed about them. Source for Dokon: own interview with Constant Lègonou from Dokon in Cotonou 13-2-1989. For Gnidjazoun: own interview with Gbese in Gnidjazoun 23-2-1989, see below.

94 The name Houawe means 'white *Parkia biglobosa* tree'. According to dynastic tradition the Agasuvi paid Kpahè 201 cowries for this land (Le Herissé 1911:280; Oké 1984:61).

This account is obviously intended to legitimise the Agasuvi's rule over the first settlers by arguing that they purchased the land. Other South Béninese chiefs of the land gave land free of charge, for example the *aïnon* of Gnidjazoun. The tradition of the Aladahonu paying Kpahè was stressed more and more during the history of the Fon kingdom. Every new Aladahonu king re-enacted it during the 'buying the country' (*xó tò*) ceremony, which consisted in the distribution of 200 or 201 cowries (symbolising 'a large number' or 'the maximum', Palau Marti 1964:182-184) among the descendants of the principal 'Gedevi' *aïnon* (Dunglas 1957:146; Ahanhanzo Glélé 1974:III). The message of this dynastic account and of the ceremony is clear: the right of the first arrived has been replaced by the Agasuvi and by the purchasing power of money.

95 Own interviews in Gnidjazoun with Gbese 23-2-1989 and with Daa Adjalala 22-12-1990. Today *amija* is still a sacrifice to a *vodun* but it now consists of any type of flour mixed with palm oil.

96 At least the traditions which I heard.

97 There are more narratives besides the one which I gave about Kpahè which mention that the 'Gedevi' threw their dead into the bush, therefore I believe that this part of the account might be true. I will argue below that this account testifies to a lack iron tools among the ancient 'Gedevi' to cultivate and to dig graves.

Before 1600 also the Ayizo of Houegbo did not know how to dig graves and were astonished that the Agasuvi buried their dead according to oral tradition heard by Herskovits (1938:I:170). However, the account about Kpahè asking cowries for burial grounds probably falsely accuses him of unreasonable demands in order to legitimise the Agasuvi's usurpation of his power.

98 On the Fon plateau the heads of the *aïnon*'s families are still addressed as *aïnon*, but this has become a purely honorary title. In kingdom times each new king distributed 200 or 201 cowries to the most important *aïnon* of the plateau to 'buy the country' from them (Dunglas 1957:146; Ahanhanzo Glélé 1974: III).

99 Own research in Sodohome 23-2-1989, Lissazounme 7-5-1990, 11-5-1990, Aoundome etc.

100 The absence or loss of agricultural rites and of oral traditions about the *aïnon*'s involvement in them might be due to a marginal importance of agriculture for 'Gedevi' livelihoods and/or to a low esteem for agriculture by the later Fon. If not, rites and/or traditions would have been preserved even if the kings usurped some of the *aïnon*'s roles later on.

101 Interviews with blacksmiths in Kana, Zado and Bohicon by Gustave Ayosso (written communication 4-2-1992).
102 According to some traditions of non-Fon origin ancestor Gede himself would have been a blacksmith (Avolonto 1990:14-15; Pazzi 1979:153), but Gede's descendants deny this. According to them there were no blacksmiths in Gede's village Kana before the time of king Hwegbaja (1625-1650), but only in Koklofɛnta (own interviews, see below).
103 The Bussa are widely known for their ancient iron smelting, see Table 4.1.
104 Interviews with 15 blacksmiths in Kana, Zado and Bohicon by Gustave Ayosso, written communication May 1991.
105 Named after the River Ogun near Oyo were iron ore was found.
106 The mythical founder of the Alu clan.
107 The mythical founder of the Tado dynasty, deified as the god of agriculture and of forging, see 4.1.1.
108 Own interviews in the blacksmiths' village Kana.
109 The blade of this hoe is stabbed with a peg into the knee of a hooked wooden handle.
110 Baumann (1944:219-220, 224); Martinelli (1984:499-501). Oral tradition ascribes close relationships to many of the just mentioned groups. The Oyo claim descent from a Nupe hunter or a Nupe princess, and/or from a Yoruba prince from Ife who also founded the kingdom of Benin, and/or from a refugee from Medina who sojourned among the Bariba before founding Oyo. The Bariba assert that Oyo has been founded by a Bariba prince (Law 1977b:30-33). These traditions prove at least that Oyo culture is indebted to Nupe and Bariba elements.
111 These hoes were also used in the late 19th and early 20th century around Porto-Novo, where Yoruba influence was strong (Hagen 1887:106; own observations Musée Ethnographique Porto-Novo) and sometime around Brazzaville (Adandé 1962:21). The latter author also describes ceremonial hooked sticks in Burkina Faso and Sudan which might have been derived form hoes. There is strong evidence that the 'Gedevi' always used hooked handles. I will come to this below.
112 One exception might be Kasai in Congo (Baumann 1944:220, 224).
113 Own research; Martinelli (1984).
114 The Adja on the eastern 'Gedevi' plateau apparently did not introduce the Adja hoe-type to the rest of the (rest of) the 'Gedevi' plateau. Maybe the Yoruba hoe was already well established on the 'Gedevi' plateau when the Adja arrived, or these Adja's access to iron was too limited to spread hoes to the whole 'Gedevi' plateau. In any case the Adja had no socio-political influence on the 'Gedevi' of the rest of the plateau. The Wemɛnu, Za and Jinu seem to have settled on the plateau under Gedevi hegemony, adopting the name 'Gedevi' for themselves and farming in most cases under the authority of Gedevi *aïnon*. It is likely that they acquired tools and farming skills through the Gedevi chiefs of the land. After all it was customary that newcomers lived and worked during a first time with a resident *aïnon*. The latter might well have provided his dependents with farm tools, and might also have prescribed the farming techniques to be used.
115 About 8 and 10 km east of Bohicon.
116 The family of the market priests in Kana-Mignonhito.
117 These two families are guardians of the name of ancestor Gede and guardians of local traditions.
118 3 km east of Bohicon.
119 About 3 km south of Lise-Sodohome. The name means 'forest where the bush fire stopped'.
120 About 6-10 km southeast of Lise-Sodohome and 2 km southwest of Koklofɛnta.
121 I want to hypothesise that the Mèdasaénu were the same as the ancient Dasa who lived in the 16th and 17th centuries on the eastern slopes of the 'Gedevi' plateau and fled in the early 18th century to the northern Dassa hills, where they mixed with local Yoruba and Adja-Popo groups and founded the Yoruba kingdom of Dassa (4.1.2; Adédirán 1984:78; Mongbo 1995:149). The Koklofɛnta-Sefunwuyanta area roughly corresponds with the homeland of the Dasa as described by Le Herissé's (1911:277-278) royal informant. The time of the Dasa's flight corresponds roughly with the time that the Fon kings Hwegbaja (1650-1685) and Agaja (1708-1734) installed their own blacksmiths in Kana. Iroko's (1989:7-8) informants believed that the Mèdasaénu were giants and that their name meant 'those over whom one cannot step'. But their name could also mean 'person-Dasa-people'. If I am right the Dasa were probably Yoruba themselves.

122 *Awolomi* in Fon.
123 The actual inhabitants of Koklofɛnta have never seen a blacksmith in their village (Own interviews in Koklofɛnta, 1991).
124 The snake-*vodun*.
125 Burton (1893 II: 79 and 87 quoted in Herskovits 1938 II: 89, 91); Le Herissé (1911:14); Pazzi (1979: 208). According to Adandé (1962:19-21), *mákpò* were used in warfare and *kpòtà* were used by the king's chief executioner to kill criminals.
126 Exposed in the royal palace-museum in Abomey. *Mákpò* figure in several other representations of historical battle scenes.
127 Respectively *Prosopis africana*, *Chlorophora excelsa*, *Kaya senegalensis* and an unidentified tree. If the Adja made similar use of *kake*, this might have been another reason for their historical preference for this tree.
128 A similar wooden hoe (or a hoe-handle whose blade has been lost) was found in northern Dahomey by Baumann 1944:209. In the 20th century the peoples of North Bénin used the same iron hoes as the Fon.
129 Dalzel (1967:219); Le Herissé (1911:278); Herskovits (1938 plate 87). Even the Fon king Akaba's (ca. 1685-1708) men still chased their Nago enemies with bow and arrow according to dynastic tradition (Le Herissé 1911:292).
130 Own interviews; Le Herissé (1911:279); Oké (1984:65).
131 Nitisols are defined as 'soils having an argic B horizon showing a clay distribution which does not show a relative decrease from its maximum of more than 20 percent within 150 cm from the surface; showing gradual to diffuse horizon boundaries between A and B horizons; having nitic properties in some subhorizon within 125 cm of the surface; lacking the tonguing which is diagnostic for Podzoluvisols; lacking ferric or vertic properties; lacking plinthite within 125 cm of the surface' (FAO 1988). Nitic properties are 'soil material that has 30 percent or more clay, has a moderately strong or strong angular blocky structure which falls easily apart into flat edged ('polyhedric' or 'nutty') elements which show shiny ped faces that are either thin clay coatings or pressure faces' (FAO 1988). The name Nitisol is derived from the Latin *nitidus*, which means shiny (Kerkdijk 1991: 69).
132 They named their other fields only by colour and texture, but some of them might also have been covered with savannah.
133 In the early 19th century most land between Klouékanme/Zouvou and the Couffo would have been forested, with the exception of a place called *fanji* at Danholi 1 km north of Akwevɛadja, according to a Fon whose ancestors settled in that area in the time of Gezo (Agblalame Avemajese, Sononhoué 7-1-1991).
134 Common expressions are *dekanmɛ* = oil palm plantation (Fon and Adja), *kluikanmɛ* = pigeon pea field (Fon and Adja), and *kutukanmɛ* = cassava field (Adja). Bush was often left to grow between these crops when they matured, especially by the Adja, who considered these plantations to be a kind of fallow.
135 Also *nukan(mɛ)* can be burnt: *a ko dó nukan lɛ towe zò à?* = have you already burnt your bush land? (Rassinoux 1987:185).
136 Hwèto Lisanon. According to him the area was called Adjazunge = forest of the Adja.
137 Victor Lisanon, Lissazounme February 1991.
138 *Gbexo* in Adja. Its roots had the form of a stool (*zinkpin*), from where the villages' name Bozinkpe.
139 Amongst others Daa Gbese, Basile Gbese, Gbeson Gnagle and Goukotan Gnagle, all interviewed separately.
140 According to dynastic traditions and traditions from Lissazounme.
141 According to both dynastic accounts and traditions from Sahè and Lissazounme.
142 This account was given when my interpreter asked about the original vegetation of the area. Vijinavo is about 400 m to the west of Lissazounme. Tafotan Lisanon was asked the same question and gave an almost identical account. The 3 men were asked separately.
143 With the exception of the 'fence kapok' *Bombax brevicuspe* which was planted around compounds.

144 Manning (1980:57) and Mondjannagni (1977:39) confirm that *Ceiba pentandra* grew mainly on the coast, but the first author, who calls all kapok species *hùn*, thinks that the most common species in the centre was *Bombax buonopozense*.

The prickly *Bombax costatum* and/or the larger but a bit less prickly *Ceiba pentandra* were early Fon symbols for something difficult to climb. King Akaba (1685-1708), who had to wait for many years before he became king, chose as his full name 'slowly the chameleon reaches the top of *Bombax costatum*' (*dɛdɛ kabakaba agama non liyá hùn*) (Ségurola 1988:234-235) or in the version of Le Herissé (1911:15) 'slowly the chameleon reaches the top of *Ceiba pentandra*' (*akaba'lo dɛdɛ e ku no wɛ do gеđehunsu o*). In the proverb quoted at the beginning of this book the chameleon also climbs on *Bombax costatum*.

*Bombax costatum* (or *Ceiba pentandra*?) was the tree which the South Béninese commonly used to make ships, *hùn* means also ship in Fon (the Fon however did not make ships). *Hùn* is also a synonym of *vodun* in Fon and Adja, which might indicate that *Bombax costatum* was one of the principal objects of worship of their ancestors. In addition, *Hùn* was used as a name for the whole 'Gedevi' plateau and especially the region where Abomey is today, perhaps because *Bombax costatum* was one of the principal trees there?

145 In reality Kana is 6 km *south* of Bohicon; the story goes on to speak of the region between these two towns.

146 In March 1729 the Fon also had to hide, this time for 3 months, while the Oyo occupied Abomey; according to Le Herissé's (1911:291, 318) royal Fon informant Agbidinukun king Agaja spent (most of) these 3 months at the other side of an affluent of the left bank of the Couffo and followed in this the example of his father and grandfather and of many 'Gedevi' whenever enemies from the East or the South invaded the 'Gedevi' plateau. Le Herissé's map in the end of his 1911 book shows the affluent 'Mono', which on the 1950 IGN maps empties into the Couffo under the name Dra at the latitude of Dokon (2 km north of Abomey) as Agaja's hiding place. The tradition from Gnidjazoun quoted below indicates that on other occasions (perhaps for shorter hiding periods) the king hid in thickets closer to Abomey and the common people in the thickets around their houses.

In 1726 Abomey town itself, within the confines of the moat which surrounded it, was 'open country' where horses constituted an advantage in battle (Dalzel 1967:14-15).

147 Paul Démè, conversation in Porto-Novo 28-11-1988.

148 I realise that zoun or avé may also refer to sacred forests, as it does in the case of Lissazounme and of Avéganme, or to something completely different, in Gnidjazoun for example it is a mound of soil which represents a *vodun* (in this case *zuún* with an ascending tone).

149 I do not follow the evolutionary anthropologists' usage of the term agriculture for plough cultivation alone.

150 I acknowledge that the disdain of agriculture of the modern Fon and their high esteem of trade might have influenced these accounts, but lack of iron and early trade in Kana are supported by other evidence.

151 Later the Fon the suffix *-kun*, which means grain, to the names of *li*, *abò* and *ayi*.

152 Tostain et al. (2003:37-38). Other wild yams in Bénin are *Dioscorea bulbifera*, *D. hirtiflora*, *D. leucardii*, *D. minutiflora*, *D. sansibarensis*, *D. smilacifolia* and *D. togoensis* (ibid; Adjanohoun 1989: 771). Not all these are edible.

153 I saw in 1990 different wild yams climbing on one tree in the sacred forest of Avégame on the Adja plateau. Some of the vines had thorns, others not. Lacking equipment, I was not able to take pictures or samples from the thorny vines, but I took some from two varieties of smooth vines. One variety matches the description of *Dioscorea bulbifera*: cylindrical vines of 1-5 mm diameter, alternating smooth cordiofole leaves with a long point (about the shape of *Dioscorea alata*) of 4-12 cm long and 2-6 cm broad and with 8-9 principal nerves all emerging from the base (*D. bulbifera* has cylindrical vines, Adjanohoun 1989:227; Flora of West Tropical Africa). The vines of the second variety were four-winged and had a diameter slightly larger than 5 mm, their alternating cordiofole leaves were covered with hairs and almost as broad as they were long but with a very narrow point, for the rest they were identical to the leaves of the first variety. Both varieties had aerial bulbils of 2-5 cm diameter. The Ehwe-Adja who were with me did not know whether these yams were edible. Wigboldus (1986:349) thinks that the dominant yam species in South Bénin before 1470 might have been *D. bulbifera*.

154 The yam harvest ritual is also called *jađuđu* or *jawuwu* (= sacred eating) in Fon and Adja. It was also commonplace among the Ewe (Merz 1878 and Spiess 1912 reviewed in Seige & Liedtke 1990: 38, 307). Zinzindohoué (1984:229-232) thinks that the *teđuđu* rite is of Yoruba origin and spread by cultural diffusion, and underlines that the Fon and Nago of Whydah primarily sacrifice yam first fruits to the god of rain and thunder in order to thank him for the rain obtained during the year. However, the Ehwe-Adja and the Fon on the Abomey plateau sacrifice yam first fruits to all their *vodun* and to *Fá* (own observations).

155 On the base of missionary reports from a.o. 1866, 1878, 1898 and 1901 (Fies), 1907, 1910-1911, Seige & Liedtke (1990:21, 36, 133-134, 159-160, 238, 278, 293, 373-374) argue that the Ewe of the later 16th century grew mainly yams, rapidly adopted maize and cassava when these were introduced in the 17th century, but still subsisted to a large extent on yams in the later 19th and early 20th centuries.

156 Own interviews in the Fon village Gnidjazoun, founded before 1600, and in the Adja village Yéhouime, founded between 1550 and 1700. I did not encounter similar traditions in younger villages, but I did not probe.

157 July.

158 The name of this ritual cowpea variety is very similar to *yaniporyi*, which is the common name for cowpeas of the Waama in North-West Bénin (De Souza 1988:386).

159 During the two years I spent on the Fon plateau I only saw one tiny pearl millet plot near Lissazounme and I heard about another one near Kana. None of my Adja informants knew any pearl millet fields on their plateau and I did not see any, but I encountered a tiny plot near the Tado-Adja village Tohoun north-west of the plateau. Gruner (1910 in Seige & Liedtke 1990:278) described *Kolbenhirse* (pearl millet) and sorghum cultivation by the Ewe around Kpalime.

160 'Discovered in the forest' seems to have been a South Béninese symbol for useful innovations. Other knowledge which according to Adja, Ewe, Fon and Gun mythologies came from the forest are for example knowledge of herbal medicine, magic charms, and other religious innovations (Herskovits 1938 I:40-42, II:261; Spieth 1906:137-138; Sodokin 1984:92).

161 Rituals may spread by cultural diffusion. For example, Ehwe-Adja parents of twins make four short ridges in one of their fields in spite of the fact that ridge cultivation was never practiced by the Adja.

162 Twins are believed to belong to the bush. Some villages used a mixture of pearl millet and sorghum flour. After the sacrifice, a mixture of cooked cowpeas, groundnuts and bambara groundnuts (*Voandzeia subterranea*) is eaten by the whole family. Because of this ritual, the parents of twins in the Ehwe-Adja village Lokogba cultivated pearl millet and bambara groundnut until at least 1940 (Own interviews in Lokogba 23-8-90 and in Zouvou 29-9-1990).

163 Several of my Ehwe-Adja informants said that the twin ritual was their only ritual with pearl millet.

164 Oral traditions identify Méma as the region where the founders of Dia came from (Togola 1996: 107).

165 See the myth of origin of Aoundome in 4.1.2.

166 A town plan of Notsé in Gayibor (1984:34) shows that the ward Alinù still exists today.

167 Gruner (1910) and Sengmüller (1913) described sorghum cultivation by the Ewe of Misahöhe (near Kpalime) and Notsé (Seige & Liedtke 1990:278, 315).

168 Own interview with Lakusa Egè in Yéhouime 2-11-1990 (Adja), several interviews in Gnidjazoun (Fon). The Ehwe-Adja account of bambara groundnut is remarkable since the crop was not grown by the Adja (anymore) since at least 1900, according to Adja testimony and colonial documents.

169 Personal communication Rosalia Madamba, bambara groundnut researcher in Harare.

170 It is difficult to assess how important bambara was. During the 20th century Fon bambara groundnut cultivation declined. Fon informants might have extrapolated this trend backward, assuming a linear decline since before 1600.

Photo 5.1: Members of the Fon lineage Sakla bow to their *vodun* Lisa in front of his temple in the sacred forest of Lissazounme, 10 April 1990

Photo 5.2: Enstoolment of the new head of the lineage Sakla

Photo 5.3: Members of Sakla lineage bow to their new *daa* under his chiefly umbrella

# 5

# Divergent socio-political developments on the two plateaux during the era of the slave trade, ca. 1625-1850

> 'My people are a military people, male and female. I cannot send my women to cultivate the soil, it would kill them. My people cannot in a short space of time become an agricultural people.' (King Gezo to Lieutenant Forbes, 4-7-1850[1]).

In this chapter I will discuss socio-political and economic changes on the Fon plateau between ca. 1625 and 1850, which is the period during which slaves constituted the main export 'product', and compare these with the Ehwe-Adja plateau. From about 1625 to 1900 the Fon formed a more and more centralised kingdom, but the Ehwe-Adja became more acephalous, for the influence of the chief of the land (*nyigbafio*) in Tado on these distant Adja declined during this period.

The study of Fon and Adja societies in this chapter will elucidate ways in which many differences between them originated during the Transatlantic slave trade period. These include differences in social organisation, in beliefs, in livelihood activities, in opportunities for socio-economic mobility, in cultural valuation of different occupations, in other words in styles of making a living. The analysis of later historical periods in the subsequent chapters will reveal how later styles were engrafted in these earlier ones and were partial continuations of these, in spite of the facts that the Fon monarchy was abolished in 1900 and that the Fon and Adja subjected to the same colonial and post-colonial governments from that date. Therefore, only insight into the Fon and Adja societies between 1625 and 1850 can help us understand the roots of present day style differences.

I will argue that the Adja continued to be largely organised on a lineage and domestic level, except for a certain religious dependence on the *nyigbafio* of Tado. Their principal economic activity remained agriculture. Economic betterment and rise in status could be achieved by hard (farm) labour by an individual and his dependents, combined with some good luck. Junior household members who worked for the seniors did so in the expectation that these seniors would later help them to set up their own productive unit.

The strength of the Fon kingdom, also called Danhomɛ[2], was in its fairly effective monopoly of violence by the kings: warfare and capital punishment. In the second place, economic production and the priesthood were submitted to tribute, which meant that economic and religious life was to some extent controlled by the State. To implement this control the king appointed a number of regional chiefs, warlords, spies, priests and diviners. Every family in the kingdom was liable to provide soldiers and/or tribute (mainly victuals) and/or forced labour to the State. The army was sent to raid slaves for the king and for the warlords from other ethnic groups. King and warlords sold these slaves or put them to domestic (farm) work. Economic betterment and rise in status were more easily obtained in the military or religious hierarchy or as trader than by hard work. One could enter this hierarchy by good luck or by winning the king's favours through loyalty or intrigue.

The emergence and the socio-political organisation of the Fon kingdom received much attention in the historical, anthropological and sociological literature. Many of these studies

were purely descriptive. Some others, for example Polanyi (1966), Akinjogbin (1967), Coquery-Vidrovitch (1971) and Elwert (1973), tried to use the Danhomɛ case to support theoretical models of wider geographical relevance. It is striking how much the conclusions of these theorists disagree. This was probably partly due to the fragmented, limited and external nature of their sources, and partly to the theoretical prepositions which they had. The majority of their sources were written, all of them by outsiders who had some contacts with the Fon court but not with the Fon and Adja people. Akinjogbin (1967) used in addition Yoruba ethnography, Elwert (1973) interviewed a few members of the Fon and Ayizo elite, but none of the scholars did fieldwork among Fon or Adja commoners. My own research fills this gap. In spite of their shortcomings these different models can partly complement each other and function as eye-openers. Of special interest is Akinjogbin's (1967) comparison of Fon and Adja. Section 5.1 reviews the most influential of these theoretical descriptions.

In 5.2 I present a history of the Fon kingdom from 1625 to 1850 based on my own oral history fieldwork, complemented with travellers' accounts and with oral traditions recorded by others. I focus on technological, socio-political and religious innovations, first because these were essential for the development of Fon styles of making a living, and second because the role of technological and religious innovations was under-analysed by other scholars. The section highlights several new opportunities for non-agrarian livelihood activities. The Fon's crops and agricultural practices will be discussed together with those of the Adja in section 5.3. That section further gives an oral history of the Ehwe-Adja ca. 1600-1850, based on micro-histories from my own research villages and on a few traditions collected by others. This 'new' oral history material sheds fresh light on the theoretical descriptions of the Fon and Adja.

In 5.4 I discuss changes in styles of making a living among the Fon and Adja between about 1625 and 1850. Changes in economic opportunities, status of different professions, and changes in labour orientation will be analysed. This section will also discuss socio-economic changes at lineage- and household level and will compare the new socio-economic relationships within Fon families with those within Ehwe-Adja families.

Central questions in sections 5.2 and 5.3 will be: How does this new oral historical material confirm and/or correct the theoretical descriptions of Danhomɛ and Adja? Which differences between Fon and Adja socio-economic organisation emerged between 1625 and 1850? Which Fon and Adja styles of making a living developed during this period?

## 5.1 Theoretical discussions on the socio-economic organisation of Danhomɛ and 'Adja'

The development and the socio-economic organisation of the Fon kingdom was discussed by many historians, anthropologists and sociologists, including some well-known social scientists who tried to describe Danhomɛ in theoretical terms. Their statements were often copied uncritically by other scholars. Because my fieldwork can shed new light on the value of their analysis, I will start with a presentation of their work. Then I will compare their work with my own findings.

Unfortunately, most of the theorists of pre-colonial South Bénin relied on written sources only. Moreover, these sources were biased towards the realm of the kingdom. Those scholars who visited the Fon plateau themselves interviewed almost exclusively Fon chiefs and other members of the Fon elite (section 3.3.1). Probably due to the nature of their sources, these

researchers mainly discussed the socio-political organisation of the Fon and Adja at state level. Livelihoods and socio-economic organisation of the common population were hardly analysed by them.

Likewise the Adja, who lacked a royal court during the same period, received much less attention. There are some fragmented empirical descriptions, mainly based on oral tradition (the most comprehensive study is probably that by Pazzi 1979). I know of only one serious attempt to analyse the pre-colonial 'Adja' in sociological terms. This attempt is from the Nigerian historian Akinjogbin (1967), who gave a description of 'Adja' and Yoruba socio-cultural organisation in the 16th to early 19th centuries. The 'Adja' in his terminology are all the Ewe-Adja speaking groups on the Bight of Bénin (see 4.1.1 for a definition of Ewe-Adja speaking groups). I will start with Akinjogbin's work because it presents his view on what these groups had in common before the Fon split of and on some differences which emerged between the Fon and the other Ewe-Adja speaking groups after that date.

### 5.1.1 From an Adja-Gedevi kinship ideology to a totalitarian Fon state ideology?

Akinjogbin (1967:14-17) is, to my knowledge, the only author who formulates a theory about the nature of ancient Adja and 'Gedevi' society[3]. He argues that all Adja and Yoruba groups (including the Ayizo, 'Gedevi', Gun and Hweđa) were organised according to an '*ebi* social theory' or 'family social theory'. *Ebi* is the Yoruba concept for lineage or family. According to him (1967:16) 'the bond of society was blood relationship, not security or common economic interest'. He explained all relations of authority, responsibility and subordination in terms of blood relations and of age. This was the principle of seniority, on which a person's status and position derived from his or her date of arrival in the family (and on gender, but Akinjogbin does not mention this[4].

If someone's authority extended beyond his agnatic family this was legitimised in part by stretching the concept of blood relationship. States were described as large families (Akinjogbin 1967:14-15). The Fon call their king *dada* and the Yoruba *baba*, which means father (ibid:15). Fictive blood relationships were established between neighbouring groups by defining their founders as brothers. For example, the founders of the kingdoms of Abomey and Porto-Novo were and are accepted as brothers of the ruler of Allada, and the latter is held to have descended from the *nyigbafio* of Tado (ibid:14-15). The founders of all the important Yoruba kingdoms were defined as sons of Oduduwa, the alleged founder of Ife (ibid:15)[5].

His 'family social theory' – what we would presently call 'kinship ideology' – implied that social relationships of authority and subordination were felt as 'not forced, but natural', and that 'the bond of society was blood relationship, not security or common economic interest' (ibid:16). But this kinship ideology also had certain rigidity, since it left only a limited scope for social mobility and for an own interpretation by its adherents (ibid:17).

In Akinjogbin's (1967:21) eyes the Fon violated this 'family social theory' when they organised and expanded their kingdom. The founders of the Fon kingdom 'rejected the traditional social theory and the political system based on it and believed that the only sure source and guardian of a right was no longer blood descent, but might' (ibid:24-25). The Fon's main act of rebellion against the kinship ideology, according to Akinjogbin (1967:66), was king Agaja's conquest of his 'father's' kingdom Allada in 1724[6]. Akinjogbin maintained that Oyo did not reject the 'family social theory' because the Oyo kings continued to be

appointed and consecrated at least in part by their 'father', the king of Ife, until about 1793 the Oyo king too gave orders to attack a town which belonged to Ife (ibid:68, 81, 176-177).

Akinjogbin (1967:25, 38, 71) argues that the Fon replaced the kinship ideology by a 'perforated pot' theory. King Gezo (1818-1858) described his state as a pot with many holes, into which his subjects had to put one finger each into each hole in order to prevent the water to flow out. According to Akinjogbin (1967:25) this meant that Gezo and the Fon no longer perceived their state as a family, but as a collection of individuals who should be ready to serve the king individually.

He presents the kings of Danhomɛ as totalitarian rulers, and argues that the 18th century Fon kings had the absolute monopoly over the slave trade in their kingdom (1967:79, 103-105, 133), and controlled all the means of physical force such as firearms, cutlasses, bows and arrows (ibid:204). While 'Adja' and 'Gedevi' chiefs inherited their title because of their position in the family and were regarded as junior brothers, chiefs in the Fon kingdom were directly appointed by the king according to Akinjogbin (1967:38): 'No office under Agaja was inalienably hereditary. Every official was appointed for his ability and was liable to be transferred from one duty to another, to be promoted, demoted or dismissed by the king' (ibid:100)[7]. However, though he (ibid:100-101) presents the selecting and dismissing of chiefs by the king as a novelty, he admits that already in the Whydah kingdom before the Danhomean conquest 'traditional chiefs' were deposed at the death of the king. I will show below that also after 1727 many offices and most titles in my Fon research villages continued to be inherited[8].

A strong point of his study is that Akinjogbin, being a Yoruba himself, presents a view from within Adja-Yoruba society. From his 'indigenous' perspective he has a deeper understanding of cultural values than the other theorists, who all present an 'exogene' view. Therefore, another merit of his model is that it avoids the economistic bias of most of the other theories about Danhomean social organisation. By and large Akinjogbin offered a culturalist explanation. In his view, economic opportunities hardly played a role in the social organisation of the ancient Ewe-Adja speaking language groups.

One might ask if he did not overestimate the strength of culture and the strength of the Fon state. His own data show for example that the Fon king's monopoly over the slave trade was not as absolute as he (ibid:79, 103-105, 133) pretends. Many private traders succeeded to sell slaves to European slave traders, often with impunity, under the reigns of Agaja, Tegbesu and Kpɛngla (ibid:105, 112, 127, 159, 171). After the presentation of my Fon and Adja case studies I will evaluate Akinjogbin's work in more detail.

### 5.1.2 Archaic or free market economy?

Polanyi (1966) used the pre-colonial Fon kingdom as principal case to support his substantivist economic theory. Though he occasionally referred to other societies he described only Danhomɛ in some detail. According to him the Danhomean economy was characterised by reciprocity, redistribution and householding rather than free market exchange. Subtantivism remains an influential theoretical position in economic anthropology, even though it received much criticism, especially from the 1940s throughout the 1970s.

According to Polanyi (1968: 68-69, 72-73, 75, 140-144) the formal meaning of economic[9] is only a logical construction but has nothing to do with empirical reality, except in fully commoditised economies where all production is for sale on self-regulating markets. Primitive and archaic economies, his terms for acephalous tribes and ancient states respectively,

would be integrated by social institutions that give the economic process unity, stability, social value and significance, and not by rational choice between insufficient means. Empirically, the most important forms of economic integration would be reciprocity, redistribution and market exchange, the latter consisting of three types, of which only the 'integrational' one would be free market exchange. (Polanyi 1968:139, 145-149, 154; Peukert 1978:4-5). Later, Polanyi (1966: vii, 70) added 'householding' as a fourth form of economic integration. In spite of his own plea for empiry he continued his argument in a very un-empirical manner, by positing that the dominant form of economic integration in primitive societies is reciprocity and the dominant form of economic integration in archaic economies redistribution. The principal socio-economic institutions in archaic economies would be fixed exchange rates and absolute government control of all external trade. The motives for trade would be status and the need for exotic goods rather than individual economic gain. External trade would be carried out by government traders and in 'ports of trade' only, and prices be set by the government or the community and remained stable over a considerable period of time. (Polanyi 1944:66; 1968:158-160, 164-165; Peukert 1978:4-5).

Polanyi (1966) described the kingdom of Danhomɛ as follows. Danhomɛ before 1870 sold large numbers of slaves to transatlantic slave traders in exchange for European manufactures, especially firearms. It used the firearms to make new captives, and exchanged them again for firearms. Polanyi (1966:94) argued that all external trade contacts with Europeans occurred in Whydah, which was Danhomɛ's 'port of trade'. In this port, which according to Polanyi lay outside the borders of the kingdom, slaves would have been exchanged for set equivalents of European goods. These rates were set by the Danhomean king and were only rarely altered. The only motive for this trade would have been Danhomɛ's need for firearms, which it had to pay as an annual tribute to the kingdom of Oyo. Like Akinjogbin, also Polanyi thinks that the king had the monopoly of the sale of slaves to foreign traders, and that all the captured slaves were the king's property, and that external trade was only undertaken by government traders, the *cabosseros*. Except for carriers, no other Danhomeans would have been involved in the external trade. Polanyi's opinion about Dahomey continues to be influential on many scholars, who echo it uncritically. Le Meur (1995:83) for example believes that the Fon kings between 1860 and 1894 had a monopoly on exports. Akinjogbin's data (see 5.1.1) however show that the 18th Fon kings did not monopolise the slave trade, for many private traders sold slaves to Europeans under their reigns.

Polanyi acknowledged that markets for food and locally manufactured goods existed inside Danhomɛ, but he believed that these markets were isolated from each other. Neither transport of commodities nor adaptation of prices between markets would have occurred. Prices of local products would have been set either by producers' organisations *só* or *sódudo*, or by the first seller to reach the market in the morning, or by the state. Only the *só(dudo)* or the state would have been allowed to change prices[10] (Polanyi 1966:81, 87-91). Retailers of agricultural products would have had lasting relationships with one or more farmers, from whom they purchased in bulk at 80% of the retail price. This implied an institutionalised profit margin of 20% (Polanyi 1966:85-87). The institutions of price-setting and fixed profits would have guaranteed low food prices and low but stable incomes for traders. Polanyi interpreted this as proof for the absence of profit motives. Because of these institutions the distribution on local markets would rather be another form of householding than a market *system* or market *economy* based on integrational exchange. According to Polanyi (1966: 70) a 'householding form of economic integration' would be characteristic for archaic

economies. In his terminology *householding* was the redistributive economic organisation of agrarian 'households'. A household could be a family, a village, a tribe etc. under the supervision of a householder. The Danhomean king would have fulfilled his role as householder amongst others by distributing cowry money 'to buy food' to the population during the annual 'customs', by feeding his visitors, and by giving them cowries to buy food on their journey home (Polanyi 1966:40, 81-82, 91). Other 'archaic institutions' in Danhomɛ would have been groups for voluntary reciprocal aid and the pawning of children, slaves, domestic animals and land (ibid:173-174).

Polanyi's analysis of Danhomɛ received much criticism. Here I will give that of other scholars who presented conflicting evidence from other written sources, while in 5.2.4 I present a critique based on my own fieldwork. We all agree that Polanyi's methodology was deficient in at least two regards. First, he relied on written documents only but did not ask how and with which purpose they were written. One of his sources was Dalzel, a slave trader who tried to prove in the 1770$^{s}$ that the king of Danhomɛ was a tyrant and that hence the export of slaves from Danhomɛ was an act of humanity. Dalzel as well as Polanyi's principal source Herskovits (1938), who mainly relied on Fon dynastic oral tradition and on other accounts from the Fon upper class, overemphasised the power of the king. Second, Polanyi relied to a large extent on accounts which were recorded between 1870 and 1931, which is during the period when palm oil constituted the main export product, to make statements about the slave trade period before 1870.

An early critic of Polanyi's empirical analysis was Klein (1968), who disagreed in the first place with the thesis that redistribution was a property of states. Second, Klein challenged Polanyi's description of Danhomɛ as a state; I will come to this point in the next section. Referring to Sahlins (1965:142), Klein (1968:212-213) argued that redistribution rather characterised chiefdoms and other forms of 'primitive' or 'pre-state' cultures (Klein's terminology). Redistribution in 'primitive' societies would be a tool to maintain social inequality simultaneously with economic equalitarianism (Sahlins 1965:159; Klein 1968: 213). The business of states, in contrast, would be to accumulate, not to give away, in order to maintain internal class differences (Klein 1968:217).

Polanyi's main critic is Peukert (1978), who made an intensive analysis of archive documents about Danhomɛ's Atlantic slave trade between 1740 and 1797. On the base of these documents Peukert (1978:230) showed that firearms were the only commodity on which the king had an import monopoly, and that gun imports were negligible compared to the total volume of imported goods. The archival sources show clearly that the prices of all (other) commodities were established by offer and demand, both in Whydah as well as on the inland markets (Peukert 1978:232-233). That the inland markets were not isolated from each other as Polanyi (1966) asserts is made evident by the presence of commodities from overseas and from other African regions which travellers observed on these markets (Dalzel 1793/1967:14; Duncan 1847 vol. II: 20, 48-49, 137; Peukert 1978:234-235). Peukert (1978) concluded that Danhomɛ from at least 1740 onwards did have a market economy in which its citizens could participate freely. The historians Argyle (1966), Manning (1982:7, 10, 42), Law (1991:49-51, 220), Coquery-Vidrovitch (1971:108), Dalzel (1793/1967:129-130, 138) and even Moseley (1979) (who follows Polanyi uncritically on some other points) all agree with Peukert (1978) that Danhomɛ had a market economy. Moreover, I will show in 5.2.4 that Fon and Adja oral traditions confirm that trade was relatively free in previous centuries.

### 5.1.3 State or conical clan?

Most authors described Danhomɛ as a strongly centralised state. Apart from Akinjogbin (1967) and Polanyi (1966), also ancient travellers such as Dalzel (1793/1967), historians such as Palau Marti (1964), Argyle (1966) and Ahanhanzo Glele (1974), the anthropologist Herskovits (1938), and others. They described the Fon kings as absolute rulers who personally appointed all the other authorities in the kingdom, controlled all trade, exercised property rights on all goods in the kingdom, levied exorbitant taxes, and tortured and killed their subjects for the slightest mistake. Klein (1968:214-223) however argued that Danhomɛ resembled a conical clan[11], and was at most an emerging state, not (yet) a fully-fledged state in Sahlin's (1965) sense. According to Klein, Danhomɛ was not a state because

- It earned more through its slave raids than through taxation,
- Tax burdens on producers were minimal,
- Slaves hardly constituted a separate social class since their children became free Danhomeans,
- The monarch did not develop a significantly separate life style from the rest of the population but redistributed most of his wealth, including rifles and firearms,
- Danhomɛ was relatively poor compared to ancient states such as prehistoric Mesopotamia, Egypt, Mesoamerica, Peru, India and China,
- The distinction between town and countryside in Danhomɛ was fluid because of the presence of home gardens in and around its towns.

A problem with Klein's arguments is that they concern more a difference in degree than a difference of kind. He does not indicate how much tax, wealth, and life style differences between the monarch and the people and between town- and country dwellers are needed to make a state. In matters of styles he would not even be able to do so, for the classification of significant style differences must include the judgement of the people themselves (see 2.2). Klein's (1968) short article contains only little ethnographic material in support of his claims; he does not seem to have done fieldwork himself. Hence Klein does not show clearly that Danhomɛ was a conical clan. My fieldwork suggests that the Fon themselves perceived significant lifestyle differences between the common people and the Fon elite, and that the commoners aspired to imitate the elite's styles in many domains. I will continue to call Danhomɛ a kingdom, thereby following the terminology of the literature and of the Fon themselves. After the presentation of oral and archival data collected by Elwert (see 5.1.4) and myself (5.2 and 5.3) I will discuss the issues of tax levels and redistribution (5.2.3), town-country differences (5.4.2), the emergence of a Danhomean slave class (6), and whether the Fon considered themselves a conical clan. My case studies partly support Klein's view on taxation, but not on the other issues.

### 5.1.4 A slave raiding mode of production?

In his attempt to describe 18th century Danhomɛ in (neo)-Marxist terms, Elwert (1973) came to the conclusion that the existing concepts did not suffice for this purpose. None of the 'mode-of-production' labels which were available in the Marxist schools fitted on Danhomɛ. The Fon kingdom could not be classified as a subsistence mode of production because the slave trade incorporated it into global markets. Its slave business however was not capitalist production either because the soldiers who raided the slaves were no wage

labourers, but forced labourers (ibid:38) (even though, as Elwert rightly points out, some men could avoid military service by providing other forms of forced labour; see also 5.2.3). Therefore Elwert launched a new 'mode-of-production' label.

He argued that the Fon kingdom had a slave raiding mode of production, which was dominant over and articulated to a subsistence mode of production. Slave raiding would have been Danhomɛ's dominant mode of production, first because state policy was geared towards stimulating slave raiding and trading, and second because it constituted the court's main source of economic gain. According to Elwert (1973:39-40, 89, 97-98) a Fon peasants' subsistence mode of production was articulated[12] to the slave raiding mode of production and supported the latter. Conflicts between different modes of production and between different interest groups were solved in favour of the slave raiding mode of production.

The economic cost of slave raiding for the Fon state would have been much lower than the gain it obtained from slave exports and from the labour of those slaves who were retained in Danhomɛ (Elwert 1973:48-50). Slave raiding was cheap for the state because recruits were not paid for their military services; they even had to feed themselves, at least until they conquered a village which they could maraud. Recruits preferred to bring their own arms because the loss of rifles provided by the court was punished by death[13]. Elwert (1973: 105) contradicts Polanyi's (1966:33-34, 40) thesis that the king redistributed cowries and other goods to the population, and argues that only members of the court received of the king's revenues. Implicitly he also undermines Klein's (1968:217) statement that the king redistributed most of his firearms and other wealth. Elwert (1973:34) believes that recruits were compelled to sell the captives whom they made at a symbolical price to the king; I will criticise this point in 5.1.5 and 5.2.3.

Elwert must be credited for pointing to the importance of violence and of slave raiding for Danhomean economics and politics. Violence became indeed a key feature of Fon society (see 5.2). For the economy of Fon society as a whole slave raiding- and trading must have been important. But for the Fon court its profitability was less than Elwert (1973) asserts because many warlords could sell their own captives (see 5.2.3). Whatever the freedom of war service, I agree that slave raiding was not capitalist- or commodity production for yet another reason: Raided slaves were not 'produced' because Danhomɛ did not contribute to their upbringing.

### 5.1.5 A tributary system?

Coquery-Vidrovitch (1971) argues that throughout the 19th century the politico-economical regime of Danhomɛ was close to a tributary or 'feudal' system in which an *économie de traite* (trade economy) occupied an important place. After 1840, with the rise of the palm oil export trade, the *économie de traite* gradually gained importance but there was no significant change in economic organisation (1971:108). Her main argument is that the king hardly engaged in trade himself, and that he certainly did not monopolise it as Polanyi (1966) and Akinjogbin (1967) pretend, but left it to private merchants. This would have held true for the slave- as well as the palm oil trade. Coquery-Vidrovitch (1971:108-111, 116) also challenges Le Herissé's (1911:243-249), Polanyi's (1966) and Akinjogbin's (1967) description of the Fon king as a totalitarian ruler who would own everything in his kingdom, or as Desanti (1945:91) believed at least all the land. She thinks that the king's so-called ownership of all the land, slaves, oil palms, inheritances etc. in Danhomɛ was an honorary ownership. Only the slaves captured by the king's female battalion would have been his effective property[14],

but even these were not sold by him since he was not allowed to see the sea. The king could only levy taxes from the effective owners.

Danhomɛ's regime, according to her, was close to a tributary or 'feudal' system because the king exploited his people mainly through tributes and shared his power with a handful of big men, the *cabécères*[15], who were comparable to 'vassals' (ibid:110). The eight principal *cabécères* were called *togan* according to Le Herissé (1911:43); they were chiefs of eight regions and at the same time leaders of battalions and merchants. The king collected rights and duties from them and from other traders. Farmers after 1850 paid a palm oil tax to the state. (ibid:110-111, 116).

The *économie de traite* was a market system that linked local markets to universal ones and integrated Danhomean farmers through market exchange. It was the commercial economy of an export product. The Danhomean *économie de traite* existed in the early 19th century, penetrated the kingdom more and more after 1840, and was consolidated under colonial rule. Coquery-Vidrovitch disagrees with Polanyi (1966), whom she accuses of unjustified dualism, that markets were isolated from each other. Goods form other African and European regions were observed on Danhomean markets. Indigenous trade networks stretched from Timbuctu to Angola. (ibid:108, 112, 114-115, 119-122).

Coquery-Vidrovitch's data show that there were indeed many private slave- and other traders in Danhomɛ in the 19th century (1971:110-111). Duncan (1847 I:122-123), Forbes (1851/1966 I:111), Law (1977a:561-568, 573-576), Peukert (1978:230), Fon and Adja mythology and many other sources support this (see 5.2.4). Also her (ibid:115-119) vivid description of private palm oil production and trade between 1840 and 1900 is largely confirmed by my own fieldwork and by archival sources. She must be credited for underlining the importance of private trade and for pointing to the fact that in many cases the king did not intervene directly but through taxes, rights and duties.

However, Coquery-Vidrovitch's thesis that the Fon kings abstained from trading themselves is not very convincing. As far as the slave trade is concerned her point is contested by Law (1977a:560-567). Coquery-Vidrovitch's opinion seems to be based on a wrong interpretation of a testimony from Duncan, who was told by king Gezo in 1845 that

> 'although he supposed many white men believed he sold the greater part of the slaves sent from that country, he could assure me that this was not the case; but the caboceers, whose soldiers captured them, were always considered to be the owners of the slaves taken in war … with the exception of those who were considered unfit for the market. These latter were considered to be his (the King's) property, and were sent to the different palaces to assist in the duties of those establishments.'[16] Gezo further 'admitted that all prisoners taken by his wives, or female soldiers, were his property.' (Duncan 1847 vol II: 264)[17].

Gezo's statement implies that the captives of his whole standing army, which included a male and a female contingent, belonged in principle to the king. This is further corroborated by eye-witness descriptions of public ceremonies during which warriors 'sold' their captives to the king for a symbolical amount of cowries, in later times complemented by a piece of cloth[18]. The ceremony was called 'the king washes his hands' for it was meant to legitimise (morally and spiritually) the fact that the king exported these slaves (Herskovits 1938 I: 79-80, II: 96). Descendants of two important officials in the Fon kingdom, the *Migan* ('minister of justice and of war') and the *Ajaho* ('minister of religious affairs'), claim that the *Migan* and the *Ajaho* divided the war captives into four categories: the first (the skilled craftsmen) to work in their professions in and around Abomey, the second to work in the king's farms,

the third for export, and the fourth for the war-lords and *gbonugan* (men of rank) (Obichere 1983:198). It is true that the Fon kings did not accompany their slaves to the seashore, but they had agents who marketed slaves on the king's behalf in Whydah (Law 1977a:562-563). Pruneau de Pommegorge, who was active on the coast in the 1750s and early 1760s, clearly distinguished between four or five merchants who sold slaves only on the king's behalf, and 'the other merchants' who sold 'the captives of [all] Africa, on commission or on their own account (Pruneau de Pommegorge 1789:208-209 quoted in Law 1977a:563 and 565). Cruickshank[19] estimated in 1848 that 8000 slaves were exported annually from Dahomey, of which 3000 were sold by the king.

In Chapter 6 I will discuss, mainly on the base of oral and archival sources, the role of the king and of other actors in palm oil production and trade. My fieldwork also sheds new light on palm oil taxes in Danhomɛ.

### 5.1.6 A commodity exchange mode of production?

Manning (1982:7) argues that 'Dahomey', in his terminology the whole area that is now South Bénin including the Fon- and Adja plateaux, already had a 'commodity exchange mode of production' between 1400 and 1660. In this mode of production, according to him, individuals and families produced goods for sale and purchased a large portion of the goods they consumed, including food, manufactures, raw materials and luxuries. The economy was monetised and markets were tied together in a network. The commodity exchange mode of production continued to dominate the Dahomean economy, but in the kingdoms from the 18th century onwards a 'slave-labor mode of production' was joined to it. In the slave-labor mode of production, slaves were employed in domestic production, as porters in commerce, and as labourers in coastal industries. (Manning 1982:10-12).

After 1840 Dahomey's revenue from the export of palm products bypassed the revenue from slave exports (Manning 1982:13). In the 19th century the capitalist mode of production appeared in part of South Bénin's transport and commerce, but the commodity exchange mode of production still remained dominant (Manning 1982:16). In Manning's (1982:19) terminology Dahomey entered the capitalist era in 1930 even though the commodity exchange mode of production was still in many ways the most important sector of economy, because the importance of capital goods in the domestic economy, for example motor vehicles and gasoline, grew sharply. I wonder whether Manning did not exaggerate the importance of capitalism.

All these models were developed to support certain theoretical standpoints; they were never checked in the field. They try to explain which political and economic structures empowered the state, but do not give much insight into the common Fon and Adja's cultural values and ways of making a living. I will present in contrast a model of the local actors' oral history which provides a better inside view.

## 5.2 The Fon kingdom ca. 1600-1850: *vodun* and violence

In this section I will present an oral history of the Fon kingdom between 1600 and 1850, which is the period during which slaves constituted the principal transatlantic exports. My analysis centres on the villages Kana, Gnidjazoun, Sahè, Lissazounme, Atchia and Aoundome, where I did anthropological and oral historical research in 1989-1991. These local histories will be

presented in the context of a history of the Fon kingdom as a whole. Published sources on Danhomɛ will be critically reassessed. Emphasis will be on technological, socio-political and religious innovations, which were largely under-analysed by other scholars.

Of particular interest was my stay in the village Kana-Dodome in 1989-1991. Kana was the second capital of the Fon kingdom, where the king had a second palace and a second court, which was in many respects analogous to his principal court. The case study of Kana in this chapter will therefore provide a window on the history of the Fon kingdom as a whole. My stay in Lissazounme and research in Sahè gave insight in pre-colonial Adja-Fon relations.

### 5.2.1 Origins of the royal family: migration of the Agasuvi from Tado to the 'Gedevi' plateau

The establishment of the Fon kingdom coincided with the establishment of European traders on the Bight of Benin. Oral traditions connect the origin of Danhomɛ first to Tado, which was the regional centre of iron technology in pre-Portuguese times (see 4.1), and then to the kingdom of Allada, which was the dominant kingdom and the principal trade partner of the Europeans in 16th and 17th century South Bénin. Myths of origin of the Fon kingdom are found today in Tado, Allada and Abomey. Although some minor differences in detail and in emphasis exist between these narratives, they agree in general on the essential points. I give a synthesis of the above-mentioned accounts as I found them in the literature. Regarding the migration of the Fon kings' ancestors from Tado to Allada and the centralisation of the Allada kingdom, mythology reads as follows. A daughter of a *nyigbafio* of Tado[20] had a son by a male leopard[21]. The child was named Agasu and grew up in Tado, where his descendants became a powerful clan. Eventually the head of the Agasuvi clan competed for the *nyigbafio*'s throne, but in vain. The murder of some of his opponents[22] provided him the surname Adjahuto (killer of the Adja). He fled Tado and eventually arrived in Ayizoland in the village Davié-Sɛmɛ, where Allada is now (Le Herissé 1911:274-275; Oké 1984:51-52; Herskovits 1938 I: 166-169)[23]. When the chief of Allada (called Tɛdo or Tɛyido) heard of Adjahuto's exploits, he retired from political leadership, assumed a purely honorary and religious role, and left the rule of the country to Adjahuto[24] (Herskovits 1938 I: 166, 168; Palau Marti 1964:100, 115-116; Oké 1984:57-58).

Adjahuto probably reigned in Allada in the early 16th century. Portuguese missionaries attested that the kingdom of Allada was well established in 1539[25]. Since at least 1553 Allada had direct trade contacts with Europeans, but indirect contacts existed since the end of the 15th century (Akinjogbin 1967:22). Allada soon engaged in the transatlantic slave trade. By 1574 its exports were regular enough for the Portuguese trader Garcia Mendes Castello Branco to write that 'We send to trade with our friend the king of Arda (Allada) slaves, ivory, cotton cloth, palm oil, and many vegetables such as yams and other foods. Every year one or two vessels filled with these items leave this port'[26].

Before the 16th century the Ayizo of Allada were rather acephalous, though they recognised the *nyigbafio* of Tado as their distant socio-religious head. They claimed descent from Tado, spoke a Ewe-Adja dialect (see 4.1), and probably depended on Tado for iron. The new possibility to obtain European iron and other commodities on the nearby coast must have helped Allada to declare greater political independence from Tado and to become more centrally organised. Nevertheless Allada continued to show socio-religious respect to Tado, amongst others by accepting the *nyigbafio*'s spiritual powers and by claiming that its own

king[27] descended from the Tado dynasty. Hence as far as Allada's cosmovision and ideology were concerned Akinjogbin (1967) was right that Allada confessed a 'kinship social theory'.

A second set of myths, of which there are again several versions, narrates how Dogbagri, the father of the Fon dynasty, migrated from Allada to the 'Gedevi' plateau. The dynastic genealogy suggests that Dogbagri left Allada around 1600. Dalzel (1793/1967:1) estimated that it was the late 16th century[28]. Most versions agree with Pazzi (1979:192-193) on the following points: At the death of one Allada king (the second king of the Adja dynasty, called Kokpon, according to some traditions)[29], three[30] of his sons contested for the throne. The younger brother Todo-Aklin or Dogbagri lost the strife and migrated to the north; he became the ancestor of the Fon kings. An elder brother[31] went east, where he or one of his descendants founded the kingdom of Hogbonu (Porto-Novo)[32]. Before leaving Allada, Dogbagri's third son Dako quarrelled with his mother in law Donu one day while she was dying indigo cloth. According to the story he killed her and put her into the indigo jar. In memory of this event Dako chose an indigo jar as his royal symbol and 'Dako-Donu' as his 'strong' name, later when he became king.

Donu's indigo jar seems at first sight a trivial detail of this myth, but it was in fact an important 16th century innovation on the Allada plateau. Knowledge of cotton cultivation, weaving and dying was introduced to Allada only in the first three quarters of the 16th century, probably from the kingdom of Benin (in present day Nigeria)[33]. By 1574 Allada sold cotton cloth to Portuguese traders, according to Branco's just mentioned testimony[34].

Most Fon narratives agree that Dogbagri first settled in Houegbo (10 km north of Allada). 'Around 1610' he left this place again as a result of a dispute and continued northwards (Le Herissé 1911:277). Several Ayizo groups who also wanted to leave the Allada plateau joined him to the north. One of these Ayizo was Agbaja from Sèhouè, whose account I gave in 4.1.2. The migrants forged ritual- and fictive kinship ties among each other by contracting the *vodununu* (blood- or 'spirit'-drinking ritual)[35].

Dogbagri and his followers continued northwards to the 'Gedevi' plateau, where they settled in Kana in the ward Tota ('on the river source'). They received some land from *aïnon* Agidi, one of the principal Gedevi *aïnon*, who lived in the neighbouring hamlet Kana-Kpota (see 4.1.2)[36]. There the newcomers from the Allada plateau were called Aladahonu, which means 'people from Allada'.

The Aladahonu accepted Dogbagri and his descendants as their leaders. Dogbagri's clan was called Agasuvi ('children of Agasu', a name which underpinned their claim to descend from the Tado and Allada royal families) or Wegbonu ('people from Houegbo'). The other Aladahonu were called Halanu or Akpénu ('people from Akpé[37]).

### 5.2.2 Establishment of a kingdom on the 'Gedevi' plateau: technological and socio-political innovations in the 17th century

On the 'Gedevi' plateau the Aladahonu soon grew in numbers, in popularity and in influence. One of the reasons for their success apparently was textile production. They came with the (in Allada newly introduced) knowledge of cotton cultivation, weaving and dying. Dynastic traditions and local traditions from Kana agree that during their early years on the 'Gedevi' plateau the Aladahonu made friends by offering cloths woven from a mixture of

cotton and raffia. Until then the 'Gedevi' made clothes from the bark of the *Antiaris africana* tree, enveloped their death in the bark of the kapok tree (*Ceiba pentandra* or *Bombax spp.*), and only occasionally purchased some cotton cloth from Hausa traders[38]. Dako-Donu's son Hwegbaja coaxed the 'Gedevi' by giving them shrouds woven entirely from cotton (so far only cotton-raffia mixtures were in use). He brought a weaver to the central 'Gedevi' plateau who taught to weave cotton shrouds[39]. Hwegbaja rose in prestige among the 'Gedevi' chiefs because he dressed in a much larger cloth than they did[40].

The Aladahonu rapidly grew in numbers, partly because migrants from the Allada plateau continued to join them. In 4.1.2.2 I narrated the myth on how they asked the *aïnon* Wo and/or Kpahè in western Kana for more land, received a plot which they called Houawe ('white *Parkia biglobosa* tree'), and then killed the *aïnon* Kpahè[41]. According to a dynastic account the dispute between Kpahè and the Aladahonu arose because he envied their maize crop and uprooted it in the time of Dogbagri (1610-1625). Dogbagri's first son Ganyehesu, who would have died together with his father in Kana-Tota 'around 1625', decorated one of his *àxósúkpò* (wand of office, see 4.1.2) with a piece of iron in the shape of a cob of maize (Le Herissé 1911:279, 281; Adandé 1962:96; Oké 1984:60), which suggests that maize was a revolutionary novelty among the Aladahonu of his time.

Maize (*Zea mais*) spread to the coast of Bénin, probably from the Gold Coast or from the kingdom of Benin[42], towards 1600. Around Whydah[43] and among the Ehwe-Adja and the Sahwè it quickly became a success (see section 4.3.3). South Béninese farmers tended to favour maize over pearl millet (*Pennisetum americanum*), which was so far their principal cereal, because it yielded more than the latter. If the dating of the Fon traditions is correct, the Aladahonu had earlier access to maize than the 'Gedevi', probably through their contacts with the South. According to descendants of Gbese and Agbaja the 'Gedevi' did not yet have maize in the time of Dako-Donu (1625-1650) (see 4.1.2 and the narrative from Gnidjazoun in 4.3.3), which might explain their envy of Dogbagri's maize:

> "When our ancestors moved from Houawe to Gnidjazoun in the time of Dako-Donu the principal crops here were pearl millet and cowpea. Yams were hardly cultivated and maize did not exist. They continued to send every year one calabash with pearl millet and smoked meat to Dako-Donu in Houawe." (Interview in Gnidjazoun 23-2-1989).

The Aladahonu not only grew in influence because of their knowledge of maize- and cotton cultivation and of weaving. They also came with superior weapons and did not hesitate to use them against the 'Gedevi'. In a culture where newcomers were expected to show respect and submit to the local chief(s) of the land, the Agasuvi violated their hosts and did not try to hide it from public accounts, which gives credibility to these dishonourable elements of the myths (Vansina 1985:105-108). Fon dynastic and neighbouring people's local traditions report numerous acts of aggression of the Agasuvi towards the 'Gedevi'. Already in the 1770s Dalzel's (1793/1967:1) South Béninese informants told him that 'Tacoodonu chief of the Foys killed the prince of Calmina and appropriated his town'[44]. According to Agasuvi dynastic tradition Dogbagri not only killed Kana's *aïnon* Kpahè but also its *aïnon* Wo when the later felt threatened by the Aladahonu's growing numbers (Herskovits 1938: I: 16; Oké 1984:61-62, 64-65; Le Herissé 1911:279-281).

After the death of his father Dogbagri around 1625[45], so the Agasuvi tradition reports, Dako-Donu continued to submit the 'Gedevi' on the north-east of the plateau (in particular the Za) by killing several of their chiefs. He killed both Akobisato from Zavè because he captured some Aladahonu and sold them as slaves, and the chief of Tindji for purchasing

them (Le Herissé 1911:282). Dako-Donu killed the chief of Zakpo[46] because he prevented the Aladahonu from entering the Zakpo market, and moved the market to Bohicon. Zakpo's chief's son and his followers fled 3 km to the north and founded the village Avokanzoun ('cotton bush')[47] (Le Herissé 1911:283). Next, Dako-Donu expanded to the west, to the region where Abomey is now. Dalzel (1793/1967:2) learned in the 1770s that: 'Tacoodonu conquered Abomey around 1625'[48]. In the west Dako-Donu first established alliances by marrying the daughter of Awisu from Dokon, who was the principal 'Gedevi' *aïnon* after Kpahè. The son of this union, Hwegbaja (who was designed heir to Dako-Donu's throne), wanted to live near his mother's village, and received from the *aïnon* Agri a plot of land at the site where Abomey is now. Dako-Donu killed Agri because Hwegbaja judged the plot to be too small, and Hwegbaja built his house on Agri's tomb[49].

How could the relatively small group of Aladahonu submit the 'Gedevi' so rapidly? The Aladahonu came with more iron weapons as the 'Gedevi' had. I argued in 4.1.2.3 that the 'Gedevi' until the 17th century did not have much iron, and that their principal tools and weapons were hooked wooden sticks *kpo*, bow and arrow, and possibly clay projectiles. If at all they smelted and forged before the arrival of the Aladahonu it was only on a small scale and with rudimentary techniques in the villages Sefunwuyanta and Koklofɛnta on the eastern slopes of the plateau; there were no smiths in the Gedevi's 'capital' Kana[50]. The Aladahonu however came with weapons forged from iron which Portuguese traders sold in Allada[51]. The memorial appliqué cloth of Dako-Donu shows the Aladahonu brandishing iron cutlasses against the 'Gedevi' who are armed with hooked wooden sticks[52].

An account of a descendant of the first Kana blacksmiths suggests that Dako-Donu established smiths near Houawe in a time when the Gedevi did not yet have smiths in Kana[53]. Mythologies of the Agasuvi and of various blacksmiths' families agree that blacksmiths from Hinvi (near Allada) worked for Hwegbaja (ca. 1650-1685)[54]; either he[55] or his son Agaja[56] (1708-1732) would have installed them in Kana for the production of weapons. Kana remains until today the principal forging village on the Fon plateau. Hwegbaja even owned the first few rifles in the inland according to dynastic myths[57].

Hwegbaja too is portrayed in numerous dynastic myths as an aggressor. Some of the motifs from the myths about Dako-Donu reoccur. Some of these myths illustrate the authority of 'Gedevi' *aïnon* over water sources, see 4.1.2. Dynastic accounts recorded by Oké (1984:65) and Le Herissé (1911:284-289) relate that Hwegbaja killed his neighbours Agbomɛ-hosu[58], Demlakpo, Dan, Zanhuanu, Di and Lansu. Dan was an *aïnon* who offered land for the house of the Agasuvi's crown prince Akaba. Again the plot was judged too small, Dan was killed and the Akaba's house was erected on his tomb. This provided the Akaba's kingdom the name Danhomɛ (in the belly of Dan). Zanhuanu, Di and Lansu were *aïnon* who controlled water sources in the vicinity of the arid Abomey. Hwegbaja killed Lansu because he kidnapped two of his wives, and the two others because they did not give free access to their sources.

Hwegbaja's wealth and power made him rise to the rank of 'big man' or principal chief among the 'Gedevi'. These principal chiefs would have formed a council which met in Dokon and was chaired either by Awisu[59] and/or (later) by rotating chairmanship[60]. The different versions of the narrative agree that Hwegbaja gained prestige by his large cotton dress, by offering feasts and other gifts to the chiefs, and that he was finally accepted as permanent leader of the council[61].

I will devote a few lines to Hwegbaja's wars on the western 'Gedevi' plateau, first because some of my Fon as well as Adja research villages were involved in them, and second because they shed light on ancient Adja chieftainship. Ehwe-Adja groups lived on the western 'Gedevi' plateau (see 4.1.1, 4.1.2, and Table 5.1 in Appendix 5) and controlled the confluents of the river Couffo. Towards the end of his life Hwegbaja started to conquer these Adja villages, a task which was finished by his sons Akaba and Agaja and his grandson Tegbesu.

Several Adja villages on the south-western 'Gedevi' plateau, as Fon dynastic accounts admit, resisted Hwegbaja for some time. These accounts report of a war between Hwegbaja and some 'Gedevi' led by Agluï, the Adja chief of Sahè and Gboli, who allied themselves with the Adja of Tokpli[62] on the Mono river. Hwegbaja's men killed many Adja (Le Herissé 1911:287, 293; Pazzi 1979:198). In the early years of Hwegbaja's successor Akaba (ca. 1685-1708) the Adja of Tokpli marched for a second time against the Danhomeans according to an oral tradition recorded by Dunglas (1957:88, quoted by Pazzi 1979:218, 233). Akaba killed Agluï and also the Adja chiefs of the Sinhoué hamlets, and appointed his own chiefs in Sahè, Gboli and Sinhoué according to the Agasuvi's dynastic account (Le Herissé 1911: 293-294).

A local myth of origin of the actual inhabitants of Sahè-Loukpè, who consider them selves to be Fon, reports:

> 'The Adja who lived in Sahè-Loukpè were chased to the other side of the river Couffo. Under the reign of Hwegbaja a hunter from Abomey with the name Agboglon Ajanu ('Agboglon the Adja') came to Sahè and saw that there were three rivers in the proximity of Sahè, while Abomey was arid. He decided to seize (*sɛxa*) these rivers, from which the name Sahè is derived. This man is our ancestor.'[63]

The Adja village Sahè-Abigo was conquered by Akaba and is now a Fon village. Nevertheless most actual inhabitants of this village belong to the *akò* Guduvi Adjalenu[64], which is a Fon clan of Adja origin[65]. Probably many of the original Adja inhabitants either stayed at Akaba's conquest or returned later on, submitted to the Fon, and adopted Fon identity. Present day inhabitants claim that the village was founded in a big forest *zukanguku*[66], but not far from the village was a savannah spot called *fanji* ('on *Andropogon gayanus*').

Also local Ehwe-Adja myths mention Fon wars against their ancestors on the Abomey plateau and on the north-eastern Adja plateau around 1700. I will come to these Adja narratives in 5.3.2. The area of Lissazounme on the south-eastern Abomey plateau was called Hungeme in the time of Hwegbaja and was inhabited by Adja. The myths of origin of the older lineages in Lissazounme hold that a certain Adjasoho[67] (see Figure 8 in Appendix 2), a Danhomean from the village Zounzonme[68] near Abomey, fought in the early 18th century against the Adja at Hungeme. He stroke them and chased them 'because he had the right to beat any one in the king's name'. For this deed he received the name Adjasoho, which means 'he who takes and strikes the Adja'. Some of the myths add that Adjasoho's eldest son Bovi was a friend of king Agaja and helped him[69] and/or his son Tegbesu[70] to chase the Adja from Hungeme-Lissazounme[71]. After the departure of the Adja the village would have been abandoned to the bush[72]. In sections 6.3 and 8.2 the 19th and 20th century histories of some Lissazounme families will be discussed.

All myths of Lissazounme's origin agree that Lissazounme was founded under the reign of Tegbesu by Bovi, his younger uterine brothers Ahanyan and Sakla, his half-brother Adiko, and his friend Agbomankunzu (Figure 8), and that Bovi became the priest of a new shrine

(*vodunkpamɛ*) under the authority of Tegbesu. In section 4.2.3 I presented local accounts about the vegetation around Lissazounme at the arrival of the Fon settlers. Another local tradition motivates the establishment of the new shrine:

> "King Agaja made war against the Adja of Aglazoume and brought a woman from there (Hwanjile) who became the mother of Tegbesu. This woman worshipped the *vodun* Lisa; it was the *vodun* whom the Adja worshipped. King Agaja sent Bovi and other people to chase the Adja and to find the place of the *vodun* Lisa, because it was the *vodun* of the mother of Tegbesu. Since she could no longer worship in Aglazoume, she would henceforth worship in Lissazounme. Bovi and his son went to search the *vodun* in the forest, and suddenly a panther came out of the forest and killed his son. Bovi fulfilled his mission by chasing the Adja and by finding the *vodun* Lisa. The king asked him to be its priest. Bovi is my 'father'. Our lineage founded the village Lissazounme."[73]
>
> Some inhabitants of Lissazounme from other lineages disagree with the last three points. According to a descendant of Ahanyan "Ahanyan was the first to settle here, and then came his brother Sakla, then their brother Bovi."[74] A descendant of Sakla thinks that it was Bovi's friend Agbomankunzu who discovered a little hut in the bush and identified it as the Adja's shrine of the *vodun* Lisa[75]. Finally an old member of the lineage Agbomankunzu said when I visited him in his field: "Sure, Lisanon is great here, after all it was their ancestor Bovi who came to search the *vodun* Lisa here. But it was Agbomankunzu who asked him to be *vodunon*". I replied "Oh, I learned that it was king Agaja or king Tegbesu who asked him to be *vodunon*". "Sure, in those days one could do nothing without the consent of the king".[76]

Other Fon joined the four brothers and their friend Agbomankunzu in Lissazounme under the reign of Kpɛngla (1774-1789). One of them was Lakan, who came with his son Segbeji from Houawé on invitation of Sakla[77]. He received land from the brothers Bovi-Lisanon, Sakla and Ahanyan. Another was Tobada, a 'son' of Kpɛngla. When Tobada's mother Naye Lolo was pregnant of him the oracle *Fá* sent her to Lissazounme because her child had to live there. The king 'entrusted' Tobada to Sakla. Both Segbeji and Tobada founded their own lineages in Lissazounme. Also the next king, Agonglo (1789-97), dispatched a 'son', Kahun, to Lissazounme (Figure 8 in Appendix 2). Kahun married a Lisanon daughter and their descendants were adopted into Lisanon lineage[78]. Agbangnizoun, between Sahè and Lissazounme, would have been founded under similar circumstances:

> "Our village Agbangnizoun was established in a forest. Tegbesu sent our ancestors here to farm and to support the rulers. On fertile forested land our ancestors cultivated on the flat, but after about 5 years the roots of the woody species decomposed, grasses such as *gbakpo*[79], *fan*[80] and *adontun*[81] started to grow, and hence they were obliged to ridge. They grew pearl millet, cowpeas, maize, groundnuts, sorghum, *dohi*[82], bambara groundnut, and also some yams and cassava." (Daa Zontin, Agbangnizoun 15-8-1990).

The myth of origin of Lissazounme introduces a theme on which I will expand in the next section because it was an important trend from Agaja (ca. 1708-1732) onwards: the establishment of royal *vodun* cults and the transformation of the local family *vodun* cults into a state religion.

Local narratives from various sources suggest that after the arrival of the Aladahonu more and more villages were installed on the red 'Gedevi' plateau soils, that is on the centre, the (south)-west and the north of the plateau. Examples are the Gbese family and the Agbaja family who moved to Gnidjazoun (see 4.1.2), Zakpo's chief's son who moved to Avokanzoun, and Hwegbaja who settled in Abomey. Dako-Donu's younger brothers Djegbo and Zon(lon) would have established themselves in Agonvezoun (2 km to the north-west of Houawe)[83]. The red soils were more forested and more suitable for agriculture than the soils

of the eastern slopes of the plateau (see 4.2). Their colonisation was probably facilitated and encouraged by the agricultural innovations of the 17th century.

The local traditions of Sahè and Lissazounme indicate that hunting was still a principal livelihood activity on the plateau from the times of Hwegbaja (ca. 1650-1685) to Tegbesu (1732-1774), but that agriculture also became important. Linguistic, archival and dynastic mythological evidence supports that maize and cotton cultivation as well as the technology to weave cotton were introduced to the 'Gedevi' plateau in the first half of the 17th century. Also the availability of iron increased during this period.

### 5.2.3 Military and religious reforms in the 18th century

In the time of Agaja (1708-1734) many things changed in Danhomɛ. Agaja set up a more effective army and administration. Under his reign several socio-religious transformations started. I will mainly discuss the military and religious changes and their implications for Danhomean livelihood practices[84]. Agaja became known as the king who conquered the kingdoms of Whydah and of Allada and incorporated them into Danhomɛ; I will not repeat this history here. From Agaja onwards Danhomɛ dominated the Atlantic slave trade on the coast of Bénin.

Agaja's rule is intertwined with the history of Kana-Dodome, one of the villages where I lived in 1989 and 1990. From Agaja onwards, all Fon kings built their own country residence in Kana, their main palace being in Abomey[85]. The king's principal officers also had two compounds, one in Kana and one in Abomey (Herskovits 1938 II: 41). Agaja installed his palace in Kana-Dodome between the river Hlan and the first Kana blacksmiths. Surprisingly, some remains of the clay palace walls are still there. The durability of these walls, so the inhabitants of Kana-Dodome believe, would be due to the fact that they were mixed with human blood[86].

The kings' palaces in Abomey and Kana were mainly inhabited by the kings' *axósi* (wives, female slaves and eunuchs) and their children (own interviews; Norris 1789/1968:xiii; Forbes 1851/1966 I:66; Le Herissé 1911:27; Bay 1983; Morton-Williams 1993:107, 110). Travellers observed and oral tradition confirms that at least from 1772 onwards the king's 'wives' tilled his fields in Kana (Dalzel 1793/1967:121; Duncan 1847: 22). From Agaja onwards the kings settled many of their specialised craftsmen, dignitaries and slaves near their palaces, some examples of this will be given later in this section (own interviews; Yélouassi 1987:27-28). Other royal slaves in Kana mainly had to farm. Groups of male slaves mostly founded their own lineages, became Danhomeans, and stayed after the abolition of the kingdom. Only some of those who were enslaved just before the French conquest decided to return home when slavery was outlawed in 1894.

> "Our ancestors were captives of Agaja. He told us to live in Tota and to cultivate cereals on the land between our houses and the river. We were not allowed to leave this land. Only since the French colonisation we started to go elsewhere." (Interview in Kana-Tota, 9-3-1989)

> "The king settled Yoruba slaves very nearby to farm for him, in Kana-Mignonhito at a place called Hlomado. With the advent of colonial rule these Yoruba left, but you can still see the ruins of their houses." (Alisɛ Adibe, Aoundome 17-8-1989)

### *Military innovations*

Agaja organised and equipped the army more efficiently. First he developed the iron industry and made sure that it came into the hands of people who were loyal to him. He or his father installed blacksmiths from Allada in Kana[87]. He also settled some Kana blacksmiths in Abomey (Ederveen 1990:70). The 'indigenous' Mèdasaénu, who forged on a small scale in Sefunwuyanta and Koklofɛnta, disappeared around his time if not before, see section 4.1.2.[88] When the iron industry developed in Abomey, the Adja blacksmiths ceased to smelt and forge in Tado according to both blacksmiths' and dynastic mythology from Tado[89] which I render in 5.3.

Agaja was the first to provide firearms to his standing army. Firearms only began to play a decisive role in West Africa's inland from the 1690s onwards[90]. Dynastic traditions recorded by Le Herrissé (1911:296-297) and Abomean blacksmiths' narratives collected by Bay (1987:11) agree that Agaja initially acquired guns through King Huffon of Whydah, who levied the heavy tax of one slave per gun, and then rendered them useless by removing the hammers before he delivered them to the Fon. The Hountondji blacksmiths in Abomey however repaired the guns for Agaja. Blacksmiths in Kana explained further that

> "The blacksmiths in Kana and Abomey had to produce bullets for the king, for which they received some iron free of charge. They bought additional iron to forge tools, which they sold on their own account on the local markets. In the 19th century the Kana blacksmiths also made cartridges."[91]

Agaja himself is reported to have said in 1726: "Both I and my predecessors were, and are, great admirers of firearms, and have left off almost entirely the use of bows and arrows, though [those] much nearer the coast use them, and other old-fashioned weapons"[92]. But this was probably only true for the standing army. Most of Agaja's recruits continued to use old-fashioned weapons.[93]

Agaja instituted or consolidated the office of *gawu*, chief of the army and minister of war, and perhaps also the office of *kposu*, the adjutant of the *gawu* (Pazzi 1979:239). The *migan*[94] and the *gawu* seem to have been the principal *gbonugan* ('ministers') under Agaja's reign (Le Herissé 1911:62, 297). Agaja's *gawu* founded the hamlets *Gawusalamɛ* (Gawu's ward) near his palace in Kana-Dodome; the size of these hamlets shows that the family was economically successful. Agaja's *gawu* belonged or was incorporated into the royal clan, the Wegbonu[95]. He was possibly adopted into Agaja's family because of his attachment to him, or he might have been his own brother. Local narratives from the villages Atchia and Aoundome, 3 km south of Kana, and another one from the royal family seem to support the latter:

> "The king appointed his brother Gawu to be priest of the *vodun* Hlan[96] here in Atchia. Before every military campaign the king came here to pray to Hlan, and after every victory he returned to sacrifice some captives. The inhabitants of Atchia and Aoundome had to bring every year *nujo* (tax in kind) to Gawu. The priest was allowed to keep them. Citizens from other regions of Danhomɛ however had to bring their *nujo* to Abomey."[97]

> "In kingdom times we used to send *nujo* to Gawu in Atchia to sacrifice them." (Alise Adibe, Aoundome 17-8-1989)

Under Tegbesu (1734-1778) the *vodun* Hlan caused great harm to the Danhomeans and expressed his envy of the king's position. As a result Tegbesu reinstalled the 'Gedevi' priest of Hlan (whom his predecessor had dismissed), and gave him the right to royal status symbols,

namely sandals, an umbrella and a hammock[98]. A caterpillar invasion in 1950 was also attributed to Hlan and the plateau Fon made sacrifices to satisfy him[99]. Today the high priest of Hlan is a descendant of the *aïnon* of Aoundome and still has the privilege to wear royal status symbols[100].

Agaja introduced military service, according to Garcia (1988:125) for 'every adult subject capable of bearing arms'[101]. Individuals however managed to escape from recruitment. Recruitment was, on royal orders, through *hɛnugan* (lineage heads), *mɛxo* (lineage elders), and warlords *ahwangan* (Elwert 1973:33; Garcia 1988:125, 140). In early times most *ahwangan* were probably at the same time lineage elder and recruited in their own lineages. Later more and more *ahwangan* were members of the new elite, recruiting among their clients. The *mɛxo, hɛnugan* and *ahwangan* also led their own recruits on the battlefield (Le Herissé 1911:63, 68-70; Garcia 1988:125, 140).

To Agaja[102] is also credited the creation of the office of military spy *agbajigbɛto* or *lɛgɛdɛ*. These spies were recruited and led by chiefs called *agbajigan*, and were put under the command of the *ajaho*, the minister of religious affairs[103]. Spies scouted the villages that Danhomɛ planned to attack and served as guides during the invasion[104].

The *mɛxo*, *hɛnugan, ahwangan* and *agbajigan* benefited socio-economically from their military roles. In the first place they misused[105] their power to recruit to extract a surplus in kind from their people. Local accounts by Fon of chiefly- as well as slave descent maintain that military service could be avoided by paying tax in kind and in later times also by money:

> "In the times of the kings at least those who had not sent a son to war had to pay a tribute in palm oil and palm kernels to the tax-collectors. The quantity depended on the capacity of each one. The tax-collectors also seized domestic animals, and kept part of the oil and kernels for themselves". (Own interview in Kana 16-11-1990).

> "In the time of the real kings, until the French conquered Danhomɛ, the *nujo* were collected by the *gbonugan*. The *gbonugan* chose in each village about 5 *nujoto* and told one 'you bring each year this amount of maize', to another 'you bring that amount of palm oil', to another 'you bring this amount of *li*[106]', to another 'you bring so many cowries'. Nobody had to bring palm kernels, but in rare cases some had to bring beans. They had to render these things in order not to be sent to war or to be recruited for forced labour: drummer, hammock carrier, cultivator for the king, soldier... The *gbonugan* recruited the soldiers and the *mɛde* (forced labourers) among those who were not *nujoto*. The French appointed my father as *chef de région*. He perceived *takwe* (head tax) for the white men and *nujo* for Agoli-Agbo, but after the destitution of Agoli-Agbo (in 1900) he kept the *nujo* for himself." (Interview in Lissazounme 7-9-1990)

In Fon eyes different forms of forced labour (*mɛde*), including military service[107], and different kinds of tax could be substituted for each other. Who had to pay what depended on negotiations between individuals with their warlords and/or tax collectors, and possibly even between individuals and the king[108]:

> "My grandfather was chief of the army *agbajigan*. One day the king requested him to send his son to war. My grandfather pleaded with the king to let his son serve in another way. So the king told my father to give every year 41 *kon* (of 50 kg each) of grains of maize, beans or pigeon peas, depending on which crop produced well. But the king gave him twelve slaves to help him." (Avohuinon Gbotan, Sahè-Abigo 12-11-1990).

In early colonial times many Fon gave money and agricultural products to local *chefs* or worked in the *chefs*' fields in order to avoid labour recruitment on behalf of the French State. A son and a wife of a *chef de village* as well as a letter of the French *commandant* of Abomey

testify to that Fon *chefs* and farmers considered tribute and labour service to be exchangeable and that farmers bribed the *chefs* to be exempted from obligations towards the state:

> "My father Golo was a *chef* here in Sahè, they carried him in a hammock[109]. The villagers came to ridge for him free of charge in order to be exempted from *mɛde*. The *mɛde* was forced unpaid labour on roads and railways far from the village. It is true that the white men paid for the *mɛde*, but they paid through the *chefs de canton*, and these never transmitted the salaries. This happened in the times of *chef* Ganslègo." (Tessi Golo, born around 1910-1920, Sahè-Abigo 7-9-1990).
>
> "My husband Golo was *chef de village*. The people came to ridge for him while we his wives sowed." (Ahosi Glodjo, Sahè-Abigo 18-10-1990)

> '*(…) honneur vous faire parvenir sous ce pli Proces-verbaux enquête faite en Août 1931 sur agissement chef de région GNACADJA Dogbogan dit Davou à la suite transmission plainte habitants Detouonou, qui accusaient ce chef de se faire verser de l'argent pour exempter certains de ses administrés des prestations en nature et du recrutement des travailleurs de Savé. Les faits ont été suffisamment prouvés pour que Davou fut relevé de ses fonctions de chef de région de Détouonou (…). Davou a raison lorsqu'il dit que ces faits sont de pratique courante. (…). C'est sourtout au sujet du recrutement des travailleurs du Savé-Niger, beaucoup plus que pour les prestations ordinaires que tous les indigènes savent qu'ils peuvent racheter pour 30 francs, que ces faits se produisent. Les cultivateurs répugnent à abandonner cultures, femmes et enfants pour aller travailler pendant 6 mois aux Voies de Pénétration malgré l'appât d'un salaire de 2,50 par jour et la ration. Ils préfèrent, lorsqu'ils le peuvent, donner cent, voire deux-cents francs, pour s'en exemter. Je suis entrain de faire une enquête sur un fait identique dans le canton de Cana.*'[110]

These local testimonies falsify the image of Danhomɛ, as it is often advanced in the literature[111], that every adult Danhomean man had to perform military service as well as being tributary to the king.

In the second place the *hɛnugan* and *ahwangan* were able to appropriate booty, including slaves. Though it is often said that all captives belonged to the king (Herskovits 1938 I: 82; Lombard 1967a:74) and that Fon warriors had to render him the slaves whom they or their regiments captured for a symbolical price (Le Herissé 1911:52; Elwert 1973:34), this probably applied only for the standing army. Gezo's statement to Duncan (see the quotation in 5.1.5) implies that the *ahwangan* (called *caboceers* by Duncan) were considered the owners of a large proportion of their regiments' captives and could sell them on their own account. Forbes (1851/1966 II: 62) listed the *Mehu* and the *Migan* among the Danhomean military chiefs who dealt slaves. The false image that all war captives belonged to the king was probably created by eye-witness descriptions of the 'the king washes his hands' ceremony (during which some warriors 'sold' their captives to the king for a symbolical amount of cowries, see 5.1.5), but this does not prove that the symbolical 'sale' concerned all captives.

In the third place *ahwangan* often received benefits from the king. The account from Sahè-Abigo confirms Herskovits' (1938 I: 79; II: 97) statement that the king gave slaves to successful warlords. Victorious *ahwangan* received other benefits as well. Gezo for example would have granted his 'caboceers' the right to collect custom duties in towns which their personal regiments conquered (Duncan 1847:283 quoted in Herskovits 1938 I: 129). Bravery of lower ranking warriors, if it took the king's eye, was also rewarded publicly with the gift of a slave and/or with promotion (Herskovits 1938 I: 79), as happened to Gnaglagla from Gnidjazoun whose story I narrated in section 4.2.3. Another member of his lineage said:

> "My ancestor Gnaglagla cut the Yoruba king's head and so our king made him village headman here. On one of his visits to the palace, Gnaglagla saw the slave Nakenchi, and asked the king

> to give this slave to him. Nakenchi was an inhabitant of Gnidjazoun who was sold into slavery by his own family. So the king gave Nakenchi to Gnaglagla. But Gnaglagla's own sons did not want Nakenchi to inherit the stool together with them. Hence Gnaglagla gave his daughter in marriage to Nakenchi, and gave land to the girl. This is the only case I know in which a daughter of our lineage inherited land." (Simplice Gnagle, Gnidjazoun 9-11-1990)

The position of *ahwangan* was profitable and many aspired to it. In the 1840s several brothers and sons of kings, 'ministers' and 'caboceers' were reported to have their own regiments[112]. Under the reign of Glele (1858-1889) the rank of *ahwangan* 'includes all officers that can bring ten to a hundred dependents or slaves into the field'[113], and every high official had his own 'head war-man or war-woman' (Burton 1893 II: 50 quoted in Herskovits 1938 II: 89). These regiments of dignitaries were in the first place their personal bodyguards; to mobilise them for war still required the king's order[114].

Also the creation of a female battalion is ascribed to Agaja[115]. He would have transformed his father Hwegbaja's female 'elephant hunters'[116] *gbeto* into a permanent contingent of female warriors and equipped them with firearms (Palau Marti 1964:141; Garcia 1988:128). Snelgrave (1734:125-127)[117] confirmed that Agaja had 'a great Number of Women Soldiers' who marched behind the male ones. However, the image that all women were liable to serve in the army, first presented by Skertchly (1874:454-555) and repeated by Garcia (1988:132), seems to be exaggerated. Burton (1893 II: 148) already corrected the image by stating that not all Danhomeans, but only 'every Dahomean of note in the kingdom' had to present his daughters above a given age; my own research supports this[118]. Garcia (1988:132) adds, on the base of family histories, that some mothers succeeded to hide their daughters.

Danhomean policies promoted a warrior ideology. The public 'sale' of the standing army's captives to the king, which was described by several eyewitnesses (see 5.1.5), and the public reward of brave or successful warriors served this end. All captors were openly praised during the slave-selling ceremony (Burton 1893 II: 149-150 quoted in Herskovits 1938 II: 97). Agaja and his successors tried to instil a warrior ideology by introducing military training for boys from the age of about 7 onwards and by teaching young boys to shed human blood. Eyewitnesses wrote about Agaja's army:

> 'I observed, this Army consisted of about three thousand regular Troops, attended by a Rabble of ten Thousand at least, who carried Baggage, Provisions, dead Peoples Heads, etc. The several Companies of Soldiers had their proper Colours, and Officers, being armed with Musquets and cutting Swords; and with Shields. (…) I took notice, that abundance of Boys followed the Soldiers, and carried their Shields; and asked the Linguist, 'What was the occasion of it? He told me, That the King allowed every common Soldier a Boy at the publick charge, in order to be trained up in Hardships from their Youth: and that the greatest part of the present Army consisted of Soldiers bred up in this manner.'[119]
>
> '*Pour apprendre à la jeunesse de son pays à ne pas épargner le sang dans les pillages, il ordonna à tous les garçons de son camp, dont quelques-uns n'avaient pas plus de sept ou huit ans, de couper la tête de tous les prisonniers âgés ou blessés qui n'étaient pas commerciables.*'[120]

### *Religious innovations*

From the time of Agaja onwards also religion was transformed to serve the purpose of the State. He and his successors turned 'Gedevi' family *vodun* cults into state cults, imported new state *vodun*, instituted a regular cult for the royal ancestors, and transformed 'Gedevi' systems of divination. The examples of Agaja's appropriation of the 'Gedevi' *vodun* Hlan

in Atchia (be it with only temporary success) and the installation of his wife's *vodun* Lisa in Lissazounme were already given. But before I go into the description of the religious changes under Agaja I want to speak about an unnoticed aspect in South Béninese pre-colonial history, namely the impact of Islam[121]. Though it is true that next to no Fon converted to Islam, I will argue that the religious changes in the Fon kingdom cannot be understood without a Muslim influence.

Muslims were present in Allada and Whydah since the early 17th century[122], in Oyo probably already a century before[123]. In Allada in 1671 the 'Great Marabou' was "the second person in the kingdom and also the first minister in both spiritual and temporal affairs" and he was the only person who did not have to prostrate before the king (Barbot 1678-1712 quoted in Hair 1992:658). In Whydah 'Marabous' were already influential enough in the years 1667-1674 to oppose Christian missions. They burned a chapel, prevented missionaries from speaking in public by hustling the people against them, convinced the king who was about to be baptised not to abandon his ancestor's religion, and poisoned three missionaries[124]. In Oyo Muslim diviners were probably already active in the 16th century, and Islam was well established in the 17th century (Law 1977b:12, 75-76, 215). The Oyo called Muslims *imalɛ* and the Fon called them *malɛ* (man from Mali). The Fon today are convinced that Islam reached them through Oyo[125]. Fon oral tradition speaks of the arrival of a first group of 33 Hausa and Nupe traders, craftsmen and priests, coming through Old Oyo under the leadership of the malam Iliyasu in the time of Agaja. In any case Muslims enjoyed a high status on the Abomey plateau since Agaja's times for their writing and leatherworking skills – arts which were unknown to the 'Gedevi' and Adja peoples – and for their magic (Dalzel 1793/1967:48-49).

The presence of Muslims at Agaja's court is confirmed by European eyewitness accounts[126]. Agaja granted the malam of the Muslim community the title *Malɛhosu* (king of the Muslims) and adopted the custom to let him pray, divine with sand and make magic charms for every New Year and especially for every military campaign (Adamu 1978:114-115; Alapini 1985:140).

Danhomean dynastic mythology even ascribes the origin of the name 'Fon' to a Muslim diviner[127]. The Abomey plateau was first called Hun[128] according to South Béninese traditions from various sources. In the early years of the Agasuvi kingdom its ethnically diverse population had no common name, but soon

> 'The king of Ayo[129] invited the kings of Adja, of Ketu, of Savè and of Hun. Our kingdom was the youngest; therefore it was called Hun, because one says about a young child *e do hun mɛ*. Then the king of Ayo called a Muslim diviner. This was how the Danhomean kings saw their first Muslim diviner. The king of the Ayo gave cattle, cloth and pearls to the diviner and asked him to predict which of the four kingdoms, Adja, Ketu, Danhomɛ, Savè, would become the most powerful one. The country of Ayo did not participate in this test because it was without doubt the strongest. The diviner made four small mounds of soil and poured ink[130] on them. He said: 'Each of these heaps represents one of the kingdoms Adja, Ketu, Savè, Hun. On one will grow a *kake*[131] (a tree with hard red wood), on another a baobab, on the third a ficus, on the fourth a *fon*[132] bush. In three years I will come back.' After three years the diviner reappeared and the king of Ayo called again the four kings. These were the words they heard:
>
> 'The *kake* is a very hard tree; one cannot make anything from its wood. The baobab is a very big tree, but its wood it too soft[133]. The ficus is a tree in whose shade the trader would always like to take shelter but because of its wide branches it will not resist the wind[134]. Before the *fon* all the other trees will bow down, everyone will bend the head before him because his fruit is crowned.'[135] (Le Herissé 1911:47-48)

I will come back to this myth in Chapter 7, in the context of Fon and Adja styles of making a living and French images of them. For now we can retain that it underlines the status of Muslim diviners in Danhomɛ, and that it suggests Danhomean-Muslim contacts before the name 'Fon' became known. Contemporary written sources indicate that the Agasuvi kingdom was called Fon since at least 1687. In that year the Danhomean king prohibited temporarily the passage of slave caravans through his kingdom[136]. On the coast Du Casse wrote:

> '*Cette année (…) les Noirs disent qu'ils ont quelques différents avec le roi de Foin, qui est dans les terres, et les empêche de passer. (…) Le roi de Foin, de son côté, empêche le passage des captifs sur ces terres*.'[137] (Du Casse 1687:15, quoted in Pazzi 1979:219, 233)

I now come to the transformation of divination, of *vodun* cults, and of ancestor worship under Agaja. Muslim influence on Danhomean divination was strong. Not only did Agaja and his successors consult Muslim diviners, also the Fon's own 'animist' divination practices changed. I will first describe ancient 'Gedevi' and Adja divination practices, then mention the growing role of Muslim diviners (*alfa*), and finally discuss the rise of *Fá* divination.

Before the arrival of Muslim diviners and of *Fá* the Adja and the 'Gedevi' divined mainly through consultation of the dead (necromancy), called *xòyóyó*. One of the eldest women of each lineage, called *tashinon* among the Ehwe-Adja and *tanyinon* among the Fon-'Gedevi', was the priestess of the lineage ancestors and the principal necromancer[138]. My knowledge of the *tashinon*'s and *tanyinon*'s practices is mainly based on own observations, on descriptions of elderly Fon and Adja informants, and on Le Herrissé (1911), Herskovits (1938) and Houngbedji (1967). Besides being a priestess and necromancer the *tashinon/tanyinon* intervened and intervenes in the selection, consecration and rule of the *hɛnugan* (male lineage head), in marriage practices and in rituals associated with childbirth[139]. She pours the lineage's libations and brings their sacrifices to the ancestors. Fon *tanyinon* preside over the funerals of lineage members and receive a small material reward for these services[140]. Some *tanyinon* were able to acquire considerable wealth.

> "*Tanyin'sinhoué* ('house of the *tanyinon*') is the name of a fairly large *hwedo* (lineage segment, compound) in Kana-Dodome. It was founded in the later 19th century by a female household head who owned several slaves. The compound grew under her leadership because the slaves intermarried and gave birth to children." (Own interview with a slave woman born around 1900 in Tanyin'sinhoué, 24-3-1989)

The *tashinon/tanyinon* interprete(d) the ancestors' will to the lineage. They consulted the dead during the annual ancestral sacrifices and also on personal request, and were as such the principal diviners[141]. According to Le Herissé (1911:176-177) the ancestors' voice is often unintelligible and must be interpreted by the *tanyinon*.

> During the annual sacrifice to their ancestors in 1989, the whole *hwedo* Tonu in Lissazounme assembled before their ancestral shrine. I saw the *tanyinon* enter to pour blood on the *asɛn* (altars to the ancestors). A man shouted payers into the shrine '*novi miton dié*…'[142] A dark voice resounded from inside (own observations 11-10-1989)

At present as in the past also some Fon men, called *gbokanto*, engaged in necromancy through a system in which a voice, presumably of an ancestor, is heard from a pot turned upside down. This system is called *gbo* or *de gbo do nu*[143]. One can imagine that the religious authority of the *tanyinon* and the *gbokanto* undermined the authority of the Fon kings.

Starting with Agaja the number of Muslim diviners, called *alfa*, gradually increased in Danhomɛ. King Tegbesu (1732-1774) would have attacked and enslaved a group of

Muslim Bariba to make them his diviners (Le Herissé 1911:303; Adamu 1978:120). Later other Hausa, Nupe, Oyo and Bariba Muslims came to the Fon plateau, some as prisoners of war and others as traders. Those who were not employed as royal diviners at the court were allowed to establish their own wards (called Malè) near the Abomey and Kana markets, to marry local women and to exercise their professions freely[144]. The *alfa* practised divination by sand[145].

Most traditions assert that also the *Fá* divination system was introduced in Agaja's time to Danhomɛ[146], allegedly from Oyo[147]. The king welcomed also this new system of divination. Herskovits (1938 II: 209) was told about the old necromancy *gbo* that:

> 'the King, who hated this *gbo* because it permitted too many alliances against him, looked out for something which was truly a thing of the gods. Thus, when some time later a man of Zado named Gongon came to tell the King of the existence of Fá (…), he was given all opportunity to spread this new form of divination'[148].

*Fá* divination consists essentially in casting convex objects to obtain stochastic symbols. The resulting figures are written down and interpreted by the diviner. *Fá* is very similar to the ancient Arab Islamic system of divination *Khatt* or *Derb el raml*. The Yoruba and the Nupe seem to have known it since their Muslim contacts in the 9th and 10th centuries. They each transformed it into their own 'indigenous' system, called *Ifá* by the Yoruba and *Eba* by the Nupe (Danfulani 1997:34-36; Nadel 1954:38-39)[149].

*Fá* divination soon enjoyed a high status among the Fon, partly because it involved 'writing' down symbols[150], partly because of a belief in its efficacy[151], and partly because it did not depend on family ties. Fon mythology calls *Fá* 'the *nùwlánwlán* (writing) of *Mawu* (God)'[152]. The diviners of the new system, named *bokonon*[153] by the Fon, gained socio-economic power and prestige. Each Fon king from Agaja onwards had a *bokonon* as his principal court diviner, to whom he gave the title *gedegbe* (Garcia 1988:22, 139-140). In principle the profession of *bokonon* was and is open to all men, but not to women. *Bokonon* learned their craft by apprenticeship and initiation[154] and divined for anyone who paid for this service[155]. Most *bokonon* also produced and sold magic charms as remedies for the problems which they diagnosed themselves. An increasing number of male Fon learned the art of *Fá* divination. In my research lineages this was especially the case since the later the 19th century, therefore I will present these cases in Chapter 8. The growing popularity of *Fá* also fostered *vodun* cults, because the *Fá* oracle usually prescribed sacrifices or initiations to a *vodun*[156].

I will now discuss the transformation of *vodun* cults in the Fon kingdom. Agaja and his successors imported many new *vodun* into Danhomɛ, tried to bring family cults under state control, and many 'private' cults became public. *Vodun* worship increased greatly in Danhomɛ, in particular in the proximity of the capitals Abomey and Kana where many royal cults were installed.

So far *vodun* worship in South Bénin was organised along kinship lines. A lineage member, in most cases the *hɛnugan* (lineage head), fulfilled the role of *vodunon* (priest) of the lineage gods. All lineage members venerated the lineage *vodun* and they worshipped only these. Worship implied communal sacrifices by the lineage, mainly the *teđuđu* (annual sacrifice of yam first fruits), among some 'Gedevi' clans also a *liđuđu* (sacrifice of pearl millet first fruits), and an annual gift from the produce of the lineage commons[157]. Some lineage members might be initiated as *vodunsi* under the supervision of the *vodunon*. *Vodunsi* were specially

trained and dedicated to serve the *vodun* and were possessed by him, which manifested as trance, in Fon *vodun wa ta mɛ* ('the god comes into the head'). *Vodunsi*-to-be worked for the priest during their training period – which usually took a number of years – and continued to do so from time to time afterwards[158]. They, their relatives or their (promised) husband brought gifts for the priest, for the initiation rituals, and according to Herskovits (1938 II: 177) the relatives also tilled the priest's fields[159]. A major gift was for the 'liberation' ritual; candidates had to stay with the priest until it was paid. Most *vodunsi* in training were young women, and many of them ended up as wives of the priest[160].

In the coastal towns trance-cults seem to have been public by the end of the 17th century. Bosman (1704/1967:371-375) observed in the 1690s in Whydah's capital that the seclusion of people who manifested signs of possession by Dangbe in the temple complex of this *vodun* was already common practice. In Danhomɛ *vodun* worship started to transcend lineage boundaries from Agaja onwards. I already described how Agaja adopted the 'Gedevi' cult of Hlan as a state cult, how his wife Hwanjile imported the *vodun* Lisa in Lissazounme, and how the kings tried to control these cults by appointing their own priests, which succeeded only partially in the case of Hlan. Now I will show how the kings replaced some other 'Gedevi' priests and how Agaja introduced the *vodun* Hevioso, Sakpata and Mawu in Kana. Then I will discuss the socio-economic and political impact of these state cults.

> 'The 'Gedevi' of Akpa lineage in the village Kotokpa (on the eastern slope of the plateau) worshipped their deified ancestor Akpa as *vodun* of the river Koto. Agaja conquered the village and sent Sogbo to be priest of Akpa.' (Myth heard in Kotokpa by Alidou, Dagba & Soukessie 1983:4-5)

The 'Gedevi' had a thunder-*vodun* called So or Jiso whom they worshipped in the bush, near rivers and in indigo trees (Herskovits 1938 II: 151; Le Herissé 1911:116). But the village Hevié in the Whydah kingdom already had an urban shrine to the thunder-*vodun*. Agaja conquered Whydah in 1727, appropriated Hevié's *vodun*, called him Hevioso (thunder from Hevié), built a *vodunkpamɛ* ('enclosure of the god', compound where *vodunsi*-to-be live during their training) for him in Kana-Dodome, and appointed a priest[161]. The *vodunsi* of Hevioso learned to speak Hweđa (the language of Whydah) and were called *Hweđanu*[162]. The priesthood of Hevioso in Kana became hereditary; the priestly lineage established the ward Sohwe around the shrine. Nevertheless Hevioso remained a state *vodun* and Jiso was marginalised. But the king did not succeed to eliminate Jiso completely, and under Glele's (1858-1889) reign Jiso too was granted the status of public *vodun*[163].

> "The 'Gedevi' in Sodohome worshipped the *vodun* Aïzan. King Kpɛngla (1774-1789) invaded the village, deported many inhabitants into slavery, and destroyed the *vodun* Aïzan. But the priest erected the *vodun* again. Then Kpɛngla appointed Agbanon from Alladaho to be priest of Aïzan in Sodohome." (Own interview in Sodohome, 23-2-1989)

The *vodun* Sakpata, the god of the earth and of the smallpox, would have been imported by Agaja, at the occasion of a smallpox epidemic which decimated the Danhomeans during an armed conflict with the Adja of Hondji[164]. Agaja suffered of the smallpox himself; Snelgrave observed in 1727 that his face was pitted with the smallpox (Snelgrave 1734: 7 quoted in Akinjogbin 1967:62). As *vodun* of the earth Sakpata is widely worshipped by Fon farmers.

Family traditions of the priestly lineage Mawuhwe in Kana agree on the following points. Agaja invaded the Ana (Yoruba) village Dume[165] near Tchetti, enslaved (some of) its inhabitants, and settled them in Kana-Dodome. There he ordered them to establish a cult

for the *vodun* Mawu, as well as for Lisa and Agɛ[166]. One Muslim was associated to them to help with the establishment of the new cult[167]. They became together the founders of a lineage with the name Mawuhwe, even though the individual lineage members belonged to different *akò*. The priesthood of Mawu became hereditary in this lineage. Ever since each *vodunon* of Mawu in Kana orders one lineage member to become Muslim and to pray in the mosque of Kana-*Malɛ*[168]; the other members however remained animists. Mawuhwe was installed on the lowest part of Kana because there was sand. Sand was needed for some rituals in the *Mawukpamɛ*[169]. The kings held trials by ordeal in the *Mawukpamɛ*[170]. Mawu and Lisa were granted the right to human sacrifice, on the grounds that they belonged to a royal cult[171]. The *vodunkpamɛ* was an important source of income for Mawuhwe. People from all over the kingdom came to be initiated as *vodunsi* of Mawu or to make other uses of the priest's ritual services (for which of course they had to pay). The number of *vodunsi* increased because they did not only come of their own decision or on prescription of *Fá*, but also each *vodunsi* had to make sure that he or she was succeeded by a relative after death. Being a *vodunsi* implied observing numerous taboos, but many enjoyed the status and occult powers that it brought. The fields of Mawuhwe were situated from their houses onwards into the valley Hlan. This was not much land. In 1990 all the inherited land of the lineage was *hɛnuaïkungban* (lineage communal land). It has probably always been so.

The *vodun* in and around Kana were also worshipped by the kings themselves. King Gezo (1818-1858) used to bring thank-offerings to the *vodun* at Kana and to make gifts to their *vodunon* after military campaigns according to an eyewitness report:

> 'On the return from war in January, the king resides at Cannah, and what is termed 'makes a Fetish', i.e., sacrifices largely and gives liberal presents to the Fetish people.' (Forbes 1851/1966 I:17)

The *vodun* played an important role in the ideological transformation of the kingdom. Their worship and the associated social practices became important political and economic motives for the Fon, in particular those in the centre of the plateau. The *vodun* cults brought income and status first to the priests, second to diviners who benefited from beliefs in the *vodun*[172], third to craftsmen and traders who sold ritual objects, fourth to the kings themselves. Priests were taxed by the king. According to a descendant of the priests of Mawu in Kana

> "All Danhomean *vodunon* had to render account to the king of every one of their activities. *Vodunon* received gifts for every ritual, every sacrifice, every prayer and every initiation. 'Rendering account' implied that they had to send one part of this payment to the king. Rates were not specified, but they knew which amounts were acceptable. Today the *vodunon* have to send these gifts to Sagbaju, the head of the royal family."[173]

Agaja's final religious innovation was the transformation of the cult of the royal ancestors. So far Agasu, the royal family's ancestor, was only their *hɛnuvodun*. Agaja turned his cult into a state cult. He gave authority over all the other priests to Agasunon, the priest of Agasu (Ségurola 1988:16). Shrines to Agasu were installed in Abomey and Kana. Henceforth the Fon kings were consecrated on the Abomey plateau and no longer in Allada, which implied emancipation from the ancestral kingdom (Alapini 1985:47).

Agaja and his successors believed that their strategic success depended on the help of their ancestors and the *vodun* and that Danhomɛ would only prosper if sacrifices were made to them. From Agaja onwards the cult of the royal ancestors became an annual event in which all Danhomeans were expected to participate, and humans were included into the sacrifices

to the dead kings. In other West African kingdoms (for example Whydah, Allada, Oyo, Benin and Asante) some kings and chiefs took some of their wives and slaves along with them into the grave (Barbot 1678-1712 in Hair 1992:640; Palau Marti 1964:34, 84-85; Emecheta 1979; Law 1985:61-62)[174], but Danhomean kings received annual human sacrifices on their graves. Sacrifices to royal ancestors were called *hwetanu* ('principal thing of the year') in Fon and 'customs' by contemporary Anglophone writers[175]. Some of the victims were war captives and others criminals, for during the *hwetanu* the king also spoke justice and issued decrees. Agaja also greatly increased the number of victims at royal funerals, compared to his predecessors and to other West African kings (Law 1985:67-69, 73-74).

All the *hɛnugan* (lineage heads) in the kingdom were expected to send gifts to the king at the occasion of the *hwetanu*[176]. Those who lived near Abomey, and all the 'big men' in the kingdom including Europeans, were expected to attend in person and to bring their gifts. The European Norris observed the *hwetanu* in 1772 and wrote:

> 'The black merchants, or trading men, and indeed every head of a family, must also attend for a few days, and bring a quantity of cowries, proportioned to their circumstances. Each of them endeavours to make his present, which is in fact a tax, as respectable as he can; and would be reprimanded, or perhaps punished, if he did not do so.'[177]

Polanyi (1966:33, 40, 81) portrayed the *hwetanu* as a redistributive event because the kings threw some cowries to the spectators and because king Tegbesu and/or Kpɛngla gave the European visitors more valuable gifts than these gave to him (Dalzel 1793/1967: xx-xxiv, 146-147). But the king(s) around 1800 do not seem to have reciprocated to the Europeans (Labarthe 1803:109; Elwert 1973:106). My Fon informants don't believe that the king gave cowries free of charge; he would only have exchanged them against labour and products[178]. Dalzel's own description suggests that most visitors could snatch at best a few cowries. Distant citizens who could not attend but were nevertheless expected to send gifts did not receive anything at all. The net benefit of the *hwetanu* was probably for the king. The throwing of cowries had probably mainly a symbolical and ideological function. The *hwetanu* were an occasion to demonstrate royal wealth and power, to stimulate a warrior ideology, and to reaffirm the belief in the royal ancestors' ability to assist in warfare.

Herskovits (1938 I: 113-115) brought the 'customs' in connection with taxation, but Klein (1968) argued that taxes in Danhomɛ were minimal. Norris (Dalzel 1793/1967:122), Elwert's (1973:67) informant from Allada, and my Fon informants speak about presents to be made, not of set taxes to be paid. The value of the gifts was not specified by the king but decided by the giver, who was only guided by what was considered to be respectable, and probably by a desire to outmatch others.

### 5.2.4 Markets, traders and trade networks

Trade and markets are central to the interest of almost all the scholars who theorised on Dahomean history. Commodities and commodity chains can also play an important role in socio-technical networks and styles, see 2.3.3. I will first present the results of my fieldwork on markets, commodities, trade networks, and social practices in trade, and then criticise Polanyi on the base of these. The oldest markets in South Bénin, on the 'Gedevi' – as well as on the Adja plateau, seem to have been established along rivers. Their myths of origin speak in general about women who came to fetch water and other women who sold prepared food to them; some also mention the sale of fire-stones, sauce ingredients and palm wine.

> "The market *Mignonhito* in Kana existed long before the arrival of Dako; it was a Gedevi market. Mɛenyon was woman who made *akpan* from pearl millet that she ground between two stones; her husband Agidi cultivated pearl millet. She sold the *akpan* and gave water from the river Hlan, therefore she was called 'good person' (*mɛ enyon)*. In her times cowries were used as money. Blacksmiths from Koklofɛnta, about 6 km to the northeast, came to sell hoes and cutlasses and to buy staples on the Kana market in the time of Mɛenyon, before Hwegbaja."[179]
>
> "Mɛenyon gave water, *akpan*, fire-stones and fibres to light fire. Because of her goodness she was named Mɛenyon, and the market that emerged was called *Mignonhito*."[180]

On the Adja plateau the market of Kisame near the source of the river Kpako was probably the first market of importance. The Ehwe-Adja day of rest, *Kisagbe*, is still named after it[181]. Other ancient Adja markets on the river Kpako were Afiganme, founded well before 1750, and Azové, founded around 1750:

> "Kisame was the first market. It was founded by Segblenu from Yéhouime, who sold *ɛgblɛn* (maize cakes), *gawu* (bean cakes), palm wine and *flefi* (a spice from *Prosopis africana*[182] seeds)." (Interview in Houétan-Touvou 6-11-1990).
>
> "There was a market called A*f*iganme ('big market') at Kaïteme on the river Kpako where they sold sauce ingredients and palm wine mixed with tobacco, potash and bark of *Antiaris africana*. When the people were drunk from this mixture they killed each other and the market was moved to Azové. My paternal great-great-great grandmother Nalu was the first person to sell here at Azové. She sold *flefi* to women who came to fetch water in the river Kpako."[183]
>
> "Nalu was the first person to expose her commodities here. She sold *flefi*, salt, and also pepper and palm fruit to those people who did not want to go to the bush to gather these two sauce ingredients themselves. The salt came from Keta on the coast. Women went to Keta to bring salt. The salt was sometimes transported on the river Mono."

Several travellers' accounts from the 19th century confirm that salt manufactured at Keta, Anecho and Grand Popo was shipped on the Mono until Togodo and carried from there to Adja markets[184], see also Chapter 6. Other 'Gedevi' markets would have existed before 1650 at the place where Abomey is now[185] and in Zakpo. The latter would have been a staple food market where cowry-money was used according to Fon dynastic mythology (see 5.2.2). The *ahinon* (market chief) of the principal Abomean market narrated:

> "Before Hwegbaja there was a market called 'Gedevito' here in Abomey, where they sold shrouds, alcoholic drinks, *ata* (cowpea cakes), *akasa* (maize cakes), and goats to sacrifice. Cowries were used as currency since before Dako; cowries existed since the time of Jesus Christ. Our ancestor Vodouhè was the eldest son of Dako. Dako appointed Vodouhè to organise the rituals for death princes in Abomey and to be *ahinon* (chief of the market) Gedevito. The office of *ahinon* of the principal Abomean market remained in our lineage. My task as *ahinon* is to take a little bit from the commodities of each seller on each market day, and to send it to the royal palace. The *ahinon* did not set prices, nor did the *Zangbeto* society. Prices depended on offer and demand. Neither were benefit margins fixed, though retailers could agree among each other to retail at 3200 if they purchased at 3000. It is true that in the past they counted 80 cowries for 100 cowries." (Interview with Vodouhè Zinkponon, Sonou 22-7-1989). A child of the lineage explained in more detail how and why the *ahinon* gathered commodities during the late 1950s:
>
> "My father was *ahinon* of the *Hunjro* market. On each *Hunjrogbe* he went to the market with a small bag from palm leaves. I accompanied him until the age of 7 that is until about 1960 then I started to go to school and I had no time anymore to accompany him. Daddy took products from some women traders and put them into his bag: From some *atanon* he took an *ata*[186], from others other commodities, etc. Each *Hunjrogbe* he went to other traders. They did not give to him like one gives to the mothers of twins, he just took. On his return from the market he stopped at the king's house, opposite of Singboji palace. Daddy gave part of the commodities to the king or

> to one of his representatives to render him account. The rest was taken home and distributed to the children. Each child received an *ata* or another snack. None of the commodities that daddy levied on the market was sacrificed to the *vodun*. Daddy did this because he had to do it for the king, because he represented the king on the market. It was believed that misfortune would fall on our family if he failed to do so. He did not gain from it. The amounts he levied were symbolical, and their value did not even compensate for his time spent on the journey. In 1961 daddy died, and his successor did not levy commodities on the market anymore. My daddy was never *daa*[187] of the family, his brother was *daa*."[188]

It is possible that South Bénin had some cowries before the 16th century and used them for ritual purposes or as money or both. Cowry-money existed in Mali and Gao not later than the 14th century[189] and was probably known as money in the kingdom of Benin before 1515[190]. Some traditions suggest that the Adja had contact with the Niger bend between the 11th and the 14th centuries (see 4.1.1).

The testimony of the *ahinon* of Abomey indicates that the kings taxed traders. In the Kana market, where the same institution existed since Tegbesu (1732-1774), taxes were motivated by religion according to its *ahinon*:

> "Mignonhito was a great market that attracted people from far and near. Therefore king Tegbesu appointed my ancestor Gokun as *ahinon* to supervise the market. Gokun had to maintain peace and justice on the market. He also had to take a little bit of each commodity, from each seller, and send it to the palace, where it was sacrificed to the *vodun*. Our family ate part of these commodities and gave the rest to the king's *bokonon*. Our family continued to do so on each market day until the Kana market lost its splendour." (Interview with Daa Ahinon, Kana-Mignonhito 19-6-1989)[191]

The South Béninese myths portray an image of a flourishing local and interregional trade in indigenous consumer goods[192]. In the myths the development of trade appears as an indigenous affair. Also after the arrival of Europeans on the coast local dynamics would have been instrumental for, or even at the base of, commoditisation processes on the Fon- and Adja plateaux, according to many Fon and Adja today.

Commodity production and trade is believed to have developed in the Fon kingdom in the orbit of the *vodun* cults. The manufacture and sale of ritual objects was according to some the principal form of commodity production in Kana before 1850:

> "The market of Kana became great by the sale of objects for the kings and for the *vodunkpamε*. There were bronze statues, shrouds and other cloths for the *vodunkpamε*, and bracelets for the *vodunsi*. Of course there were animals and agricultural products which could be sacrificed. Hence it was a market which depended on the *vodunkpamε*, or a royal market because the *vodunkpamε* always depended on the palaces, they were often concentrated around the palaces. The Kana market started to dwindle with colonisation because the things of the kings and of the *vodunkpamε* lost their splendour." (Interview with Jules Gnavo and Jérome Sessinou from Kana-Dodome, Cotonou 29-8-1989)

But also iron tools were forged and sold in Kana according to a blacksmiths' account:

> "In the time of the kings our ancestors forged hoes and other tools for sale on our own account, and bullets on the king's command. The iron for bullets was provided by the king, but for the other things our ancestors purchased iron on their own account. Farmers came to our house to buy tools, and we also sold tools in the market." (Interview with Victor Azaïnon, descendant of the first blacksmith in Kana 19-6-89)

Interregional trade consisted to a large extent in the exchange of African products which were locally unavailable or in short supply, for example salt, fish, pottery, and increasingly

also staple foods. Appropriate clay to make pottery was only found in certain places[193]. Written testimony from 1850 and both Fon and Adja oral traditions from the time of Gezo speak about structural food shortages among the Fon, which resulted in an interregional food trade between Fon and Adja. Oral accounts portray the Ehwe-Adja village Zouvou as a place where Adja exchanged their food crops against the Fon's non-food products before 1858. This interregional trade would have been in the hands of Fon traders. An Adja from Zouvou:

> "The Fon did not know how to cultivate. Therefore they came to us for yams. They bartered salt for yams, tobacco for yams, pottery for yams, because they knew how to make pottery. This was before the Fon came to fight against us."[194]

A Fon from Klouékanme (1 km from Zouvou) gave his account of the Zouvou trade:

> "Before our ancestor Gbotan arrived here there was a market in the Adja village Zouvou, where our women exchanged salt, *ata* (cowpea cakes)[195], and other things which the Adja did not know to make, against the Adja's yams and peppers. The women from Sahè brought pottery. They paid with cowries until these became too heavy[196].
>
> Then the king sent our ancestor Gbotan, who came from Sahè-Loukpè, to cultivate and to recruit soldiers here. The Adja chief Danji gave Gbotan all the land with meagre *Imperata cylindrica* on it. The Adja don't like this type of land because of their flat tillage techniques[197]. Hence he received a field 1 km from Zouvou, where he planted *kulekun* (pigeon peas). There he started to sell palm wine in the evenings. Then king Glele sent a *vodunon* to consecrate the new market by installing a *Tolɛgba*[198]. Consequently the customers preferred to go to Gbotan's pigeon pea field (*kulekanmɛ*). This is how the market moved from Zouvou to Klouékanme."[199]

In 1850 Forbes (1851/1966 II:102) heard during the *hwetanu* in Abomey that the Danhomeans used to buy maize from the Adja, and feared that Gezo's war that year (against the Ana of Atakpame, who received asylum from the Adja) would cause maize shortages on the Fon plateau.

Some Fon also traded European products. Several female traders acquired considerable wealth, for example the Danhomean woman Paussie (*Kposi*, a wife of the Fon king?), who was able to purchase seventy slaves with the revenues of her iron- and coral trade in the time of Kpɛngla[200]. Oral tradition of Kana blacksmiths affirms that iron and iron tools were traded freely. This shows that, in contrast with what is often believed, Kpɛngla had no monopoly on the iron trade.

Agaja and his successors organised the export of their slaves. In 5.1.5 and 5.2.3 I argued that the captives of the royal standing army belonged to the king and the captives of the warlords' regiments to these warlords. In contrast with what Polanyi (1966), Akinjogbin (1967) and others believed, the kings did not interfere in the sale of slaves of these warlords or of merchants who purchased slaves in the hinterland, except through taxation. But the kings had agents who marketed the royal standing army's captives.[201]

After his conquest of Allada and Whydah in 1727 Agaja appointed officials to organise the marketing of his slaves. *Húngàn* ('chief of the ship') in Kana-Dodome had to supervise the transport of the king's slaves from Abomey until their embarkation at Whydah, according to an account of the Houngan family[202]. Eyewitnesses speak of initially three royal officials in Whydah, who dealt with the French, the English and the Portuguese traders respectively and collected duties from them. But in 1733 Agaja replaced them by a single official, called *yovogan* (chief of the white men), who marketed henceforth the king's slaves (Akinjogbin 1967:101-103; Law 1977a:562-563). The family of Agaja's *Húngàn* did not remain success-

ful, for the *hɛnu* Houngan in Kana-Dodome consists today in only two poor huts. Possibly the *Húngàn* was also dismissed and/or had very little control over slave transports[203].

There can be no doubt that also the growth of external trade gave an impetus to commodity production and trade in Danhomɛ. In the first place the transatlantic imports of (cowry) money and the development of a trade- and transportation infrastructure on behalf of the export trade facilitated also domestic trade. Second, although imports of European products competed with some local industries (for example iron smelting) the greater availability of imported raw materials had a multiplier effect on local commoditisation[204]. Third, Danhomean export traders spent part of their new earnings on local commodities such as local foods and drinks[205], cloth, ritual objects and -services, tools, services of prostitutes and the like. Itinerant traders described how they refreshed themselves on the roadside[206], testifying to a flourishing trade in locally prepared foods, and stimulating this trade. The restaurant business was almost entirely in the hands of women. In Tegbesu's time several Fon women had thatched stalls in the Abomey market (Dalzel 1793/1967:107-108).

I will now come to my own criticism on Polanyi, based on the results of my own fieldwork. A critique of Polanyi on the base of literature was already presented in 5.1.2. Fon and Adja today believe that indigenous dynamics played an important role in the development of trade before 1850. The principal commodities on the Fon- and Adja plateaux would have been of African manufacture. Many commodities were produced and sold for culture-related purposes, for example ritual objects and agricultural tools in models that fitted local styles of farming. Commercial taxes by the Danhomean State were motivated by religion. Tax collectors believed that part of the taxes were sacrificed to the *vodun* and that the well-being of their own family depended collecting these taxes on behalf of the king. I therefore agree with Polanyi that Danhomean economic and commercial practices were embedded in cultural ones.

However, my data contradict Polanyi's thesis about the existence of two principal socio-economic institutions in Danhomɛ. The first institution, according to him, would have been fixed exchange rates and price-setting by the state or the community (by guilds *só* or by the first seller to arrive in the market). In spite of my efforts to find Fon or Adja oral traditions about such an institution, all my informants agreed with the *ahinon* of Abomey that prices were always established by offer and demand. Also the *ahinon* and the *aïnon* of Kana-Mignonhito insisted that in kingdom times "Prices changed automatically when the harvest was plenty. The *Zangbeto* society did not set prices, nor did the sellers of the same product agree among each other to fix the price."[207]

The second socio-economic institution in archaic Danhomɛ, according to Polanyi, would have been absolute government control of all external trade. This would have been achieved by isolating markets from each other. However, although much of the trade on the Fon- and Adja plateaux in the 17th, 18th and 19th century consisted in the sale of prepared food, Polanyi's image of isolated Danhomean markets does not reflect reality. Interregional exchange of African and European commodities took place as well. Nor did the state control all (external) trade. Oral tradition from blacksmiths in Kana confirms that iron and iron tools were traded freely. The same applied for iron imports on the coast, as the case of Paussie (Dalzel 1793/1967:208-209) and Peukert's (1978) archival research show. The free sale of cutlasses for agricultural purposes in Kana contradicts Akinjogbin's (1967:204) claim that the trade of these means of physical force was controlled by the king.

One of Polanyi's fallacies was that he relied on written documents only but did not ask how and for which purposes they were recorded. Two of his principal sources were Dalzel (1793/1967) and Herskovits (1938). Both overemphasised the power of the king, Herskovits (1938) because he mainly relied on Fon dynastic- and upper class oral tradition, and Dalzel (1793/1967) because he was a slave trader wanting to show that the Danhomean king was a tyrant and that hence the export of slaves from Danhomɛ was an act of humanity. Another deficiency of Polanyi (1966) is that he mixed accounts which were recorded between 1870 and 1931 with accounts from before 1870, which is problematic since in the second half of the 19th century Danhomɛ was transformed from a slave exporting to a palm oil exporting economy.

My data suggest that free market exchange did exist on the Fon plateau between at least 1600 and 1850, and on the Adja plateau between at least 1700 and 1850. Hence I disagree not only with Polanyi (1966) and Akinjogbin (1967), but in part also with Elwert's (1973) thesis that Danhomean peasants had a subsistence mode of production. Commodities were produced on a small scale: some Fon and Adja women prepared food, some Adja farmers grew yams, Fon women on the left bank of the Couffo made pottery, Fon blacksmiths forged tools, and some Fon made ritual objects for sale. Commodity production and trade were however not yet important activities for the majority of the Fon and Adja farmers.

Trade became an activity of the Danhomean upper class. Many traders were wealthy. Traders could withdraw from the disdained agriculture and leave field labour to slaves. Under these circumstances it is no surprise that trade became a high-status activity in Danhomɛ. As a Fon of princely descent said about the 19th century:

> "If there is no *kanumo* (slave) you can send an *anato* (commoner), but not for field labour. Farm work was reserved for *kanumo*." (Gaston Dakossi, 1-1-1991 in Atindehouhoué)

## 5.3 Ehwe-Adja internal and external social relations ca. 1600-1850

The main content of this section is an oral history of the Ehwe-Adja between ca. 1600 and 1850. The Adja's styles of making a living will compared with those of the Fon. Section 5.3.1 discusses Adja and Fon hunting and farming livelihood practices. Mainly on the base of local narratives I will analyse the Adja's livelihood practices, discuss changes in their social relations, and try to compare these with those of the Fon during the same period.

There are no primary written sources about the Ehwe-Adja from before 1850, and very few recorded oral traditions. Therefore the text below is largely based on oral sources collected by myself. Besides oral traditions I also considered linguistics. One important source were migratory myths from my five principal Adja research villages[208] Atindehouhoué, Honsouhoué, Lagbahome, Lokogba and Zouvou and from a sample of Ehwe-Adja villages from all over the plateau (these myths are summarised in Table 5.1 in Appendix 5). Migratory myths were a useful source first because they exist in most Adja villages, and second because they usually describe socio-political and ecological situations, and the migrants' economic activities and motives before, during and just after the move. More extensive local oral histories were obtained from my principal research villages and their immediate surroundings. Dates were usually estimated on the base of genealogical reconstructions, and in some cases on the base of a clear connection between a local narrative and a particular historical date (a Fon king for example).

Adja-Fon relations were an important factor in Adja history from at least 1700 onwards. Very little has been written so far about these relations and the literature is almost only based on Fon accounts. Local Adja narratives provide complements and in some cases counter-narratives to well-known Fon traditions.

### 5.3.1 Farming and hunting, first reasons to settle on the Adja plateau

Not later than the 16th century the Ehwe-Adja started to migrate from the plains around Tado to the Ehwe-Adja plateau. In the beginning they probably came on hunting expeditions. Myths of origin of several ancient Ehwe-Adja villages state that the founders were hunters who decided to stay when they found a water source and when they saw that the plateau soil was suitable for agriculture. While the first motive seems to have been hunting, the motive of agriculture became more important when the circumstances appeared attractive. Table 5.1 in Appendix 5 suggests that the first villages were installed on the edges of the plateau near rivers. Later the arid centre of the plateau was also colonised. The greater availability of iron after 1500 must have facilitated agriculture on the more forested plateau. As an example of a myth of origin of an ancient plateau village I give that of Yéhouime.

> "Afojunu from Huju (near Tado) came here to hunt. At first he did not see water here, but then they saw mud on the trunk of a tree, and the footprints of a wild boar. They followed the footprints of the boar and found the river Kpako. Hence they settled here, at a place where the tall grass *yehui* (Sorghum arundinaceum) grew. Therefore they called the village Yéhouime. Afojunu cultivated maize, cowpeas, yams and bambara groundnut. Yes also oil palms, and there were wild yams in the bush."[209]

Soon the Ehwe-Adja started to disseminate internally on the plateau. These internal migrations too were in the beginning often motivated by hunting and later increasingly by farming. This was the case of Lokogba, one of my principal research villages, where two men agreed on the following points:

> "Lokogba on the river Kpako was founded in or before the 18th century by Honkpa and his mother's brother's son Holonu. They were farmers at Yéhouime, and Honkpa was a hunter. Honkpa came to Lokogba to hunt. Holonu followed him to farm, and then Honkpa also started to farm. They settled near an iroko tree (*loko*) which they worshipped as a *vodun*." One of the informants, descendant of Honkpa, said: "They left because they lacked land at Yéhouime." But according to the other, a descendant of Holonu: "A conflict at Yéhouime was their primary reason to move."[210]

One of the first villages on the Ehwe-Adja plateau was Adjahonme (Womí), located near a river in the north-east. Its myth of origin, narrated in 4.1.1, claims that its founder magically grew a circle of cactus around the village to hide and protect it. This mention of protective vegetation around villages, grown by its inhabitants, will appear to be significant motif in Adja narratives.

Until about 1740[211] most newcomers on the Adja plateau seem to have been from Tado and surroundings (Table 5.1 in Appendix 5). An exception were the founders of Avégame on the north of the plateau, who where Ewe from Bè (where Lomé is now). They came in or before the 17th century to hunt and to cultivate. They brought their own agricultural fertility cult with them, which suggests that agriculture was important for them:

> "Hongbadje left Bè after a dispute about a playing cards game. He and a woman were taken to Avégame by a spirit. When they arrived here there was nobody in the whole region. They

came from Bè with six *vodun*, whom they installed in a sacred forest at Avégame: Hwɛnhwe, Dan, Sakpata, Naagbe, Anokan and Kpakpè. We sacrifice to these *vodun*, after consultation of *Fá*, for rain, against storms, pests and crop diseases, and for pregnant women. We never go to Tado for agricultural rituals, the *nyigbafio* of Tado and his brothers are incapable to make it rain because they do not always consult *Fá*, and they also make other sacrifices to stop the rain so that people should send them gifts for rain rituals[212]. Later some of us dispersed from Avégame to other places on the Ehwe-Adja plateau, where we founded the villages Aïssanhoué, Loko-Atuï, Kissahouédji, Ahouehoué, Fogbadja, Etonhoué, Ounsanganhoué and Welehoué. We all belong to the *akó* Hweno."[213]

"When our ancestor arrived in Aïssanhoué there was nobody in the whole region between here and Tabligbo. The villages Azové and Dodohoué did not yet exit; at the place of Azové there was only a big forest of prickly plants *azo*. Our ancestor was a hunter. One day he discovered the river Kpako while he was hunting, and shot with his gun into the air for joy."[214] On the base of the genealogies I estimate that Aïssanhoué was founded not later than 1750.

The Ehwe-Adja practised slash and burn agriculture with minimal tillage. In Chapter 4 I argued that they had iron hoes[215] and cutlasses. They used these to cut trees, to make mounds for yams in the first year after clearing woody land, and to weed superficially in subsequent years. Some trees were left standing in the field for the yams to climb on. In the subsequent years after clearance, at least until the 16th century, pearl millet (*Pennisetum americanum)* was cultivated in the first seasons and mostly cowpeas (*Vigna unguiculata*) in the second.

After the introduction of maize in the 16th or 17th century[216] this crop quickly replaced pearl millet among the Adja, but not among the Fon. It seems that the shift from pearl millet to maize coincided with the migration of larger numbers of Adja from the savannah to the plateau. Ordinary groundnut (*Arachis hypogea*) was also introduced to West Africa in the 16th (Pazzi 1979:187) or 17th (Bosman 1704/1967:301; Alpern 1992:26) century by the Portuguese. The Fon and Adja started to cultivate it on a small scale and called it *azin*. Oil palms and grew semi-spontaneously on both plateaux. Women gathered their fruits alongside various edible leaves, Adja women also the seeds of *kake* (*Prosopis africana*) and Fon women the seeds of *Parkia biglobosa*, from which they made a spice. The Adja probably did not have cotton as early as the Fon.

The ancient crops yam, pearl millet, cowpea and oil palm acquired ritual importance among the Fon and Adja. All the ethnic groups who speak one of the Ewe-Adja languages[217] used to sacrifice the first fruits of their yam harvest to their *vodun* as I explained in section 4.3.1. Yam first fruits, goats and cows are also sacrificed to the mythical founder of the Tado dynasty, Togbui-Anyi, at the occasion of the *gbogbuezan* festival in Tado every year in August since at least 19th century and probably before[218]. Cowpeas mixed with palm oil and/or a libation were a basic component of most Adja sacrifices to their *vodun*[219]. In section 4.3.1 I argued that the Adja also had rituals with pearl millet and a narrative about how maize replaced pearl millet. Maize not only replaced pearl millet but also outdid yam as the Adja's principal staple. Nevertheless maize did not acquire ritual importance, probably because it was so recent. No harvest festival was ever dedicated to maize, and there never was a general taboo to eat from the new maize harvest before sacrificing its first fruits[220].

### 5.3.2 Fleeing from Fon aggression into the 'bush', ca. 1700-1900

From the end of the 17th century onwards Fon aggression against the Adja triggered off internal Ehwe-Adja migrations. I presented the wars of the Fon kings Hwegbaja, Akaba, Agaja and Tegbesu against the Adja from a Fon point of view in section 5.2.2. But also local

myths from some Adja villages relate of these wars. According to accounts from various sources Womí (Adjahonme) was invaded by the Fon around 1700, in spite of its hedge of cactus and bush. As a result many Adja left Adjahonme and settled elsewhere on the plateau. Myths of origin of several Ehwe-Adja villages state that their founders left Adjahonme from 1700 onwards (Table 5.1 in Appendix 5)[221]. Houétan and Touvou would have been founded around 1700, Gnonfinhoué towards the second half of the 18th century. An account from Touvou:

> "Our ancestor Zogbetan fled from the Abomey plateau to Adjahonme because of the Fon wars. His son Efionyi was born in Adjahonme. When Efionyi was 20 years old, around 1700[222], a Fon attack on Adjahonme caused Zogbetan to flee with his wives and children to a water source on the western Adja plateau, where they founded Houétan-Touvou. It was the first village in the region, therefore the French appointed a chief in Houétan in colonial times. Zogbetan belonged to the *akó* Ehwefio, which means 'chief of the Ehwe'."[223]

Traditions from Adjahonme also speak about Fon invasions around 1700, as a result of which the Fon changed the village's name Womí into Adjahonme, which means 'door of the Adja' (Pazzi 1979:84-85) or 'palace of Adja'. According to Fon mythology king Tegbesu's (1734-1778) mother Hwanjile was born in Adjahonme[224]. A local tradition from the Adja village Gnonfinhoué:

> "Gnonfin left Adjahonme (ca. 1750-1780) and founded Gnonfinhoué near the source of the river Kpako. Around 1800 his daughter married Kedji from Adjahonme. Gnonfin asked Kedji to settle with his wife in Gnonfinhoué and gave him land there. Kedji's descendants stayed on this land. Gnonfin and Kedji both belonged to the *akó* Womí."[225]

These local Adja narratives run counter to a generally accepted Fon public account, namely the Fon claim that they never aggressed the Adja. It is often said that the Fon kings did not attack the Adja out of respect for their ancestor Agasu, who would have descended from the Adja, in other words out of respect for the kinship ideology (see 5.1.1)[226]. If my dating is correct the Fon threatened the 'Adja' village Aïssanhoué[227] in the second half of the 18th century, which resulted in the out migration of some individuals.

> "A 'brother' of my great-great grandfather was a hunter at Aïssanhoué. He left Aïssanhoué because of Fon wars. He hid in a *loko* tree (iroko, *Chlorophora exelsa*), and founded a village there which he called Loko-Atuï. Later three sons of my great-great-great grandfather joined him in Loko-Atuï. They founded a small market under the iroko, which they called 'the mosquitoes are eating us, it would be better to kill them with a gun'."[228]

It was common practice for aggressed Adja who felt unable to defend themselves to abandon their villages and to hide in bush land at some distance from the village until the danger was gone. The Fon and 'Gedevi' did the same when they were threatened by a superior enemy[229]. Differences between Fon and Ehwe-Adja were that the latter were usually the aggressed ones and mostly felt inferior to their invaders, while the Fon pursued a more offensive strategy. Hence the Ehwe-Adja more often went into hiding than the Fon. The myths of origin of Loko-Atuï and several other villages indicate that many Ehwe-Adja refugees ended up by settling permanently in their hiding places.

The Ehwe-Adja neither had an organised army, nor do they seem to have been armed well to defend themselves. An oral source on the north-western Adja plateau suggests that until somewhere in the 18th century the only blacksmiths on the Ehwe-Adja plateau lived in Tchikpè on the east of the plateau. Tchikpè seems to have been founded by migrants from Tado in the 17th century (Olou 1986:19).

> "My great-great grandfather Hwedanbu came from Tado with fifteen brothers, who were all blacksmiths, hunters and farmers. There were no blacksmiths in this whole region. Therefore, when the sixteen brothers arrived at Aplahoué they were well received so that they would settle down. Until then the inhabitants of this area used to acquire tools in Tchikpè. The sixteen brothers settled in Djikpame-Afikoué. I believe that this was early in the 18th century, because my father, grandfather, great-grandfather and I were all born in our fathers' old age."[230]

Mythology of Tado's royal as well as blacksmiths' families reports that in the 18th or 19th century (namely around the time that the Fon kings became powerful) larger numbers of Tado blacksmiths, the Alu (see 4.1), settled on the Adja plateau around Houégame and Dogbo, as well as in Abomey. I give a dynastic version of the myth[231]:

> '*Trois fois de suite, les armées d'Agbomè envahirent les Alu et les anéantirent. Plusieurs d'entre eux furent capturés et déportés à Agbomè où ils développèrent les techniques de forge. Après ces attaques répétées de l'ennemi, Avli, un des fils de Gagli, prit la résolution d'interdire à jamais le travail du fer aux Alu. On trouve actuellement au Dahomey [Bénin] un grand nombre d'Alu qui travaillent encore le fer. Ils forment le principal noyau de peuplement de Hwegamè. Ils viennent régulièrement faire des libations à leurs ancêtres. On les trouve aussi à Dogbo. La guerre les a beaucoup éparpillés*.'[232]

One Fon king, probably Gezo, would also have tried to raid Adja from the blacksmiths' village Tchikpè, causing inhabitants to flee westward, according to mythology of the refugees:

> "In the mid-19th century the Fon army planned to invade my ancestors' village Tchikpè and to capture its inhabitants. But our *vodun* Tchigohla warned them in a dream and they all fled. Some animals sent by Tchigohla wiped out their footprints. They first fled to Bozinkpè on the northwest of the plateau. Then one of the refugees, my father's father Tchigosu, was invited by his mother's sister's son in Edahoué on the centre of the Adja plateau to settle there, where my father Dɛngbɛnɛn was born. Later daddy migrated for some time to Dodohoé 9 km north-west of Tado, in the valley of the rivers Mono and Klikou[233]. There he met an Ehwe-Adja girl and her father Dosu and her two brothers, Degbe and Atcha, from Aïssanhoué, who had come to Dodohoé to hunt and stayed to farm. Daddy married the girl. Later in the later 19th century he moved back to the Ehwe-Adja plateau and settled in Edahoué." (Sonyonu Dɛngbɛnɛn, Edahoué 29-9-1990)[234]

These Adja narratives discredit the Fon public account (Gayibor 1992:29) that they always respected their 'father-kingdom' Tado and never made war against it. Nevertheless, their common ancestry might occasionally have been an ideological weapon of some Adja against the Fon.[235] Other Adja seem to have accepted a degree of incorporation into the Fon kingdom under a combination of threats and gifts. Forbes (1851/1966 I: 20) wrote about the Ehwe-Adja village 'Katoo' (Katome in the savannah north of the Adja plateau) that:

> 'To the West, Katoo is a possession, not by conquest, but conciliation. The people wished and the king agreed to war; but the Fetish people declared that, if war was made on Katoo, the king would be killed: the king sent large presents to the chiefs, and Katoo voluntarily submitted.'

Another frequently mentioned reason to migrate (besides hunting, the quest for farmland, war and the attempt to hide from the enemy) was disease in the home village. Disease and epidemics were often interpreted as a curse on the affected locality, hence the need to move. A migratory myth from Houéganme combines the motives of war and disease[236]. When I asked the former *chef de région* of Houéganme, Pierre Alofa[237], for an interview on local history he invited me to come a few days later. At my return he gave me two handwritten pages and said: "I wrote the history of Houéganme for you." I asked a few additional questions, collected migratory myths from neighbouring villages, and compared these with

a Houéganme tradition collected by Pazzi (1979:157) and a contemporary written account. I reproduce below a synthesis of these accounts. Pierre Alofa:

> "Houéganme was founded by my great-great-grandfather Kpotokan, an itinerant Ana *bokonon* (diviner) from Notsé. On his journeys, many of his children died." Inhabitants of Domi (a hamlet near Houéganme) specified that "our ancestor Evuin settled with his 'brother' Kpotokan in Ganme-Houégbo (2 km from Houéganme) because of Fon attacks on the Ana." According to contemporary written accounts the Fon attacked the Ana between Atakpame ('Tapa') and Mahi unsuccessfully in 1823[238], and the Ana of Atakpame successfully in 1850, causing them to flee for refuge to the Adja ('Ahjah')[239]. Later the Fon invaded Ganme-Houégbo, captured the grandfather of the informant, and killed him in Abomey.
>
> Pierre Alofa continued: "In 1840[240] Kpotokan sought refuge[241] with king Gezo in Abomey." Pazzi (1979:157) heard in Houéganme that Kpotokan learned *Fá* divination in Abomey[242]. Alofa: "Then Gezo made Kpotokan head of the 'province' of Houéganme because the Fon had just conquered the Adja and divided them into twelve regions[243]. Kpotokan had to collect maize and palm kernels for Abomey and to recruit soldiers to go into war for the Fon. In those days there were not many oil palms here. Our ancestors went as far as Sahwè to buy palm kernels and to gather them in the bush from un-maintained palms. Kpotokan installed a magic charm in the soil of Houéganme to prevent his children to die[244]."

Their own myths tell that the Ana of Ganme-Houégbo disseminated after some time (around 1850) into small villages around Ganme-Houégbo: Kpotokan installed himself in Houéganme were *azwi* grasses grew. His 'brother' Evuin founded Domi. His 'son' Kpoku settled in the shade of three trees and gave the place the Fon name Titongon[245]. Other Ana founded the village Aname. Some Ana from Aname migrated to the west of the plateau and created the village Agbedranfo, according to themselves because bush fallow had disappeared in Aname but still existed in Agbedranfo.[246] According to others the area between Houéganme and Aname had always been a *zohuji* (grassland) region in the midst of more forested spots on the plateau. Be this as it may, in any case the Ana followed the Adja practice to let circles of bush grow around their villages. These Ana adopted the Ehwe-Adja language and identity.

According to many other informants in the area Kpotokan only levied maize, palm kernels and soldiers for Abomey in the immediate surroundings of Houéganme. Asu did the same in some hamlets between Houédogli and Toviklin. But the majority of the Ehwe-Adja denies that their ancestors ever had such obligations towards Abomey. The levying of palm products from some 'Adja' applied to the 1850-1900 period; therefore I will discuss this issue in more detail in Chapter 6. First I present myths of origin of Asu's people, because they illustrate Adja social relationships and strategies in the 19th century and because one of my principal research villages belonged to him. Two 'great-grandsons' of Asu agreed:

> "Asu came in the early 19th century from Mahi with his wife, with three younger brothers, and with his *toganvi* (father's elder brother's son) Deda. According to one of his 'great-grandsons' they fled from Mahi because of Glele's wars, but genealogical reconstructions suggest that it was rather Gezo's (1818-1858) wars against the Mahi[247]. They installed themselves under an isolated oil palm tree in a valley 2 km south of Houédogli on the central Ehwe-Adja plateau; therefore they called the place Dekime[248]. There Asu's wife gave birth to her first son, whom they called Gbegnon, which means 'life is good' (i.e. life is better here than at Mahi). Asu was a farmer and hunter."
>
> Then follows an account of which the two great-grandsons gave two slightly different versions: 'Under the reign of Glele (1858-1889) the Fon came to the Adja plateau and raided nine (in another version seven) children of Asu, who lived at that time in Houédogli[249]. In those days the Fon had oil palms on the eastern Adja plateau, and when they came to collect their palm fruit Asu opposed them and eventually killed some Fon. He told Glele that he would continue to kill Fon until Glele would render him his children. Asu was one of a twin, 'just like Glele'.

> So he said to Glele: "Why do you who are a twin just like me do this to me?" So Glele sent him a stool, a chief's umbrella and nine people, but only seven of them had red hair like Asu's children. Asu replied: "I don't want Fon and Yoruba children, I want Adja children."' According to one version his plea for 'Adja children' was in vain, but according to the other version "He finally recovered his own children."[250]

Both versions agree that Asu was charged to produce maize, beans and palm oil for Glele with the help of these nine people, that the nine called him Asuxeshino ('ruler Asu'), that he dispersed them in five hamlets between Houédogli and Toviklin[251], and that Asu had a stool from Glele[252]. In addition, Glele would have purchased maize, beans and palm oil from Asu at prices set by the Fon. The nine cultivated on their own and on Asu's behalf and entertained oil palm plantations for him.[253] They were allowed to marry and had children. Today the inhabitants of Asu's hamlets worship Asu as their ancestor, are largely endogamous among each other, and consider themselves to be Ehwe-Adja of the *akó* Waci, which means either 'people from the Come area'[254] or 'slaves'.

Another 'great-grandson' of Asu admitted that his grandfather was Asu's slave. The first time I asked him for the myth of origin of Honsouhoué I was in company of my interpreter from Atindehouhoué. He pretended not to know it. A few days later I was in Honsouhoué alone. He called me and a primary schoolboy from his lineage to come to his house and said:

> "You wanted to know the history of our village. In the mean time I asked some other old men, and they told me that Honsou was a war captive of the Fon. He was sold as a slave to the Adja Asu, who installed him in Honsouhoué. Honsou married three wives. His second wife, my father's mother, was a slave of Dendi origin. Later Honsou acquired one male slave himself, who also married and had children. He and his children became members of our *hɛnu*."

The latter part of the Houéganme and Asu narratives illustrate another defensive strategy of the Adja, namely to keep their villages small and to let a circle of trees and shrubs grow around them, so that the village would not easily be remarked by the enemy[255]. Strips of bush land surrounded all pre-colonial Adja villages. Even larger Adja villages such as Tado and Adjahonme had in the beginning a hedge of 'magically grown' vegetation around them according to their own mythologies[256]. Other uses of these strips, besides camouflage, were to keep domestic animals from entering the fields, as toilet, as burial ground[257], as source of fuel wood and of medicinal plants, and for future expansion of the village[258]. Also sacred forest patches were usually located in such strips. The eldest written eyewitness account of the Adja plateau described these circles of bush in the following terms:

> '*La route de l'intérieur de Toune*[259] *à Athiémé passe sous d'épaisses forêts de palmiers à huile. Les villages, très clairsemés, sont perdus au milieu de la brousse. Ils sont défendus contre les invasions subites par une fortification naturelle, la végétation très dense. Un taillis épais entoure chaque village, et les chemins aboutissent à des portes, faites avec des troncs d'arbres. Des sentiers à peine visibles se croisent en tous sens et vont même se perdre sans issue dans la forêt. Nous avions un interprête Ouatchi qui poussait de temps en temps un cri. Les Ehoués se gardent constamment. Avant la guerre ils craignaient les Dahoméens. Aujourd'hui ils on peur les uns des autres. Le brigandage est assez repandu entre Dobo et Bopa-Sahoué.*' (Alexandre de l'Albeca (1895): Voyage au pays des Ehoués (Dahomey), 20 juillet 1889. Paris. Microfiche, AOM Aix-en-Provence)

Such hedges of bush continued to grow around most Adja villages until at least the 1950s, as can be seen from aerial photographs. Villages on the edges of the plateau still have these circles today (own observations; Brouwers 1993:87).

### 5.3.3 Decentralisation of Adja socio-political organisation

The Ehwe-Adja strategy to live in small hamlets did not facilitate political centralisation. In contrast with the Fon (and with the Ayizo, Hweđa, Ewe and Gun) they never founded their own kingdom. They never chose their own chiefs of the land. All my Ehwe-Adja informants believe that those of their ancestors who settled on the plateau before the early 19th century appropriated virgin land without asking permission from anyone. They continued however to recognise the *nyigbafio* of Tado as distant chief of their soils. But by the 19th century most of the plateau land was occupied. Since then newcomers had to obtain land from local residents.

One way for newcomers to obtain land was to settle matrilocally. Usually all Ewe-Adja speaking ethnic groups were patrilineal and settled patrilocally. Matrilocal residence however was a common exception, often applied in cases of hardship in the patrilineage. Matrilocality usually led to the absorption of the matrilineal descendants into their mother's patrilineage[260]. This shows that the 'family social theory' or kinship ideology of Akinjogbin (1967) in practice may have included cognatic relationships. We saw above how Kedji from Adjahonme settled with his father in law in Gnonfinhoué and received land from him. Also the founder of Atindehouhoué did so in the time of Gezo (1818-1858). According to Hundé, the founder's great-grandson in the paternal line:

> "Nana and her parents hid in Aïssanhoué because of Fon wars in their village Gangbenouhoué (between Houéganme and Houédogli). Also Akpo hid in Aïssanhoué because of smallpox in his village Tokanme (near Adjahonme). Nana became pregnant from Akpo, but her parents did not allow her to marry him because Tokanme was rather close to the dangerous Fon kingdom. Therefore Nana married Sala, whose father was from Tchanhoué (between Aïssanhoué and Azové) but whose mother was from Gangbenouhoué[261]. On advice of Nana's father the young couple settled in Gangbénouhoué 'because Tchanhoué was too far away'. Sala received land from his mother's brothers. Nana's three sons founded their own hamlet at 500 m from Gangbenouhoué and called it Salahoué. Atindehu, who was Akpo's son and the eldest of the three half brothers, was the head and became a respected 'big man' in the area. Therefore the village was also called Atindehouhoué. In the time of Glele some people from Adjahonme, settled at Atindehu's side and founded the ward Djakahoué."[262]

The preference for father's sister's daughter (cross cousin) marriage among all groups who spoke Adja-related dialects facilitated relationships with matrikin. Cross cousin marriages were called *vidokpokanta* in Fon[263], *nyinivi-tashivi* (mother's brother's son and father's sister's daughter) among the Ehwe-Adja, and 'installing a jar of water' among the Tado-Adja[264]. During the era of the slave trade however the frequency of cross cousin marriages among the Ehwe-Adja gradually diminished as compared to the Fon and Tado-Adja; the former came to prefer more direct exchange of women between lineages within a few years. This preference was related to a lack of lasting supra-lineage ties among the Ehwe-Adja, and might have been partly due to their difficulty to keep long term promises in these dangerous times. Fon ideology on the other hand stimulated cross-cousin marriages with a reference to 'our culture', to a 'strategic need to forge sustainable inter-lineage relationships', and to a 'backwardness of direct exchange marriages'. Fon family heads used spiritual means (curses and threats to curse) to force their sons and daughters into cross cousin marriages.[265]

The Ehwe-Adja remained loosely attached to the Tado 'kingdom' and maintained religious and some socio-economic relations with the *nyigbafio*, especially in the beginning. Most Ehwe-Adja, with the exception of the Hwɛno from Bè (who conducted their own rites in

Avégame[266]), contributed to agricultural rituals in Tado and continue to do so to some extent until today. In 4.1.1 I presented testimonies of elderly men from several of my Ehwe-Adja research villages who remembered how their village sent field products, sacrificial animals and/or money to Tado in cases of drought, for harvest festivals, and for the *gbogbuezan* ritual. The frequency of these gifts to the *nyigbafio* would however have declined since at least 1900[267].

Ehwe-Adja lineage heads (*hɛnugan*) also conducted rain rituals on behalf of their own lineage. Gradually the importance of these lineage rituals, which consisted in general in sacrifices to the lineage ancestors in cases of drought, increased compared to the agricultural rites in Tado. The following account is based on own observations and interviews in Atindehouhoué and Avégame, from 18 to 26 April 1990:

> The first season of 1990 was exceptionally dry. Normally the rainy season on the Fon and Adja plateaux starts around March, but in May 1990 the farmers were still waiting for the first rain. Mid-April some Ehwe-Adja villages sent money to the *vodunon* Tofa to buy sacrificial animals for a rain ritual in the sacred forest of Avégame; these animals were sacrificed on 18 April but did not produce rain.
>
> On 24 April the council of *mɛgan* (seniors) of the village Atindehouhoué, which did not contribute to the sacrifice of 18 April, decided to collect money in their own village for a rain ritual. Inhabitants of Atindehouhoué said: "Our last rain ritual was 3 years ago; that year we sacrificed to the *vodun* Yewe in a place called Ho-Loko on the north of the Adja plateau." Only the oldest *mɛgan* still remembered the last time that Atindehouhoué sacrificed in Tado, many decades ago. Now they decided to consult the oracle *Fá* to which *vodun* they should sacrifice. At first they proposed to let the *vodunon-bokonon* Tofa do the consultation (they knew him well because his mother was from Atindehouhoué), but since Tofa's ritual on 18 April had remained without result the *mɛgan* of Atindehouhoué changed their mind and engaged a *bokonon* of their own village. This *bokonon* advised: "Sacrifice a goat and two cocks to ancestor Atindehu and to all village *vodun*, and some cowpeas with palm oil to all the trees in the village." One of the village elders (*mɛgan*) agreed: "Since the ritual of Tofa on 18 April did not succeed it is logical to sacrifice at village level now, even though we learned that Tofa will conduct another ritual in Avégame tomorrow. We will neither go to Avégame tomorrow, nor go to the *nyigbafio* in Tado. Our village ritual is also a big thing!" Every adult villager was requested to give a standard amount of money for the sacrifice.
>
> On 26 April the *tashinon* (priestess of lineage ancestors) of the *hɛnu* Atindehu together with the *mɛgan* and the *bokonon* who had done the consultation conducted their village ritual, while Tofa sacrificed again in Avégame. The *tashinon* commented: "I am in charge of all the sacrifices to our lineage ancestors. But we do not sacrifice to our ancestors every year, but only if a consultation through a *bokonon* requires so."

On 26 April also members of the *hɛnu* Asu sacrificed to their ancestor to obtain rain. This (fictive) lineage used to sacrifice to 'ancestor' Asu every couple of years, every time when there was a drought. As far as the lineage *mɛgan* remember they never participated in supra-lineage rain rituals. Also for them it was several years ago since they last sacrificed to their ancestor. One of the *mɛgan* explained:

> "In the past we sacrificed to Asu every couple of years, every time when there was a drought, and all the five hamlets of Asu's 'sons'[268] collected money among their adults for the sacrifice. But this year only two *mɛgan* collected money because ancestor Asu demanded, through the consultation of *Fá*, only 2 chickens, beans and a bottle of *sodabi*." (Own interview with Lofa Sokposu, Dékime 21-5-1990)

According to a Tado myth the Ehwe-Adja would have rendered during a certain period palm oil as a 'tribute'[269] to the *nyigbafio*, who lacked oil palms in his own savannah environment.

In Ehwe-Adja eyes however all their offerings to the *nyigbafio* were voluntary gifts. The Tado account connects the palm oil 'tribute' to the building of a town wall around Tado and admits that the Ehwe-Adja's gifts declined after some time. This wall seems to have been constructed during the high-days of the Fon kingdom[270].

> 'The palm oil that the Ehwe-Adja gave as tribute was mixed with clay and used to build a town wall around Tado. But the Ehwe-Adja's oil gifts diminished and hence there remained openings in the wall.' (Pazzi 1979:91)

Tossa, an Ehwe-Adja from a lineage which maintained relatively strong relations with Tado, described the Ehwe-Adja's 'tribute' to Tado as 'voluntary thanksgiving' after a good harvest, or rather as a self-inflicted obligation to 'pay' for a good harvest:

> "Since the times of Kpoyizun and before, after a good or fairly good harvest every village used to collect agricultural products and to bring them to the *nyigbafio*. These offerings were like the civil tax of the government. But the *nyigbafio* did not force anybody to give and he did not send his agents to collect tribute, the people gave as much as they had promised (at the beginning of the rainy season) to give if the harvest would be good. The *nyigbafio* used these products for the public welfare: he used them for the upkeep of his *vodun*, and to feed himself and his *tasinon*. The *tasinon* helped him to conduct rituals for rain, for health, to stop epidemics etc. Therefore I say civil tax."[271]

*Nyigbafio* Adjakanumabu agrees with the version that, at least since the second half of the 19th century (the reign of *nyigbafio* Kpoyizun), the Adja only brought voluntary contributions[272]. The Adja nevertheless knew how much was appropriate to give for each occasion if they decided to visit the *nyigbafio*. Tossa had a good idea of how much money was needed for a rain sacrifice, and if the money collected by the young people in his village did not suffice, he and the other old men topped it up themselves[273].

Tado became increasingly unable or unwilling to guarantee the Ehwe-Adja's security, even though Tado would have had an army (Gayibor 1992). Some Ehwe-Adja myths even suggest that certain *nyigbafio* or other inhabitants of Tado used violence against them. Narratives from different villages speak of war in the village Hedotoume on the northern edge of the Adja plateau around 1800, though they disagree on who was the aggressor: myths of origin of the Adja villages Dekpo and Kaïteme mention Fon invasions and the raid of a girl by the Fon king, the myth of origin of the Adja village Bossouhoué speaks of a war at Tado, and inhabitants of Hedotoume narrate that Tado-Adja came to raid slaves on behalf of the *nyigbafio*[274]. If these migrations were all triggered off by the same war, the version that it was an attack by Tado seems most credible[275]. War, between brackets, is a broad concept in Fon and Adja terminology. It is used for all kinds of disasters, for various forms of human conflicts but also for diseases, which are conceptualised as war of the gods against humans. For the founders of Dekpo, Kaïteme and Bossouhoué these 'wars', combined with a lack of water at Hedotoume, were reasons to leave that place and to found their own small villages. (Interviews in Dekpo, Kaïteme and Bossouhoué, November 1990).

Gradually the Ehwe-Adja's relations with Tado became looser. Not only did their palm oil gifts decline but probably also their contributions for (agricultural) rituals in Tado. With the development of the forging industry on the Adja- and Fon plateaux and the decline of forging in Tado the Adja became less dependent on Tado for iron tools. The Ehwe-Adja dialect came to differ slightly from the Adja-Tado dialect.[276]

The weakening relations between the Ehwe-Adja and Tado, combined with the absence of centralisation among the Ehwe-Adja themselves, implied that the latter became gradually

Table 5.2: Fon and Adja titles for addressing male patrikin, matrikin and affines

| | Fon | Adja |
|---|---|---|
| Father's father | *Daa, daágbó, tógbó* | *Tógbó* |
| Father's elder 'brother'[1] | *Fofó, daa (-daxó)* | *Togan, fofó* |
| Father | *Tó, daa* | *Edà* |
| Father's younger 'brother' | *Daa kpɛvi* | *Todi* |
| 'Brother' | *Novi súnù* | *Novi unsù* |
| Elder 'brother' | *Fofó, vi mɛxó* | *Fofó* |
| Younger 'brother' | *Novi kpɛvi* | *Novinjɛ, fofóvi* |
| Eldest son | *Vi mɛxó, nukon-gbevi* | |
| Youngest son | *Kpodevi* | |
| Mother's 'brother' | *Nyolòn* | *Nyini* |
| Husband | *Asú* | *Asù* |
| Husband's father | *Asutó* | *Asutó* |
| Wife's father | *Asitó* | *Ashitó* |
| Husband's brother | *Nohwɛn* | *Todi* |

1 Classificatory brother; this includes FS (brother), BS (nephew), FBS (male cousin) etc.

Table 5.3: Fon and Adja titles for addressing female patrikin, matrikin and affines

| | Fon | Adja |
|---|---|---|
| Father's mother | *Nongbó* | *Enongbó* |
| Father's 'sister'[1] | *Tanyi* | *Tashi* |
| Father's 'eldest sister' | *Tanyinon, daa nyonù* | *Tashinon* |
| Father's elder 'sister' | *Akovi* | *Dadágan* |
| 'Sister' | *Novi nyonù* | *Novi nyonlù* |
| Elder 'sister' | *Dadá* | *Dadá* |
| Younger 'sister' | *Dadávi* | *Dadávi* |
| Mother's mother | *Nonòn* | *Enonòn* |
| Mother | *Nòn, nana* | *Enòn* |
| Mother's elder 'sister' | *Nagan* | *Nongan* |
| Mother's younger 'sister' | *Nafí* | *Nondi* |
| Wife | *Asi* | *Ashi* |
| First wife | *Yale, hwesidaxo* | *Axwenon* |
| 'Brother''s wife | *Asi mitòn* | |
| Husband's wife (co-wife) | *Asísi* | *Asíshi* |
| Husband's mother | *Asúno* | *Asunon* |
| Wife's mother | *Asino* | *Ashinon* |

1 Classificatory sister; this includes FD (sister), BD (niece), FBD (female cousin), FFD etc.

more acephalous between the 17th and the 19th centuries. Hence during the same period that Fon socio-economic and political organisation became more and more centralised, Ehwe-Adja organisation became rather less central.

Kinship, affinity and seniority, the latter especially within the lineage, remained important organizing principles of Fon and Adja society (Tables 5.2 to 5.4). Seniority within the lineage guided matters of succession to office[277]. Labour duties and the obligation to show respect went along the lines of seniority. In return, seniors were to provide maintenance and protection to their juniors. Men and women had their separate hierarchies and women were generally of lower status than their brothers of the same age. The extensive terminology to address matrikin, in particular female matrikin, shows that relationships with them were and are important in addition to patrilineal relations.

Table 5.4: The concept of 'age' among Fon and Adja

| | Fon | Adja |
|---|---|---|
| Young man[1] | *Donkpɛ* | *Dajɛ* |
| Young girl | *Diovi* | *Tugbejɛ, nyonlùvi* |
| Man | *Súnù* | *Unsù* |
| Woman | *Nyonù* | *Nyonlù* |
| Old man | *Mɛxó, degéno* | *Mɛgan* |
| Old woman | *Nyonxó* | |

1 From puberty until physical strength declines or until the man withdraws from physical labour. Among both Fon and Adja, the concept conveys a positive notion of juvenile strength. When the Fon call the *donkpɛ* for a work party, all men capable of wielding a hoe turn up to work a little and especially to feast 'because we all want to be young and strong'.

Sources for Tables 5.2 to 5.4: own research; Adjahi Baï (1976); Alapini (1969:28); Aguenou (1983:33, 42-44, 52); Anonymous (s.d.:5 and 1983:III, 1); Ségurola (1963:7).

Seniority was in the first place based on date of arrival in the compound, which means that lineage members had a higher status than strangers, be they wives, slaves, or other newcomers. This hierarchy did not stop at death. The deceased were sensed to have even greater magic powers than the living, and to stay in contact with the latter through the ancestral rituals.

Seniority was not only dependent on biological age, but also on achieved status. *Mɛgan* (Adja) and *mɛxó* (Fon) meaning 'old man' as well as 'big man', are concepts for seniority rather than for age. Matters of personal achievement such as marital status, number of children, acquired socio-political and religious titles, material wealth, skills, knowledge, and the demonstrated ability to command the loyalty of others all contribute to seniority. The relationship between seniority, status and power was a dialectical one. Seniority conveys access to the loyalty and labour services of others but was also dependent on them. Differential access to the means of production was defined in terms of kinship and seniority, and it also helped to define them. This concept of seniority is very similar to the Yoruba's (Berry 1985:8, 64)[278].

> 'When I asked the Ehwe-Adja in Atindehouhoué who was the eldest person in the village the answer was usually "*mɛgan* Hundé" (a former *chef* under colonial rule), in spite of the fact that there were others more advanced in age. Also other wealthy middle-aged men were called *mɛgan* while poor old and middle-aged men were not.' (Wartena 1987:43-44)

The principle of kinship and seniority within the lineage did not differ between the Fon and Adja. The linguistic similarity between concepts also underlines this. Certain positions in the lineage however, in particular that of the *hɛnugan* and the *tanyinon*, obtained more important roles and hence acquired greater status and power among the Fon. The Fon also created additional offices at lineage level, in particular the offices of *vigan, donkpɛgan* and *salanon*. The centralisation of Fon society also implied the creation of titles and offices on supra-lineage level.

The case of the rain rituals in the Ehwe-Adja villages Atindehouhoué and Honsouhoué illustrates the importance of a council of village- or lineage *mɛgan* (seniors) among the Ehwe-Adja. *Hɛnugan* among the Ehwe-Adja had relatively little influence compared to the other members of this council. Fon *daa* and *hɛnugan* in contrast gained more powerful positions in their compounds and lineages during the time of the kingdom. The same applied for Fon *tanyinon* compared to Ehwe-Adja *tashinon*. This was partly due to the growing importance

Table 5.5: Achieved seniority, titles and offices in Fon and Adja[1]

| | Fon | Adja |
|---|---|---|
| Big man | *Mɛxó, mɛdaxó* | *Mɛgan* |
| Chief | *Gán* | *Fio* |
| Chief of the soil | *Aïnon* | *Nyigbafio* |
| Ruler, king | *Axosu* | *Xeshino, hweshino* |
| Lineage head | *Hɛnugan* | *Hɛnugan* |
| Compound head | *Daa* | |
| Vice-compound head | *Vigan* | |
| Ward head | *Salanon* | |
| Work party-head | *Donkpɛgan* | |
| Priest (or priestess) | *Vodunon, hunon* | *Vodunon, hunon* |
| Ancestral priestess | *Tanyinon, akovi, daa nyonu* | *Tashinon* |
| First wife | *Yale, hwesidaxo* | *Axwenon* |
| Mother of twins | *Hoónon* | |

1 The titles which the Fon have in excess over the Adja were created during the time of the kingdom.

of ancestor worship among the Fon. The cases of the rain rituals in Atindehouhoué and Honsouhoué and other evidence indicate that the Ehwe-Adja did not sacrifice very frequently to their ancestors. Among the Fon however, annual sacrifices to lineage ancestors became institutionalised during the time of the kingdom. In this Fon lineages probably followed the example of their kings and the latter's annual *hwetanu*.

### 5.3.4 Markets, traders and trade networks: Adja trade quenched by Fon raids

The principal Ehwe-Adja markets were Kisame, A*f*igame, Azové and Klouékanme. The trade which went on there was already discussed in section 5.2.4. Other markets on the Ehwe-Adja plateau that existed in the 19th and probably also the 18th century were those in the villages Aplahoué, Aïssanhoué[279], Houétan, Avégame, Adjahonme and Zouvou. These markets (except Zouvou, which disappeared before 1900) are mentioned by early colonial written accounts, but the fact that all these villages belong to the most ancient Ehwe-Adja villages, founded before the 19th century (see 4.1.1), and that neither written nor oral accounts mention markets in other Ehwe-Adja villages, suggests that these markets may also have been founded before the 19th century.

A look on the map shows that all these markets were in the north-west of the Adja plateau, again with the exception of Zouvou which disappeared in the 19th century[280]. Eastern Ehwe-Adja markets did probably either not emerge or not stand because of the proximity of the dangerous Fon kingdom.

The Ehwe-Adja's principal external trade relationships until the 1890s seem to have been with the Tado-Adja in Tetetu and Tado and with the South. Tetetu (Sagada) was the entrepot for salt from the Anecho region (see 5.2.4 and section 6.4). According to Abotchi (1995:457) '*Tado était non seulement un carrefour commercial important où les Aja de la diaspora venaient se ravitailler en produits de tous genres, mais aussi et surtout un centre spirituel*.' Maps of 1893 and 1895 show that the Ehwe-Adja's principal external roads led to Tado, coming from 'Avegoro' (= Avegodo, 1 km northeast of Azové) and from 'Ouetan' (= Houetan, a few km north of Azové[281]), and from 'Avegoro' to the south. The lack of other roads was probably due to the insecurity caused by the Fon kingdom.

In general the Ehwe-Adja seem to have traded less than the Fon during the era of the slave raids, in particular in the east of their plateau. In contrast with the latter, the Ehwe-Adja engaged less in trading to other regions, again in particular to the east. This suggests that not only their limited access to European raw materials and cowry money, but also the insecurity of their plateau kept them from trading.

Under these conditions the occupation of trader was not a realistic goal to be aspired by the Adja. The Adja could only accumulate by cultivating. At best, some profits could be made by selling agricultural products to the Fon, but even in this case the Adja were dependent on the Fon traders and had to take any payment the latter offered.

### 5.4. Development of different styles of making a living

Klein (1968:117) argued that there were no significant life style differences between the Danhomean monarch and his people. However, since styles are folk categories and are defined at least in part by their adherents themselves (see 2.5), what is a 'significant' life style difference between the a people and their ruler should be decided by themselves. Klein, who only made a superficial study of written sources, was not in a good position to discern style differences.

I will defend in this section that the Fon did perceive differences in (life) styles between the elite, the commoners and slaves, and that they attached significant status differences to these styles. I will show how Fon and Adja styles emerged when activities that brought economic and socio-political success in the slave trade period acquired status in themselves. But I will also show that Fon commoners adopted elements of the elite's styles for other than economic reasons. I will argue that this 'style-diffusion' accounted for many of the changes in the social, cultural and productive organisation of pre-colonial Danhomɛ.

Fon history confirms Bourdieu's (1979) thesis that the lower classes tend to aspire the styles of the upper class. Fon commoners imitated many elements of their rulers' styles of making a living. They strove to engage in the same economic activities and (religious) rituals as the elite, aspired chiefly status symbols, implemented the rulers' style of leadership and -labour organisation within their own units of production, etc. The Ehwe-Adja did not have distinct socio-economic classes, but they too tried to copy the styles of making a living of the 'big' men in their neighbourhood.

#### *Similarity of pre-1600 Fon and Adja sources of status*

Before 1600 the socio-cultural organisation and the production techniques of the 'Gedevi' were fairly similar to those of the Adja. The livelihoods of the 'Gedevi' and the Adja were based on hunting, gathering, agriculture and the production of bark-clothes. Women in river-side villages made pottery, and the Alu in Tado mined, smelted and forged iron tools (see Chapter 4). Ritually, production was controlled by family heads and by regional chiefs of the soil. This means that there was a low degree of professional specialisation, except in Tado. Status differences were hardly based on occupation (probably again with the exception of the Tado blacksmiths) but on gender and on 'seniority'. Seniority, as we know from 5.3.3, depended on date of arrival in the compound and on matters of personal achievement such as marital status, number of children, material wealth, skills, knowledge, the demonstrated ability to command the loyalty of others, and acquired socio-political and religious titles.

However titles were rare in ancient 'Gedevi' and Adja society, the principal acquired ones were *hɛnugan* (lineage head), *tanyinon* or *tashinon* (priestess of the lineage ancestors), *vodunon* and *vodunsi*.

### *Clothes as ancient Fon and Adja status symbols*

One status symbol emerged fairly early among both 'Gedevi' and Adja, probably not later than the 17th century. This status symbol was clothing. We saw in 5.2.1 and 5.2.2 that cotton and the art of weaving cotton cloth were introduced to the Allada plateau in the 16th century, to the 'Gedevi' plateau in the early 17th century, and to the Ehwe-Adja plateau probably even later. Until then the 'Gedevi' and most likely also the Adja made clothes from the bark of trees. Cotton cloth was scarce in ancient 'Gedevi', Fon and Adja society. Therefore it should be no surprise that clothes became indicative for a person's status and vice versa.

In the era of the slave trade the seniority of Fon and Adja men and women prescribed which cloth they were allowed to wear. 'Young' people and slaves wore nothing but a *go*, a small piece of cloth tied to a string around the waist and passed between the legs[282]. *Avò*, loincloths wrapped around the waist, were only allowed after ritual initiation into adulthood around the age of 15. This taboo no longer applies in the 20th century but its memory is conserved in certain Fon expressions.

*S'àvò* means to be big (Ségurola 1988:70) and the expression 'he is allowed to wear an *àvò*' means 'he is adult', being about 15 years or older. When I tried to estimate the age of elderly Fon and Adja men and women many said things such as 'I was allowed to wear an *àvò* at the time of the eclipse of the sun' to indicate that they were over 15.

Large cloths wrapped around the shoulders were at first a luxury that only big men could afford, but such wealth could also contribute to become a big man. Hwegbaja (ca. 1650-1685) rose in status among the 'Gedevi' chiefs partly because he dressed in a larger cloth than they did according to a Fon dynastic account recorded by Le Herissé (1911:24-25) (see 5.2.2). Wrapping ones cloth around the shoulders remained a chiefly status symbol on the Bight of Bénin; and it remains 'not done' for ordinary adults to wear their cloth that way. Adja- and especially Fon etiquette still demands to appear barefoot, bareheaded and on some occasions bare from the waist upwards before the Adja's *nyigbafio*, before the head of the Fon royal family, before important priests, and on some ritual occasions before certain Fon chiefs, for example one's own lineage head[283]. Fon kings in the 18th century forbade the use of certain types of garments to their subjects, and restricted these outfits to themselves as symbols of royal authority (Dalzel 1793/1967:xv; Elwert 1973:100).

## 5.4.1 The royal style trickles down in Danhomɛ: rising status of non-agrarian activities

During the 17th, 18th and 19th centuries South-Béninese socio-cultural and economic practices changed, especially those of the Fon compared to their predecessors the 'Gedevi'. In section 5.2 I presented the principal technological, political, military, religious and commercial innovations in the Fon kingdom during the era of the slave trade. We saw that among the Fon new economic, socio-political and religious roles emerged, for example those of weaver, warlord, spy, soldier, royal smith, priest of a state cult, Muslim diviner, *Fá*-diviner *bokonon* and *vigan*. Also some old roles acquired greater importance under the Agasuvi rule, for example those of *hɛnugan* (lineage head), *tanyinon*, trader and slave.

***Profitability of non-agrarian activities***

The new off-farm activities were economically profitable in the time of the Fon kingdom. Sections 5.2.3 and 5.2.4 gave some examples. The size of the wards Gawusalame and Tanyin'sinhoué today illustrates the economic success of Agaja's commander-in-chief *gawu* and of a *tanyinon* in Kana-Dodome. The *ahwangan* and *agbajigan* (warlords) and also the lineage heads and -elders in their military roles were able to sell the slaves which their regiments captured, received bribes, and occasionally received gifts from the king, especially slaves. They put these slaves to work their farms. Priests received gifts and diviners payments for their services. Successful priests had in addition *vodunsi* in training whom they put to work in home industry and probably in the fields. *Vodunon* of public cults tended to have more *vodunsi* than the lineage *vodunon*. Market priests (*ahinon*) appropriated part of the taxes they perceived for the king as described in 5.2.4. Smiths and producers of ritual objects, especially cloth, were among the first to sell their commodities on local markets. Danhomean cloth was soon renowned and found a ready market also outside Africa, especially Brazil, during the time of the Fon kingdom[284]. Free trade in slaves and other commodities flourished and many Fon traders became wealthy, for example the woman Paussie who purchased seventy slaves with the revenues of her iron- and coral trade. Traders, warlords and priests who had slaves or *vodunsi* to work their fields could partly withdraw from farm labour themselves. The kings set the example in this regard by putting their slaves and (slave) wives to work in the fields around their palaces in Kana and probably also elsewhere.

Fon blacksmiths were reputedly rich. This is affirmed by one of the 'names' that the Fon gave to the *akó* Ayato, the clan of blacksmiths[285]:

> 'Though the *akó* are always seated, their work is dear; the *akó* use small anvils, but receive great riches.' (Herskovits 1938 I: 181)

The reference to sitting is significant. At present as in the past the Fon and Adja regard as real work only what is done standing. When they encounter a person engaged in standing work they greet him with *okú d'àzo* or *bon travail* (Fon respectively French for 'work well'), but when meeting a seated person the greeting is *okú d'áyì jíjòn* or *bonne assise* (Fon and Pidgin-French for 'sit well') even if the sitting person is actually working. Seated activities such as forging, selling on the market, reading and writing are rather classified as leisure, and may be pursued on the local day of rest, which is one day in four on which labour with iron farm tools is strictly forbidden (Hodonou 1976:231). The day is called *Kisagbe* in Ehwe-Adja and *Hunjrogbe* or *Mignonhigbe* in Fon. Most Fon in the villages I studied, even in Aoundome (see 8.1.2), respected the taboo on standing work with iron tools on *Hunjrogbe*. A few Fon, for example Daa Alikoton whom I quote in section 9.2.3, restricted the taboo to ridging only. While *àzo* is the general Fon concept for work, the term *lɛ huèn*, literally ridging, is used in a figurative sense for 'hard, unpleasant work' (Segurola 1988: 242). Fon blacksmiths observed Tuesdays as their day of rest instead[286]. Adja farmers were at the time of my fieldwork more inclined to work in their fields on *Kisagbe*. In section 8.2, 8.3 and 9.2 I will show how this relates to the Adja's greater industry in agriculture and to the Fon's greater religiosity. But also the Adja attributed things which went wrong to the wrath of the gods. The drought in April 1990 which I mentioned in section 5.3.3 was, according to priest Tofa, the *vodun*'s punishment for the Ehwe-Adja's farm work on *Kisagbe*. To obtain rain and forgiveness they therefore sacrificed several goats, chickens and a dog in the sacred forest at Avégame on 26 April and promised to rest henceforth on *Kisagbe*'s

(own observations). Christians may go to market or work at their desk on Sundays, but – at least Protestant ones – not in their fields[287].

### *Rising status of non-agrarian activities*

Seated activities obtained not only a different but also a higher status than other types of labour among the Fon. Fon blacksmiths were not only rich but also enjoyed a high standing. Next to forging, weaving was another seated activity that became prestigious according to Fon dynastic tradition[288], especially the weaving of shrouds[289]. Herskovits portrays weaving and forging as the most respected occupations, and farming as the least: 'The weavers, with the iron-workers, are held as the most honoured of Dahomean craftsmen' (1938 I: 45), and in the parade of representatives of various professions during the annual *hwetanu* at the Fon king's court 'the weavers came first, while the cultivators, under their *glegán*, were last' (ibid:114).

The status of weaving remained high until at least the Second World War[290]. In the early 20th century it was the only activity which Fon princes did not consider below their standing[291]. Archival documents show that until the 1930s, weaving was the principal occupation of those Fon *chefs de canton* who were of royal descent[292]. Also one of the elder sons of Prince Ahovi, whose family I studied in Lissazounme, was a weaver during the early years of the 20th century.

> '*Les princes se distiguent par leur paresse, leur orgueil, leur amour exagéré du luxe et des fêtes. Pour eux tout travail manuel (à part celui de tisserand) est une déchéance; ils restent inactifs dans leurs cases.*' (Rapport mensuel Juin 1907 Cercle d'Abomey, ANB, Porto-Novo)

The prestige of seated activities also applied to reading and writing. I have shown in 5.2.3 that Muslims were honoured in the Fon kingdom for their writing skills, and that the *Fá* divination system derived it's status among the Fon in part from the inscription of it's symbols and from being called the 'writing of Mawu' (see also Herskovits 1938 II:203). Literate people among the Fon received the title *akowe*, which means scribe in Yoruba[293].

Not only seated but also other non-agrarian activities rose in status among the Fon, notably those which were associated with military or spiritual power, called *acɛ* (section 8.2 and Chapter 10). Section 5.2.3 described how brave or successful warriors received public praise and titles from the king. This promoted a warrior ideology and raised the standing of warlords in Fon society. Those warlords who had slaves in their farms withdrew from field labour themselves. Their example contributed to the glorification of warfare and to the disdain of agriculture among the Fon. This celebration of warfare and stigmatisation of agriculture was further stimulated through warrior songs[294], dances, memorial appliqué cloths[295], and bas-reliefs showing military victories[296]. Dynastic chronicles tended to change every military defeat into a success. An Amazons' song and a bas-relief which went with it[297] explicitly contrasted warfare with agriculture, the former receiving a high and the latter a low status:

> 'May the men stay at home
> to cultivate maize and oil palms!
> But we, we will go to turn over
> bowels with our hoes and cutlasses!'
> (Song of the Danhomean Amazons; Garcia 1988:132).

Both the Amazon's song and the indigenous citation from king Gezo in the introduction to this chapter, which was recorded by Lieutenant Forbes when he tried to convince Gezo to switch from slave- to palm oil exports, show that some women also joined the military and shared its status. Adandozan or Adanzan (1797-1818), under whose rule the Fon experienced several defeats, made a statement similar to Gezo's. At a certain moment Adandozan failed to render the annual tribute to Oyo, claiming that he was unable to pay. Fon dynastic tradition relates that the Oyo (Nago) king was not amused:

> 'The Nago king sent Adanzan a mattock with this message: "So you are poor now? Cultivate, and you will be able to pay my tribute!" Adanzan replied: "Our fathers did not cultivate with hoes, but with guns. The kings of Danhomɛ cultivate only war!"' (Fon dynastic account recorded by Le Herissé 1911:313)

Also priests and diviners were honoured in the Fon kingdom, as I showed in 5.2.3 for Muslim- and *Fá*-diviners. The Fon kings promoted the prestige of the two new divination systems by engaging court diviners of both systems, by following their advice, and by spreading success stories about them. Being recognised as diviner was also a possibility for strangers to rise in status and to escape from enslavement[298]. Being a *Fá*-diviner *bokonon* is something to boast about for modern Fon. During a first interview my respondents rarely spoke without being asked, but in response to my first question "What is your name?" many diviners insisted to add "My name is x and I want you to know that I am a *bokonon*."

The prestige of public *vodun* and of their priests was such that lineages and villages that had them were often named after them. This applied for my research lineages Lisanon (see 5.2.2), Sohwe and Mawuhwe, and for the villages Lissazounme, Aoundome and Gnidjazoun (see 5.2.3 and 4.1.2). The *vodunon* of Hlan in 5.2.3 was granted royal status symbols. Priests and also *vodunsi* were honoured (and feared) for their occult powers *acɛ*. Most *vodunsi* were female, but the other positions of prestige were mainly occupied by men as long as local trade was unimportant[299]. This made initiation as *vodunsi* the easiest way for women to rise in rank and power. The eyewitness Bosman (1704/1967:375) testified that female *vodunsi* and *vodunon* in the 1690s in Whydah were less submissive to their husbands than other wives, and in some cases dominated them. Female Fon, Adja and Gun *vodunsi* today enjoy more autonomy from their own and other men and a higher status in their patrilineages than other women[300].

All this contributed to the glorification of warfare, crafts, trade and religious enterprise, in other words of off-farm activities. At the same time, agriculture became despised in the vicinity of Kana, Abomey and other slave trading South Beninese towns because slaves were employed in it[301]. Upper class Fon men in Abomey, Kana and Whydah withdrew from farm labour in order to concentrate on status-conferring craft industries, (slave) trading, warfare, and priestly activities. Gradually among the Fon the new professions became prestigious in themselves. This gave rise to a class based society, yet a society in which women could have a share in status position.

### *Fon chiefs adopt royal rites and styles of leadership*

We saw (Table 5.5) that Fon and Adja society were organised on the base of kinship and seniority, and that titles such as lineage head (*hɛnugan*) and priestess of the lineage ancestors (*tanyinon, tashinon*) were the same in both languages. The leadership styles of Fon *hɛnugan* and *tanyinon* however changed during the era of the slave trade. Their roles became

more influential, more visible, and more associated with conspicuous leisure. The Fon also introduced new prestigious titles that promoted conspicuous status leisure, for example those of *vigan* and *donkpɛgan*.

In pre-kingdom times the *tanyinon* and *tashinon* were not only priestesses but also female head of their lineage. They led the ancestor worship, intervened in the consecration[302] of the *hɛnugan,* had to give their consent to marriages, conducted rituals associated with marriage and childbirth, introduced young wives into the customs of the lineage, and had in general authority over women married into the lineage (ibid and 5.2.3).

The *hɛnugan* of ancient 'Gedevi' and Adja lineages controlled the lineage land and the lineage *vodun*[303] and had an important voice in the council of lineage elders. The Fon also gave the title *daa* to lineage, to sub-lineage or compound heads. The *daa*'s role was similar to that of the *hɛnugan*; whatever I write about Fon *hɛnugan* in this section also applies to the *daa*. The *daa* or *hɛnugan* could claim the lineage members' labour for certain activities, in particular on the lineage land. He organised the sacrifice of the lineages' yam first fruits *teđuđu* (own observations; Agbo 1991:170; Sagbohan, Sekpe & Lokonon 1983:27). He also assisted the *tanyinon* or *tashinon* in the cult of the ancestors. The Ehwe-Adja and (at least some of) the 'Gedevi' clans however do not seem to have venerated their ancestors on a regular base, but only in times of need. Fon and Adja oral traditions and recent Adja practice suggest this[304].

The Fon kings' authority was associated with certain rituals and status symbols, and with conspicuous leisure and -consumption. They demanded certain outward expressions of respect. Fon commoners strove to imitate this style of leadership.

Danhomean kings adorned themselves with status symbols such as decorated umbrellas, wands of office (*àxósú)kpò* (see also 4.2.1), stools, and the right to wear shoes and headgear while all others in his presence went barefoot and bareheaded (see also the case of the priest of Hlan in 5.2.3). Etiquette demanded to prostrate flat on the ground and to throw soil over one's own shoulders in addressing the king[305].

The Fon kings themselves engaged in the prestigious activities like warfare, (slave) trade and religion, but not in agriculture. Of these activities only the religious ones were open to most commoners, therefore I focus on these. Sections 5.2.2 and 5.2.3 gave examples of how Fon kings installed public *vodun* cults and worshipped these themselves. In section 5.2.3 I argued that the Fon kings from Agaja onwards greatly expanded the splendour of the cult to their own ancestors. Offerings to the Fon royal ancestors became an annual event, called *hwetanu*, in which all Danhomean families were expected to participate through the presence of a representative or at least through sending gifts. The Fon monarchs turned the *hwetanu* into a festival of many weeks, with conspicuous sacrifices, public giving of the gifts of families and 'big men' to the king and of the king to some visitors, speaking of justice, public praise of warriors, and other forms of entertainment.

Common Fon more and more aspired to royal status symbols and royal forms of outward respect, and granted these to their own *hɛnugan*. They honoured their *hɛnugan* by kneeling, prostrating, walking barefoot and sitting on the ground in his presence[306]. They copied many of the status symbols of their king, for example umbrellas and sceptres, and granted these to their *hɛnugan*. They consecrated their *hɛnugan* during public enstoolment ceremonies, which involved that the *tanyinon* blessed him and seated him on a small stool[307] – smaller than the king's. Fon *hɛnugan* delighted to wear large cloths wrapped around the shoulders

and their other status symbols during ceremonial occasions. Ehwe-Adja *hɛnugan* in contrast rarely exposed status symbols in public and were rarely addressed with outward respect. (Own observations).

Lineages of Fon commoners imitated the kings' ancestor cult. They too started to venerate their ancestors on an annual basis, and called this rite *hwetanu* or *ahanbiba* ('libation'). They too started to expect all lineage members to assist at the event or at least to contribute materially. They too exposed the contribution of each member in public. They too organised music and dances to which neighbours from other lineages were invited. Each Fon lineage tried to show off with expensive sacrifices and -entertainment. The first lineages probably followed the king's example; the others did not want to lag behind their neighbours. A Fon in Kana-Dodome explained that: "Normally our lineage should not celebrate the *ahanbiba* because this was not our *akò*'s custom before we arrived on the Fon plateau. But here we conformed to the local customs."

Fon commoners also followed the king's example in the domain of *vodun* worship. Those lineages which received state cults from him henceforth worshipped these as their *hɛnuvodun* (lineage gods). Other lineages, who wanted to imitate the king and their neighbours, gave more splendour to the cult of their own *hɛnuvodun*. Many lineages installed more *hɛnuvodun* themselves. The worship of these *hɛnuvodun* involved at least one communal sacrifice by the lineage.

Institutionalised annual worship did not exclude consultation of- and offerings to the *vodun* or ancestors on other occasions. To the contrary, it seems to have boosted faith in their ability to help in times of need. The Fon today and in the recent past seem to consult their *vodun* and ancestors and to make offerings to them out of their own initiative more frequently than the Adja.

The roles and positions of Fon *hɛnugan, daa* and *tanyinon* were strengthened by the Fon expansion of ancestor- and Fon *vodun* worship and became more associated with spiritual power. In each contact with lineage ancestors the *tanyinon* and *hɛnugan* or *daa* intervened. The *daa*/*hɛnugan* had authority over each sacrifice to lineage *vodun*, in most cases directly in the position of lineage *vodunon*. Fon *tanyinon*, in contrast with Adja *tashinon*, also obtained an important role in funerals and were granted material rewards for their services. Fon *tanyinon*'s influence on marriages and on the *daa* or *hɛnugan* became more pronounced than that of Adja *tashinon*. The *tanyinon*, but not the *tashinon*, received part of the bridewealth for each lineage girl[308]. In their ability to interpret the ancestors' will to the lineage the *tanyinon* were consulted regarding the selection of the *daa* and *hɛnugan*, and had an important voice in the council of lineage *mɛxo* (elders)[309]. The Fon *daa*/*hɛnugan*, for their part, were far more influential in this council than the other *mɛxo*. The position of Ehwe-Adja *hɛnugan* in contrast did not differ much from that of their fellow lineage elders. Fon *daa* and *hɛnugan*, but not Adja *hɛnugan*, continued to control important tracts of lineage land (*hɛnuaïkungban*) and of the oil palms on it[310].

*Donkpɛgan* ('chief of the young men') and *vigan* ('chief of the children') became Fon titles associated with labour supervision. The *donkpɛgan* could put the young and middle aged inhabitants of his ward or village to work, the *vigan* those of his lineage.

The *vigan* was formally the second in command of a Fon lineage or compound[311], ranking directly under the *daa* or *hɛnugan*. Most *vigan* were slightly younger and physically

stronger than their *daa* or *hɛnugan*. The *vigan* went with the junior people to the field and supervised their labour there, while the *daa* or *hɛnugan* stayed at home.

The *donkpɛgan* organised communal labour by his ward or village and said some prayers during funerals. They would have been ancient 'Gedevi' village heads to whom the Fon kings granted new privileges (Herskovits 1938 I: 65). *Donkpɛgan* had the right to summon all the young and middle aged villagers to work in a field, build a house, or dig a grave on behalf of a fellow villager[312]. The kings gave the *donkpɛgan* authority over graves and burials, which was (and is) an influential position given the importance that the Fon attach to funerals[313]. *Donkpɛgan* were granted status symbols such as a stool and a large cloth wrapped around the shoulders, and the right to be greeted with respect even by the king (own observations; Herskovits 1938 I:70-71).

Both the *vigan* and the *donkpɛgan* supervised physical labour, mostly on the land, but did not participate in the work themselves. Hence their prestige was associated with conspicuous leisure. This stimulated the Fon disdain of physical work in general and of farm labour in particular.

### 5.4.2 Stigmatisation of the countryside on the Fon plateau

We have seen that many new economic opportunities emerged in Danhomɛ and that the new professions obtained a high status. Farm labour however was more and more left to slaves, mainly female slaves, and declined in status. The new high status activities were largely carried out in town and were associated with urban life. Together with disdain for agriculture the Fon developed disdain for rural life and for the countryside '*nukanmɛ*'. The town rose in status in Fon eyes. Ancient crafts such as pottery[314] and wood carving, which were through their raw materials more associated with the countryside, do not seem to have obtained a high status.

The Fon, Adja and 'Gedevi' used to classify inhabited areas, be they large or small, as *tò* (village or town), in distinction to *zùn* or *ave* (forest), *gbe* or *zogbe* (grassland), *gle* or *agble* (cultivated land), and *nukanmɛ* (bush fallow) (see also Table 4.3).

The Adja and the 'Gedevi' do not seem to have valued *tò* more than the other categories. Forest and grassland was valued as a source of game and of magic[315], cultivated land as a source of agricultural products. All Adja *tò* were purposely surrounded by a circle of forest (see 5.3.2), the same probably applied for many 'Gedevi' *tò*. The Adja valued the *ave* around their villages as protection against invaders, as a source of timber, firewood, fodder, medicinal herbs, as toilet and as graveyard. Most Adja *tò* were kept small because this permitted them to hide in the vegetation and hence gave security.

In Danhomɛ however, *zùn*, *gbe*, *gle* and *nukanmɛ* obtained a pejorative meaning. They were applied not only to vegetation but to the countryside in general, including small villages. *Nukanmɛ* came to signify not only bush but also backwardness. *Nukanmɛnu* became a derogatory label for rural people, who hardly engaged in trade and in 'urban' crafts. It was considered backward to live in a small village, not to engage in urban economic activities, and to live in close association with vegetation, especially spontaneous vegetation. The highest status was associated with larger towns, in particular with the capital Abomey. Everything outside of larger towns was slightingly called *-gudo* (behind, outside) if not *nukanmɛ*. Abomey (*Agbomɛ*) meant 'inside the fortification'. The countryside around Abomey was called *Agbogudo*, literally 'outside the fortification'. A popular Fon proverb belittles the *Agbogudonu* as ignorant:

> '*Agbogudonu mõ kogbe. E đò: able lõlõ!* (An inhabitant of the countryside sees chinaware and says: Wow, what a miracle is this! (Fadairo 1986:527; Ségurola 1988:20)

Another term that the Fon used for rural people was *waci*. Also this word had a derogatory meaning. We saw in 5.3 that *waci* means 'slave' in Adja. In Fon it means 'savage' or 'man of the bush' (Garcia 1988:99) and is also used in the sense of 'slave' (Den Ouden 1986:73). *Waci* was a label that the Fon elite applied in particular to the people who lived on the Adja plateau and between there and the coast, and especially to families who once surrendered to the Fon. Their argument was apparently that these people were acephalous farmers and in the military sense inferior to the Fon[316]. For the French, Ouatchi became the name of the major ethnic group in the south of what is now the Mono province.

Rural Fon aspired to *'faire sortir notre village de la brousse*' (let our village emerge from the bush). For them this meant in the first place that they cleared the surroundings of their *tò* of any spontaneous vegetation, be it *zùn*, *gbe* or *nukanmɛ*. Only *gle* (field) was permitted around compounds, and these home gardens had to be free of weeds. Klein (1968:219) errs to interpret Gezo's orders to cultivate all the spare land in and around the town of Whydah as a "failure of the Dahomean state to develop and intensify the crucial cultural distinction between town and country, which in all the classic examples denotes the difference between state and primitive, tribal and peasant culture". Cultivation of 'fence-near fields' *kpawugle* was undertaken exactly to fight nature in favour of culture and to intensify the distinction between town and country. Fon in Lissazounme made clear that the status of their village was at stake when they explained in 1990:

> 'We cultivate the *kpawugle* remove the bush from our village. We cultivate them to let our *tò* emerge from the *nukanmɛ* which surrounds it.' (Kerkdijk 1991:52)

While for the Adja the bush around their village meant security, the Fon classified spontaneous vegetation as dangerous: "We clear the bush to expel snakes from our village" (Kerkdijk 1991:52). The security of Fon *tò* came to consist not in 'invisible' bush but in military strength and visible clay fortifications. Protection was provided not by vegetation but by walls around compounds. Compound walls became prestigious in themselves. Hence the replacement of bush by clean-weeded home gardens and by compound walls was a matter of Fon style and status.

Secondly the Fon made their villages 'emerge from the bush' by engaging as much as possible in 'urban' economic activities. Only predominantly agricultural villages were labelled as *nukanmɛ* or backward. Villages with many craftsmen, traders, priests, diviners and warlords were not *nukanmɛ* even if they were rural. Hence it was not (only) for economic reasons but also for individual and collective status reasons that rural Fon aspired to the new non-agrarian economic activities.

### 5.4.3 Bush and agriculture, the Adja's wealth and safety

Among the Adja the importance of farming as opportunity for upward mobility seems to have increased during the slave trade period. Agriculture and security became from the 17th century gradually the most important motives in Ehwe-Adja migratory myths, at the expense of the ancient activities like hunting and (in Tado) smelting and forging (see 5.3). Trade networks remained or became rudimentary on the Ehwe-Adja plateau, especially in the east, apparently because roads were insecure in the vicinity of the slave raiding Fon

kingdom. Hardly any mention of other activities is made in Adja myths; therefore I assume that these were rare.

The greater availability of iron through European imports benefited Adja agriculture. We also saw in 5.3.3 that the Ehwe-Adja's relations with Tado loosened and that they became gradually more acephalous. This implied that their remittances to the *nyigbafio* and other chiefs declined and that their own productive units (and villages) became relatively small(er). Consequently, Ehwe-Adja productive units farmed solely on behalf of themselves, they did not have to share the fruits of their labour with external authorities. Their efforts in the field were rewarded by greater wealth of their own small unit. Hence hard agricultural labour and the application of farming skills and knowledge were economically profitable for the Adja. South Béninese cultivation techniques were such that economics of scale did not apply to farm productivity. To the contrary, the smaller the farm the better the cultivator appeared to know and adapt to local field conditions. A minimum farm size for a proper division of labour and to guarantee a degree of security seems to have been provided by extended (three generation) households. Unmarried sons were willing to work for their father in exchange of acquiring agricultural skills and knowledge and to receive a bride from him as a postponed reward for years of faithful service. Married sons did not immediately receive land, but only after some years and sometimes in stages. In the mean time they continued to work for their father. Able-bodied fathers, even though they controlled the labour of their sons, also tilled the soil themselves to further develop their farm knowledge, because the labour of one man made a serious difference in such small productive units, and because field labour was not despised.

Security was guaranteed in the first place by avoiding dangerous occupations such as long distance trade. Also forging seems to have been dangerous because of the noise it made. Several myths narrate that the noise of Tado's smithies was heard day and night from afar (see 4.1.1). The Tado dynastic account given in 5.3.2 states that the *nyigbafio* asked the Tado smiths to cease their work because of this noise. When they continued to forge they were invaded by the Fon, many were enslaved and the others abandoned their craft. This suggests that iron mining, smelting and forging among the Adja declined not only because European iron imports and the development of forging elsewhere in South Bénin competed with their craft, but also because the iron industry was difficult to reconcile with the Adja strategy to hide from enemies.

For the Ehwe-Adja tried in the second place to hide from enemies by keeping their villages small, letting a circle of *avé* (trees and shrubs) grow around them, and by avoiding visible wealth. In contrast to the Fon who prided themselves in large houses and compound walls, the Ehwe-Adja had houses that looked poor. Inside these houses however some Adja hid their money in clay pots (see 1.3).

Chiefly status symbols such as large cloths, umbrellas, stools, titles and prostrating were used less frequently by the Ehwe-Adja than by the Fon. Even 'father' and 'mother' were titles – parenthood was a sign of wealth and made people rise in status – which the Ehwe-Adja avoided until recently; children called their parents by their personal names. They rationalised this lack of outward respect with the belief that 'witches will attack the kids if they know whose child they are'[317]. Fon mothers in contrast were hardly called by their own name anymore after the birth of their first child; everybody called them 'mother of x' (x being the name of the child)[318]. And while Fon grooms exposed the gifts that they made to their brides in public during the *zindo* festival, the Ehwe-Adja believed that brides who openly received gifts risked bewitchment and infertility for many years[319].

The Ehwe-Adja felt secure in close association with 'natural' vegetation, practising quiet local activities such as farming, shared poverty, and separation (in small groups) from the outside world. The threat of external enemies nurtured a sense of community and of co-operation within the small co-residential groups.

A successful Ehwe-Adja big man was one who kept his small group of dependents secure, was a skilled and knowledgeable farmer, and worked hard in agriculture with the help of these few dependents. Such men not only acquired material wealth but also social prestige. Farm labour was not demeaning for the Ehwe-Adja, but the best way to generate agricultural skills and knowledge, to accumulate and to rise in status.

## Notes

1 Parliamentary Papers 1852 (1455) vol. LIV quoted in Law 1985:85. Forbes 1851/1966 II:187-188 diary of the same day has: 'The king (…) continued: "but the Dahomeans had never given up slave-dealing. His people were soldiers, his revenue the proceeds of the slave trade (or the sale of prisoners of war). Do we not observe the absence of agriculture?" (…) The king then dictated a letter to her Majesty, stating (…) that the military state of his subjects alone at present precluded his becoming the head of an agricultural people."

2 I will use both names, Fon kingdom and Danhomɛ, to design the kingdom of the Agasuvi rulers from 1625 and 1900, even though oral tradition connects the origin of the name Danhomɛ to the reign of king Hwegbaja (ca. 1650-1685, see 5.2.2), and the names Fon and Fon kingdom seem to have become established shortly before 1687 (see 5.2.3). I will use the name Fon to design the Fon-speaking ethnic group, that is in the first place the population of the Abomey plateau between 1600 and now, and in the second place the Fon-speaking migrants since 1724 from the Abomey plateau to other areas. A warning must be raised: the Fon kingdom (or Danhomɛ) was between 1727 and 1900 'larger' than the Fon ethnic group. During this period it extended its authority first over the Ayizo of the Allada plateau and then also over the Mahi around Savalou; the Ayizo and Mahi never adopted the Fon language and identity.

3 'Gedevi' was the name applied before ca. 1700 to the population of the Fon plateau; they spoke a language of the Ewe-Adja linguistic group (see 4.1.2).

In another part of his book Akinjogbin argued that the Fon kings tried to prevent the transatlantic slave trade. This argument has received much criticism, which I will not repeat here. Akinjogbin's theory of 'Adja' and 'Gedevi' social organisation has received much less attention and will be the subject of my discussion.

4 See Berry (1985) for an explanation of the principle of seniority among the Yoruba.

5 The founders of the Edo kingdom of Benin and of the great Yoruba kingdom of Oyo both claimed descent from Oranmiyan, a later ruler of Ife (Law 1977b:30-33, 172).

6 I could add that the Fon kings' ancestor Ajahuto's murder of the *nyigbafio* of Tado and the Aladahonu's aggressive behaviour towards the 'Gedevi' chiefs of the soil were also attacks on the kinship ideology.

7 He also shows that even the heir to the throne was indicated by the king, who disregarded the principle of primogeniture, nevertheless after the king's death the throne was often contested (1967:61-62; 110, 116, 178-179). This is confirmed by Garcia 1988.

8 Hereditary were most of the lower offices and in the case of priests usually also the higher offices. The right to inherit titles might have coincided largely with the right to inherit material property. Elwert (1973:70) argued, against Burton's (1893 II: 213) claim that the king was heir of all Danhomeans, that the king only appropriated part of the moveable inheritance of higher secular office holders such as the *gbonugan* and important chiefs.

9 Formal economics are based on the assumption that insufficiency of means and rational choice are common features from which all economies can be understood. According to Polanyi, most scientists except for substantivists base their economic analysis on these formal economic assumptions.

10 In Porto-Novo the *zangbeto* secret society was required to approve any changes in the price of maize and to announce these changes to the whole town just before they went into effect (Manning 1982:74).

11 In Kirchhoff's (1959:268-269) sense.

12 Elwert (1973:50, 87) borrowed the idea of articulation from Terray and Meillassoux (1973), who argued that a dominant capitalist mode of production is supported by and articulated to a peasant subsistence mode of production in modern African societies. Though he mentions Terray as one of his sources, Elwert does not give the year(s) of publication.
13 Elwert (1973:33). Here Elwert is in disagreement with Le Herissé (1911:52), who believes that the weapons of the soldiers, as well as all war captives, belonged to the king.
14 She seems to base this on statements made by Gezo to Duncan (1847 vol II: 263-264). Law (1977b: 562) thinks that the king tried to underplay his involvement in the slave trade in order to evade pressure for its abolition.
15 Men of rank. The Portuguese title *cabosseros* was usually given to those whom the Fon called *gbonugan*.
16 Those slaves 'who were considered unfit for the market' might have included a large number of women, since male slaves fetched a higher price in Whydah and constituted the bulk of the exports. In any case, eyewitness accounts and local Fon tradition speak of large numbers of female slaves in the Fon kings' palaces.
17 Quoted by Law (1977a:562), Polanyi (1966:36) and Coquery-Vidrovitch (1971:111).
18 Eyewitness accounts by Snelgrave (1734:37-38); Forbes (1851/1966 I: 17) and Burton (1893 II: 149-150, quoted in Herskovits 1938 II: 96-97). Only the earliest eyewitness Snelgrave (1734:37) claimed that this sale occurred on royal order. The value of the cloth and cowries was roughly correlated to the local market value of the slave, though it was only 1/16 to 1/32 of this market value according to Elwert (1973:34).
19 Parliamentary papers, 1849 (399), vol. XXXIV, Missions to the King of Ashantee and Dohomey, item 2, inclosure: Report by B. Cruickshank Esq. of his Mission to the King of Dahomey, 9 Nov. 1848. Quoted by Law (1977a:567).
20 In some versions one of the *nyigbafio*'s wives.
21 Some versions connect Agasu to the 'Gedevi'. In one version the mother of Agasu came from Ouassa on the southern 'Gedevi' plateau and married an Adja (Le Herissé 1911:107). In another version the leopard was a 'Gedevi' herself. Both versions obviously try to legitimise the rule of Agasu's descendants over the 'Gedevi' after 1650, claiming that they were not intruders but returned to their own kin.
22 According to some versions he killed amongst others the *nyigbafio* himself.
23 In one Allada version it was a deposed *nyigbafio* who took the name Adjahuto and fled to Allada together with some of his brothers (Oké 1984:57).
24 Or to Adjahuto's brother, with Adjahuto's son as *vigan*, according to one Allada version. A *vigan* ('chief of the children') in Fon society is the second in command of an effective lineage, in general the second eldest male. His task is to supervise the young lineage members' labour. If political and religious power was shared between Adjahuto (or his brother) and Tɛdo this would not be the only case of a separation of religious and political (or economic and political) chieftaincy in South Bénin. The *nyigbafio*, the 'king' of ancient Adja-Tado, shared his authority with the *zunon* ('bush king'), who was the priest of the royal ancestors (Palau Marti 1964:99-100). The 19th century Fon rulers Adandozan, Gezo and Glele were called 'town king' and had as their counterpart a 'bush king' who was in charge of economic affairs, notably palm oil trade, since it was considered not befitting for the 'town king' to engage in trade himself (Burton 1864:85-88 quoted in Palau Marti 1964:130; Skertchly 1874:271-272 quoted in Herskovits 1938 II: 50; Polanyi 1966). See for a discussion of double kingship among Adja and Yoruba groups Palau Marti (1964:221-223).
25 In that year they discovered that the king of Benin (in present day Nigeria) held prisoner ambassadors sent to him by the ruler of Arida, which was later identified as Allada (Wigboldus 1986:316; De Lespinay 1991:124; Adandé 1993:85).
26 Branco 1574 quoted in Verger (1968:159); Pazzi (1979:154) and Wigboldus (1986:318). (My translation). The foods were victuals for the slaves.
27 In calling the ruler of Allada a king I follow the terminology of travellers accounts of the 16th and 17th centuries and of oral tradition (*àxósú* = ruler in Ayizo and Fon is usually translated with king).
28 Their departure was probably stimulated either by the growing insecurity in the kingdom of Allada due to slave raids, or by the opportunity to raid slaves in the northern hinterland and sell them to the coast, or both. European traders on the West African coast in the late 16th and early 17th centuries competed and cheated each other, raided slaves, and hired Africans to raid slaves and to attack each

other's possessions, hence kindling also African enmities (Akinjogbin 1967:19-20; Elwert 1973:22). In Allada the situation deteriorated when around 1595 the Dutch arrived, exporting their political conflicts with Portugal and Spain (Akinjogbin 1967:21; Pazzi 1979:192).

29 Akinjogbin (1967:21).

30 In one version two sons and a brother, who won the strife.

31 Or the descendant of an elder brother.

32 Le Hérissé (1911:276-277); Akinjogbin (1967:21-23); Oké (1984:59); Herskovits (1938 I:168-169); Palau Marti (1964:117).

33 The kingdom of Benin received the cotton plant from the Portuguese, with whom it traded since 1486. In the early 16th century the kingdom of Benin was already famous for its cloth exports (Pazzi 1979:177). Until then the Adja and 'Gedevi' made clothes from the bark of trees, see Chapter 4. They also had a tradition of weaving 'raffia' cloth *edidi* or *jiji* from the fibres of a palm variety (Rapport économique Dahomey 1939-1940, Archives Abomey).

34 See quotation above; Pazzi (1979:154, 177); Wigboldus (1986:318-319, 325-326).

35 During the *vodununu* rite the participants vow themselves to the *vodun* and to each other (Hazoume 1947). A descendant of one of the migrants explained 'we are all brothers because of the *vodununu*, but the Wɛgbonu are uterine brothers' (own interview in Gnidjazoun 22-12-1990).

36 Own interviews in Kana; Yelouassi (1987:27).

37 A village on the north of the Allada plateau. The migrants came from several villages around Apké.

38 Own interviews in Kana; Le Herissé (1911:277-279); Oké (1984:59-60, 65-66); Herskovits (1938 I: 16). Herskovits erroneously attributed the arrival in Kana and the introduction of cotton cloth and of weaving to Hwegbaja.

39 According to a dynastic account recorded by Herskovits (1938 I: 16, 360) and Oké (1984:65). This account has to be seen in context with other changes in funerary practices which Hwegbaja is held to have introduced and which will be described below.

40 According to a dynastic tradition, narrated by the Fon prince Agbidinoukoun (Le Herissé 1911:24-25).

41 Own interviews in Kana; Le Herissé 1911:280; Oké 1984:61; Yelouassi 1987:27).

42 Maize was introduced in the 16th century to the Gold Coast (De Marees 1602/1987:40, 63, 110-113) and to Benin (Nago 1997:10).

43 Maize was a staple around Whydah by the end of the 17th century (Bosman 1704/1967: 339, 391; Alpern 1992:25; Juhé-Beaulaton 1990).

44 Tacoodonu was Dako-Donu, the Foys are the Fon, and the prince of Calmina was the chief of Kana.

45 Le Herissé (1911:279); Oké (1984:60).

46 1 km north of Bohicon.

47 This name might have been given because cotton cultivation was an outstanding novelty at that time.

48 This dating seems too early if the town of Abomey is meant, in the light of the more generally accepted chronology of the kingdom, but not if 'the eastern part of the Abomey plateau' is meant.

49 Narratives from the Agasuvi and from the Awisu family in Dokon agree on these points (own interview in Dokon 24-2-89; Le Herissé 1911:24, 284, 289; Oké 1984:64; Avolonto 1990:25-26). Building his house on Agri's tomb was inspired by a belief in the magic power of death bodies. The South Béninese (at least from the second half of the 17th century onwards) bury their ancestors in their houses and live on their graves (Barbot 1678-1712 quoted in Hair 1992:640). By living on the *aïnon*'s instead of on his own father's grave, Hwegbaja claimed not only the *aïnon*'s socio-political authority but also his spiritual power. Nevertheless one might ask (1) why Hwegbaja settled near his mother's village, since patrilocality was the norm among the Adja- and Yoruba related groups, and (2) whether the change of residence masked a change in dynasty. The latter question also because a myth of the southern Hwla holds that Hwegbaja was a son of their own king Awusa, who ruled around 1700 (Gayibor 1977:57 cited in Pazzi 1979:147). However, (1) Matrilocality was a 'common exception' in South Bénin, and (2) Hwegbaja's son Agaja claimed that Hwegbaja was Dako-Donu's son (Deslisle 1728 cited in Pazzi 1979:208), which seems plausible.

50 Fon traditions today emphasise that the only smiths and smelters before the arrival of the Aladahonu were found in these two villages, own interview in Kana-Mignonhito 27-6-1989; Iroko (1989:2, 4, 6, 12).

51 Own interviews with Fon blacksmiths; Pazzi (1979:193).
52 Exhibited in the royal palace in Abomey.
53 "In the time of Dako-Donu there were blacksmiths in Agouna-Ganjɛkpinji, but not yet here in Kana." Agouna-Ganjɛkpinji is between Kana and Houawe. (Interview with Victor Azaïnon, a descendant of the first Kana blacksmiths, Kana-Dodome 19-6-1989).
54 Fon chronology now generally estimates that Hwegbaja reigned from 1650 to 1685. Dalzel (1793/1967: 2) estimated that it was from 1650 to 1680.
55 According to myths of blacksmiths in Kana-Dodome and in Sinhoué (Ederveen 1990:69-70). It is often assumed that the Kana smiths were the first blacksmiths on the 'Gedevi' plateau.
56 According to a myth of the ancient forging family Hountondji in Abomey (Bay 1987:11).
57 Le Herissé (1911:84); Garcia (1988:133-134). Though firearms were imported on the West African coast since the second half of the 16th century, only after 1690 they started to play a decisive role in the inland.
58 This name means 'king of Abomey'.
59 Hwegbaja's mother's father, or latter's successor as family head. According to Fon custom until today the head of Awisu's lineage is called Awisu. See also section 3.3.1. (Own interview in Dokon; dynastic tradition recorded by Le Herissé 1911:24).
60 Oké (1984:64) and Avolonto (1990:26). Rotating chairmanship would have been created because of the (increasing number of) conflicts between 'Gedevi' groups. If the number of conflicts between 'Gedevi' groups increased during the life of Hwegbaja this might have been due to the Atlantic slave trade. Starting from 1636, the slave exports from the port of Whydah expanded considerably, due to an increase first in the Dutch and Portuguese, and from 1660 also in the English and French demand for slaves (Wigboldus 1986:320; Manning 1982:27-30). The main providers of these slaves were the king of Allada, the king and some big men of the coastal Hweđa (Whydah), and by traders from the north passing through these two kingdoms (where they were taxed by the kings; Bosman 1704/1967: 363a). That not later than the 1660s slaves came from the 'Gedevi' plateau or beyond is confirmed by Barbot (1732:325, cited in Pazzi 1979:199), who mentions that Allada had a conflict with Danhomɛ in 1671 when the latter closed the trade route to the north. By the 1680s and 1690s the increasing demand for slaves encouraged widespread man-stealing by the inhabitants of Keta, Popo and Whydah on the coast of Benin and by the Ayizo of the Allada plateau (Bosman 1704/1967:331-334; Akinjogbin 1967:36). According to Danhomean dynastic tradition the Hweđa of Whydah went as far as the 'Gedevi' plateau in their search for victims. They and also the Nago (Yoruba) adopted the custom to invade the 'Gedevi' plateau during the dry seasons under the reigns of Hwegbaja and his son Akaba (1680-1708), but when the inhabitants hid in the bush the invaders returned home empty-handed (Le Herissé 1911:289, 291). Bosman (1704/1967:363a) reports that in the 1690s the Hweđa also purchased slaves as far as 200 miles inlands, that is far beyond the 'Gedevi' plateau.
61 In the dynastic account one of the chiefs summarised the events leading to the change in chairmanship in the following terms: "Hwegbaja beats those who refuse to bow to him and he fills the stomach of the others" (Le Herissé 1911:24-25).
62 To the south of the Adja plateau.
63 Gléle, Behanzin and Adjademe (1984:3). With this conquest also the clay of Sahè-Loukpè, which was the principal source of clay for pottery of the plateau, came under control of the Fon (Pazzi 1979:120, 129, 162).
64 This was the case of the majority of the (dozens of) inhabitants with whom my assistant and I spoke.
65 Herskovits (1938 I: 176).
66 Daa Aladasi, born around 1913, Sahè-Abigo 15-8-1990.
67 Adjasoho's ancestors would have come 'from Weme', which probably means that they were Wemenu (see 4.1). Adjasoho himself belonged to the *akó* Akosu Majanu. This *akó* had been on the Fon plateau since before the arrival of the kings. Herskovits (1938 I: 177) records that it is a capable and trustworthy clan which has given Danhome many of its important leaders, and that its mythical ancestor (*tóxió*) Gbosinkpo would have come from the north. There is a priest for Gbosinkpo in Lissazounme today.
68 All accounts have Zounzonme (3 km south of Abomey); only one has Zoungbozounme (near Kana).
69 In the versions of Victor Lisanon (Lissazounme 29-4-1989) and of Hunon, son of a Lisanon woman, see section 8.2 (Lissazounme 14-4-1989).

70 In the version of Tafotan Lisanon (Lissazounme 5-5-1989). Also according to Daa Ahanyan it was Tegbesu who chased the Adja from Lissazounme (Lissazounme 20-5-1989).
71 Possibly the chasing of the Adja from Hungeme was a gradual process.
72 According to the version of Hunon. Most other versions of the myths seem to agree with this.
73 Own interview with Victor Lisanon, Lissazounme 29-4-1989.
74 Own interview with Daa Ahanyan, Lissazounme 20-5-1989.
75 Own interview with Ahodo Sakla, Lissazounme 1-9-1989.
76 If Agbomankunzu was the one who discovered the shrine it seems plausible that he asked Bovi to be priest.
77 According to two independent accounts by Célestin Segbeji and by Hunon, Lissazounme 14-4-1989.
78 Under all kings, but especially under Agonglo, many of the king's slaves were integrated into his lineage. Therefore it is possible that Kahun and Tobada, whose offspring claim descent from Agonglo, were in reality his slaves.
79 Panicum maximum.
80 Andropogon gayanus.
81 Brachiaria deflexa.
82 Kerstingella geocarpa.
83 According to myths narrated by Oké (1984:62) and Yelouassi (1987:27).
84 Banégas (2003:318-319) agrees that Danhome's power was mainly military and religious.
85 Each king built his palace in a different ward of Kana (the same applied for their Abomey palaces). (Own observations, Yélouassi 1987:27).
86 Many expressed this opinion, for example Dieudonné Abihunje on 25-8-1989 and Sonyonu Dɛngbɛnɛn 29-9-1990). But even though these walls were surprisingly durable it would be good to protect this historical monument against the rains!
87 These blacksmiths were of Adja-Tado descent according to the informant of Herskovits (1938 I) and according to the Hountondji family in Abomey, who claim descent from these Kana blacksmiths (Bay 1987:11).
88 I believe this because the Mèdasénu disappeared some time after the establishment of the Fon kingdom, at a time when European iron imports became more important, according to local Kana and Koklofɛnta accounts (own interviews; Iroko 1989:12; see above), and because according to dynastic mythology Akaba (1689-1708), Agaja (1708-1732) and Tegbesu (1732-1774) repeatedly invaded the area of Koklofɛnta and Sefunwuyanta on the eastern Abomey plateau (Le Herissé 1911:292, 295, 301-302).
89 Gayibor (1992:46-47, 63; 1993:252).The deportation of Alu blacksmiths to Abomey might have coincided with Hwegbaja's, Akaba's or Agaja's wars against the Adja (see 5.2.2).
90 Firearms were however imported on the coast since the second half of the 16th century, and Hwegbaja is said to have used some rifles already (Le Herissé 1911:84; Garcia 1988:133-134).
91 Own interview with descendants of the first blacksmiths in Kana, 19-6-1989. Garcia (1988:134, 146) give a similar account, and adds that when the French conquered Kana in 1894 they found 8000 cartridge-cases and the necessary equipment to load them in the Kana forges (see also Herskovits 1938 I: 126-127).
92 Quoted in Law (1992:6).
93 See quotation from Snelgrave (1734:79) below; M'Leod (1820:45-46 quoted in Herskovits 1938 II: 80); Le Herissé (1911:63); Garcia (1988:126, 128, 134-135, 137-138).
94 An office instituted by Hwegbaja.
95 Today the hamlets Gawusalame in Kana belong to the Wegbonu clan (Bernardin Abihunje, Kana 16-10-1989).
96 See also the myth of origin of the village Aoundome in 4.1.2 on the importance of the river-*vodun* Hlan.
97 Own interview in Atchia, 8-8-1989. If the first *gawu* was a king's brother this would falsify the common opinion that ministers in Danhomɛ, and certainly the ministers of the first seven kings (Garcia 1988:25-27), were never of royal descent (Le Herissé 1911:32). It is generally assumed that no Danhomean ministers were princes. Garcia (1988:25-27) argues that the 19th century kings Gezo, Glele and Gbɛhanzin violated the 'norm' by installing their brothers as ministers. If already Agaja appointed his brother or father's brother as *gawu* one can hardly uphold that there was such a norm.

98 This right implied that the priest had to avoid meeting the king because he could not fulfill the royal greeting etiquette which demanded to uncover head and feet in presence of the king (dynastic tradition recorded by Le Herissé 1911:112-113).

99 According to a colonial report: '*La plupart des cultures vivrières ont eu à souffrir de l'attaque des chenilles, qui ont pillulé dans le cercle fin Mai et Juin. Ces chenilles sont connues des Fons d'Abomey, qui les appellent les 'chevres de Hlan'. La rivière fétiche Hlan est censée les envoyer périodiquement pour punir ceux qui oublient de lui vouer le culte qui lui est dû. Des sacrifices de cadeaux divers ont été offerts à Hlan pour apaiser sa colère. Les chenilles ont disparu en certaines régions, mais les destructions causées par les insectes sont énormes. Le mil, les haricots, les légumes et parfois le maïs ont souffert dès le début de l'invasion.*' (Rapport économique semestriel Cercle d'Abomey premier semestre 1950, Archives Abomey).

100 See the myth of origin of Aoundome in 4.1.2.

101 See also Skertchly (1874:444) and Burton (1893 II: 55) quoted in Herskovits (1938 II: 79).

102 Agaja's memorial cloth depicts the punishment of a spy who was found guilty of providing false information (Pazzi 1979:240). The use of spies certainly went together with a shift in battle goal: from settling local conflicts to the invasion of unknown territory to capture the inhabitants by surprise.

103 The latter according to Pazzi (1979:239), see also Garcia (1988:140).

104 Spies underwent the *vodununu* ritual (spirit- or blood-drinking) before they were worthy of trust (Segurola 1988:17; Elwert 1973:26). In the enemy village they presented themselves for example as traders. Back at home they slandered about the targeted village to set up the Danhomeans against it (Le Herissé 1911:64-65). The fear of being spied is still important among the Fon. As mentioned in Chapter 3, this rendered my research on the Abomey-plateau rather difficult. There is also a relationship between the word *lɛgɛdɛ* (spy) and the much-used word *gɛdɛ*, which designates a 'complicated', crooked and therefore dangerous person.

105 I say 'misused' because this was not the intention of the kings. Le Herissé (1911:72) confirms that the selection of recruits was 'arbitrary'.

106 Li is an ancient Fon word for pearl millet. Younger Fon call it likun. Pearl millet was cultivated on the Fon plateau until 1960.

107 Military service was seen by my Abomey plateau informants and by Elwert's (1973:72) informants from various parts of Danhomɛ (mainly the Allada plateau) as only one form of forced labour.

108 It is however possible that we should read 'representative of the king' instead of 'king' in the story below.

109 His father, prince Golo, was the owner of one of the large oil palm plantations worked by slaves in Sahè in the later 19th century, see 6.3.2. Transportation by hammock was a status symbol reserved for men of rank.

110 Affaires politiques, Commandant de cercle à Gouverneur, Archives nationales Porto-Novo. The *proces verbaux* joined contained the testimonies of sixteen witnesses from Detouonou who all declared that Davou used to go in person to young men and asked them to pay 100 francs or 300-500 yams annually. Some young men paid already since 8 to 10 years.

111 For example in Skertchly (1874:444) and Burton (1893 II: 55) quoted in Herskovits (1938 II: 79); Garcia (1988:125).

112 Duncan (1847 I: 283) and Forbes (1851/1966 II: 55-57) quoted in Herskovits (1938 I: 129 and II: 81 respectively). Glele's brother Vilon for example (who also hold the office of *migan*) succeeded to assemble 200 new soldiers and to present his own contingent to the king (Le Herissé 1911:69; Garcia 1988:26).

113 Burton (1893 I: 147 quoted in Polanyi 1966:36).

114 Garcia (1988:130). The size of these private regiments was no threat to the state either: under the reign of Gbehanzin (1889-1894) no dignitary would have had more than 30 guards, and the total number of men in the private contingents in Abomey was about 300 (ibid).

115 The first few female warriors would have been employed by Akaba, partly under the influence of his twin sister Hangbé, who would have reigned together with him and advocated a greater socio-political involvement of women (Garcia 1988:131).

116 They also hunted other animals.

117 Quoted in Herskovits (1938 II: 84-85).

118 Oral histories of the – mainly commoner – families I studied did not mention military service by their daughters. Age of recruitment was 12-14 years according to Garcia (1988:132).

119 Snelgrave (1734:77-79) quoted in Dalzel (1967:48) and in Herskovits (1938 II: 80).

120 French translation of Smith's (1751:130) description of the conquest of Whydah in 1727, quoted in Pazzi (1979:148). Dalzel (1793/1967:21-22) rendered Smith's account in his own words, elaborating on the Danhomean cruelties for the sake of the anti-abolitionist case: "The general, probably by his master's command, gave orders that the remaining prisoners, who through age, wounds, or infirmities, had not been able to march with their fellows to head-quarters, should be put to death on the spot. And to heighten this bloody act with accumulated horrors, he committed the execution of them to boys of his army, whom he thereby meant early to endure the deeds of cruelty, and furnishing them with swords, ordered them to cut off the prisoners' heads. As some of these boys were only seven or eight years of age, and hardly able to manage such a weapon, the torments these unhappy wretches must have suffered (..) were easier to be conceived than described."

121 Islam seems to have fraternised with South Béninese *vodun* religion as soon as it arrived. Later a French administrator described the historical harmony between Islam and *vodun* in the following terms: '*L'accueil bienveillant que le fétichisme a réservé à la réligion musulmane, accueil si éloigné de l'esprit sectaire de l'islamisme, a brisé l'élan de cette religion de façon plus sûre que n'auraient plus le faire les resistances les plus opiniâtres. (..) Le fétichisme est la réligion la plus écclectique et la plus accueillante qui soit, il n'exige pas une foi bien profonde et ne demande jamais de martyres. Les chants, les tamtams, les libations en constituent l'essence, le nombre des divinités est illimité et toutes celles qui se présentent sont les bienvenues*.' (Rapport d'ensemble Dahomey 1909, situation politique et administrative, AOM Aix-en-Provence).

122 Alapini (1985:139).

123 Law (1977b:12, 75-76).

124 According to Father Labat (1730:270-272, quoted in Pazzi 1979:68-69). With 'Marabous' Labat must have meant Muslims and not animist priests.

125 Own research. Many Fon even assert that 'the' Yoruba are Muslims.

126 The Englishman Bulfinch Lambe, Agaja's prisoner in Abomey from 1724 to 1726, wrote from Abomey that Agaja had many regards for the 'Mallayes' which he had at his court (Pazzi 1979:247). Snelgrave saw about 40 'Malaye' in the Dahomean camp in Whydah in 1726, and was told that the king treated these Muslims kindly because of their leatherworking skills, that they were prisoners of various wars, used to be traders, and, like white men, possessed the art of writing (Dalzel 1967: 48-49). If a captive claimed to be Muslim he had to recite Islamic prayers before the *Malɛhosu* and if he passed this test he was allowed to live in the Malè ward. One way how the Danhomean king respected Muslims was that they were the only ones to be exempted from prostrating before him. Instead they greeted the king by clapping their hands (Adamu 1978). The king of Allada in 1671 granted the same favour to his 'Great Marabou' (see quotation from Barbot above; Hair 1992: 658).

127 According to Le Herissé (1911:47) this first contact with a Muslim diviner and the giving of the name Fon occurred during the reign of Tegbesu (1734-1774), but the eyewitness accounts of Lambe prove that Muslim malams were already at Agaja's court in 1724-1726. The first contact, especially if it took place outside Danhomɛ, might well have been in the time of Akaba (ca. 1685-1708) or before.

128 Various oral sources confirm that the Abomey plateau was once called Hùn, see for example Ségurola 1988:234-235. In the 17th century the Lissazounme area would have been called Hungeme. Though the dynastic account relates the name Hùn to the kingdom's youth, *Hùn* also means blood, god, and kapok tree in Fon. Did the name Hùn refer to the presence of kapok trees on the plateau or to its sacredness?

129 Oyo.

130 At present as in the past, Muslim writings are often considered sacred, as is the paper, ink or chalk which they are written. All these are frequently used for ritual purposes.

131 *Prosopis africana*, the preferred tree of blacksmiths because of its hard wood. *Prosopis africana* is called *kakɛ* in Adja and *ajasin kakɛ* (= kakɛ of the Adja) in Fon. The ancient Adja protected the tree, as did blacksmiths of northern Togo (Goucher 1988). At present as in the past the Adja prepare a spice *flefi* from *kakɛ* seeds, which fulfils a similar role in their dishes as the Fon's spice *afintin* from

*ehwa* (*Parkia biglobosa*) seeds. *Flefi* belonged to the Adja's earliest commodities and is disdained by the Fon, while the Adja rarely eat *afintin*. The Fon and Adja label each other as *kakɛ* and *ehwa* eaters respectively, see also Chapter 1, and sections 5.2.4 and 8.3. Fon and other inhabitants of the *département* du Zou now fell large numbers of *Prosopis africana* trees to make charcoal for sale to urban households, which endangers the species in this *département* (MEHU 1993:31). All this supports that the ancient Adja smelted and forged and the 'Gedevi' did not.

132 *Vitex doniana*. The *fon* bush has edible leaves (*fonman*) which are much eaten by the Fon today, but not by the Adja. Boiled *fonman* are omnipresent on Fon markets and frequent in Fon dishes, but I never saw them on Adja markets, nor in Adja dishes. The *fon* bush prefers the relatively sandy *sols ferrugineux* of the lower lying parts of the Fon- and Adja plateaux over the *sols ferralitiques* of the higher parts of the plateaux. It also grows on the sandy soils between the beach and the plateau soils (own observation, verbal communication Jean Dah-Dovonon).

133 Ketu was once a large kingdom.

134 A preferred tree of traders because of its shade; Savè was an ancient trading centre.

135 The small black fruits of the *fon* have petals which look like a crown.
(This Fon parable is quite similar to an Old Testament parable recorded in Judges 9:8-15. Maybe the Muslim diviner knew this Old Testament story?).

136 The king's motive might have been an attempt to levy taxes, or an attempt to safeguard his own citizens from being sold into slavery. Pazzi (1979:218-219) thinks that the road was closed because the Ehwe-Adja invaded Danhomɛ at the same moment in order to help their 'brothers' in Sahè to resist Danhomean rule.

137 "This year the blacks say that they have some conflicts with the king of Foin, who is in the inland, and prohibits them to pass" and "The king of Foin, from his side, prohibits captives to pass through his country" (my translation).

138 The *tashinon* or *tanyinon* is in principle the eldest female descendant of a *hɛnu* (lineage), an *ako* (clan), and among the Fon also of a *hwedo* (lineage segment, compound). In some Fon families the title is given to a number of old female lineage members (own research). In some other lineages this larger group is called *akovi* (Houngbedji 1967:104-107; Mondjannagni 1977:114; Herskovits 138 I:157-158). In the Adja-Tado royal clan the *tasinon* are (today) males, though also there they are the priests of the clan's ancestors (see 4.1.1). Probably in this clan the office came into male hands when its importance started to transcend the clan's boundaries.

139 Fon *tanyinon* fix the amount and composition of the bridewealth and pronounce blessings over the bride. *Tashinon/tanyinon* have authority over young wives in the compound, introduce them to the families' customs and could put them to work. They supervise clan-specific rituals associated with pregnancy and childbirth and the ritual of taking a newborn baby outdoors for the first time. Therefore they are also seen as the guardians of clan-specific traditions. (Own interviews; Houngbedji 1967: 105, 107; Herskovits 1938 I: 157; Aguenou 1983:37).

140 Le Herissé (1911:162-174); Houngbedji (1967:105).

141 In Whydah between 1678 and 1712 the female priestesses of the snake-*vodun* Dangbe served as public diviners. The traveller Barbot wrote in these years in a letter from Juda (Whydah): 'You also find thatched huts (which they call case de Dios) where they keep snakes. (…). They never pass in fron of these cases de Dios without going in to salute the deities which they shut up in them. Most of them even consult them about what they must do to remain always in their favour. Since each of these huts contains an old Mooress, whom they maintain to serve as priestess, and who feeds herself in that place on the meat and fruits each person brings there daily, she replies in a deep and deliberate voice, telling one person to refrain carefully from sleeping with his wife during certain days and certain times, another never to eat the flesh of hens or oxen or sheep, and yet another never to drink palm wine or beer'. (Barbot quoted in Hair 1992:638).

142 "Here are your brothers and sisters…"

143 Herskovits (1938 II: 202, 209) adds that the voice is heard after rubbing the pot with cowries. A Fon schoolteacher from a village near Abomey told me that the pot can also speak without being touched: "I always believed that they use a trick, but last year I witnessed this ritual in my mother's *hɛnu* and I saw that the pot spoke just by itself".

144 Own research in Kana; Adamu (1978:114-116, 121-122).

145 Alapini (1985:67); Danfulani (1997:34, 36-37).

146 In Whydah the *Fá* system, or at least the first part of it, was already known before Agaja. An anonymous document written between 1678 and 1701 describes 'daily' consultation by shaking palm kernels in the hand and writing down the obtained symbols (quoted by Pazzi 1971:48-49). Today only when a man consults *Fá* for the first time the use of palm kernels in the described form is compulsory. For other consultations the *agumaga* (string with convex objects) is mostly used (Alapini 1985:73).

147 Le Herissé (1911:146); Herskovits (1938 II: 104, 209); Palau Marti (1964:245); Alapini (1985:67). Pazzi (1979:49-50) however thinks that *Afá* was known by the first *nyigbafio* of Tado and spread in South Bénin with the out migration of the different Adja groups from Tado, but this does not seem likely, for the Ewe believe that they received *Afá* from Dahomey and Yoruba, not from Tado (Spieth 1906:68).

148 Some myths credit king Tegbesu for having imported the *Fá* cult from Oyo (Herskovits 1938 II: 104). It is widely accepted that Tegbesu was held hostage in Oyo before he ascended the throne. This would have enabled him to import many innovations from Oyo to Danhomɛ.

149 In all these systems (*Khatt, Derb el raml, Eba, Ifá*, *Fá* and *Afá*) four (stringed) convex objects are cast, which results everywhere in the same 16 basic stochastic symbols, called 'houses' by the Arabs, Nupe, Yoruba and Fon (Nadel 1954:38-39; 55-64; Hounwanou 1984:26; Danfulani 1997:35). The scores of the separate casts are written down for later interpretation from right to left as in Arabic script (Le Herissé 1911:146; Herskovits 1938:202). Yoruba oral tradition confirms the north-eastern Islamic origin of *Ifá*.

Also the divination by sand by Sahelian Muslim diviners *alfa* or *alufa*, whose system is called *Hatí* by the Nupe (Nadel 1954:55-64), resembles *Fá* (Alapini 1985:67). *Hati* would also have been derived from the Arabic *Khatt*. But *Hati* and *alfa* were introduced to Nupe and the coast much later, according to Danfulani (1997:36-37) only in the 19th century. See also Maupoil (1943/1981:41, 50-51) on the Muslim origins of Fá divination.

150 I mentioned already that the Fon of Agaja's time admired Muslims for their literacy (Dalzel 1793/1967:48).

151 An example of faith in *Fá* in the time of Kpɛngla is given in 5.2.2 in the myth of origin of Lissazounme. Dynastic mythology claims that success-stories spread by the court contributed to the acceptance of *Fá*: "When the system was first introduced (…) the people were skeptical of it. It happened, however, that soon thereafter a great drought occurred, and no rain fell throughout the kingdom. When every known device to bring rain had been tried without avail, the King had recourse to the new system. The diviners of *Fá* threw their kernels and ordered the sacrifices their system had indicated as necessary. On the very day the sacrifices were made, rain fell abundantly in the region of Abomey. People from other parts of the kingdom were thus inspired to come and ask that the same be done for them, and wherever these *Fá* diviners were called, they made the required sacrifices and rain fell." (Herskovits 1938 II: 208-209).

152 Herskovits (1938 II: 203). Mawu is probably God, or perhaps the *vodun* with the same name, see below.

153 This is more similar to the *Eba* diviners who have the Hausa name *boka* (Nadel 1954:39) than to the Yoruba *Ifá* diviners who are called *babalawo*.

154 Also all Fon kings, presumably since Agaja, received themselves the third and highest degree of initiation to the cult of *Fá* (Alapini 1985:90).

155 Cash payment to the *bokonon* constitutes an integral part of the divination ritual. Similarities between this ritual payment between the *Fá* and *Ifá* cults on the Bight of Benin (own observations; Marcos 1974:316; Alapini 1985:73; Le Herissé 1911;141, 145) and in the New World (O'Connor & Falola 1999:117, 120) reveal that cash payment was already institutionalised at the time of the Atlantic slave trade.

156 Alapini (1985:74) speaks in this context of solidarity between *Fá* and the *vodun*.

157 Own interviews and observations among Fon and Ehwe-Adja.

158 Own interviews; Herskovits (1938 II: 189). The *vodunsi*-in-training's labour for the priest was in the past probably in the first place agricultural; among Ehwe-Adja *vodunshi* (of their *hɛnu*'s *vodun*) and among the Ewe's *trocosi* this is still the case today (own observations and interviews; French 1997:4). I saw and heard of many Ehwe-Adja *vodunshi*-in-training working in fields and villages and walking the streets, they are not secluded. Fon *vodunsi* of public *vodun* in 20th century Kana

and Lissazounme however worked in the priest's home industry; according to my informants they made palm oil and cowpea cakes for sale, lived in complete seclusion and did not farm during their initiation. In the past however Fon *vodunsi*-to-be probably also farmed for the priest; narratives about Fon *vodunkpamε* suggest that seclusion was not practiced in the past (Herskovits 1938 II: 182).

159 This might have applied especially for such public *vodunkpamε* where *vodunsi*-in-training were secluded and could not farm themselves, as is the case in many public Fon *vodunkpamε* today (own interviews).

160 For example if the *vodunsi*'s relatives could not pay (own interviews and observations in the Fon village Lissazounme and the Adja villages Atindehouhoué, Loko-Atuï and others).

161 Own observations. According to myths told to Le Herissé (1911:108) and Herskovits (1938 II: 104) it was Agaja's wife Hwanjile who introduced Hevioso to Danhomε, but on page 153 of the same volume Herskovits says that his informants did not confirm this account.

162 'Thing of Whydah'. Own research.

163 Le Herissé (1911:108).

164 Le Herissé (1911:128); Ségurola (1988:456). See section 5.2.1 on Agaja's confrontation with the Adja and section 8.1 on Sakpata.

165 Members of Mawuhwe lineage insist that their ancestors in Dume were Ana, and this is probably the truth. In early colonial times however some Dumeans would have claimed to be Adja in order to legitimate their wish to be attached to the *poste* of Parahoué: "*Je tiens aujourd'hui à vous soumettre quelques questions de frontière. (…) Le désir des gens de Tchetti d'être rattachés à Athiémé semble légitime: les habitiants de ce village ainsi ceux de Doumé sont en effet des Adjahas ayant toujours reconnu l'autorité du rois de Tado*." (Poste de Parahoué 13 Avril 1901, Dahomey et Dépendances, ANB Porto-Novo). Herskovits (1938 II: 102) confirms that the Mawu-Lisa cult originated in Dume.

166 *Kanumon vodunsi* (slave-'wives' of a god) were a category of Danhomean slaves that were dedicated to the cult of a deity (Obichere 1983:196-197). The *vodun* Lisa is considered the husband of the female *vodun* Mawu, and Agε is their son. Therefore the three are usually installed together in the same *vodunkpamε* (the same applies for the *Lisakpamε* in Lissazounme, but there Lisa is the principal object of worship while in Kana it is Mawu).

167 Mawu is, and seems to have been since at least 1600, the name of the supreme creator-God in South Bénin. He was considered too remote to be worshipped or reached (own research; Bosman 1704/1967: 368a; Skertchly 1874:461 quoted in Herskovits 1938 II:289; Agbo 1991:112; Ségurola 1963:375; Marcos 1974:338-339; Sodokin 1984:46; Pazzi 1979:53). Therefore it puzzled anthropologists that the Fon started to devote a cult to a *vodun* called Mawu (Le Herissé 1911:127; Herskovits 1938 II: 289-292). My research suggests that Islam was instrumental in the birth of this *vodun* cult, a fact which might explain its establishment and which has gone unnoticed so far.

168 Oral communication by the contemporary Muslim in the *vodunkpamε* of Mawu in Kana, who was my landlord in 1989. His paternal uncle added that Hwanjile's son king Tegbesu ordered one of his own sons to convert to Islam in order to spy the Muslims among the Oyo.

169 I hypothesise that Muslim diviners *alfa* might have divined by sand in the *Mawukpamε*, see the section on Muslim divination above.

170 The suspects, coming from Abomey, were given poison by another group of Ana slaves from Dume who lived at 2 km distance in western Kana. Upon arrival in the *Mawukpamε* most of them died. The distance between the two Ana groups was maintained to conceal the responsibility for the suspects' death and to avoid acts of revenge (own interviews with descendants of both Ana groups).

171 According to Herskovits (1938 II: 105) it was the only *vodun,* besides the royal ancestors, who had this right. My informant in the village Atchia however claimed that also the *vodun* Hlan received human sacrifices (see 5.2.2), and Foà (1895:237) described human sacrifice to the *vodun* Lεgba in the Porto-Novo region. Possibly the human sacrifices in the *Mawukpamε* were partly or mainly empoisoned suspects, for the Fon kings usually took care to find moral of customary justifications for sacrificing humans (Marcos 1974:360).

172 A *bokonon* in Lissazounme explained 'we sell better in the areas where people worship the *vodun*'.

173 Bernardin Abihunje, Kana 1990. Lombard (1967b:112) confirms that a representative of the royal family was appointed since early colonial times by the princely *chefs de canton* (apparently with

French consent) to preside rituals like the king used to do, and also to install the heads of Fon lineages.

174 Chiefs including Danhomean ones continued with this practice until king Gezo reserved from 1840 onwards the right to sacrifice human beings to his ancestors and for his own sins to himself (Foa 1895:196-197; Palau Marti 1964:107-108, 131; Forbes 1851/1966 I: 32, II: 199-200 and Burton 1893:234 in Law 1985:74).

175 Skertchly (1874:118-119) cited in Law (1985:69); Le Herissé (1911:51). The same word 'customs' was also used for the funeral rites of Fon kings, called *axosutanu* in Fon; the number of human victims during *axosutanu* was usually much higher than during the *hwetanu*, Elwert (1973:105).

176 Elwert's (1973:67, 106) informants on the Allada plateau emphasised that their ancestors had to send gifts but did not need to attend in person. This contradicts Dalzel (1793/1967:122) and Herskovits 1938 I: 113-114) who claim that all Danhomean family heads and chiefs had to attend. The Allada plateau belonged to the Fon kingdom since Agaja conquered Allada in 1724 (Lambe 1724 quoted in Akinjogbin 1967:65).

177 Dalzel (1793/1967:122). In this part of his book Dalzel presents Norris' diaries as if they were his own.

178 This opinion was expressed by the *ahinon* (market-chiefs) of the principal markets of Kana and Abomey (own interviews in Kana-Mignonhito 27-6-1989 and in Abomey 22-7-1989, see 5.2.4).

179 Own interview with Daa Aguidi and Gbese Aguidi, Kana-Mignonhito 27-6-1989.

180 Own interview with Jules Gnavo and Jérome Sessinou from Kana-Dodome, Cotonou 29-8-1989.

181 Adja accounts hold that "Before there was a market at Kissa near Houétan, which was held on *Kisagbe*. We were told that we would meet evil spirits in the field if we work with the hoe on *Kisagbe*." (Eugène Adogan, Kplakatagon 12-2-1991). All the surrounding ethnic groups rest from field labour on the day of their principal market(s). The Fon rest from field labour on the day of the Kana-Mignonhito, Abomey (Hunjro) and Klouékanme markets; this day is called *Mignonhigbe* or *Hunjrogbe* after the names of the Kana and Abomey markets. The Dogbo-Adja rest on *Dogbogbe*, the day of the Dogbo market. Only on the Ehwe-Adja's day of rest *Kisagbe* there is no (important) market anymore today. See on the Kisame market also Rapport mensuel Novembre 1911 postes d'Athiémé-Bopa-Parahoué, ANB Porto-Novo.

182 The *kakɛ* tree (*Prosopis africana*) symbolised the Adja in the myth of origin of the name 'Fon' in 5.2.3.

183 Own interview with the market priest Gossou Djaho 6-11-1990; see also interview with Gossou Djaho by B. Ensing in Wartena (1987:63). On the base of the informant's genealogy down to Nalu, I estimate the creation of the market of Azové to have occurred around 1750 and that of Aʼliganme some time before. It is not unlikely that the excessive palm wine consumption and/or the fights at Aʼliganme were a result of the slave trade.

184 Robertson (1819: *Notes on Africa*, London, p. 234) and De l'Albeca (1895: Le Dahomey en 1894, *Bulletin de la Société de Géographie*, 7e serie, XVI, p. 207) (both cited in Law 1994:164); Plehn, R. (1895) *Beiträge zur Völkerkunde des Togogebietes*. Phil. Dissertation, Halle (quoted in Pazzi 1979:82, 93).

185 Own interview with the Abomean market priest Zinkponon Vodouhè, Abomey 22-7-1989.

186 Cowpea doughnut.

187 Head of a lineage or lineage branch.

188 Personal communication by Simplice Davo Vodouhè, Wageningen, December 1995.

189 Ibn Battutah saw Maldive cowries being exchanged for gold in Mali and in Gao in the 14th century (Ibn Battutah quoted in Johnson 1970:19).

190 When the Portuguese started to import cowries to the kingdom of Benin from 1515 onwards the inhabitants immediately accepted these cowries as payment (Johnson 1970:18).

191 Also on the Dogbo market offerings to the market *vodun* were made (in the 19th and 20th century), in the belief that peace and order in the market depended on these (Wartena 1988b:64).

192 Also a written account from around 1800 (Robertson 1819:234) notes that salt from Keta was traded into the interior.

193 For the Fon and Ehwe-Adja these places were the left banks of the rivers Mono and Couffo and some of the latter's left bank tributaries, on the Fon plateau especially Sahè, Zinkanme, Oumbegame and Agrime (Rapport Cercle d'Abomey 1908, ANB Porto-Novo; Manning 1980:64), and on

the Ehwe-Adja plateau especially the Lomo, a tributary of the Mono (own interview in Tchankada 1-10-1990). Pottery production was dominated by women.

194 That is before the time of king Glele (1858-1889), who conquered Zouvou and other eastern Adja plateau villages. The account continued: "After some time the Fon also started to buy palm kernels and palm oil from us, because they did not know how to make palm oil. They paid these with cowries. This was in the time of king Glele." (Own interview in Zouvou 25-5-1990).

195 The Fon's *ata* differ from the Adja's *gawu* in that *gawu* contain the cowpea's skin (endocarp) but *ata* do not.

196 Massive cowry imports by German traders in the second half of the 19th century caused a devaluation that made cowries as heavy as the food crops for which they were exchanged (see Chapter 6 and Manning 1982:55, 75).

197 The only way to eliminate this obstinate weed is either to uproot it in the process of ridging or mounding, or to quench it under a cover crop, see section 9.2. If *Imperata cylindrica* is meagre (*sɛkija* in Fon) this indicates that the soil is quite poor. Permanent flat tillage can not eliminate *Imperata cylindrica*.

198 'Village Lɛgba', one of the principal *vodun*.

199 Own interview with Martin Djenke, Klouékanme-Djenkehoué 8-1-1991. Wartena (1988b:65) gave another Fon myth of origin of the Klouékanme market: Gbotan started to purchase palm kernels from Adja women who passed through Klouékanme in the intention to sell the kernels in the Lalo or Tchikpè markets. Gbotan purchased palm kernels, but neither palm oil nor groundnuts, the latter were only traded in Lalo. (Martin Djenke did not know this second myth of origin, but the two myths agree that Gbotan did not purchase palm oil). The Lalo and Tchikpè markets on the Adja plateau were surrounded by Fon (slave) villages and controlled by the Fon slave Hamada (Rapport Cercle d'Abomey 1908, ANB Porto-Novo; Luning 1986:31-32). If palm oil and groundnuts were sold there before they were sold at Klouékanme these were probably mainly the surrounding Fon slaves' products.

200 Paussie had been able to trade iron during a long period, in spite of the alleged interdiction to sell iron to anybody else but the king and his ministers, before she was arrested for the equally forbidden sale of coral (Dalzel 1967:208-209).

201 Similar situations prevailed in the Whydah and Allada kingdoms before the Danhomean conquest. In the 1690s the wealthiest Hweđa men drove "a very considerable Trade, not only in Slaves but all other sort of Commodities" (Bosman 1704/1967:343), but also slave traders from hinterland states were able to deal with Europeans (Snelgrave 1734:61). The Whydah and Allada kings taxed slave traders and organised the marketing of their own slaves through officials called *yevogan* ('chiefs of the white men') (Law 1977a:557-558). In Whydah's capital Savi, all sorts of commodities were sold daily in public markets before Agaja's invasion in 1727 (Smith 1744:130 quoted in Pazzi 1979: 249).

202 Own interview with Daa François Houngan in Kana 9-3-1989; Yélouassi (1987:28). See section 3.2.4. The institution was not new. About sixty years earlier, Dapper (1676:119) observed inWhydah that '*Honga*, de kapitein van de boot krijgt iets voor elke boot die aan lant [sic] komt' (honga, the captain of the ship, receives a gift for each ship that comes ashore).

203 Agaja's successors probably did not appoint a *Húngàn* from the same family and if they did the position might have become unprofitable under their reigns.

204 European iron imports stimulated, for example, local production of iron tools and of commodities which could be made with these tools.

205 Alcoholic beverages were much consumed by the new elite on the Abomey plateau as well as in Whydah and in Allada. Local beer *liha* (called *pito* by the Portuguese) and palm wine (*deha*) was in high demand (own interviews; Dapper 1676 II: 115-116; Bosman 1704/1967:342; Dalzel 1967: 120), although on special occasions imported liquors were served (Dalzel 1967:14).

206 Norris dined repeatedly in the market place during his stay in Abomey in 1772 (Dalzel 1793/1967: 138), though he had also many meals sent to him free of charge by women of the king's court both in Abomey and in Kana (Dalzel 1793/1967:120). He observed that Danhomean prostitutes supplemented their incomes by brewing beer and raising chickens for sale (Dalzel 1793/1967:129-130). On his departure from Abomey king Tegbesu gave him 20000 cowries (5 cabess) towards defraying his expenses on the road (Dalzel 1793/1967:146). Under the reign of Glele (1858-1889), Burton (1893/

1966:170) bought drinking water from a *sinnon* ('water-mother', trader of drinking water) in a small market on his journey from Abomey to Kana, and observed the sale of meals and beer by women on the roadside (Burton 1893/1966:49, 178). In the early commoditised Whydah the sale of prepared food and beer by women was already commonplace in the 1690s (Bosman 1704/1967:342).

207 Own interview with Daa Aguidi, Gbese Aguidi and Daa Ahinon, in the presence of several members of the family Guedenon, Kana-Mignonhito 27-6-1989.

208 Of these five, Atindehouhoué and Honsouhoué were most important because I lived in the former in 1985 and 1990-1991 and in the latter in 1989.

209 I had asked about oil palm and pearl millet cultivation and whether there were wild yams in Yéhouime. The Yéhouime informants said that they never learned about pearl millet cultivation. They mentioned the other crops spontaneously. See section 4.3 on ancient crops. The principal Yéhouime informant, Lakusa Egè, explained how he descends in the paternal line from Afojunu; on the base of this genealogy I estimate that the village was founded between 1550 and 1720. (Own interview in Yéhouime 2-11-1990).

210 Own interviews with Lofa and Jean Louis, interviewed separately. Lokogba 28-5-1990.

211 This date is suggested by the analysis of my oral sources. It might be significant that it coincides with Agaja's conquest of the coast.

212 *Vodunon* Tofa went on to tell about occasions on which he sacrificed successfully for rain or against pests during the droughts of the mid-1970s. Some of these sacrifices were made on request of various Adja plateau and Allada plateau villages, others on request of the *chefs de district* of Aplahoué and of Klouékanme. Some of his clients had first gone to Tado but without success, see also section 3.3.2. The fertility cult at Avégame has similarities with the cult of the fertility god Nyigblɛn at Bè and Togoville, amongst others the essential role of sacred forests in both cults and the interdiction to wear anything but a loincloth inside the forest (own observation; Chesi 1980; Gayibor 1993: 143-145).

213 Own interview with *vodunon* Tofa, Aïssanhoué 27-4-1990.

214 Own interview with *vodunon* Tofa, Aïssanhoué 1-11-1990.

215 This was also the opinion of *nyigbafio* Alokpeto and seven Tado-Adja dignitaries, interview in 1942 by Koumbo Blaise Amouzou (Gayibor (1992:29).

216 Maize was introduced in the 16th century to the Gold Coast (De Marees 1602/1987:40, 63, 110-113) and to Benin (Nago 1997:10). It spread very fast on the coast and was a staple around Whydah by the end of the 17th century (Bosman 1704/1967: 339, 391; Alpern 1992:25; Juhé-Beaulaton 1990).

217 See the definition in section 4.1.

218 Own interviews with several Ehwe-Adja and with the *nyigbafio* Adjakanumabu. According to them the Adja, including the Ehwe-Adja, used to send agricultural products and (since about 1945) money for these sacrifices on a voluntary base. Some elderly Ehwe-Adja from my research villages remember how they assisted at the *gbogbuezan* festival. But since 1982 the Togolese government levies a tax of 300 FCFA from every man and 200 FCFA from every woman in the region for *gbogbuezan* (Adjakanumabu, Tado 6-9-1990; Agbo 1991:168-170). The sacrifices are led by the present *nyigbafio* and by his *tasinon*.

219 Cowpeas mixed with palm oil were and are the 'starter' in all sacrifices which involved animals, and constituted the sole part of many smaller sacrifices. The cowpeas had to be of the red *vonuyu* variety.

220 I met only one Ehwe-Adja, a *vodunon*, who refrained personally from eating from the new maize harvest before sacrificing some of it to his *vodun*.

221 With the exception of the informant from Touvou, all my respondents who claim that their ancestors came from Adjahonme belong to the *akó* Womí. According to a Womí tradition recorded by Pazzi (1979:162) ten villages stem from Womí; I believe that it might be more than ten.

222 I estimated this date on the base of the genealogy from Efionyi down to the speaker.

223 Own interview with Degbe Hovo, Touvou 6-11-1990.

224 Pazzi (1979:239). Later Tegbesu built a palace for her in Adjahonme (Bay 1983:347, 361).

225 Own interview with Fandegla Evo, Gnonfinhoué 2-11-1990.

226 Koumbo Blaise Amouzou ('secretary of Tado's ancestral customs') described, on the base of an interview with *Nyigbafio* Alokpeto and with seven Tado-Adja dignitaries in 1942, the relations between Tado and the Fon in the following terms: "*Nous étions souvent en guerre avec les Fon et les*

*Nago. Bien que proclamant officiellement qu'ils ne pouvaient pas attaquer le pays de leurs ancêtres, les Fon sont venus plusieurs fois piller Tado. Ce sont des hypocrites*." (Interview with Amouzou by Gayibor in 1973; see Gayibor 1992:29).

227 Aïssanhoué's inhabitants, though of Ewe descent, had adopted the Ehwe-Adja language and identity.

228 Own interview with Kégonhou Ehoun, Loko-Atuï November 1990. On the base of the genealogy of Kégnonhou I estimate that Loko-Atuï was founded in the second half of the 18th century.

229 See the case of Tutujason in the village Gnidjazoun in 4.2.3, and Le Herissé 1911:291 and the map in his Appendix.

230 Own interview with Tozo Kakpo, Djikpame-Afikoué 9-11-1990. Tozo Kakpo was a retired civil servant and the president of the local 'association historique'; therefore he was convinced that his own interpretation of local history was correct. Such local 'specialists' in oral history are not always the best informants according to Vansina (1985).

231 Alu tradition confirms the first part of the myth, that the Fon invaded Tado and deported many Alu, where they developed the forging industry, though in the Alu version the Fon attacks occurred seven times (Gayibor 1992:63). Pazzi (1979:266-267) thinks that the Fon or Yoruba invaded Tado around the 1730s.

232 Account by Sossou Tchodo, great-great-great grandson of *nyigbafio* Ajavivi (Gayibor 1992:46-47).

233 According to Abotchi (1995:253, 259-262), many Ehwe from the Ehwe-Adja plateau settled around Dodohoé (in the 'sectors' of Ahassomé and Petchikoé) in the later 19th century, attracted by the fertile farmland and probably pushed by invasions of the Danhomean army on the Adja plateau.

234 On the basis of genealogical information I estimate that Tchigosu was born between 1800 and 1840. His son Dɛngbɛnɛn's farm will be discussed in section 6.5 and Adja migration in 8.1.

235 As for example in another account by the old Adja of Tchikpè descent who narrated the just mentioned myth from Tchikpè. In this account, 'Kpoyizun' stands for the *nyigbafio* of Tado (Kpoyizun was *nyigbafio* in the late 19th century), and 'Hweshino' stands for the Fon king (*hweshino* means ruler): "Kpoyizun made sacrifices for Hweshino so that he should succeed in war. Kpoyizun made the *vodun* and in this way he gave Hweshino the (magic) power to capture Yoruba, Mina and also some Adja, whom he used as human sacrifice. That is, the strong captives were enrolled in the Danhomean army, the weak ones were fed to the king's lions and panthers, and the medium ones were asked 'whom do you choose, Migan or Mewu?' The Adja chose Migan, because his name means in Adja 'we are saved'. But Migan bound them to be slaughtered like pigs, they were beheaded and their blood used to build compound walls. When Hweshino told Kpoyizun that he would make war against the Adja, Kpoyizun replied: 'If you fight against me while I conduct rituals for you, you risk loosing in the end.' But Hweshino continued to catch Adja. One day he captured an Adja man and his mother. The woman was not seen again, until 4 years later she returned with some white men, who started to fight against Hweshino. The white men had wooden statues with guns that killed the Danhomeans, and the Danhomeans could not kill the statues. Finally the Fon king surrendered to the white men. Until today nothing grows on the place where he surrendered." (Sonyonu Dɛngbɛnɛn, Edahoué 29-9-1990).

Kpoyizun himself told the French officer d'Albeca in July 1889 that Gbɛhanzin, the new king of Danhome, had visited Tado in January of that year to be invested as king by the *nyigbafio*, and that '*Le roi de Toune* [Tohoun, where the *nyigbafio* of Tado resided in the 19th century] *ou Adjaa consacre les rois d'Abomey et leur donne investiture*.' (Journal of d'Albeca, 23 July 1889, p. 23 in AUBLET, Edouard (1894) *La guerre au Dahomey, 1888-1893*. Paris.)

Maupoil (1961:52, cited by Pazzi 1979:305) agrees that the Abomean kings regularly sent sacrifices for the ancestors to the *nyigbafio* in Tado in the times of Kpoyizun, apparently after a long period of not doing so under Kpoyizun's predecessors.

236 Pierre Alofa's version of the myth suggests a third, for the pre-colonial Adja more exceptional motive, namely the desire to exercise the profession of *bokonon* (diviner). But first it is not sure whether the founder was already a *bokonon* when he settled (see the version of Pazzi 1979:157), and second he was originally not an Adja, but an Ana (Yoruba) who adopted Ehwe-Adja identity.

237 Pierre Alofa was born in Houéganme in 1925. His father was the *chef de canton* Alofa Vifen, his mother Fansi Assogba. Alofa Vifen died in 1955. Pierre Alofa became *chef de région*, probably in

1955, but not later than the end of 1957 he was demoted to *chef de village,* under the *chef de canton* Adolphe Kpatoukpa who lived in Djakotome. Nevertheless Pierre Alofa continued to pretend that he was *chef de canton*. He deposed several *chefs de village* in the area and appointed others against the will of Adolphe Kpatoukpa. Pierre Alofa was punished by imprisonment in 1958. (Chefs – Affaire Pierre Alofa 1957-1958, Archives Aplahoué).

238 Royal Gold Coast Gazette, Cape Coast, 18 March 1823 (cited by Law 1994:156).

239 Forbes (1851/1966 I: 16-17; II: 92-97). At one point in his work Forbes (1851/1966 I: 16) gives the date as 1840, and this date was copied by Herskovits (1938 II: 93), Cornevin (1962/1981:122; 1969: 111) and Pazzi (1979:304), but Law (1994:156) thinks that this is a misprint. Pazzi (1979:304) adds that the Fon took some Ana as captives to Abomey. According to local Atakpamean traditions and the Fon prince Agbidinukun's account to Le Herissé (1911:323) the Fon invaded Atakpame again a few years later. Karl (1974:206) thinks that the Fon marched against Atakpame in 1842 and 1849, but the Atakpameans believe that later successful Fon attacks were under king Glele (1858-1889) (Cornevin 1969:111). Pierre Alofa calculated on the base of his own genealogy that Ganme-Houégbo was founded between 1740 and 1850.

240 The fact that Alofa wrote that it was the year 1840 suggests that the (incorrect) date given by Herskovits (1938 II: 93), Cornevin (1962/1981:122; 1969:111) and Pazzi (1979:304) has entered local 'oral' traditions.

241 'Sought refuge with' was perhaps a euphemism for 'was captured by', since Gezo would have invaded Atakpame in the same year.

242 If this is true, Kpotokan either visited Abomey already before 1840 or he only became a *bokonon* after 1840.

243 Forbes (1851/1966 II:93-97) heard at the *hwetanu* (annual sacrifice to the Fon royal ancestors) in 1850 some Fon chiefs propose to attack the Adja to punish them for their assistance to the Ana, but Dahomey decided to attack Abeokuta instead. Possibly the Adja were attacked later and/or by some minor Dahomean regiments?

Pierre Alofa added orally that Kpotokan was made head of the villages Adjido, Aname, Atchioume, Atindehouhoué, Danmakahoué, Domi, Game-Houégbo, Hedjame, Houédogli, Houmba, Kpéï, Kpévé, Koutoukanme, Ouanou, Oussoume, Maïboui, Agomèhoui, and Nigbo.

244 He would have pronounced the spell *ku jɛ gan mɛ* (death is imprisoned in the soil), from which the name of Houéganme would have been derived. The first part of this Houéganme myth was also heard by Pazzi (1979:157), but he (ibid) and Mondjannagni (1977) think that Houéganme means prison of the Ehwe-Adja. Elsewhere Pazzi (1979:84) claims that it means crossroads of the Ehwe-Adja.

245 *Atin atòn gon* = Fon for 'near three trees'; in Adja this would be *aci aton gbo*. Perhaps these 'sons' of Kpotokan were not Ana but Fon (slaves)?

246 Own interviews in the Ehwe-Adja villages of Ana descent Domi, Titongon and Agbedranfo, 1990.

247 Genealogical information suggests that Asu fled early in the 19th century, which is very well possible since both Gezo (1818-1858) and Glele (1858-1889) marched several times against Mahi villages (Le Herissé 1911:323, 328, 335-336; Pazzi 1979:304-305).

248 'Among the palm kernels'.

249 Houédogli was an Adja village founded by Waci 'from Comé'; Waci however also means 'slave' in Adja.

250 The first version, which implies that the seven were slaves, was more difficult to admit for the two informants (they were both grandsons of one of the seven) than the second version. Both agreed that among Asu's nine 'sons' two had a special status. A third 'great-grandson' of Asu admitted to me in private that his grandfather was sold to Asu as a slave (see below). Therefore it seems likely that Asu had seven slaves and two sons.

251 According to both informants these were the hamlets Honsouhoué, Dekime, Hogbaya, Tchankada, Kpohoudou (near Toviklin). One of them mentioned in addition Zaffi-Kpakouihoué. Inhabitants of another hamlet in the area, Gohouenou, also claim descent from Asu and call themselves 'Waci' (own interview 18-5-1990).

252 Glele would have given him the stool with these words: "I see that you are strong. Therefore I give you a stool so that you may reign in your region and help me to make war. Please buy a [sacrificial] goat and a white cloth, and we will fix a date for your enstoolment." In Wartena 2001 I described

how Asu's family later lost the stool to their neighbour Atindehu. Atindehu's grandson Hundé however, who inherited the stool, claims that Atindehu received the stool not from Asu but from Degbɛ, whom the *nyigbafio* of Tado had appointed chief of Houédogli (own interview with Hundé Joto, Atindehouhoué 3-1-1990).

253 Own interviews with Lofa Sokposu, Dékime 21-5-1990, and with Hoonon Houegnon, Dekime 5-10-1990.

254 An Adja-Ewe speaking ethnic group in the south of the Mono province. According to one Fon informant (a schoolteacher in the Adja village Atindehouhoué) however the Waci around Come were also the Fon's 'slaves' since Agaja submitted them (own interview with Gaston Dakossi, Atindehouhoué 1-1-1991).

255 According to a Fon informant in the Adja village Atindehouhoué this became especially important during the palm oil exporting era 1850-1900, when the Fon required oil palm products from slave masters on the Adja plateau. Slave masters hid their slaves in small hamlets in the midst of bush and pretended not to have any slaves (Gaston Dakossi, 1-1-1990). I will come to this strategy in Chapter 6.

256 See the introduction to Chapter 4 and section 4.1.1 for some examples.

257 For people who died of a contagious disease or by lightening, which is seen as a curse from the *vodun*; others were buried in their compound.

258 This is confirmed by Adja accounts from many villages, Wartena (1987; 1988b; 1994b:77-79); Kerkdijk (1991:30-32); Brouwers (1993:89).

259 From the context it is obvious that this is Tohoun, a town halfway between Aplahoué and Tado. The road from Tohoun to Athiémé led probably through Dekpo, Aplahoué or Azové and through some Ehwe-Adja villages to their south.

260 Hardship in the patrilineage and various other reasons could lead to the absorption of matrilateral relatives in their mother's patrilineage. Children are incorporated into their mother's lineage instead of their father's lineage if their mother is not married under one of the accepted marriage regimes. Children could be sent to live outside their paternal home on a diviner's recommendation (Den Ouden 1990:8-9, 14). Fiawoo (1984:226) describes how Ewe children are absorbed into their mother's lineage if they are threatened by hardship in their own patrilineage.

261 Possibly this was a cross cousin marriage.

262 Own interview with Hundé Joto, grandson of Atindehu, Atindehouhoué 3-1-1991. On the basis of genealogical information I estimate that Akpo was born around 1835. Livelihoods of the Henyon family from Djakahoué will be discussed in sections 6.5 and 9.3.

263 Herskovits (1938 I: 317-326) erroneously claims that in all *vidokpokanta* marriages (and in all *vidotohwe, hadudo, chiosi, ahovivi, avonusi* and *gbosu do nu gbosi* marriages) among the Fon the children (in the case of *vidotohwe* half of the children from a given marriage) would be controlled by and absorbed into their mother's family, but this is definitely wrong.

264 It was in a mother's interest to marry her daughter to her brother's son, because this implied that the daughter would live in her mother's village and care well for her mother if the latter would visit her own family or return there in old age. Hence the mother 'installed a jar of water' for herself. Cross-cousin marriages are also extremely popular among the Ayizo, where they are called *jodekon* (Frey-Nakonz 1986).

265 I deduced information on historical marriage patterns and practices from Fon and Adja family histories, genealogical studies, informants' opinions, and observation of today's practices.

266 Own research in Avégame and Aïssanhoué.

267 A typical testimony: "In cases of drought our village used to send some young men to Tado. I also went one time. We gave the *nyigbafio* some bags of maize or other agricultural products from the village, and liquors or a goat. A prayer was said and the drinks or goat sacrificed in Tado's sacred forest. The *nyigbafio* blessed the grains which we brought, saying that it would rain. He gave us some of the blessed grains and told us to mix them with others and sow them to produce a good harvest. We promised 'If we have indeed a good harvest we will bring you part of it' and went home. Nowadays we sacrifice less frequently at Tado in cases of drought – and if we do so we rather send money than maize – but the villages near Tado (including villages on the north-western Adja plateau) give more field products and other things for the *gbogbu* and to thank for a good harvest than 20 years ago." More or less the same testimony was given, independent of each other, by Tossa and his

son (Bozinkpé 25-9-1990), Fandegla (Gnonfinhoué 25-9-1990), Yohosu Cuna (Gnonfinhoué 4-10-1990), Hundé Joto (Atindehouhoué 5-10-1990), Ada Sosu from Atindehouhoué (Tado 6-10-1990), Gigi & Kandé Joto (Atindehouhoué 18-4-1990), and confirmed by *nyigbafio* Adjakanumabu (Tado 6-10-1990). See also Agbo (1991:141).

268 He mentioned Sodeglahoue, Tchankada, Dekime, Kpakouihoue and Honsouhoué.

269 If the Ehwe-Adja gave palm oil this were probably also more or less voluntary contributions motivated by belief in the *nyigbafio*'s powers rather than a fixed 'tribute'; I will come to this below.

270 Tado's motives for building a town wall were Fon and Yoruba invasions (Gayibor 1992:61-62). According to Gayibor (1996:70) the wall was built in the 17th or 18th century. Apparently a circle of bush no longer protected the town sufficiently. Pazzi (1979:266-267) thinks that the Fon or Yoruba invaded Tado around the 1730s.

271 Own interview in Bozinkpe 25-9-1990. *Tasinon* are male and female members of the Tado court's ruling council, see section 4.1.1. Reasons why the speaker's lineage maintained stronger relations with Tado than many other Ehwe-Adja lineages were probably that it lived on the northwest of the Adja plateau and that it belonged to the *akó* Tadovi.

272 Own interview with *nyigbafio* Adjakanumabu, Tado 6-9-1990.

273 Own interview with Tossa in Bozinkpè, 1990.

274 Pazzi (1979:84, 305).

275 Those who spoke of Fon invasions possibly ignored the aggressor and just assumed that it must have been the Fon 'as usual'.

276 A Tado-Adja explained the difference between the Ehwe- and the (Tado)-Adja in the following terms: "*Nous sommes les mêmes. Seule la langue nous divise. Nous sommes également de clans différents. Ceux qui sont issues de Tado pratiquent les mêmes cérémonmies que nous. Ceux-ci disent être partis de Tado il y a longtemps. Parmi eux, certains reviennent se faire enseigner les pratiques religieuses.*" (Gayibor 1992:63-64).

277 In the Fon kingdom, status symbols associated with seniority became very similar to the symbolism of the Gun and the Yoruba. Hierarchy among the Adja remained less visible.

278 Berry (1985:8) explains a very similar hierarchy based on seniority among the Yoruba as follows: 'In pre-colonial Yorùbá society relations of authority and subordination were organised in terms of seniority. People of junior status owed service, obedience, and loyalty to their seniors, both within and beyond their immediate household or descent group. Juniors' obligations included labour services, in return for which they could expect both maintenance and protection. Seniority, in turn, was not based solely on age, sex, or demographic status; it could also be achieved, principally by demonstrating one's ability to command the loyalty and service of others. The relationship between seniority and wealth or status was thus a dialectical one: seniority conveyed authority and access to the productive services of others but was also dependent on them. A chief, an elder, or a 'big man' who failed to satisfy his subordinates' expectations ran the risk of losing their support and, in consequence, much of his own influence and/or wealth. In short, differential access to the means of production was defined in terms of kinship and seniority, and it also helped to define them'. And: 'Within the compound, relations of authority and subordination were based on seniority. Seniority was not, however, determined solely by age: it depended also on other aspects of family status (marriage, childbearing), on order of arrival in the compound, on knowledge, and on demonstrated ability to command the loyalty and resources of other people.' (Berry 1985:64).

279 Aïssanhoué, 3 km east of Azové, is since the middle of the 18th century the residence of the Ehwe-Adja's most important agricultural priest next to the *nyigbafio* of Tado. Its market, which has ceased to exist, is described in Rapport mensuel Novembre et Décembre 1918 cercle du Mono, ANB Porto-Novo.

280 Possibly there were other eastern markets which disappeared from the map and from Adja memories.

281 The pre-colonial importance of this Houetan-Tado road is striking, for colonial documents do not mention it. By 1952-54 it had completely disappeared. Aerial photographs from these years do not even show a narrow path from Houetan in the direction of Tado, while there were many other roads.

282 Le Herissé 1911:172; Fadairo 1986.

283 Own observations and interviews; Gayibor (1993).

284 Danhomean cloth was exported overseas throughout the slave trading period until the first World War (Manning 1982:108, 111). Foà (1895:129) testifies that it fetched good prices in Brazil in the 1890s.
285 According to most sources all blacksmiths were members of the *akó* Ayato. Sometimes slaves and other strangers were incorporated into this *akó*, they mostly became smiths. Some of my informants claimed that members of the *akó* Jetovi were also blacksmiths, but could not substantiate this by concrete examples. None of the members of the *akó* Jetovi whom I knew was a blacksmith or named blacksmiths among his ancestors. During the kingdom period forging on the Fon plateau seems to have been restricted to the royally controlled smithies in Kana and in Abomey. It was easy to prohibit forging and hence iron weapon production in other places because of the noise it made.
286 Own interviews and observations; Herskovits 1938 I:182)
287 Catholics refrained less from farming on Sundays, see 7.1.2 and 8.2, but the animist majority and about 10 Protestants of Atindehouhoué imposed this rule also upon me. Once I tried to weed my home garden on a Sunday to relax from writing the whole week, but having to cross the village with my hoe all the animists shouted shame of it and made me quickly return to my field notes, where all could see me but nobody cared.
288 Also in Whydah the weavers of fine cloth enjoyed a high status according to an eyewitness in the 1720s (Labat 1730 and 1956b:82 cited in Wigboldus 1984:19).
289 Shrouds are called *avogan*, which means 'big cloth' or 'chief of the cloths'. They belong to the only cloths, together with tunics for tourists and certain marriage cloths, which are still of native manufacture today (own observations; Avolonto 1990:68; Herskovits 1938 I:46).
290 The profitability of weaving remained high until the end of the First World War, with resurgence during the Second World War, due to competition from European cloth imports.
291 Forging was probably not a real option for them because they did not belong to the *akó* of blacksmiths.
292 Fiches signalétiques et notes sur les chefs indigènes 1919-1932 Abomey E chefs, ANB Porto-Novo.
293 Ségurola (1988:41). This suggests that the Fon received their esteem for literacy, together with other Muslim institutions, in pre-colonial times from the east.
294 See for example Le Herissé (1911:270).
295 For example Le Herissé (1911 plate opposite page 112).
296 Bas-reliefs are shown in Le Herissé (1911 plates xx, xxi, pages 321, 323, 332).
297 Le Herissé (1911:332).
298 Captives who claimed to be Muslims had to recite Islamic prayers in front of the king's malam (*malɛhosu*) and if they passed this test they were allowed to live in the Muslim ward. Likewise it seems that if someone wanted to work as a *bokonon* or as a Muslim diviner his knowledge of the respective divination technique was tested by the royal diviners, at least initially and in the Abomey region.
299 In those years trade in other commodities than slaves was not yet very important. Later, trade also became a prestigious activity which was dominated by women.
300 Own observations. According to Meyer (1999:16) female Gun and Wemenu *vodunsi* may visit ceremonies of their *vodun* without the permission of their husband, may not be beaten by anyone, and occupy high ritual positions in their own kin group.
301 Bosman (1704/1967:342); Burton (1893:330); Le Herissé (1911:313); Law (1991:64).
302 In any case among the Fon and in the Adja royal family in Tado; I assume that she once did among all Adja and 'Gedevi'.
303 Most *hɛnugan* were at the same time *vodunon* of the principal lineage *vodun*, but even if another lineage member was *vodunon* of these *vodun* the *hɛnugan* had responsibility for- and authority over them.
304 For the Ehwe-Adja see 5.3.3. Herskovits (1938 I) mentions several Fon *akò* (he calls them sibs) who would not worship their ancestors; today however these *akò* also celebrate the annual *ahanbiba* (own interviews).
305 Herskovits (1938 I:328); Le Herissé (1911).
306 Own observations and interviews; Foá (1895:244-245).
307 Own observation is Lissazounme 10 April 1990; Herskovits (1938 I:138).

308 Aguenou (1983:29); Adjahi Baï (1976).
309 Own interviews; Houngbedji (1967:105-106).
310 They gave this land in usufruct to lineage members and appropriated the produce of the oil palms, Wartena (1994a+b; 1999; 2001).
311 The title *vigan* also exists among the Ayizo of the Allada plateau (Elwert 1973:101) though it is unclear since when. An Allada account suggests that the Agasuvi already had a *vigan* when they ruled the kingdom of Allada in the 16th century (see 5.2.1; Oké 1984:57-58) but this might be an anachronism.
312 The labour that the *donkpɛgan* organised was formally on behalf of any villager who offered the *donkpɛgan* a piece of cloth and some drinks for this service. In practice it was mostly on behalf of big men and of grooms who wanted to ridge a field for their father in law. (Own observations and interviews in Aoundome 17-8-1989; Lissazounme 12-5-1990 etc.; Herskovits 1938 I:71-73).
313 The *donkpɛgan*'s consent is needed to dig a grave, he says some prayers during the funeral, receives gifts for these services, and sees to it that it that the tomb is not desecrated (own observations and interviews; Le Herissé 1911:172-174; Oké 1984:64). The need for the last task is explained by accounts about the theft of heads and skulls of dead 'Gedevi' to fabricate magic charms (Le Herissé 1911:161) or to expose them under one's feet (Herskovits 1938 I:16).
314 The villages Oumbégamé and Sahè on the north-western and south-western extremes of the Abomey plateau respectively were the principal pottery producers of the Cercle d'Abomey because the proper clay was found only there. (Own interviews in Sahè; Rapport commercial et industriel Abomey Juin 1900, Rapport sur la situation agricole dans le Cercle d'Abomey Février - Novembre 1900, ANB Porto-Novo).
315 See note to the myth about pearl millet and maize in 5.3.1.
316 According to a Fon schoolteacher on the Adja plateau, *wa ci* means literally 'it is finished with them' or 'they are arrested'. *Wa* = to do, to accomplish; *cí* = to (ar)rest, to stop, to immerse. This name would have been given by Agaja to the population of the Comé region in the southern Mono after his victory over them. The survivors accepted the name and lived henceforth under the authority of Abomey. By extension, the name was given to other Mono people that Abomey submitted. (Gaston Dakossi, Atindehouhoué 1-1-1991)
317 Own interviews in Atindehouhoué, 1985.
318 Own observations; Herskovits (1938 I:145-149).
319 Own observations and interviews in Lissazounme, Honsouhoué, Atindehouhoué and other villages.

Photo 6.1: Adja oil palm ‘fallow’ *dekan*: densely planted oil palms with an undergrowth of shrubs

Photo 6.2: Tapping palm wine

# 6

# Divergent Fon- and Adja trajectories of commoditisation during the palm oil boom ca. 1840-1920

> "The oil palm is our wealth. You cannot be satisfied by drinking only oil; if you plant oil palms in the way the Fon do you will not harvest enough maize. It is useless to have a compound wall from cement bricks while being hungry inside!" (Adja sayings)

## 6.1 Introduction

1840 marked the beginning of palm oil exports from South Bénin in the direction of Europe. From then onwards the former Slave Coast became known as a palm oil export economy. During the next 100 years or more, though slave exports continued until the 1890s (Manning 1982:29; Djivo 1994), palm oil became known as the principal export product of the kingdom and later the colony of Dahomey. What did this mean for Fon and Adja styles of making a living?

Until the 18th century West African overseas palm oil exports were almost exclusively destined as provision on board of slave- and other ships[1]. At the end of the 18th century European industries started to demand oil palm products as lubricant and for the manufacture of soap and candles (Lynn 1997:2-3, 12-16), but until the 1840s they purchased them only on the Gold Coast and in the Niger delta (ibid:17-18, 26, 34-41).

In 1838 or 1839 the merchant Hutton from the Gold Coast, followed in 1841 or 1843 by Régis from France, started to export palm oil from Whydah[2]. This period coincided with technological innovations in the Europe that led to an even greater demand for palm oil[3]. From the 1860s onwards European firms also bought palm kernels (Manning 1982:52). Prices for palm oil continued to rise compared to those of manufactured goods imported into West Africa until 1870. After this they declined a little, but remained good until the 1950s (Hopkins 1973:132; Wartena 1988b:146; De Lange 1987:24, 29). All this facilitated the establishment of commercial palm oil production among the Fon and among many other ethnic groups in West Africa (Hopkins 1973:132; Lynn 1997:31), but not among the Adja. This chapter explores the social, ethnic, historical reasons why these differences occurred.

Oil palms grew spontaneously in the forest-savannah mosaics on the plateaux of South Bénin. Their genetic origin is probably West Africa (Lynn 1997:1-2), their natural habitat is the forest patches in forest-savannah mosaic vegetations (Zeven 1967:21-23), and they were well established in South Bénin by 1320 BC according to pollen analysis by Salzmann & Hoelzmann (2005:196) and several others (Maley 2001:79). Until 1840 South Béninese oil palms were semi-domesticated. They were not (systematically) planted; propagation was mainly by palm nuts that had fallen down. In the fields they were often protected and benefited from the soil tillage and weeding devoted to annual crops. This led to a gradual increase in the number of palms.[4]

Vandereyst (1919), Zeven (1967:52-54) and Hartley (1988:13-17) argue that oil palm density depends mainly on population density. The two latter authors even think that this

relationship is linear, and that oil palm density increases with population density until the threshold of about 250 inhabitants and about 200 oil palms per ha. With higher population densities, oil palm density would decrease again due to the growing need for staple food crops.

In this chapter I will argue that their classification is too simplistic, for it does not take into account variations in palm densities for social and politico-economic reasons. Although their prognosis comes close to the actual developments on the Fon plateau as a whole, it does not fit to those on the Adja plateau. Closer analysis of the Fon and Adja will show that the choice whether to plant palms, and if so in which density, depended on the farmer's social position, his politico-economic opportunities, and his style of making a living.

### 6.1.1 Controversies about the nature of Danhomɛ's economy during the 'palm oil boom'

The nature Danhomɛ's economy between ca. 1840 and colonisation was subject to theoretical and empirical debates. Controversies focused on the questions what label to apply to this economy, whether the nature of the economy after 1840 was different from that before, and if there was a change to which extent this was caused by state policies and to which extent by initiatives from below. Many assumed that the main or only reason for Fon farmers to produce palm oil for export was that the state levied a palm oil tax. Other points of discussion were to which degree the development of palm oil export production and trade were in royal or in private hands. Much of the literature presents Danhomean palm oil production as if mainly carried out by slaves on large plantations, belonging to the Fon elite. In this view, common farmers were only marginally involved. Most early colonial documents pretend that the Adja, in contrast with the Fon, did not plant oil palms for commercial purposes in the 19th century, but other colonial reports contradict this. This section gives an overview of those debates in the literature which are relevant for the rest of this chapter.

#### *No significant change, but persistence of a trade economy and of a 'feudal' system?*

Coquery-Vidrovitch (1971) argues on the base of pre-colonial traveller accounts that, even though palm oil exports from Whydah loomed large from 1840 onwards, there was no significant change in Danhomɛ's economic organisation throughout the 19th century. According to her, the politico-economical regime of Danhomɛ was close to a tributary or 'feudal' system in which an *économie de traite* (trade economy) occupied an important place. She thinks that the king hardly engaged in trade himself, neither in slave- nor in palm oil trade, but left trade to private merchants, whom he exploited through tributes. Therefore she compared Danhomɛ's economy to a tributary or 'feudal' system. But it was also an *économie de traite* because local markets were linked to universal ones, commodities were produced for export, and Danhomean farmers were integrated into a 'market system' through market exchange. Though the *économie de traite* gradually gained importance, especially after 1840, Danhomɛ's economic organisation remained fundamentally the same.

Also Manning (1982:7), classifying the nature of Danhomɛ's economy during different historical periods (see 5.1.6), thinks that there was only a minor, partial change after 1840. He argues that Danhomɛ had a commodity exchange economy since at least the 15th century. This commodity exchange economy remained dominant during the era of palm oil exports

after 1840, even though the capitalist mode of production appeared in part of the transport and commerce of what is now South Bénin (ibid:16). Similar arguments were advanced for other oil trading states on the West African coast by Alagoa (1971), Latham (1973) and Austen (1970; 1987) (see Lynn 1997:5).

Coquery-Vidrovitch (1971:115-119) pictures palm oil production and trade as being entirely in the hands of many large and small Danhomean farmers and traders. The king continued to derive his income mainly from taxation. Not later than 1850 king Gezo instituted a palm oil tax, called *kuzu*[5]. In her view, the main reason why Danhomean palm oil exports developed after 1840 was that the pre-established local private trade structures were geared to it. Private slave traders now put their slaves to work in oil palm plantations and sent them to transport the oil to the coast. Small farmers and traders, the latter especially women, now also entered the new business.[6]

### *Palm oil commodity production to pay taxes or on the Fon elite's plantations only?*

In all regions of the African oil palm belt besides Danhomɛ, pre-colonial palm oil export production was a small-scale business, usually a family business. Hopkins (1973:125) and Lynn (1997:56, 58) think that this was because; given the available technologies, there were no economics of scale to be gained in palm oil production[7]. In Danhomɛ however, 'large scale' oil palm plantations worked by slaves were described by several travellers[8]. Focusing on these plantations, Le Herissé (1911:52, 90), Cornevin (1962/1981:98, 132, 197, 219, 338-339), Obichere (1983:191, 198) and Law (1977a:573-575) suggest that most of Danhomɛ's palm oil was produced there. Lynn (1997:56) hypothesises that 'special factors' must have operated in Danhomɛ to allow for large-scale plantations, but what these factors were remains unclear.

The debate so far centred on whether these plantations belonged to private businessmen or to the king. Coquery-Vidrovitch (1971:115-119) thinks that they were private. Le Herissé (1911:52, 90), Cornevin (1962/1981:98, 132, 197, 219, 338-339) and Obichere (1983:191, 198) in contrast only mention large Danhomean oil palm plantations worked by slaves that belonged to the king. In doing so, they portray the king alone as important palm oil producer.

In the debate about the relative importance of the king and of private businessmen in palm oil production and -trade, Law (1977a:573-575), Soumonni (1979:57-58), Manning (1982:54), Le Meur (1995:84) and Lynn (1997:56, 58) take an intermediate position. Law believes that the first large scale oil palm plantations were established by private traders, because this was the case of the three earliest oil palm plantations attested in the literature (Forbes 1851 I:114-115, 123). Not later than the 1870s however the king also set up his own plantations and let his female soldiers transport his oil to the coast[9]. Manning (1982: 54) and Le Meur (1995:84), using some Fon oral sources, confirm that both the king and the Danhomean elite set up palm plantations. In 1852 Gezo attempted to monopolise the palm oil trade, and forbade all palm oil and -kernel trade, except in Whydah and except by himself[10]. However, this attempt remained futile. Private businessmen and slave-owners continued to produce and sell palm oil (Law 1977a:575-576; Manning 1982:53).

One thing however almost all authors who discuss the Danhomean large scale oil palm plantations have in common. They all portray palm oil production in Danhomɛ as an upper

class business that relied on slave labour. Le Herissé (1911), Cornevin (1962/1981), Obichere (1983) and Law (1977a) remain silent on palm oil production by free small scale Fon farmers, except for a short reference to palm oil taxes (Le Herissé 1911:86-87) and for a footnote in Law (1977a:574, note 133). They suggest that Fon farmers rendered palm oil as tribute but did not sell it. Lynn (1997:56) devotes only a few lines to small Danhomean oil palm farmers. It was probably the curiosity of the Danhomean large scale plantations – for they were an exception in West Africa – combined with the lack of written data on Fon and Adja small scale oil palm cultivation practices, which encouraged these scholars to focus on the former. But with this focus they created the image that small farmers were only indirectly, through the alleged palm oil tax, involved in palm oil export production, that commoditisation remained restricted to the Fon elite, and that Fon and Adja petty farmers remained almost unaffected by commodity relations. This image also suggests that small farmers were too backward to develop an export sector and that a State or at least an upper class was needed to do this.

Manning (1982:54) in contrast states that most of the palm products exported before 1890 came from Danhomean family farms in the commodity exchange sector. Relying mainly on written sources however he does not explain how family farms were organised. My research wants to fill this gap on the base of oral data from some Fon and Adja families. Having studied the descendants of free- and of some slave Fon and Adja, my research also sheds more light on the social organisation of production by slaves than is found so far in the literature.

### *Pre-colonial commoditisation through palm oil production?*

Also in contrast with Coquery-Vidrovitch (1971), Hopkins (1973:124-166) posits that the rise of West African palm oil export production in the 19th century brought a significant change. It would have implied a rupture with old economic structures. The slave trade was dominated by a small number of political and military chiefs, but palm oil commodity production was open to all farmers. This would have encouraged the commercialisation of land and labour. Law (1977a:574, 576) agrees with him.

The view that (palm oil) commodity production went hand in hand with the commercialisation of its factors of production goes along with theories regarding processes of commoditisation, commercialisation, or incorporation into market systems. Friedmann (1980:165, 174) argues that with commoditisation producers become increasingly motivated by profit maximisation compared to other values regarding their decisions how to allocate resources, in particular their own labour[11]. Consequently all in- and outputs in the production process – land, labour, and products – would obtain a market value.

Commoditisation and commercialisation are usually seen as related to individualisation processes. Kahn (1978) regards individual ownership of means of production a condition for commodity production, and Friedmann (1980:167) considers individualisation of productive enterprises to be the underlying mechanism in the development of simple commodity production (section 2.3.1). This individual ownership thesis was challenged by Visser (1999) and many others, and will be challenged again by the Fon and Adja cases. Furthermore, I will argue that individualisation cannot be measured on a linear scale. It remains unclear whether Friedman (1980) would classify an individual who relies on his own strength and has neither market relations nor personal ties for the mobilisation of resources as individu-

alised or not. Commoditisation theory also failed to study empirically producers' (changing) motivations and the (changing) social relations inside and between concrete 'productive units'. In the present chapter I will study these changes among the Fon and Adja, and will argue in Chapter 10 that it is important to specify which personal relations are replaced by market relations and which ones not, rather than applying the label 'individualised' to a whole society.

The tendency to portray commoditisation as an externally determined, linear process is a major flaw of commoditisation theory. Research in other parts of the world has shown how groups and individuals are actively involved in their own commoditisation or decommoditisation, speeding up or slowing down the process, commoditising some of their relationships and decommoditising others. My study of the Fon and Adja will reveal different styles and trajectories of commoditisation. Within each group some livelihood activities, some products, and some social relations commoditised, but others not. Occasionally, personal ties replaced market relations rather than the other way round.

### *Commoditisation encouraged by pre-colonial policies?*

For all their different views on when commoditisation started on the Bight of Bénin, Hopkins (1973), Coquery-Vidrovitch (1971), Manning (1982) and Law (1977a) agreed that Danhomɛ had a commodity production and -exchange economy long before colonisation, namely from at least the mid 19th century onwards. With this they implicitly criticised Bernstein's (1977: 62) commoditisation theory, which 'credits' the colonial powers in Africa for breaking the 'natural economy', triggering off commoditisation with the tool of taxation, helped in some colonies by (Para) state plantations.

Interestingly, Burton (1893/1966:129, 181), Cornevin (1965/1970:28), Luning (1986: 30-31) and Lynn (1997:43) mention policies of the Fon kings Gezo and Glele as driving forces behind the development of Danhomɛ's palm oil export production. Gezo forbade the felling of oil palms (Soumonni 1979:58; Luning 1986:30), the production of palm wine (Burton 1893/1966:129), and the cultivation of other commercial crops such as rice, sugar cane, coffee, tobacco and groundnuts, at least around Whydah (Burton 1893/1966:181). As already mentioned he launched a palm oil tax. The kings also adjudged themselves the right to confiscate any plot of land with 'insufficient numbers of' or 'not fully exploited' oil palms (Desanti 1945:148). Gezo motivated these measures by declaring oil palms a sacred tree (Soumonni 1979:58) or a *vodun* (Lynn 1997:43) and his personal property (Law 1977a: 575). Gezo would also have ordered to plant an oil palm at the birth of each child, so that oil palms became associated with human life and felling them was and is considered like killing a person[12]. Le Herissé (1911:231) and Herskovits (1938 II:250) noted that the umbilical cord of each newborn Fon child was buried under an oil palm[13] near his mother's house, and that the Fon feared that intentional injuries or magic directed towards this *palmier du nombril* might harm the person whose umbilicus lay there.

As already mentioned several authors portray Danhomean palm oil production as mainly carried out on large scale plantations (Le Herissé 1911:52, 90; Law 1977a:573-575; Lynn 1997:43, 51, 56). If these policies were indeed meant to encourage commercial palm oil production, the Fon State would already have used the same strategies to bring about commoditisation as the 'imperialist' colonial governments did in Bernstein's view.

### 6.1.2 Questions that remain

#### *Adja oil palm cultivation?*

The inhabitants of the Adja plateau did not engage in the Atlantic slave trade. We saw in 5.2.4 that before 1840 their external trade relations were mainly with Tado, Abomey and with their southern neighbours, to whom they sold basic staples such as yams and maize in exchange for salt and other commodities. The new demand in palm products opened in theory the same possibility for Adja farmers to produce commodities for sale also to European traders as were open to Fon farmers. But the Adja had neither a king nor a strong chief of the land who could stimulate them to do so. In 5.3.3 I argued that the influence of the *nyigbafio* over the Ehwe-Adja dwindled during the 19th and 20th century and that their palm oil 'gifts' to him declined.

During the era of the slave trade before 1840 Fon and Adja styles of making a living differed considerably. Those of the Adja were mainly based on subsistence agriculture in small, fairly independent groups, but the Adja also sold some food products to the Fon. Among the Fon agriculture was more and more left to slaves, and status and economic success were obtained from non-agricultural activities (Chapter 5). An important question for this thesis is whether after 1840, when Fon and Adja farmers had in principle the same possibilities to produce palm products for sale, Fon and Adja styles of making a living became the same. Did style differences flat out for economic reasons?

Colonial administrators believed that the Adja were little involved in commercial agriculture, failed to produce oil for sale but 'destroyed their palm groves for tapping palm wine', and were in general economically backward. In 1.1 I argued that the Adja kept this reputation (among Fon and Europeans) until today. Several early documents of the colony of Dahomey state that oil palm density was highest near Abomey, Whydah, Allada, Porto-Novo and in the Mono valley south of Athiémé, but relatively low on the Adja plateau (Reconnaissance du *Cercle* d'Abomey 1906-08, ANB Porto-Novo; Adam 1910; Manning 1982:63). Was south Béninese oil palm cultivation indeed mainly on the Fon elite's plantations and by farmers who had to satisfy their king's tax demands, but not by the more acephalous Adja?

There are, however, some problems with the image that the Adja did not sell field products in the early 20th century. We saw that they used to sell yams and maize to hungry Fon in the first half of the 19th century. Some early colonial reports also mention extremely dense oil palm thickets on the Adja plateau which where tapped for wine[14], and that palm wine was one of the Adja's principal commodities sold on local markets as well as exported to Togo[15]. Were those who labelled the Adja 'little involved in commercial agriculture' blind to food- and palm wine trade or did the Adja de-commoditise after 1840? If degree of commoditisation or de-commoditisation is to be assessed, also other commodities besides palm oil should be considered. Such an assessment would be needed to compare the nature of the Adja's economy with that of the Fon. It would also shed light on the question to which extent a local elite or a centralised government was needed to stimulate commercialisation – be it through taxation and other policies or by organising commodity production itself – for the Adja had neither an elite nor a strong king.

***What were Fon and Adja styles of making a living during the palm oil boom?***

In the existing images of South Bénin during the 'palm oil boom' of 1840-1920 the socio-economic organisation and the technologies of oil palm cultivation, palm oil transformation and oil marketing at grassroots level remain obscure. This holds especially for small farms. How were land, labour, palms and their produce used on Fon and Adja family farms? Did farmers only produce palm oil to pay taxes, or (also) for sale out of their own initiative? If they increased commodity production, did this entail changes in social organisation? Also the socio-economic relations on the famous Danhomean oil palm plantations are largely undescribed. Which forms and extent did slavery take on the Fon and Adja plateaux during the palm oil boom? Did commercial palm oil production stimulate the commoditisation of other in- and outputs such as land, labour, other (agricultural) products and services? How did Fon and Adja motivations and labour orientations change during this period? We have seen in Chapter 5 that agriculture enjoyed a high esteem among the Ehwe-Adja, but a rather low one among the Fon. Of special interest is therefore the question whether the status of farming changed among the Fon during the 'palm oil boom', if so, how.

An important item that this book wants to address is the sustainability of styles of making a living. If oil palm exploitation increased, which changes in cultivation- and transformation techniques did this entail? How did these changes interact with the ecological environment? The comparison between Fon and Adja will show on the one hand the impact of the Fon State, and on the other hand the active role of common Fon and Adja practices in shaping the South Beninese economy.

## 6.2 Palm oil production on the Fon plateau ca. 1840-1920

### 6.2.1 Expansion of oil palm plantations

There is evidence that Fon farmers expanded their oil palm plantations soon after the installation of palm oil traders in Whydah. 18th century visitors to the Abomey plateau did not yet describe large numbers of oil palms. Norris, who travelled from Kana (= Calmina) to Abomey in 1772, specified that there were no trees:

> 'I left Calmina at five in the evening, and prosecuted my journey for Abomey, which I reached in two hours: the intermediate country is cleared of trees, and the road, which is an excellent one, lying high, affords a very pleasing prospect of the country, which I found in high cultivation, chiefly corn and callivances, for the supply of the adjoining towns.'[16]

As mentioned in the introduction to this chapter, oil palms until about 1840 were semi-domesticated. They were not actively planted, but propagated by nuts that had fallen down. Oil palm density was probably slightly higher in fields where they benefited from soil tillage and around villages than in the semi-deciduous forest.

But in 1856 Repin (1863:102) observed 'bouquets' (thickets) of oil palms in the proximity of Fon villages, and found this remarkable enough to record it. Seeing this he apparently assumed that Fon villagers were in a position to produce palm oil for sale.

> '*Ce sont des vastes plaines, légèrement ondulées, semées, surtout aux abords des villages, de bouquets de palmiers, de dragonniers et de fromagers. Tantôt on disparait dans les prairies de hautes herbes, tantôt on traverse de belles cultures de mil, de manioc, d'igname et de maïs.*' (Repin 1863:102).

Repin's observation also suggests that oil palms around Fon villages were denser than before and/or denser than elsewhere. The majority of the palms in the new thickets must have been installed between 1820 and 1850, for oil palms may form a thicket only between the age of roughly 8 and 30-35 years[17].

During the 1880s, Burton (1893/1966:168, 171) travelled at long the road from Kana to Abomey. He now described many oil palms in the midst of grassland and grain fields at long that road near 'Davi' (Houawe), Attaho and Leflefun. The plantations near the first village would have belonged to the king and ministers. Between Zogbodome and Kana he (1893/1966:121-122) also observed grassland, 'palmyras' and fields:

> 'From Kana to Agbome all is historic ground, and the land is emphatically the garden of Dahome, showing a wondrous soft and pleasant aspect. The soil is sandy, with the usual pebbles overlying red and yellow clays, and where grass is not, the surface is a succession of palm orchards and grain fields belonging to the King and his ministers. (…)
>
> The land around is called Leflefun[18], from the Nago people, whose chief, Chade, was slain by King Gezo, and who were finally settled here. The eye dwells with delight upon the numerous country villages, like the 115 towns of the tribe of Judah, and upon the thin forest of palms rising from the tapestry of herbage, here waving, there cut short, which combine to make this spot the Fridaus or Paradise of Dahome-land.' (Burton (1893/1966:168, 171).
>
> 'The next halt was Zogbodomen, (…). The few miserable thatch huts are shaded by the fleshy-leaved figs, called on the Gold Coast 'Market trees', and are almost buried during the rains by densest grass, from which rise the stateliest palmyras. Presently crossing level ground, with vegetation here tall, there dwarfed, now green, then brown; we sighted from afar a deep depression, stretching from east to west. On the farther side of this valley (…) stands Kana. (…) There is palpably more field than habitation, and far more fallow than field.' (Burton (1893/1966: 121-122).

In 1892 the French army made vegetation maps and -descriptions of part of the central and the eastern Fon plateau. According to these documents, in the centre, at least in the triangle between Abomey, Zoungbo and Saklo, the majority of the land both far and near from villages was planted with oil palms. In the centre-east, on the border between the red plateau soils[19] and the lower grey soils around Zoungbo-Bogon, Zoungbo-Zounme and Kinta, oil palms were still mainly planted around villages. On the eastern slopes of the plateau oil palms were concentrated in river valleys, since the other soils[20] in the east were less suitable for palm oil production. (See Map 6 in Appendix 1).

Between 1905 and 1907 the colonial administrators systematically surveyed the major crops of all the *régions* of the *Cercle* d'Abomey. They saw oil palms on most red plateau soil fields. Palm groves were densest on the south west of the plateau (in the regions of Sinhoué, Tanta and Sahè), where the palms of Sinhoué would have the highest yield of the whole *cercle*. In the north, the centre and the south east of the plateau[21], oil palm plantations were alternated by '*plaines*' with annual crops, and palms were usually densest around villages. In the savannah north of the plateau, around Djidja and Oumbegame, oil palms were only planted around hamlets and markets. In the extreme southeast palms only grew in river valleys.

The French also noted that already in those days many Fon oil palms were so old that they were not productive anymore (Adam 1910; Manning 1980:56), that is over 50-60 years old. This means that these palms were installed not later than the 1840s or 1850s.

Oral histories of Fon families confirm that common farmers planted oil palms at least from the mid-19th century onwards. More importantly, these local narratives shed light on the social

organisation of palm oil production. All lineages I researched on red plateau soils planted their first oil palms on the lineage's communal land in the second half of the 19th century, and managed them as a common property resource. Lineage land was called *hɛnuaïkungban* and lineage oil palm plantations *hɛnudeju*. On the plateau most lineage commons were on the land nearest to the houses (*kpawugle*[22]); on the eastern slopes they were often in river valleys. As examples I present the *hɛnudeju* of some families in the plateau villages Lissazounme, Gnidjazoun and Sahè-Abigo and the riverside village Kana-Dodome, whose livelihoods I discuss further in sections 8.1 and 8.2.

Tobada found some spontaneous oil palms on the land which was allocated to him when he came to Lissazounme in the time of king Kpengla (1774-1789) (see 5.2.2). In the mid-19th century Tobada's son Aklekunhɛmadu (born around 1805) started to plant large numbers of oil palms on the lineage commons, later assisted by his son Zankuxɛmasanu (born around 1840). Zankuxɛmasanu's son Ahosuhwe continued the planting. By 1915 the first palms had died from old age, but some of Ahosuhwe's palms were already bearing fruit. The Tobada women transformed them into oil that the daa stored for lineage rites and ceremonies, that is for sacrifices and for cooking at the feast[23]. In this they followed the example of the royal family, who used the oil from their palms at Houawe for the sacrifices to the royal ancestors (see 6.3.1). Neighbours from other lineages also assisted at these occasions, and it was the lineage's pride to spend much on them. If oil was left it was sold on the daa's account. During the 1920s Ahosuhwe planted more palms, helped by his sons Adagbe and Afokpon because he was sick himself. Each rainy season he gave them about 10 oil palm seedlings to plant. His third son Hunon did not help planting because he was undergoing initiation as *vodunsi*. (Hunon and Danon Tobada, Lissazounme 22-6-1990; Germain Tobada, Lissazounme 14-11-1990).

In the time Glele (1858-1889) the head of the lineage Lisanon in Lissazounme was Degenon (see section 8.2 and Figure 10 in Appendix 2). According to his daughter in law Gboju: "The first palms on the *kpawugle*[24] were planted by the before last *daa* [Degenon] before my husband became *daa*. They are *hɛnudeju*. Later the plantation was rejuvenated." (interview Lissazounme 19-1-1991). Lisanon lineage continued to manage the palms on the *kpawugle* as lineage property. The oil was given to the *daa*, who reserved part of it for lineage rites and ceremonies, gave some to his wives and sold the rest on his own account. He gave the land under the palms in usufruct to individual lineage members. Degenon died around 1890 or 1900. His younger brother Gomayahanto succeeded him as *daa* and manager of the lineage palms. Besides from palm oil sales and subsistence agriculture, Degenon and Gomayahanto earned a living from their position as priest of the *vodun* Lisa. People from all over the kingdom came to be initiated as *vodunsi* of Lisa or to make other uses of the priest's ritual services, for which they paid in cash and in kind, including labour (see also 5.2.3). Probably they worked to a large extent in palm fruit processing[25].

Ahehemɛ, Segbeji's great grandson, was born in Lissazounme in the second half of the 19th century. He farmed about 9-10 ha with the help of his three sons, of which 2-3 ha were *kpawugle* in common property of the *hwedo* (lineage branch). Not later than the 1880s he planted oil palms on these *kpawugle*. His youngest son Célestin saw mature palms there when he was born around 1903-1908. The first palms on Ahehemɛ's other fields, which were at 1 km from the village, were planted during the 1910s. In addition to his Lissazounme fields Ahehemɛ purchased land at Attogon on the Allada plateau; this was probably around the 1910s. From the 1910s onwards some members of Segbeji lineage started to earn

income from carpentry. Yacivi Marcellin Segbeji, whose mother descended from king Gezo, learned the craft in Cotonou in the 1910s or 1920s and became an almost full-time carpenter. Ahehemɛ's son Célestin learned carpentry from Yacivi and through his work at the French administrative *residence* in Abomey in the 1920s. Later several members of Segbeji lineage installed themselves around Attogon to work as carpenters (see further section 8.1).

Ajalala, born 1840-50, was *hɛnugan* in Gnidjazoun in the time of Glele and Gbɛhanzin. During those years he planted oil palms on the *hɛnuaïkungban* and also on his personal fields. By 1940 many of these palms had died from old age. Ajalala was also a healer who served amongst others at the royal court[26]. This was a rewarding but dangerous job according to his son Atinhwede, who later followed him in the same profession:

> "My daddy was *Asohuto*, diviner of the *vodun* Sakpata and healer of the king. Many people came to be healed; they queued like in hospital and paid him per consultation. Daddy even did not go to the field. In those days healing was more rewarding than today because nowadays many people go to medical doctors. But then daddy had to flee to Allada. That is where he purchased the *vodun* Sakpata. On his return he installed Sakpata here.
>
> Later I also became a great healer and magic charm trader. Besides helping daddy on his farm I sold fish in Abomey, which I purchased near Cotonou, before my marriage around 1930. I learned this trade from a fellow villager. In those days agriculture was only for subsistence. One strove to have another occupation to earn cash, and daddy was glad that I had one."[27] (Daa Ajalala Atinhwede, born around 1902, Gnidjazoun 15+22-12-1990).

The lineages Ajamaï and Avohuinon in Sahè-Abigo planted oil palms on their *hɛnuaïkungban* in the later 19th century. In the mid-20th century most of these palms were old and unproductive. The *daa* of both families felled them and planted some new ones. (Daa Avohuinon, Sahè 21-11-1990)

Mawuhwe lineage was installed in one of the lowest parts of Kana, 300 m from the river Toga (see 5.2.3). The fields of Mawuhwe were situated from their houses onwards into the river valley. This was not much land. In 1990 all their inherited land was common lineage property (*hɛnuaïkungban*)[28]. The *daa* gave plots in usufruct to individual lineage members to cultivate food crops. In the 19th century the lineage planted their valley land with oil palms, and managed them as their *hɛnudeju*, which meant that the oil was lineage property[29]. The river land was good for oil palms, but other Kana soils were only marginally suitable for palms and hence very few were planted in the village. See sections 5.2.3 and 8.1.2 on other livelihood activities of Mawuhwe people.

Not later than in the 1880s individual farmers, at least those on the centre of the Fon plateau, started to plant oil palms on their personal plots, which where usually situated at some distance from the village. An account of a woman from Zoungbo suggests this, as does map 6 in Appendix 1.

> "My father in Zoungbo-Zounme had large oil palm plantations towards the end of the 19th century at the place where the Kana airport is now. This was about 2 km from the village. As a girl in the 1910s, I helped my mother, brothers and sisters to process father's palm fruits into oil and kernels and to sell both on his behalf. He received the whole revenue, and in exchange he fed us." (Navo Madeleine Kpleli, born around 1901, Lissazounme 29-9-1989)

It is likely that some lineages with valley land moved their palm oil factories to the riverside. Much water is needed for Fon and Adja palm oil production procedures. By processing palm fruit at riversides, especially that from valley-grown oil palms, transportation labour could be avoided. During the same period, palm oil in the Niger delta was processed on

riversides (Lynn 1997:53). In 1990 I saw a palm oil factory on the shore of the river Hlan about ½ km from the nearest village.

### 6.2.2 Management of lineage oil palm plantations *hɛnudeju* from ca. 1850

Planting trees was and is a sign of land ownership among the Fon and Adja. Several Fon and Adja farmers spoke to us in the following terms: "When our ancestors settled here they planted, as customary, oil palms at once to show that the land was theirs."[30] Or "When our ancestors cleared a field they planted oil palms all around it so that nobody would take the land when it was left fallow." Among the Fon in the beginning only lineage- and compound heads (*hɛnugan* or *daa*)[31] were supposed to plant and own palms. This state of affairs still subsists in some villages in the 'traditionalist'[32] centre of the plateau, for example in Gnidjazoun, where a farmer of about 45 years told me:

> "I never planted oil palms for myself because I am not the *daa* of the house. The oil palms on the fields that I cultivate belong to my father. I will only have the right to own oil palms when I become the *daa* of the house."

This taboo for ordinary lineage members to own palms affirmed the *daa*'s claims of ownership to all lineage land. Even if land was given in usufruct to individual lineage members (also married ones) who were not *daa*, it remained lineage property and therefore the user was not allowed to plant trees on it. Though we saw in the case of Tobada's descendants mentioned above that already in the mid-19th century young men did plant palms, they did this only for and on the orders of their father, who in this case happened to be *daa*[33].

The interdiction for young Fon and Adja men to plant trees on their own account was and is supported by certain *vodun*, notably the earth-god Sakpata. Before being allowed to plant trees for themselves men first have to be ritually initiated into adulthood. Young men who violate this law risk to be attacked by evil spirits. After this ritual the man still has to wait until he has 'permanent' land rights before he may plant his own trees.[34]

Since at least the late 19th century in most Fon and Adja villages, male lineage members from a certain age onwards received more or less 'permanent' rights to some land, as well as the right to plant trees on it; I will come to this in 6.2.3. The *daa*'s exclusive rights to land and oil palms became restricted to the *hɛnuaïkungban* (lineage commons). A farmer born around 1960 in Sahè, who cultivated annuals on a plot of *hɛnuaïkungban* since 1983, said:

> "I never planted any oil palms. Only our parents can give the order to plant oil palms. Otherwise, to plant oil palms during their life would be like stealing the soil from them. I have only protected some spontaneous seedlings in my plot. My father is *daa* since 8 years and he has never felled an oil palm." (Innocent Adjamaï, Sahè 1990)

The *daa*' formal ownership of the *hɛnuaïkungban* and of all the palms on it was submitted to restrictions. He was not allowed to alienate any part of the land permanently, nor to fell any palm on it at his own will[35]. To fell a palm the agreement of the lineage council was needed. This agreement was not easily granted, since the 'killing' of oil palms was frowned upon – possibly partly under the influence of king Gezo's (religious) measures to protect palms; I will come to this below. In the past the lineage commons were probably cultivated collectively, but since at least the late 19th century lineage members and their wives could

ask the *daa* for a plot of lineage land in temporary usufruct to cultivate annuals on their own account. Lineage members who wanted to build a house also received land in the lineage commons for this purpose; construction was the major reason why the area of the *hɛnuaïkungban* declined.

The men of the lineage had to transplant oil palm seedlings and to harvest the palm fruit on the lineage commons. The women of the lineage had to transform this fruit into oil and kernels for the *daa*. He had to provide enough oil for the subsistence needs of the lineage and for lineage rituals. If the king demanded a tribute in palm oil it was from the *daa* that he claimed it, not from individual lineage members (own research; Herskovits 1938 I: 115). If there was any oil left after fulfilling these obligations – and there mostly was – the *daa* was free to sell it on his own account. He usually sent some women of the lineage to market it for him, but he had to give the women who prepared the oil part of the revenue. It is noteworthy that from at least the late 19th century most Fon women received red palm oil and money, but no kernels, because this differed from Adja practice. Adja women had a right to palm kernels and only to these; I will come to this in 6.3.3. But both Fon and Adja women were able to set up their own business with their share in palm products.

Present-day testimonies suggest that the need of palm oil or cash for lineage rituals was an important motivation for the Fon to maintain lineage oil palms and to render their oil to the *daa*. Magico-religious beliefs were strong and conspicuous feasts and sacrifices were an important source of Fon status. In 5.2.3 and 5.4.1 I explained how lineage rituals – *vodun* cults and the cult of lineage ancestors – became important activities and a source of motivation for the Fon from Agaja onwards, but not for the Adja. We will see that Adja farmers were hardly motivated by religion to plant palms.

The lineage histories and Repin's eyewitness description of the 1850s indicate that many Fon plateau lineages planted oil palms on the village-near lineage commons in the mid-18th century. Lineage accounts also affirm that more palm fruit was harvested than needed to pay taxes, that the (sub)-lineage heads sold oil, and that many women earned money on their own account with the manufacture and marketing of palm oil.

Much of the Fon land and many Fon oil palms continue to be exploited under the common property regime until today. In 1987 on the red plateau soils almost half of the area under oil palms was still collective lineage oil palm plantation (Adjinacou 1987:31, 41). The rights and duties of the *daa* regarding the *hɛnuaïkungban*, the *hɛnudeju* and its oil are still the same. The *daa* still allocates plots in the lineage commons and the oil is still used for lineage rituals. Tributes to the king however have been replaced by a tax on inhabited land to the postcolonial State, at least in Kana[36]. Nevertheless the *daa*'s income from oil had declined in my research villages, because many palms on the *hɛnuaïkungban* had become old and unproductive, some of them had died, and more and more houses were built on the commons.

> "Today it is not easy to find people who want to become *daa*. If you are *daa* you have no time, you have to be there for each ritual and each dispute. And the oil palm plantations that are given to the *daa* are not as large as before because all the land has been distributed already." (Laure Lisanon, Lissazounme 21-9-1989)[37]

The cases of Tobada in 6.2.1 and early colonial literature (Adam 1910; Manning 1982:56) confirm that since 1900 many Fon oil palms were so old that they were hardly productive any more, or had even died of old age. The yield in fruits and in wine of palms over 40-50 years declines sharply. Extensionists always recommended Fon farmers to fell these palms and to

replace them by young ones, but in vain. Fon farmers had a sacred reluctance to the felling of mature palms. Felling mature palms is called *hu de* (killing palms) instead of *mu* or *zin* (felling trees). One Fon farmer said "oil palms are venerated here, we don't kill them". Since king Gezo declared the oil palm a *vodun* in order to protect it (Lynn 1997:43), palms were almost treated like humans. Most Fon palms were allowed to die a natural death. This also applied for many private palms, which are not protected by communal property rights.

### 6.2.3 Oil palm cultivation on individual plots from the late 19th century

As already mentioned, plots on the lineage commons were given by the *daa* in temporary usufruct to lineage members, but outside the *hɛnuaïkungban* lineage members could receive 'permanent' land rights. 'Permanent' in the sense that they could lend it out, pawn it, and pass it on to their heirs. Until today many Fon lineages frown upon the sale of inherited land[38], though such sales are frequent since at least the Second World War.

On such land outside the lineage commons individual men were since at least the late 19th century allowed to plant oil palms 'in the name of the *daa*', that is under his spiritual authority, which protected them against spiritual attacks. They were permitted to sell the oil and kernels on their own account, but not to sell or fell the palms at their own will. Therefore Navo's father could in the later 19th century plant his own palms at 2 km from his village, Zoungbo-Zounme, and let his wife and children process and market the oil for him. Men with an own income had to contribute more to their own household's subsistence, their personal clothing, and their own bridewealth[39] than men who only worked for their father or the *daa*. The latter were rewarded for their labour with a first wife (see the testimony of Pierre Ahovi in 6.3.3).

Maps 5 and 6 in Appendix 1 show that since the late 19th century oil palms grew on most red plateau soils, also on those at a greater distance from villages. Since such distant fields were usually not managed by the *daa* but by younger men, I conclude that from the later 19th century most adult Fon produced palm oil on their own account. Hence commercial palm oil production was not (only) an activity of slaves on the Fon elite's plantations as Le Herissé (1911:90) and Law (1977a:573-575) suggest, but a business of many small Fon farmers.

The younger men who planted their own oil palms adopted most elements of the oil palm cultivation pattern that they had observed in the lineage plantations. They established their own oil palm plantations by transplanting spontaneous seedlings. They opted for the same planting densities or a bit less, probably because most of these younger men cultivated themselves annual crops under their oil palms, while the lineage head did not cultivate himself under his oil palms and therefore did not mind the shade. The younger men also refrained from felling adult oil palms. They only weeded spontaneous seedlings if these became too numerous.

### 6.2.4 Oil palm cultivation ushered by pre-colonial taxation?

I argued here that common Fon farmers produced and sold palm oil on their own account, they did not render all their oil as tribute to the king. However, the literature leaves us with a number of questions about palm oil taxes. Were there any tributes in palm oil at all, what were the tax rates, and which forms did taxation take? How important was taxation for the development of palm oil commodity production?

The authors who argue that Gezo and Glele stimulated palm oil production through taxation do not present a clear image. The literature is ambiguous and contradictory on a number of points. First, did the new palm oil tax replace the old tax in food grains (Le Herissé 1911:86) or was it added to it (Herskovits 1938 I: 116; Cornevin 1965/1970:28)? Second, was a palm oil tax levied from all Danhomean commoners (Le Herissé 1911:87) or from all oil palm plantations (Herskovits 1938 I: 115-116; Soumonni 1979:57)? Third, had farmers a choice to pay either in palm- or in other products (Luning 1986:30), or had they still other options? Fourth, historical palm oil tax rates are ambiguous, Forbes (1851 I: 35, 111) mentions one eighteenth of production, Herskovits (1938 I: 116) one third.

Local narratives, gathered between 1972 and 1991 from descendants of Danhomeans[40], also speak of various tributes and duties to the kings and his agents. These accounts suggest that there was a great degree of flexibility in the Fon's taxation practices. Tributes and other duties to the State were negotiated between the chiefs and tax collectors and their subjects. There was no compulsory palm oil tax for all Fon farmers.

In 5.2.3 I argued already that Fon farmers had a great degree of choice to satisfy the State's demands either in palm oil, in food products (maize, pearl millet, cowpeas, pigeon peas, yams), in cowries, or by military service, religious services, and other forms of forced labour (*mɛde*). Ahovi, Agoli-Agbo's (1894-1900) tax collector in Lissazounme (an oil palm area on red soils per excellence), requested a few farmers in his area to render food grains, others to give palm fruit (Wartena 2001:246), and still others to work for the State, according to his son's testimony quoted in 5.2.3. My many Fon informants perceived tribute in kind as one broad category called *nujo* (= thing rendered) that could consist of any agricultural product that was rendered to the state. Garcia (1988:29) agrees that local chiefs collected a *kuzu* consisting in various agricultural products, of which they kept part for themselves and rendered the rest to the king. The term *kuzu*, used in the literature for Danhomean (palm oil) taxes, was known by them as a synonym for their preferred term, *nujo*. None of them knew a separate concept for palm oil tax. They called a farmer who rendered tribute in kind a *nujoto*, and specified that only some farmers were one. According to them all goods and services, including palm oil, were interchangeable when it came to please tax collectors and the king, and it depended on negotiations between these and their subjects who had to give what.

Though tax collector Ahovi did not collect palm products from all farmers, he obliged them all to work in his own fields and palm groves. Several eyewitnesses, including Ahovi's own sons, described this labour to me. Ahovi's wives and children then transformed the palm fruit from his groves into oil and kernels (see the testimony of his son Pierre in 6.3.3). Hence Ahovi did not push (many) farmers into palm oil commodity production through taxation, but he produced palm oil himself with the help of corvée labour. One of his sons narrated about the 1910s[41]:

> "When my father was *chef de région* the villagers worked for him. Each village had its turn to work [in his fields] on the day that was fixed for them. The people even came to work in my *gbadagle* ('evening field') as long as my daddy was *chef*. When they came daddy gave them to eat. His wives cooked for the labourers from the *nujo* that the villagers had given him before." (Boniface Ahovi, Lissazounme 4-10-1989)

Local traditions from the villages Atchia (see 4.2), Sahè-Abigo (see 5.2.3), Ladikpo (Luning 1986:30) and others suggests that the king took the situation and specialisation of villages and of individuals into account in his choice what to claim from whom. The villagers

of Atchia were requested to render religious services (sacrifices to the river-*vodun* Hlan) instead of a *nujo* in agricultural products. The *agbajigan* in Sahè-Abigo could choose each year which food grains he gave, depending on which crop had produced well. The traveller Labarthe (1804:121, quoted in Elwert 1973:67) confirmed that corvée labour and tribute in kind were interchangeable in the time of king Agonglo or Adandozan. He observed that 'chacun paie de droits soit en corvée, soit en nature'. In other words, the image provided by the literature and by local accounts reflects the negotiation that led to variable arrangements between king and producers.

By arguing that a palm oil tax motivated farmers to plant palms, the literature implies that the king should have set tax rates. Forbes (1851 I: 35, 111) and Herskovits (1938 I: 114-119) even give a rate. However, their descriptions of rates and the process of rate setting nourish the controversy on this matter. Forbes observed gifts of palm oil to the king in Abomey in 1850, and estimated that palm oil taxes amounted to one eighteenth of production. Herskovits' informant however claimed that in pre-colonial times, palm oil tax rates were about one third of production. He also claimed that the *tokpo* ('minister of agriculture') and his agents (*hunmɛkponto*) kept an account of the number of oil palms, granaries and animals of every farmer, as well as of the age of the palms, and that the king fixed the tax rates accordingly.

Herskovits' account about the census and taxation is not very trustworthy. It was obtained on the very last day of fieldwork in the privacy of Herskovits' apartment from an upper class respondent (section 3.3.1; Herskovits 1938 I: iv-viii; Argyle 1966; Preston Blier 1989). My own and Argyle's (1966) Fon respondents, including the sons of the tax collector in Lissazounme, rejected this account as a ridiculous concoction. None of them believed that the State counted oil palms or any other property, or that tax rates depended on these. All were convinced that tax rates were set more or less arbitrarily by the tax collectors[42].

In brief, local Fon accounts cast doubt on the effectiveness of taxation for stimulating palm oil production. If farmers could substitute tribute in palm oil by other gifts or services to the State, there was no need for them to plant oil palms.

### 6.3 Changes in labour- and in Adja-Fon relations

Palm oil export production went hand in hand with changes in the use of land and labour. 'Plantation' slavery is often mentioned in connection with Danhomean palm oil, but its organisation remains obscure. Even less is known about changes in gender division of labour in palm fruit processing and in access to land to grow palms. I will argue that in order to produce oil the Fon called not only upon slave labour but also upon Adja land, Adja food, and the labour of their own sons. These changes will be discussed in this section.

Slavery would have been a means of the Fon elite to stimulate palm oil export production. In this section I give a modest contribution to an inside view on slavery on the Fon- and Adja plateaux. Though the region was called the Slave Coast, little sociological field research has been done about slavery on the Bight of Bénin. This might be due partly to the difficulty of the subject. Descendants of slaves tend to hide their origins from strangers; prolonged fieldwork is needed to gain their confidence. Some descendants of slaves in my research villages started to speak to me of their own initiative after some time, but many questions still remain since I did not probe actively. I complemented their testimonies with those of some early colonial administrators. Below I will present my preliminary findings.

The literature on Danhomɛ (Herskovits 1938 I: 99-100; Obichere 1983:196-199) often distinguishes between 'domestic slaves' of Fon commoners and 'plantation slaves' of the Fon elite. Furthermore it is argued that during the second half of the 19th century slavery in the Fon kingdom increased enormously, for slave exports declined and war captives were now put to work in oil palm plantations, palm oil processing and transportation. Herskovits (1938 I:99) thinks that this made slavery in Danhomɛ more closely akin to slavery known in America and the West Indies than has been recorded in any other portion of West Africa. It is also asserted that the children of slaves born within Danhomɛ became free Danhomeans[43]. But was this so? What were the positions of slaves on the Slave Coast?

The Fon word for slave is *kanumo*, literally 'person attached by a rope'. It is obvious that the Fon kings from Agaja (1708-1732) onwards owned large numbers of slaves, and that some Fon commoners, for example the warlords, also had slaves (see 5.2.3). From about 1840 onwards Fon slaves also settled on the Adja plateau (see 5.3). Slavery was officially abolished with the advent of colonial rule. For analytical reasons I distinguish slaves according to their residence and to their master.

### 6.3.1 Royal 'plantation' slaves on the Fon plateau

All Fon kings from Agaja (1708-1732) to Gbɛhanzin (1889-1894) owned large numbers of slaves. Until the mid-19th century most royal slaves lived in and around the kings' palaces in Abomey and in Kana (see 5.2.3). The palaces were almost exclusively inhabited by slave-wives of the king; Bay (1983) gives a good analysis of their roles and positions. The history of Kana indicates that male slaves were mostly allowed to found their own lineages and became, at least with the time, fairly independent in organising their own livelihoods. However, they and their descendants were prohibited to quit the land that was allocated to them. Some of these slaves acquired a high status for their association with the king, especially those with special skills like blacksmith, priest, diviner, leatherworker etc., for example the priestly lineage Mawuhwe and the slaves of Muslim descent (5.2.3; Yélouassi 1987). On the other hand the stigma of being of slave descent remained on these lineages. Though the descendants of the kings' male slaves probably had more freedom than their slave-fathers, they remained distinct from other Danhomeans.

From the mid-19th century onwards the Fon kings extended the system of slave-lineages to other regions of Danhomɛ[44]. In the first place they settled slaves in Houawe, the Fon plateau village where the founder of the Fon dynasty, Dako-Donu, received land from *aïnon* Kpahè (see 5.2.2). The slaves in Houawe maintained oil palms for the kings; these where probably the palms that Burton (1893/1966:168, see 6.2.1) saw there. In the time of king Agoli-Agbo (1894-1900) the descendants of these slaves gave the red oil to the king and were allowed to keep the kernels – like the Adja women – and the food crops for themselves (Rapport politique Cercle d'Abomey Mars 1900, ANB). Burton's (1893/1966:171, see 6.2.1) account suggests that also the Nago war captives of Gezo (1818-1859) at Leflefun managed oil palms.

King Gezo and his son Glele (1859-1889) appropriated some semi-domesticated oil palms and the land on which they grew in sparsely populated areas on the edges of the Fon- and Adja plateaux, and sent slaves to exploit these palms. They motivated this by declaring it a royal right to confiscate any plot of land with 'insufficient' numbers of oil palms, or with oil palms that were 'not fully exploited' (Desanti 1945:148). This royal practice might have been another incentive for Fon farmers to plant oil palms themselves.

In this way king Gezo and Glele installed oil palm plantations and slave-lineages in several villages. Early administrators describe such plantations in the Fon plateau villages Sinhoué, Sahè[45], around Gboli, and in the region of Zado along the river Hlan[46]. Cornevin (1962/1981:98, 338) mentions 'royal' plantations in Kpokissa and Oumbouémedi on the river Hlan, in 'Driridzé' (probably Diridji at the northern fringes of the plateau), in 'Kpinkpandou' (probably Kinkpandan on its western slopes), and in Afomaï on the north-eastern Adja plateau[47]. In some (if not all) places however, the king did not supervise the slaves himself but entrusted them to chiefs or princes; this was for example the case in Sahè and in Zado[48], and also in Whydah, Pahou, Cococodji[49] and Dekouenou[50] on the coast.

The management of the 'royal' oil palm plantations in Zado, Houawe, Sinhoué, Sahè and Gboli was briefly studied the early colonial government, in the context of its policy to abolish slavery, at the time that Agoli-Agbo (1894-1900) was still their puppet king. A colonial report:

> *'**Zado**. Situés à Saigon Ablata, près de la rivière Hounto, ces palmiers ont poussé naturellement, ils étaient la propriété de tous. Les habitants des villages à alentours en récoltaient les amandes, l'huile, sans que personne ait jamais trouvé à redire. Gléglé*[51] *s'aperçut de cet état de choses, se les approprira et les confia à un nommé Gedeboissou qui fût chargé de leur entretien et d'en assurer la récolte. Après la mort du roi ils retombèrent dans le domaine public.*
>
> ***Boli**. Les palmiers de cette subdivision se trouvent situés à Sihoué Zoumé, Sihoué Potan, Sihoué Dodji, Sihoué Akodébakou, d'une part. De l'autre à Sahé Loukpé, Bozon. Comme ceux de la subdivision de Zado ils ont poussé naturellement. Du temps de Guézo, des esclaves avaient été donnés à divers souschefs pour les entretenir, en faire la récolte. Ce roi laissait aux habitants de quoi subvenir à leur nourriture. Du temps de Glèglè-Béanzin cet état de choses subsista. Le roi actuel ne fournissant personne pour les entretenir les différents chefs les repartirent entre les villages situés en proximité, gardèrent une partie de la récolte pour eux et en donnèrent l'autre au roi'*. (Abomey le 1er septembre 1899 nº 174, ANB Porto-Novo, Politique générale 1E, Cercle d'Abomey et poste de Parahoué)

In Sahè I also did fieldwork myself. According to Sahè farmers the 'royal' oil palm plantations at Sahè were situated in the Couffo valley, called *Kufokpa* (= along the Couffo). Cultivators of the Couffo valley had to render part of the oil to princely chiefs, but were allowed to keep all the other products of the land. A woman who was born around 1905 in Sahè-Abigo testified about her youth in the village in the early 20th century, when Golo was *chef de village* there:

> "All the land at *Kufokpa* [near Sahè-Abigo] belonged to *chef* Golo, a descendant of king Hwegbaja. But the river land at Sahè-Loukpè belonged to prince Agbohɛsu. Kpogba and other princes owned other parts of *Kufokpa*. When a stranger came to farm in an oil palm plantation of Golo a contract was made, and the tenant had to pay rent. But my mother descends from Golo, therefore she received a plot free of charge, where she grew vegetables for sale." (Ayonu Lisanon, Lissazounme 18-12-1990)

A middle-aged woman in Sahè-Abigo explained how Agbohɛsu's plantation was managed in the time of Gbɛhanzin:

> "Agbohɛsu was an *axosu* (ruler, king). In the time of Gbɛhanzin he had slaves here in Sahè. They had to give each year 8 *estagnons* of palm oil to the king. [Later] the slaves' lineage used to give him oil, which he sold to build brick houses in Abomey." (Linsi Avohuinon, Sahè-Abigo 16-11-1990)

Two other farmers in Golo's palm grove testified that they have to render part of the oil to him until today:

> "My parents received a plot in Golo's oil palm plantation to cultivate annual crops. They had and have to transform the fruit of the palms on it into oil and give part of this oil to *daa* Golo. He was also *chef de village*. There were already palms on the plot when they received it. Later my parents planted more palms for Golo, and he himself also planted some; all these palms belong to him, and we have to give part of their oil to him. The amount of oil we have to give is proportional to the size of the plot and the number of oil palms on it: 1, 2, 3 or 4 *estagnons* annually [1 *estagnon* = 20-21 litres].
>
> We are not allowed to fell the palms that Golo planted. We even need his consent to fell those that we planted ourselves. If all the palms would die we would have to plant new ones in order to be able to pay our palm oil tax, otherwise Golo might sack us from the plot. He has often chased tenants who did not render him tribute. Golo does not tell us how much we have to give, but we know how much our parents gave and continue to give him the same amount." (Adalo Lisanon, Sahè-Abigo 17-12-1990).

> "Since about 1962 my husband has an oil palm plantation of 6 *donhun* (ca. 1 ha) from Golo. Before that, my husband's father's brother farmed the plot; my husband received it at his death. My husband used to give Golo 2 *estagnons* of palm oil annually. Recently Golo felled many palms on the plot, since then we give him only 1 *estagnon*. My husband wants to plant new oil palms. Then he will have to start giving 2 *estagnons* annually again. But we will harvest much more oil than that."
>
> I asked: "What would happen if your husband would not give oil anymore?" She: "Nothing would happen." But her husband, who had arrived in the mean time, disagreed and interrupted: "If we don't give oil anymore Golo might sack us from the plot." (Interview with the parents of Gukotowin, Sahè-Abigo 17-12-1990)

I was quite surprised to hear that in 1990, ninety years after the destitution of the last Fon king, the descendants of 'plantation' slaves still had to render palm oil to the royal family. However, also Edja (2001:13) confirms that inhabitants of former slave-hamlets depending on Abomean or Whydahean masters, are allowed to grow food crops for themselves and enjoy security of tenure, but have to render palm wine and other palm products to the landowning family, and are obliged to guard and maintain the land. According to one of Golo's sons the people also ridged his fields free of charge in (early) colonial times[52]. Also Herskovits (1938 I: 55) was told in 1931 that the descendants of slaves of *gletanu* (large elite farmers) near Djidja 'today have their own fields, but are still under obligation to work a half of each day for the descendants of the masters'. These were on the one hand cases of the persistence of class relations in Fon society that cast doubt on the assertion that the descendants of slaves became free Danhomeans. On the other hand, also the early colonial government judged that the head of the royal family should continue to receive the red oil of the plantations at Gboli (Sinhoué, Sahè and Bozon) and at Houawe from local farmers who maintained them[53].

> '*J'ai fait une enquête afin de savoir si les palmiers de Boli et de Ouaoué lui appartenaient. J'ai constaté que ces palmiers avaient été plantés par les anciens rois (…). Pour les entretenir, Agoli-Agbo les avait confiés aux habitants des villages les plus rapprochés qui (…) conservaient les amandes et donnaient l'huile au roi. Je crois bien qu'on peut laisser les choses subsister ainsi. Ce qui revient à la famille royale sera versé à celui qui en est aussi le représentant, au père de famille en un mot. De cette façon les fils de Guézeau, Gléglé, les princes par conséquent pourront donner à manger à leur père comme ils disent, faire les fêtes annuelles*'. (Rapport politique Cercle d'Abomey Mars 1900, ANB Porto-Novo)

If this colonial report is correct, the king in kingdom times used to receive all the red oil, but not the kernels nor the food crops, from the above-mentioned plantations. The slaves in these plantations were free to make their own living; they only had to render a tribute in

palm oil to their royal masters. Manning (1982:73) affirms that Danhomean slaves had rights to part of the product of their own labour, and were also allowed to sell it. The testimonies from Sahè-Abigo suggest that the level of the slaves' tribute to their masters declined from 'all red oil' in 1900 to 'part of the red oil' in 1990[54].

Unlike free Danhomeans, the slaves apparently did not have the option to substitute their gifts of palm oil for other forms of *nujo*[55], and the amounts they had to give seem to have been higher. In this regard the slaves' position on the royal family's land was akin to the position of a lineage member who cultivated a plot of *hɛnuaïkungban*: both had to render all the palm oil to the family head. Likewise, the use of the oil from the king's groves at Houawe and Gboli was similar to the use of oil from *hɛnudeju*: both were destined for lineage rituals.

Also in contrast with free Danhomeans, pre-colonial 'plantation slaves' were not allowed to leave the land and their masters. Compared to domestic slaves and their descendants, inhabitants of slave villages were less easily absorbed into their master's lineage. The case of Tutujason's slave Nakenchi (5.2.3) suggests that male domestic slaves and their sons could inherit in their master's lineage, though this did not happen automatically but had to be negotiated between the master and his free sons. In colonial and post-colonial times the inhabitants of former slave villages tended to have a lower status than their neighbours (Herskovits 1938 I: 103; own research); they were probably more easily recognised and stigmatised than the descendants of domestic slaves. But in all other aspects the Danhomean 'plantation slaves' were more comparable to tenants or tributary peasants than to plantation slaves in the Americas or the West Indies.

The early colonial documents and oral testimonies further suggest that the distinction between the king's and private businessmen's plantations was sometimes fluid. The kings entrusted slaves in Sahè, Sinhoué, Bozon, Zado and Houawe to chiefs, some of them princes. These chiefs, at least those around Gboli, were supposed to keep part of the plantations' produce and to give another part to the king. The colonial government expected the princes who received oil to give it to the head of the royal family, to be used for the sacrifices to the royal ancestors. Also in this regard the royal oil palm plantations were akin to the *hɛnudeju* of ordinary lineages, whose oil was also used for lineage rituals. This however shows that there is no easy answer to the debate between Coquery-Vidrovitch (1971) and Law (1977a) about whether the large oil palm plantations belonged to the king or to private merchants. More research would be needed on the access of the king, of private businessmen, and of the slaves to the various palm products, to other crops, and to various forms of the slaves' labour.

### 6.3.2 'Plantation' slaves on the Adja plateau

Also on the Adja plateau the Fon installed slaves during the palm oil boom, especially in the centre and the east. Which products these slaves had to render seems to have varied from place to place. In 5.3.2 I mentioned already the cases of Asu in Houédogli-Dekime, to whom Glele entrusted nine slaves, and of and Kpotokan in Houégame, who supervised groups of Ana settlers, probably slaves, on behalf of Gezo and Glele. Asu had to produce palm oil, maize and cowpeas for Abomey, and Kpotokan had to send palm kernels and maize. Also Gbotan, the founder of the Klouékanme market on the eastern Adja plateau (5.2.4), was a slave of Glele according to local Fon and Adja accounts. Gbotan would have had to render food crops to the king, but no palm products:

> "Gbotan was a captive of the Fon king. The king did not want to recruit him into the army, therefore he sent him here to cultivate maize, cowpeas and pigeon peas, these three things. Gbotan had to send part of his produce to the king.
>
> In the time of Glele many Fon fled from Abomey and came here. They started to fight against us Adja. The Fon became numerous and tried to take more land from my great-grandfather Danji. We Adja between Zouvou and the Couffo became afraid and fled westwards, leaving all our land to the Fon[56]. Jɛnkɛ was a Fon who fled from Sahè during Glele's wars, he received land here from Danji." (Sohungbe, Adja born around 1900, Zouvou 25-5-1990)

Fon slaves of Yoruba and Mahi descent settled in Lalo and Ladikpo (Anon s.d.: 95; Luning 1986:31-32), and also the 'Fon' founders of Akwevɛadja were apparently slaves. The settlers in these three villages on the eastern Adja plateau had to produce food crops and palm oil for the royal court.

> "King Glele commanded my great-grandfather to settle here on the Adja plateau because the soils here were fertile and because Abomey had to buy food from the Adja. Therefore the village where we settled was called *akwe vɛ Aja* = 'the Adja will not receive our cowries anymore'. The Adja who lived here before were chased as far as the Sahwè[57] region. Our ancestors had to carry part of the maize, pearl millet and palm oil that they produced to the king's court in Abomey. The king sent agents to check whether we fulfilled these obligations properly." (Interview in Akwevɛadja-Hwedanuhwe with a great-grandson of one of the founders, 7-1-1991).

> "My great grandfather was sent from Agbangnizoun to the fertile Adja plateau by king Gezo. He settled at Sononhoué on the eastern Adja plateau, where all the land was forested except for a small savannah island with *Fan* grasses (Andropogon gayanus) 1 km north of Sononhoué. Later, others joined my great grandfather at Sononhoué." (Agblalame Avemadjesse, Fon born around 1916, Sononhoué 7-1-1991)

In Lalo and Ladikpo, the slave Ahamada was appointed as supervisor of the slaves and charged to send a fair proportion of their food crops and palm products to the royal court (Anon s.d.:95; Luning 1986:31-32). On the eastern fringes of the Adja plateau Fon chiefs installed groups of Yoruba slaves in Tandji, Kadébou, Adjassagon, Azangbé, Dadji, Ahogbeya and Aglali. Colonial administrators found these slave villages surrounded with oil palm plantations in 1905-1907, which suggests that the slaves had to produce palm oil for their Fon masters. In early colonial years these Yoruba groups tried to escape from their masters' control. The French however judged that the villages in this eastern part of the Adja plateau, but not in other areas, should continue to depend on the Fon 'kingdom'.

> '*Région de Tandji. Cette région peuplée presque exclusivement d'anciens esclaves nagots et entièrement située sur la rive droite du Couffo, continua néanmoins à dépendre du royaume d'Ago-li-Agbo après la conquête. Depuis, ses habitants ont essayé maintes fois de se soustraire à leurs anciens maîtres notamment en 94, 98 et 1904. De leur côté, les chefs dahoméens notamment Ago-li-Agbo ont non seulement protesté contre ces mouvements séparatistes mais encore réclamé les territoires de Lalo, au delà de Tandji. Le prétexte? La mère d'un roi y serait enterrée.*
>
> *En partant du Sud, et tout au bord du Couffo, on trouve Tandji, Cadebou, Adjassagon, Azangbé, Dadji, Ahogbeya, Aglali. Ce sont tous des villages entourés de palmeraies.'* (Cercle d'Abomey 1908, ANB Porto-Novo)

Other 'Fon' (some possibly also of Yoruba descent) came in the second half of the 19th century of their own free will to the eastern Adja plateau in order to evade Danhomean rule, to look for fertile land[58], to marry, or to settle near relatives, near a friend or near a healer (Luning 1986:31).

> "Gezo sent Akpanukun here to look for fertile soils. When he arrived there were no Adja here and most land was forested, though on some spots grew *fan*[59] and *gbakpo*[60] grasses, intergrown

> by *gbetakun* shrubs. Later Akpanukun's brothers and friends joined him." (Interviews with six elderly members of the Fon families Huntin, Zankuku and Akuta in Kplakatagon, 9-1-1991)

It was even more difficult here than on the Fon plateau to distinguish between freemen and slaves and between slaves of different categories of owners. The possibility for Adja plateau slaves to hide, with the complicity of their local masters, in small hamlets from their distant Fon plateau masters, contributed to this difficulty. From the perspective of my Adja plateau informants it was irrelevant whether local slaves belonged to the Fon king, to his agents, or to private Fon businessmen. What mattered to them was that the masters represented the Fon State. The difference between free Adja and slaves of Fon owners however was, according to them, that free Adja did not regularly render tribute to the Fon kingdom[61]. But occasionally the Fon would also have invaded free Adja villages, seized domestic animals and claimed the contents of granaries and of oil jars.

> "In the days of Glele there was no market here. Glele's men entered our villages and said 'we want to purchase the content of this granary at this price; unhusk the maize cobs and remove the grains for us!' And they poured the content of our palm oil jars into their own recipients. We had to accept whatever price Glele offered us." (Lofa Sokpossu, Dekime 21-5-1990)

Local accounts indicate that Adja plateau slaves of distant Fon masters had much room to manoeuvre and to manage their own lives, probably more room than most Fon plateau slaves. In contrast with the Fon plateau slaves who could not leave their land, Adja plateau slaves migrated to neighbouring villages and hamlets to settle near friends or to hide in the bush. Settlement narratives of slave families in Akwevɛadja and Sononhoué quoted at the beginning of this section, emphasising the fertility of the Adja plateau soil, suggest that the Adja plateau slaves benefited from the good yields. Slaves needed their master's permission to marry, but most of them were allowed to do so after some years of faithful service. Some slaves were able to accumulate enough to pay the bridewealth – if required – from their own pocket, in other cases their master paid for them. Much like married sons, married male slaves were granted a plot of land on their own by their supervisor and were allowed to cultivate part-time for their own family. Several of Asu's nine slaves married; his slave Honsou was able to marry tree wives and to acquire one male slave himself. All their descendants became members of Asu's lineage (see 5.3.2). Also the supposed slave Gbotan purchased several slaves himself and allowed most of his slaves to marry.

Some Adja plateau slaves, for example Ahamada and probably also Kpotokan, were promoted to the position of supervisors of the Fon king's local slaves. Ahamada and Gbotan became important traders. Gbotan would have created the Klouékanme market with his food crop, palm wine[62], palm kernel, salt and gunpowder business in the early years of Glele. Besides this, Gbotan was able to retain or acquire land and houses in Sahè-Abigo in the south west of the Fon plateau. I met many farmers in that village who descended from him and who owned large tracts of land there[63]. Narratives about Gbotan and the market illustrate how Adja women, Fon businessmen, and slaves made a living during the second half of the 19th century. They show that many slaves accumulated on a small- and some on a large scale.

> "Gbotan was a Fon who sold gunpowder here. The Adja big man Danji became afraid that he would be captured. Therefore he gave land to Gbotan. Once Danji was indeed deported to Abomey, but he was liberated later on." (Firmin Gbenaza, Adja, Zouvou 25-5-1990)

> 'The women of Nigbo and the surrounding [Ehwe-Adja] villages carried their palm kernels to the market of Lalo or Tchikpè, which was supervised by Ahamada. Five years after the founda-

> tion of this market, the Fon Gbotan from Danhomɛ started to stop them on the road, purchased their palm kernels, and brought these to Abomey. He sold salt which he imported from Abomey. So the Klouékanme market was born. Palm oil and groundnuts were only traded in Lalo, not in Klouékanme.' (Interview 9-1-1986 by B. Ensing, Wartena 1988:65)
>
> "My ancestor Gbotan was a great farmer and trader at Klouékanme. He grew maize, pigeon peas and cowpeas and sold them locally. In the dry season he also purchased staples in other places if they were cheaper there, and sold them in Klouékanme and in Abomey. His wives and children transformed the fruit of his oil palm plantations into oil and kernels and sold them in Klouékanme and in Abomey. With the revenues of his sales, Gbotan bought war captives from the king. These slaves processed palm fruit for Gbotan and did all heavy work that one cannot do one self. Female slaves became his concubines and produced children for him. These children became children of the lineage.
>
> Male slaves had the right to marry a slave girl. Often the slave presented himself the slave girl of his choice. Once married, the slave had the right to ask the master for a field. If the 'father' had consented to the marriage he also agreed to give land. In those days there was so much land that one could even give 40 *kantin* (2,3 ha) to a married slave. Married slaves farmed some days to feed their own family, and on other days they worked for their master. They chose together on which days they wanted to work as a group for their 'father'. Some male slaves even married a free girl, but in such cases the slave either paid the bridewealth from his own savings, or the master paid for him. No bridewealth was required for a slave bride, because she had no parents to give it to." (Avohuinon Gbotan, Sahè 12-11-1990)

Manning (1982:73) affirms that Danhomean slaves were allowed to engage in trade. But in spite of their relative freedom, inhabitants of (former) slave hamlets on the Adja plateau suffered and continue to suffer from the stigma of being *waci*[64] and 'people of the bush'.

The Adja plateau narratives further show that palm oil production was not the primary task of the 'plantation' slaves there. Oil palms were still rare on the Adja plateau, but its soils were still more fertile than those of the Fon plateau. The slaves around Houégame would not have rendered any palm oil to the Fon at all, but only palm kernels and maize. Most other Adja plateau slaves had to grow cereals and pulses next to palm products for the Fon. Apparently the production of food grains for the degraded Fon plateau was an important duty of slaves on the richer Adja land. Hence, though the Adja plateau slaves were tributary to the Fon, their masters took the productive specialisation of villages into account. Nevertheless, some pressure was exercised on the slaves to render palm products. Traditions of Asu's and Kpotokan's lineages assert that it was difficult for their ancestors to satisfy the Fon's demands in palm oil and -kernels, since oil palms were still scarce on the Adja plateau. Kpotokan at times sent his women into the bush to gather kernels and overripe palm fruit (from which the kernels could still be extracted) from semi-spontaneous palms, or purchased kernels from the Sahwè between the Adja plateau and the coast. Asu's slaves were among the first to plant oil palms in a systematic manner on the central Adja plateau, and consequently called their village Dekime ('among palm kernels'). This name suggests that such plantations were still a remarkable novelty on the Adja plateau, but also that palm kernels were a more important commodity for the Adja than palm oil.

The local narratives also indicate that the Adja plateau, especially the centre and east, continued to be unsafe during the second half of the 19th century. The Adja from Akwevɛadja fled to the Sahwè. Danji was deported to Abomey. 'The' Adja between Zouvou and the Couffo became afraid and fled westwards according to Danji's grandson Sohungbe. Glele raided Asu's children. Adja from Tchikpè fled to Bozinkpe on the north-western plateau around 1850. Dɛngbɛnɛn, the son of one of these Tchikpè refugees, and Dosu from Aïssanhoué,

moved on to Dodohoé, 8 km northwest of Tado (see 5.3.2). According to Abotchi (1995: 253, 259-262), many Ehwe-Adja from the plateau settled in Dodohoé and its neighbouring villages[65] in the later 19th century, attracted by the fertile farmland and probably pushed by invasions of the Danhomean army.

### 6.3.3 Changes in gender division of palm fruit processing labour

Changes in gender division of labour and probably also of rights to palm kernels occurred among the Fon during the palm oil boom. So far the transformation of palm fruit into oil used to be a female task in South Bénin (Repin 1863), and the women seem to have obtained the nuts (shells and kernels) as a reward for their labour. Fon and Adja women and girls carried the palm bunches from the field to the village, or sometimes to a river where water was easily available. Women and girls carried water to the site of the transformation. The only 'traditional' male tasks were related to harvesting palm bunches. Most Adja- and some Fon men first had to create access to the palms by clearing shrubs that enchroached these. Fon men climbed palms; Adja palms were often small enough to be harvested from the ground. Men cut down the palm bunches and chopped them into pieces with a machete so that the fruits could be removed by hand. Both men and women helped with this removal. Then women boiled the fruits in water and pounded them in a mortar or (among the Fon) with the feet in a basin called *deto* (palm fruit hole)[66]. After pounding, women separated the nuts and fibres from the oily substance. The latter was mixed with water and heated again until the red oil floated on top. The women rendered this oil to the owner of the palms, who was mostly their male household- or compound head, as in the case of Navo (see 6.2.1) and of almost all Adja families. If the grove was a Fon *hɛnudeju*, as in the case of Tobada and Lisanon the oil was given to the lineage head, who used some of it for ritual purposes (see 6.2.1 and 6.2.2). The owner distributed other parts of the oil to the women of his group for cooking, lightening and soap production. 'Traditionally' the women seem to have kept the nuts themselves (Desanti 1945:153).

From the mid-19th century onwards Fon men sold much of their oil. Women and girls under their authority had to carry the oil to the market and sell it there on his account, as Navo and her mother and also Ahinon in Lissazounme (Wartena 2001:246) had to. Most women seem to have been allowed to spend a small part of the sale on their lunch and on sauce ingredients for the household, that is on subsistence only. Some women managed to keep tacitly a little of the money for themselves (own interviews a.o. in Sahè 16-11-1990; Laarakker 1990:63).

Adja- and at least some Fon women in the southwest and extreme east obviously had the right to keep the nuts (shells and kernels) from the palm fruit that they processed[67]. The same applied for Ibibio, Ngwa and Isoko-Urhobo women around the Niger delta and for Krobo women (Martin 1984, 1988:47-48; Aghalino 2000:22, 28; Lynn 1997:53). Adja- and south-western Fon women also had the right to glean nuts from overripe palm bunches that had fallen from (temporarily) non-maintained[68] trees, no matter to whom the tree belonged (own research; Hoogervorst 1987:36). Overripe fruit does not contain red oil anymore[69], but the kernels are still good. Probably originally all Fon women had these rights[70].

Until 1860 palm kernels and palm kernel oil had a low value in South Bénin. Kernel oil was only used a little for deep-frying (but even for that purpose the Fon and Adja preferred red palm oil or groundnut oil) and as an ingredient for local soap (*a*)*kotò*. The demand for

frying oil and *kotò* was limited. Hence the majority of the palm nuts were used, uncracked, as fuel. Cracking was a labour intensive activity (own observations; Elwert 1983:113) and was also women's work, as was kernel oil- and soap manufacture. The shells of cracked nuts were likewise used as fuel[71].

But from the 1860s demand for palm kernels rose because European firms started to purchase these in Whydah (Manning 1982:52). From then onwards, most Fon women and girls had to crack palm nuts and sell the shells and kernels on behalf of their *daa* or of their household head. Navo's childhood memories (see 6.2.1) and Avohuinon's account about his ancestor Gbotan's household (see 6.3.2) illustrate this. Fon women in Sahè lost their right to glean nuts, though some of them could still keep the nuts of the fruit that they processed for their men[72]. Fon men apparently claimed the kernels when these obtained a high market value and when palm nuts became abundant in their women's huts with the increase of red palm oil production. Most men started to give the women a little bit of red oil instead as a reward for their processing labour; some allowed them also to keep the shells[73]. Among the Ehwe-Adja however, palm kernels were still relatively scarce because little red oil was produced. Ehwe-Adja women retained their customary rights to the nuts until today.

Navo and Avohuinon's accounts further indicate that in the late 19th and early 20th centuries not only Fon women and girls but also boys transformed palm fruit into oil and kernels. It also seems that all Gbotan's slaves, male and female, were employed in processing his palm fruit. This seems plausible for in the 19th century more and more male slaves were retained in Danhomɛ together with the female ones because the excess of New World prices for male over female slaves declined (Manning 1982:30, 49; Luning 1986:31). Consequently, boys and male slaves engaged in formerly female tasks. Fon boys continued to work in palm oil manufacture in the early 20th century. Pierre, born in Lissazounme in the early 1910s, testified how he and his brothers helped with all stages of palm oil production for his father Ahovi, a former *chef* with twelve sons, in the 1920s:

> "As a boy I prepared palm oil for my father. I harvested palm bunches, detached the fruits from them, and fetched water in the rivers Sahè and Couffo because there were no water tanks in that time. Then we boiled the fruits, pounded them and prepared red palm oil. In the second half of the 1920s there was a well in the village, but it had dried up[74]. We were two families who used to help each other in turns with fetching water to prepare oil, as a form of mutual help *sò*. Daddy did not pay my brothers and me for this work. But he cared for us, clothed us, and would pay the bridewealth for our first wife, as an accumulated salary. But daddy died before I was old enough to marry." (Pierre Ahovi, Lissazounme 24-10-1990)

Changes in gender division of labour in palm oil manufacture were also observed in Lagos, in the Niger delta, and in the Ngwa and Ibibio regions east of the delta (Martin 1984; 1988: 32-35). There too almost all stages in palm oil production used to be women's work, with the exception of the removal of fruits from bunches and (sometimes) the pounding. But when in the 19th century palm oil exports rose, first male (probably slave-) involvement in pounding increased. Then men in Lagos and the Niger delta took over virtually all stages of the production process, making it less labour intensive and less 'female' by replacing the first boiling of the fruits by fermentation (cooking was a female task). Ngwa men followed in the 1920s. Most male oil producers in these regions seem to have been self-employed labourers in their own palm oil industries. Their labour fortified their claims to the whole produce. Among the Fon however it was mainly junior men who had to prepare palm oil for their fathers or masters.

Fon men's involvement in formerly 'female' tasks in palm fruit processing was temporary. Today, Fon boys help only rarely with cracking palm nuts and almost never with fetching water or with other tasks in the transformation process. An exception is the pounding of the boiled fruit, a heavy task that is more and more done for wages, often by Fon men, sometimes by women[75]. Not only in palm fruit processing but also in other kinds of work it became more and more difficult for Fon seniors to control the labour of junior men. Adja men do not seem to have engaged at any time in history in fetching water for palm oil production, pounding boiled palm fruit or cracking palm nuts, except possibly for wages.

In agriculture proper no change in gender division of labour occurred during the palm oil boom. Among the Fon, women used to perform all field tasks since at least the 1770s (see 5.2.3; Norris 1789/1968:86, 147; Dalzel 1793/1967:121; Duncan 1847: 22), except probably clearing bush fallow. But bush fallow hardly existed anymore on the Fon plateau in the second half of the 19th century; I will come to this in 6.5. Until the 1910s Adja women only helped with 'female' tasks on the household's fields, namely piling up woody vegetation that the men cleared, burning it, sowing and harvesting. The family histories that I collected indicate that around 1900 about 30% of the Fon women had their own 'afternoon fields' and that all these women grew food crops for subsistence and for sale. The percentage of Fon women with own fields gradually increased until the mid-20th century under the influence of commercialisation. From ca. 1920 onwards Adja women started to perform all field tasks and cultivate on their own account as well. This implies that until 1920 among the Adja, in contrast with what many theories about African women's farming assert, men were alone responsible for all the heavy work with iron tools in subsistence agriculture. Fon women however carried with their men the burden of soil tillage and of subsistence cultivation. (Wartena 1997 and 2001).

### 6.3.4 Free Fon farmers appropriate food and fertile land on the eastern Adja plateau

As already mentioned also some free 'Fon' settled in the second half of the 19th century to the eastern Adja plateau. My research on both plateaux suggests that the majority of them came from the south west of the Fon plateau. Almost all families in Sahè-Abigo and also several in Lissazounme had some land on the Adja plateau[76]. The fertile Adja soils and personal relations were the principal motives for the acquisition of Adja plateau land. (Several descendants of migrants specified that the Adja soils were so rich that ridging was not necessary during the first years). Fon in Akwevɛadja on the Adja plateau told me:

> "Our ancestors came from Sinhoué-Lègo to Akwevɛadja to look for fertile land. The first years after their arrival here they cultivated on the flat because the soil was rich. After some time they started to ridge the poorer plots and the plots with spear grass (*Imperata cylindrica*). The topsoil here has become slightly sandier since the arrival of our ancestors." (Dasi, Jèsusi and Nicholas Agbanyon, Fon at Akwevɛadja, 8-1-1991)

> "Our ancestors came from Gboli to the Adja plateau in kingdom times. My father was a soldier for king Glele here among the Adja. This is how he met my mother, an Adja woman, at Akpeyhoué near Djakotome. They married and settled here in Akwevɛadja on the eastern Adja plateau." (Doyito Klikpezo, born around 1917, Fon at Akwevɛadja 5-1-1991)

Adja accounts confirm that their ancestors gave land to Fon from Sahè, see 6.3.2. Some of the first Fon to acquire Adja plateau land were princes, amongst others Kandiko from Lissazounme and Golo, the prince to whom the slaves at Sahè-Abigo were tributary since the time of Glele. Two of Golo's sons in Sahè remember:

> "All the land between Sahè and Klouékanme belonged to my grandfather. In the later 19th century my father had a farm at Danholi on the Adja plateau. We farmed there and ate here in Sahè, hence moved back and forth. We had oil palms on our Adja field, at a density that was normal for us Fon[77]. I inherited the Danholi field, but returned to Sahè [in my old age] because we are from here." (Daa Golo, born around 1899, Sahè-Abigo 21-11-1990)
>
> "My father was a *chef* here, *chef* Golo, and the people came to ridge for him free of charge[78]. He had land at Djihami on the Adja plateau. In my childhood we grew pearl millet there, and I chased the birds from the millet during 30 days. [Besides pearl millet] the people often grew cowpeas or groundnuts for my father in the first season, and cotton or groundnuts in the second. He planted cotton about 5 times between 1947 and 1960; it was a variety that takes 5 months to mature." (Tessi Golo, born 1910-1920, Sahè-Abigo 7-9-1990)
>
> "As a young man I farmed myself at Djihami, while my parents lived in Sahè. Later I returned to Sahè because my parents were sick. After their death I became responsible for my younger brothers and sisters here and so I could not return to Djihami. Very few Fon who farm at Djihami return definitively to Sahè, except if they receive responsibilities for the family here, for example if they become *daa*, and even in those cases some members of their family will continue to cultivate their fields at Djihami." (Tessi Golo, Sahè-Abigo 27-2-1991)

Several Fon commoners obtained land next to the princes. According to several interviews in Lissazounme, king Glele's 'son' Kandiko acquired land from the Adja at Lanta on the extreme northeast of the Adja plateau in the later 19th century, but the principal residence of the lineage Kandiko lineage remained in Lissazounme. Through Kandiko's mediation many Fon obtained plots at Lanta, altogether 'more than 40 hectare[79]. Around 1900 also Lokonon Segbeji from Lissazounme asked for a piece of land at Lanta, and received 1.5 hectare. Lokonon planted a few oil palms and farmed part-time at Lanta with his five wives and children, but also retained his land and houses in Lissazounme. When he became older, Lokonon stayed in Lissazounme and left the Lanta field to his eldest son Norbert, whom he also allowed to plant more palms. At Lokonon's death around 1961 Norbert inherited the Lanta field and the younger sons his fields at Lissazounme[80]. (See also section 8.1)

Around the time of Glele also several members of the lineages Aladasi and Zinflou, free lineages that lived in Sahè since before the times of Akaba (1685-1708)[81], obtained land on the eastern Adja plateau. The case of Amajivo Aladasi's household illustrates how common Fon made a living from their fields on both sides of the Couffo. At the end of the 19th century Amajivo had a few hectares (probably between 5 and 10) near Klouékanme and cultivated them together with his sons and daughters. At the same time he maintained his houses and some fields in Sahè. He granted plots to his wives and adolescent sons to grow crops on their own account. His wife Ananon for example had in the 1910s and 1920s a small plot in the Couffo valley where she grew vegetables for sale[82]. During the rainy seasons Amajivo's household members spent most of their time on the Adja plateau, where they grew maize, cassava, cowpeas, pearl millet, sorghum, bambara groundnut, *doyi*[83], yams, pigeon peas, tomatoes, capsicum peppers, groundnuts and oil palms. They ridged all their fields and the girls also helped with this, though their Adja neighbours cultivated on the flat. Wives, sons and daughters assisted with weeding. Ananon and the other women transformed the cassava into *gari*. Part-time some household members cultivated their Sahè fields. In the dry seasons they all returned to Sahè, the men to harvest their oil palms there, the women to make oil

and to grow vegetables in the Couffo floodplains after the retreat of the water (they fetched high prices for dry season vegetables), and all to attend family rituals[84]. They carried part of their Adja plateau food crop yield through the Couffo, whose water was usually low during that period[85]. Around the turn of the century Amajivo's sons married, but they continued to farm together with their father. When he became older, Amajivo stayed in Sahè while his sons farmed his Adja plateau land. After his death this pattern was repeated in the next generation: his son who succeeded him as *daa* stayed in Sahè to assume his responsibilities for the family, while younger family members continued to farm on the other side of the Couffo.[86] The family's motivation to farm on the Adja plateau was obviously to attain a greater degree of self-sufficiency in basic staples.

> "My ancestor, who descends from the *aïnon* of Sahè, went to Akwevɛadja and received fertile, unoccupied land there. In my youth, when I started to go to Adja with my father, the soil there was still more fertile than here. Later I inherited a field of 9 ha at Akwevɛadja, while at Sahè I have only 0.6 ha. Each time when my Sahè fields become poor I go to Adja. But now my fields there are as poor as my fields here." (Doha Zinflou, Sahè 19-6-1990)

Just like Golo, Lokonon, Kandiko, Amajivo, Zinflou and their dependents almost all the free Fon on the Adja plateau retained houses and fields on the Fon plateau and returned there from time to time, in particular during dry seasons and for family rituals[87]. This distinguished them from their slave neighbours, Gbotan exempted, who had no access to Fon plateau land. Most free Fon returned definitively to their village of origin in their older age (especially if they were appointed as *daa* of the home lineage, if they felt in other ways responsible for family members 'back home', or if they were sick themselves). Returnees usually left their Adja plateau fields to younger family members, but some who lacked family labour rented it out to Adja tenants.

> "My father acquired land at Adja-Akwevɛadja, where I farmed with him when I was young. We always farmed on the flat there because the soil was *zùn* (forest, 'fertile'). Ridging degrades the soil more rapidly than cultivation on the flat. We observed this at Akwevɛadja: two farmers had fields with the same soil type and the same fertility. One ridged during 15 years, the other cultivated on the flat. They always grew cotton alternated with maize, and the cotton on the flat always yielded more. The farmer with the poorer yields started to ridge because he is Fon, and habits are a part of yourself that you do not easily abandon. Later daddy let his field to an Adja. After daddy's death the Adja's brothers took it. I farm here at Sahè; my health is not very good." (Lante, born around 1917, Sahè-Abigo 14-12-1990)

The family history of Amajivo's extended household and the myth of origin of Akwevɛadja (see above) suggest that most common Fon's primary motive to farm on the Adja plateau was to attain a greater degree of self-sufficiency in basic staples. The name Akwevɛadja ('the Adja will not receive our cowries anymore') testifies that many Fon by Glele's times used to depend on food purchases from the Adja. Forbes (1851 II:102; see 5.2.4) confirms the latter, he heard during the *hwetanu* in 1850 in Abomey that Danhomɛ used to import maize from the Adja and had to fear shortages of this staple due to Gezo's military expeditions to the west. Also the Adja narrative about the barter trade at Zouvou before the time of Gbotan (see 5.2.4) and the family account of Gbotan's food crop trade affirm that throughout the 19th century many Fon purchased or bartered basic staples on the Adja plateau.

## 6.4 Interregional trade and traders

In this section I will discuss commodity flows to and from the Fon and Adja plateaux and the merchants who engaged in this trade. The volumes of these flows are indicators for the Fon- and Adja's commoditisation, commercialisation and relative specialisation in certain products, as well as for the ecology and fertility of each plateau. The involvement of merchants in interregional trade relates to the Fon and Adja's politico-economic power in the region as well as to their styles of making a living. During the palm oil boom the Fon and Adja each specialised in the production of certain commodities besides palm oil: the Adja sold food crops, palm wine and -kernels, the Fon sold groundnuts, palm oil and -kernels and bought food. The Fon's commodity exchanges seem to have been more important than the Adja's. Interregional trade, also to and from the Adja plateau, was in the hands of the Fon and of the Adja's southern and western neighbours. This implies that the occupation of trader remained important and prestigious among the Fon, though the occupation of oil palm and cotton planter temporarily also gained importance. Female trade increased in scope and in prestige, especially among the Fon. The Ehwe-Adja continued to hide in their villages and to farm mainly for subsistence.

### 6.4.1 The Adja plateau, a granary for the Fon and their south-western neighbours

The Fon's dependency on Adja plateau food seems to have continued during the palm oil boom when many Fon acquired Adja land. Though the new settlers now grew their own food and consumed much of it themselves, Fon traders like Gbotan also sold staples from the Adja plateau at a higher price in Abomey. Written accounts from the 1880s confirm that the Fon kingdom received maize from the area 'north of Agoué and Grand Popo' and was unable to export maize itself (Manning 1982:93). Amajivo's daughter (born in Sahè around 1905) thinks that the inhabitants of the Fon plateau 'always' depended on food purchases from the Adja plateau:

> "The people around Klouékanme grow and have always grown more maize, cowpeas and other field crops than we on the south western Fon plateau. On the Klouékanme market they use to sell large amounts of maize. Adja plateau maize was and is more often sold on the Fon plateau than the other way round. It has always been like this; it is the Klouékanme market which feeds us." (Ayonu Lisanon, born in Sahè around 1905, Lissazounme 29-9 and 17-10-1989)

A survey on the road between Klouékanme and Sahè in December 1905 confirms that much food was carried from the Adja- to the Fon plateau in the dry season of that year, just after the harvest of the second maize- and cowpea crop. The Adja plateau received in return mainly non-food items. More than twice as many carriers went from the Adja- to the Fon plateau than the other way round, suggesting that many of them were Fon with Adja plateau fields who carried their harvest to the Fon plateau in the dry season. Others seem to have been traders who exchanged the Adja's staples against pottery (from Sahè), cowries, kaolin (used as paint for houses and make-up during ceremonial and ritual occasions), oranges, and possibly European money (invisible to those who made the count).

> '*Adja-Kouélé-Kanmé est un marché important qui se tient tous les 5 jours en pleine campagne admirablement cultivée. On y trouve (le nom l'indique, Kouélé = haricot) beaucoup de haricots, du maïs en quantité, du manioc, un peu de coton. C'est un point important d'échanges entre Adjas et Dahoméens. Trois jours sur 5 on assiste sur la chaussée du Couffo à un véritable défilé*

*de porteurs et porteuses de tous les villages du Cercle d'Abomey. Un pointage du 18 au 30 Décembre 1905 a donné 1699 porteurs allant vers les Adjas, 3678 revenant de chez eux. Les charges se décomposaient ainsi*:

| ***Allant:*** | | ***Revenant:*** | |
|---|---|---|---|
| *Cauris* | *480* | *Maïs* | *3360* |
| *Jarres* | *920* | *Huile* | *59* |
| *Caolin* | *179* | *Haricots* | *257* |
| *Oranges* | *120* | | |
| *Total* | *1679* | *Total* | *3576* |

*Il serait à désirer que (…) la route fût continuée au-dela du Couffo, tout au moins par de larges sentiers, qui mèneraient directement au marché d'Adja-Kouélé-Kanmé et à Lalo*.'[88]

In 1900 the colonial government recognised that the *Cercle* d'Atiémé produced more food crops than many other regions of the colony, but that its inhabitants (i.e. the Adja and some Sahwè) sold few of these to the coast, at least not themselves. In an attempt to commoditise the Adja, to increase French influence over them, and to cater for the food needs of other parts of the colony, an export bounty was promised by decree to those inhabitants of the *Cercle* d'Athiémé who brought food products to the Grand-Popo market[89]. Though five years later the decree was no longer in effect[90], the French began to note Ehwe-Adja maize and yam[91] sales to the south and west.

In 1905 the Germans started to purchase large quantities of maize, first in Togo, with the result that much of the maize of the Athiémé area went there and later that year also on the Lokossa market (Rapports mensuels Poste d'Athiémé Septembre + Octobre 1905, ANB Porto-Novo; Manning 1982:95). Also in 1913 the Adja plateau and the Mono region exported maize to Togo[92]. In 1910 the French administration complained that the majority of the Adja's maize surplus was sold on the Sokodé market in Togo. The dry year 1910 was a year of famine on the Fon plateau and in Grand-Popo, but the Adja plateau produced so much maize that they could still sell. The French motivated their complaints by the famine in Grand-Popo, but also in other years they opposed exports to German Togo.

'*Le Cercle de Grand-Popo a été plus gravement éprouvé, à cause de l'isolement dans lequel il est resté jusqu'à l'achèvement de la route Grand-Popo-Locossa. Le maïs que produit en abondance le plateau des Adjas, situé tout proche de Grand-Popo, ne pouvait parvenir dans ce port qu'en empruntant la route d'Abomey, puis la voie ferrée jusqu'à Ouidah et la lagune mais la majeure partie était vendue sur le marché Allemand de Sokodé et se trouvait dans l'impossibilité de gagner Grand Popo par suite de l'interdiction d'exporter les denrées édictées un moment par les autorités du Togo. (…) Au moment où la disette se faisait le plus cruellement sentir à Grand-Popo, les Allemands qui à la hauteur de Sokodé recevaient du plateau des Adjas, situé en territoire français, des approvisionnements considérables en maïs, prohibaient l'exportation sur le Dahomey des denrées alimentaires nécessaires à nos indigènes*.' (Rapport politique 3e semestre 1910 Dahomey, 14 Mi série 2G 10-23, AOM Aix-en-Provence)[93]

Another part of the Ehwe-Adja's maize was exported through Abomey by rail. As soon as the railroad reached Bohicon, that is 1905, Ehwe-Adja traders from the *subdivision d*'Aplahoué carried maize to Abomey in exchange for imported goods (Manning 1982:148). Hence, part of the maize embarked in the Fon plateau railway stations shown in Table 6.1 was not a product of the Fon, but of the Ehwe-Adja. The Adja maize was probably mainly embarked in Bohicon, since this station was nearest to the Abomey market, and possibly also in Ouansougon, which was nearer to the Adja plateau but whose road network was not as good as Bohicon's[94]. Ouansougon lay on the southern fringe of the Abomey plateau and

was probably also fed by maize grown on the fertile Vertisols south of the plateau (known as the *Ko* or Lama area) and on its south-eastern slopes. The other railway stations on the plateau itself received only little maize, suggesting that Fon plateau farmers did not grow much maize for sale. Table 6.1 in Appendix 6 shows that still another part of the Adja's maize was shipped on the river Mono directly to Grand Popo, also in 1910 (though the just quoted 1910 report pretends to deny this).

### 6.4.2 Interregional trade dominated by Fon and coastal merchants

Fon and Adja family histories that I collected and early colonial reports indicate that the Ehwe-Adja traded less than their neighbours in the 18th, 19th and early 20th centuries. Significant was the size of markets; those of the Adja were much smaller than those of their neighbours to the South and those of the Fon[95].

> *'Dans le secteur de Parahoué et celui d'Athiémé les marchés n'ayant pas l'importance qu'ils ont dans le secteur de Grand-Popo, je ne citerai que ces derniers. (…) L'importance de ces marchés est considérable, surtout celui de Houéïogboué où viennent se concentrer tous les produits (…). Le marché de Locossa est alimenté par les environs, depuis Savalou (…) et par le Togo (…) puis par les Dobos. Sè entre les deux est alimenté par les Sahoués qui ne tiennent pas marché chez eux, par les Dobos très riches en palmiers.'* (Correspondances des cercles Grand Popo, rapport annuel de l'année 1903, ANB Porto-Novo)

The Ehwe-Adja did not travel beyond their plateau to trade, except to Tado-Adja areas. The Fon and the Adja's southern neighbours in contrast had many long distance traders. In my research lineages, no Adja engaged in interregional trade before the 1930s. Among the Fon however, Houngan in Kana controlled slave transports to the coast under Agaja (1708-1734). Gbotan in Sahè and Klouékanme and Ahamada in Lalo traded palm- and food products between the Adja- and Fon plateaux from the time of Glele (1858-1889). Ahovi in Lissazounme engaged in palm oil exports from the time of Agoli-Agbo (1894-1900). The following Adja account confirms the image created by Gbotan's and Ahamada's story, namely that trade between the Fon- and Adja plateaux in the (later) times[96] of Glele and Gbɛhanzin and in early colonial times was in the hands of Fon merchants:

> "After some time the Fon also started to buy palm kernels, red palm oil and palm fruit because they did not know how to make palm oil and other palm products. At first they purchased palm kernels from us Adja. Later they also purchased from the Fon who came to live among us, because the Fon of Abomey did not know how to make palm oil. They paid these products with cowries until these became too heavy." (Sohungbe, Adja born ca. 1900, Zouvou 25-5-1990)

Early colonial reports confirm that the trade between the Fon- and Adja plateaux was almost entirely in Fon hands. Most Adja did not (dare to) carry their commodities to the south and east beyond the Adja plateau, that is not further south than Lokossa[97] and not further east than Klouékanme and Adjahonme. When some Ehwe-Adja traders carried maize to Abomey from 1905 this was an exception and a remarkable novelty. Fon traders in contrast regularly visited Adja plateau markets. Administrators of the Ehwe-Adja wrote:

> '*Les indigènes portent leurs produits sur les marchés de Koulikamé et Adja-Houmé cercle d'Abomey - Ouédémé et Lokossa secteur d'Athiémé. Sur les marchés ils trouvent comme acquéreurs les habitants d'Abomey ou d'Athiémé qui sont les intermédiaires entre eux et les commerçants.*' (Correspondance cercle de Grand Popo subdivision de Parahoué 1908-1910, Rapport d'ensemble sur l'année 1908, ANB Porto-Novo)

> '*Région rive droite du Couffo. - Villages Adjas. - (…) Les sentiers fort mauvais quoique très fréquentés par les gens d'Abomey qui se rendent au marché de Ouétan, traversent tour à tour des taillis épais, de grands espaces couverts de hautes herbes et d'arbres…*' (Rapport mensuel Octobre 1905 Cercle d'Abomey, ANB Porto-Novo)

Fon, Mina, Hwla, Nago (Yoruba) and other southern traders also controlled business between the Adja and the South in those days. In 1901 the (brand new) first administrator of the western Ehwe-Adja described the latter's exports in the following terms:

> *'La quantité de produits descendus par le Mono sur Grand Popo, pendant le mois dernier, a été considerable (…) ce sont les Minas, Nagots et Dahoméens qui - presque exclusivement - rétient encore les bénéfices de ce commerce.'* (Rapport mensuel Parahoué le 22 Octobre 1901, ANB Porto-Novo)

Among the 'Adja' families whose histories I studied, only one who originated in reality from Anecho had members who travelled before the 1930s beyond the plateau to trade.

> "My parents are originally from Anecho, but I was born in Djikpame (on the north-western Adja plateau) around 1890[98] and grew up there. When I was a girl, before my marriage around 1930, my father purchased salt, fish and cloth at Hwla on the Togolese coast, and my mother and I retailed these commodities in the Azové market. My parents did not cultivate; my father was also a fisherman and my mother only traded." (Masanvi Cohovi Gaïbo, Sahou 1990)

One of the greatest Adja traders[99] before 1925 was Koffi (not his real name) in the extreme south of the Adja plateau. This *chef de village* gathered and purchased palm oil and -kernels in southern Dogbo-Adja villages and transported them to the Athiémé port with the help of corvée- and some slave labour. In return he sold salt, cloths and jewels to the Adja plateau. His trade declined when a bridge was built at Kpinnou in 1925 and road transport began to replace shipments between the Adja plateau and the coast. Even Koffi does not seem to have travelled beyond Athiémé. (Den Ouden 1991:1, 22, 28-29).

Transport of salt manufactured at Keta 'sometimes on the river Mono' to the Adja plateau is mentioned in a myth of origin of the Azové market (see 5.2.4). Robertson (1819:234), a slave trader in Danhomɛ around 1800-1807[100], noted that salt from Keta was traded to the interior, probably also to the Adja region. Well documented is the transport of salt manufactured at Anecho (Hwla/Pla) and Grand Popo to the Adja in the 1890s. Plehn (1895)[101] observed that salt from Grand Popo was shipped on the Mono until Togodo and carried from there through the Tado-Adja market Sagada at Tetetou to the surrounding areas. In 1895-1896, Dier saw people from Little Popo selling salt at Tado (Seige & Liedtke 1990:109). According to De l'Albeca (1895:207)[102] Savalou obtained its salt in 1894 from the Adja markets at Agouna and Tado, to which it was presumably brought from the coast. Pazzi (1979:83) argued on the base of oral tradition that the salt trade from Hwla (Anecho) to Tohoun and from there to the Savalou region was encouraged by the custom duties that *nyigbafio* Kpoyizun levied at Togodo in the later 19th century. The salt trade from Hwla on the Mono river through Togodo and Tetetou, and from there northward to Tado and eastward to Tohoun and the Ehwe-Adja plateau continued until the river trade route was abandoned around 1930 (Klose 1904:276-277 in Seige & Liedtke 1990:197; Pazzi 1979:80, 82-83). Further evidence is provided by linguistics. While the Fon received their salt from Whydah and call it *jɛ*, the peoples of the Mono valley still call salt *xwlàkó* (soil of the Hwla) at night (Pazzi 1979:87; Ségurola 1988:606) even though they now also receive their salt from Whydah. The river trade route declined under the influence of road building and of colonial policies that discouraged trade

across the Togolese-Dahomean border. Unintentionally, these same policies feigned the development of Ehwe-Adja merchants' careers.

The Tado-Adja markets at Tohoun, Tetetou and Tado were probably the only 'external' markets where some Ehwe-Adja dared to go in pre-colonial days (see also 5.3.4). Several Ehwe-Adja, for example Dɛngbɛnɛn and Dosu (see 5.3.2, 6.3.2; Abotchi 1995), settled in the Tado region in the later 19th century. In exchange for salt the Ehwe-Adja offered maize, palm wine[103] and some cotton to the Tado-Adja, in any case in the early 20th century. Since the trade in palm wine interfered with palm oil and -kernel exports, I will devote a special section to it below. Some Ehwe-Adja in the savannah north of the plateau (around Lonkli, Aplahoué, Tohoun and Agouna) exported cotton to Sagada since at least 1903 until 1917[104]. Other cotton growers in Agouna used to sell their harvest to Abomean weavers (Wartena 1988b:89; Correspondance cercle de Grand Popo 1908-1910, no. 209, 1909 ANB Porto-Novo). The French colonial government was not in favour of cotton exports to German Togo:

> '*La maison Nolténius et Paul qui s'était installée à Tohoun dans le but d'acheter le coton produit par la région a renoncé à poursuivre ses opérations parce que les frais de transport à la côte soit par le Togo soit par le Dahomey lui ont paru trop onéreux. Les indigènes des environs de Tohoun qui avaient été séduits par l'idée qu'ils pourraient vendre leurs produits sur place et par l'espoir de voir s'établir chez eux un comptoir où ils auraient la facilité de s'approvisionner de marchandises, avaient donné à la culture de coton une grande extension. Il est regrettable qu'aucune maison française ne veuille s'installer dans cette région, car le marché allemand de Sagada situé à 12 ou 13 km va ainsi bénéficier du produit des graines distribués par l'association cotonnière*.' (Rapport mensuel Octobre 1910 poste d'Athiémé, ANB Porto-Novo)[105]

> *'Coton.- (…) La production de la colonie n'est pas toutes dirigée sur Cotonou et de là sur les marchés français; une grande partie du coton est expédié sur le Togo, par les régions de Parahoué, Todou*106 *et Tado.'* (Rapport d'ensemble Dahomey 1911 p. 9, 14 Mi 1661 série 2G 11-14, AOM Aix-en-Provence)

As long as their external exchanges were through foreign traders, the Adja had to accept the conditions set by the latter. Many Adja today believe that the Fon traders exploited their ancestors by paying very low prices. Some Adja think also that their ancestors' sales in the 19th century were not entirely voluntary (the accounts that I recorded were all from central Adja plateau villages, of which at least some were inhabited by Asu's slaves). Lofa Sokposu in Dekime narrated that Glele's men entered villages in the region and claimed the contents of granaries at prices set by them (see 6.3.2). Another Adja account holds that

> "Our ancestors in Zaffi[107] in the time of Gezo had to send palm kernels and red palm oil to a local chief, who gave them a little bit of money in return. I don't know whether Abomey claimed tributes in kind from them in kingdom times." (Nicholas Adogan, Adja in Kplakatagon, 4-1-1991)

In contrast with the Adja, many Fon went to the coast to sell palm products, groundnuts and maize as early as 1899-1900.

> '*Les Indigènes du cercle continuent à transporter leurs produits à la côte. Ils profitent de ce que la Lama est praticable en ce moment. Puis, l'époque du recensement ayant été avancée, ils se munissent d'avant pour pouvoir payer leur impôt immédiatement. Plusieurs quartiers d'Abomey, les villages d'Allahé, Sinhoué, Tandji, Tindji ont déjà les sommes nécessaires pour se liquider*.' (Rapport commercial et administratif Décembre 1899 Abomey, ANB Porto-Novo)

> '*Le commerce qui s'est fait pendant ces mois avec la côte a été considérable. Les habitants voulant profiter de la fin de la saison sèche afin d'avoir l'argent nécessaire pour payer leur*

*impôt, se sont rendus en masses, à Ouidah surtout, à Grand Popo également. Des huiles, des amandes de palme, des arachides, du maïs ont été transportés*.' (Mois de Février 1900, Rapport commercial et administratif, Cercle d'Abomey. Rapport sur la situation agricole dans le Cercle d'Abomey Février - Novembre 1900, ANB Porto-Novo)

'*Pendant cette période de sécheresse la population du cercle d'Abomey voyage beaucoup. Elle se livre surtout au commerce avec les grands marchés avoisinants*.' (Rapport mensuel Janvier 1906 cercle d'Abomey, ANB Porto-Novo)

'*Autrefois, la ville d'Abomey était envahie par la brousse, aujourd'hui des cultures magnifiques la remplace. Maintenant que les habitants ne sont plus forcés de donner au roi le fruit de leur travail, qu'ils peuvent sans crainte aller vendre leurs produits à la côte, ils n'hésitent plus à agrandir leurs cultures*.' (Rapport commercial et administratif, Juin 1900 Cercle d'Abomey. Rapport sur la situation agricole dans le Cercle d'Abomey Février - Novembre 1900, ANB Porto-Novo)

'*Cotonou - Ouidah - Abomey - (…) L'ensemble des cercles de la Côte nous présente une population toute entière occupée d'opérations agricoles et commerciales*.' (Rapport d'ensemble Dahomey 1913 situation politique, AOM Aix-en-Provence)

'*A l'occasion du recrutement (…) Beaucoup de jeunes gens de Cana et de Za-Alahé ont tenté d'échapper à cet appel en se rendant dans la région côtière sous prétexte de vendre des produits ou de faire des achats, trois tatas du premier village ont même été désertés par la totalité de la population mâle*.' (Rapport politique Dahomey 1e trimestre 1915, AOM Aix-en Provence)[108]

### 6.4.3 Fon and Adja groundnut- and cotton exports compared

Table 6.2: Groundnut exports from the *Cercle* d'Abomey by railway and from the *Cercle* d'Athiémé by waterway, kg in 1907-1910 and 1922

| Year | *Cercle* d'Abomey (Fon) | *Cercle* d'Athiémé (including Adja) |
|---|---|---|
| 1907 | 352070 | 0 |
| 1908 | 123070 | 0 |
| 1909 | 68750 | 0 |
| 1910 | 0 | 0 |
| 1922 | 198962 | 0 |

Sources: Rapport général sur l'année 1910 cercle d'Abomey p. 17, Archives Abomey; Rapport 4. trimestre 1922 cercle d'Abomey.

The colonial report of February 1900 quoted above notice groundnuts (*Arachis hypogea*) among the commodities that the plateau Fon carried to the coast. Groundnuts were, together with maize, described as the principal crops sown on the Fon plateau later that year[109]. Also in 1905, 1907 and 1907 groundnuts belonged to the most important crops in almost all regions of the *Cercle* d'Abomey and were sold on a large scale according to administrative surveys (Rapports mensuels Cercle d'Abomey Mai, Septembre, Octobre & Novembre 1905, Janvier, Février, Juillet & Octobre 1907, Rapport Cercle d'Abomey 1908, ANB Porto-Novo). This is remarkable, for it shows that the Fon produced commodities without being pushed to do so by extensionists or by the central colonial government; they were only encouraged a little by traders[110]. It is often assumed that groundnut cultivation started on the Abomey plateau in the mid-20th century, being a sign of commoditisation and in response to soil degradation. Traveller reports however testify that groundnuts were introduced to the Bight of Benin by the Portuguese in the 16th (Pazzi 1979:187) or 17th (Bosman 1704/1967:301; Alpern 1992:26)

century. Linguistic evidence suggests that groundnuts (*azin* in both languages) were an ancient Fon and Adja crop because bambara groundnut, another ancient crop, was named after them *azingokui* in Fon and *azingodui* in Adja (see 4.3). Fon oral traditions speak of groundnut trade on the Lalo market and of soil degradation on the Abomey plateau during the second half of the 19th century (5.2.4, 6.3.2, 6.3.4, Wartena 1988:65); Forbes (1851 II:102) and Manning (1982:93) confirm the latter. The Adja in contrast did not export groundnuts before the Second World War.

Table 6.3: Exports of cotton from the *Cercle* d'Abomey and the *Subdivision* d'Aplahoué, in kg of unginned cotton 1905-1913.

| Year | *Cercle* d'Abomey (excluding Zagnanado) | *Subdivision* Aplahoué (exports through Tohoun) |
|---|---|---|
| 1905 | 5000 | – |
| 1906 | 37000 | – |
| 1907 | 33480 | – |
| 1908 | 26640 | – |
| 1909 | 46800 | – |
| 1910 | 43200 | – |
| 1911 | 47520 | 10000 |
| 1912 | 44280 | – |
| 1913 | 61560 | – |

The 1907-1913 exports of the Cercle d'Abomey are estimated on the base of national exports of ginned cotton and of the information that Abomey used to provide about 10% of the national exports. The Cercle de Zagnanado produced 5% of the Dahomean cotton exports, the remaining 85% were produced by Savalou and Savè. The Adja's cotton exports through Dahomean ports remained negligible. (Rapp. d'ensemble Dahomey 1913). Administrative statistics did not always specify whether figures were for ginned or unginned cotton. There was a cotton ginnery in Bohicon since 1907 but the Adja region had no ginnery until 1924, therefore I assume that the Fon plateau exported ginned cotton and the Adja plateau cotton wool. The unginned weight of Fon cotton was calculated on the base of the 1911 yield of 1 t of ginned cotton for 3.6 t cotton wool (Rapport d'ensemble Dahomey 1911).

Sources: Rapport mensuel cercle d'Abomey Juillet 1906, ANB Porto-Novo; Rapport mensuel poste d'Athiémé Octobre 1910, ANB Porto-Novo; Rapport général de l'année 1910 cercle d'Abomey, Archives Abomey; Rapport mensuel poste d'Athiémé Août 1911, ANB Porto-Novo; Rapport d'ensemble Dahomey 1911, AOM Aix-en-Provence; Rapport annuel service de l'agriculture Dahomey 1913, AOM Aix-en-Provence; Manning 1982:368).

Cotton was a 'traditional' commodity of both Fon and Ehwe-Adja farmers in the savannah areas north of the plateaux[111]. They used to sell it to Abomean, to some local-, and the Adja probably also Tado-Adja weavers. Weaving was still a prestigious activity among the Fon until at least 1926[112] and, according to administrators in Abomey, the only manual work that Fon princes did not disdain. Several princely *chefs de canton* were weavers (Rapport mensuel Juin 1907 Cercle d'Abomey, ANB Porto-Novo; Fiches signalétiques chefs, ANB Porto-Novo). There do not seem to have been many Ehwe-Adja weavers; I did not encounter any[113].

When from 1904 onwards the colonial administration distributed seeds of a new cotton variety in the *Cercle* d'Abomey, also some Fon farmers on the northern, eastern and southern edges of the plateau (around Oumbegame, Allahè, Zado-Zogbodome and Sinhoué) started to grow cotton[114]. Nevertheless the majority of the Fon's cotton continued to be grown in the savannah north of the plateau[115]. Soon many Fon came themselves to ask for cottonseed (Rapports mensuel Cercle d'Abomey Avril 1906 & Avril 1907, ANB Porto-Novo). By 1907 the cotton export production from the Abomey region was so important that the *société cotonière* installed a factory to stone cotton in Bohicon.

> '*L'Association cotonnière représentée par M. Poisson vient de transporter son usine d'égrenage à Bohicon-gare. (…) Les négociants du cercle continuent à acheter en quantité des amandes de palme, du coton, des arachides etc.*' (Rapport mensuel Cercle d'Abomey Février 1907, ANB Porto-Novo)

As already mentioned the Ehwe-Adja in the savannah north of the plateau also grew cotton and sold some of it to the Tado-Adja and to Fon weavers. This Adja production is difficult to quantify; during early colonial years it was probably less than the Fon's. After 1917 some Ehwe-Adja cultivated castor bean for sale. Castor bean did not thrive well on the Fon plateau (Wartena 1988b), apparently the latter's soils were already too poor.

### 6.4.4 Adja palm wine trade

Four of the five foundation myths of Adja markets that I encountered state that these markets originated with the sale of palm wine (5.2.4; Wartena 1988b:63-65). This was said about the markets of Kisame and A*f*igame, both probably founded before 1750, about the market Klouékanme, founded in the time of Glele, and about the market of Dogbo, founded in the 19th century. Besides palm wine, other ancient Adja commodities would have been *flefi* (a spice from *Prosopis africana* seeds, see Chapter 1 and section 8.3), salt, and in some accounts other sauce ingredients, maize- and cowpea cakes (*ɛgblɛn* and *gawu*). The production, consumption and trade of palm wine were also typical for the Ewe. Merz (1878) observed wine production and sale by the Ho-Ewe, and Gruner (1913) described the ritual use of wine of the oil palm variety *sede* by Ewe around Kpalime-Misahöhe (reviewed in Seige & Liedtke 1990:38). The Adja's high palm wine consumption also struck de l'Albeca's (1895) attention when he visited their country in 1889:

> '*20 Juillet 1889 (…). La route de Togodo à Toune*[116] *par Ounkemé et Tobamé traverse un pays ondulé, parsemé ça et là de rochers de granit et de blocs de grès rouge, rempli de cultures, de grandes plantations de cotonniers, de cocotiers et de palmiers. Le tafia étant rare, on boit le vin de palme.*' (Alexandre de l'Albeca: Voyage au pays des Ehoués (Dahomey). Paris, 1895. AOM Aix-en-Provence)

Oral Adja- and written colonial accounts affirm that palm wine, *flefi*, *ɛgblen* and *gawu* were indeed important commodities on Adja markets around 1900. One of the first administrators of the Ehwe-Adja poste de Parahoué (= Aplahoué) wrote about these markets:

> '*Il y a peu d'animation sur les marchés à Parahoué principalement. Ce qui se vend le plus est le vin de palme aussi tous les jours on ne voit que cela*'. (Rapport mensuel poste de Parahoué Septembre 1905)

Not later than 1909 the Adja also exported palm wine to Togo, especially at Tokpli and Agome-Séva (Rapport mensuel poste d'Athiémé Avril 1909, ANB Porto-Novo). It was however impossible to sell palm wine very far from where it was produced because of its perishability. This might have been a reason why Fon do not seem to have been interested in the Adja's wine. In contrast with food- and palm fruit products the Fon neither purchased nor raided wine on the Adja plateau according to local myths[117]. This again might have been a reason for the Adja to produce more palm wine than palm fruit.

Palm wine in South Bénin was obtained by felling oil palms between the age of 7 and 40 years (preferably between the age of 15 and 25), but never – as is done in South Nigeria – extracted from standing palms, probably because of the dryer climate of Bénin[118]. This implied that the Adja felled palms that could still have yielded fruit. From the very first

colonial years administrators complained that the Adja's palm wine production inhibited the palm oil- and kernel trade. In other words, the Adja's palm wine sales cut their palm oil- and kernel sales:

> *'Ils cultivent aussi le palmier (…) pour en tirer le vin de palme. Cette dernière production a pris ces derniers temps une extension excessivement préjudiciable pour le commerce des huiles et amandes. Une mésure de préservation s'impose, si l'on ne veut pas voir les palmiers complètement détruits dans le cercle d'ici 10 ans, et par suite le commerce réuni.'* (Correspondance des cercles Grand Popo, rapport annuel de l'année 1903, ANB Porto-Novo).

> *'Les palmiers produiraient beaucoup plus si les propriétaires les soignaient, mais la brousse les envahit et les naturels s'en occupent fort peu. De plus la fabrication du vin de palme, boisson très goûtée dans le pays, est une plaie pour la région. Insouciant au suprême dégré l'indigène s'occupe point du lendemain, jusqu'au jour où l'on sera arrivé à lui créer des besoins. Alors peut-être se rendra-t-il compte des pertes considérables qu'il aura faite en n'entretenant pas ses cultures et en ne cherchant pas à les étendre, alors qu'il pourra le faire aisément sans que cela ne lui coûta rien, si ce n'est quelques heures de travail par jour'.* (Correspondance cercle de Grand-Popo subdivision de Parahoué no. 285 31-11-1908, ANB Porto-Novo)

Comparing the Ehwe-Adja with the Fon of the *Cercle* d'Abomey, Le Herissé (1911:48-49) complained that the Adja would be backward, amongst others because they extracted their oil palms for wine rather than to sell palm fruit:

> '*Les Adja vivent encore comme des sauvages. Quand on visite ceux qui dépendent du cercle d'Abomey, on reste étonné de les voir, presque nus, habiter de misérables huttes encerclées d'épais buissons épineux. Ils ne labourent pas leurs champs et ne connaissent pas la jachère comme les Dahoméens; ils se contentent d'un défrichement sommaire par le coupe-coupe et le feu et ils ensemencent sans même retourner la terre. Au lieu de cultiver le palmier pour trafiquer de ses fruits, ils l'abattent pour s'enivrer de son vin. Si, d'aventure, un Européen ou même un noir étranger se risque chez eux, hommes, femmes, enfants se sauvent dans les forêts. En un mot, rebelles à toute pénétration, les Adjas n'ont jamais eu aucune action dans l'histoire du Dahomey…'* (Le Herissé 1911:48-49)

Palm wine trade, in contrast with almost all other trades, was in general a male business, though there were exceptions[119]. The mythical first palm wine sellers on the Dogbo and Klouékanme markets, Bossou Soglo and Gbotan, were men (the myths I heard remain silent on the gender of the palm wine traders at Kisame and Afigame). Men and gods were also the principal consumers of palm wine. Palm wine consumption was associated with leisure and prestige. Men with money might have been more inclined to buy wine than to buy sauce ingredients. For a man who wanted to become a trader, selling palm wine was almost the only option. Therefore it seems plausible that palm wine trade was more prestigious than the female trades, and that Adja palm wine sales were important[120]. Palm wine trade obtained a new boost by the introduction of a distilling technique during or just after the First World War.

### 6.4.5 Cowry money abandoned on Fon markets by 1900 and on Adja markets by 1920

One way how foreign traders exploited the Adja was by paying them with cowries until 1910 or even 1920. Cowries were rapidly loosing their value since the mid-19th century due to massive imports of cowries, silver dollars and pound sterling by European traders[121]. Since 1890 the French declared cowries to be demonetised, and adopted after 1900 even more

aggressive policies to ban them, including physical destruction without giving compensation (Manning 1982:157). On Fon plateau markets, cowry money was almost abandoned by 1900 according to local administrators[122]. On Adja markets this happened only around 1920. Of my many old informants, no Fon but many Adja saw cowries being used as payment. The observation on the Klouékanme-Sahè road quoted above confirms that traders carried cowries from the Fon- to the Adja plateau in December 1905, but did not bring cowries back. Also the Adja account about Fon traders who paid palm products with cowries 'until these became too heavy' suggests that this continued during the speaker's life.

Colonial documents affirm that cowries were the Ehwe-Adja's main currency in 1908, and that Ehwe-Adja taxpayers went in those days to Grand Popo, Lokossa or Ouédémé to exchange cowries for francs because the government did not accept the head tax to be paid in cowries (Manning 1982:158). My elderly Ehwe-Adja informants testify that they could not exchange their cowries for francs on Adja plateau markets, and claim that cowries were the principal currency on these markets until the First World War[123]. Some think that this applied in particular for commodities such as salt, palm oil, Adja women's bridewealth, homemade palm kernel soap (*akoto*), and prepared foods such as *gawu* and *εgblen* (cowpea- and maize cakes)[124]. From the early 1920s cowries were no longer used as money, but only for ritual purposes. A descendant of the founder of the Klouékanme market told me that salt traders were the last ones who still accepted cowries in Klouékanme[125].

### 6.4.6 Engendering palm trade: reframing theory

It is often assumed, especially by 'articulation of modes of production' theories (Meillassoux 1977, Rogers 1980, Whitehead 1981/1984, Deere 1990), that only African men produce commodities or perform wage labour on their own account. African women would only produce 'use values' for the subsistence of their households. If a crop acquires a monetary value, men would claim control over it. The more men engage in cash earning activities, the greater women's subsistence production responsibilities would be.

In 6.2.2 and 6.3.2 I argued that when European demand for palm oil and kernels rose in Whydah from 1840 and 1860 onwards respectively, Fon women had to transform palm fruit into oil and kernels and sell them on behalf of the – usually male – owners of the palms. Before 1860 the kernels seem to have belonged to the women. At first sight this male control over palm oil production and -sales appears to support the articulation of modes of production theories. Fon men's new claims to palm kernels (if indeed these did not exist before 1860) are also in line with articulationist' ideas.

However, did male claims really exclude Fon women from commodity production during the palm oil boom? Did women's workload in subsistence production or as unpaid labourers in their men's oil export industries increase, or did they (also) obtain and take opportunities to produce commodities on their own account? So far little has been said about Adja practices. How did the Adja use palm fruit, how did they process it and distribute the produce? Did Adja men enter commercial palm oil production and push their women into the subsistence sector? I will argue, first, that Ehwe-Adja women were more active in selling palm kernels on their own account than Ehwe-Adja men in selling oil, until at least 1911. Second, more and more Fon and Adja women were able to earn cash incomes from palm oil production themselves.

### *Comparing Adja and Fon women's palm kernel and men's oil sales*

When palm kernels obtained a high market value in Whydah from 1860 onwards, and when 'Fon' traders such as Ahamada and Gbotan started to purchase palm kernels on the Adja plateau, the Ehwe-Adja started to sell these. There is oral and written evidence that until the mid-20th century the Ehwe-Adja produced relatively more palm kernels than palm oil for sale (Table 6.4 in Appendix 6). According to Kpotokan's family tradition (5.3.2 and 6.3.2), his dependents on the central Adja plateau only rendered kernels to king Glele but no oil because 'in those days there were not many oil palms here'. Kpotokan's folk gathered palm kernels in the bush from non-maintained palms, or went as far as Sahwè to buy them. The myth about Gbotan and the Klouékanme market (see 6.3.2) suggests that in Glele's time initially the Ehwe-Adja sold palm kernels but no red palm oil[126].

In early colonial years the Ehwe-Adja still had far more palm kernels than palm oil for sale. Their *chef de canton* Assou, son of Kpotokan, had no palm oil that he could sell in 1905 when he needed money, but he sent his dependents to gather palm kernels. An administrator wrote about him 'the *chef* Assou of Houé-Gamé told me that he sent all those who are his into the bush to gather palm kernels to pay his debt.'[127]

In the orbit of palm kernel sales the Ehwe-Adja also started to sell red palm oil on a limited scale. This would have started later under Glele's reign. According to Sohungbe, an Ehwe-Adja who narrated about his ancestors' barter trade of yams against the Fon's non-food commodities in a time 'before the Fon came to fight against us' (5.2.4), things changed later in the 19th century:

> "After some time the Fon also started to buy palm kernels and palm oil from us, because they did not know how to make palm oil. They paid these with cowries until these became too heavy. This was in the time of king Glele." (Sohungbe Danji, Zouvou 25-5-1990)

The Ehwe-Adja's palm oil exports however remained very limited both compared to the Fon's oil exports and compared to their own palm kernel sales during (early) colonial years. Export statistics from the first years of the 20th century (Table 6.4 in Appendix 6) clearly indicate that the Ehwe-Adja's shipments of palm products from their only port Ounkémé[128] consisted to a larger proportion in kernels than the rail exports of palm products from the Fon plateau. The Ehwe-Adja sold 12 times more palm kernels than palm oil in Ounkémé, but 'only' 8 times more kernels than oil were exported by rail from the Fon plateau. This means that the Ehwe-Adja specialised more in kernel sales compared to oil sales than the Fon.[129] The Fon woman Ayonu observed that some Adja palm products were transported to Bohicon in the 1910s and 1920s; her experience suggests that these products were mainly kernels:

> "When I was a young girl the Adja women brought palm kernels to their market [Klouékanme]. I purchased them and carried them to Kɛkɛholi at the bridge over the Couffo, where Europeans weighed palm kernels with balances, bought them and drove them to Bohicon. They also bought palm oil and castor beans[130] at Kɛkɛholi, poured the oil in tons, and put everything into their small lorry. Some palm oil and kernels from Sahè were also loaded at the bridge. The traders there lit lanterns to continue business in the evenings.
>
> We Fon did not have much that we could sell to the Adja in return because all the food crops were cheaper there, but we sold some salt at Klouékanme." (Ayonu Lisanon, born around 1905, Lissazounme 16-10-1989)

Ehwe-Adja oral testimony about the 1930s and early 1940s suggests that until at least the Second World War their palm oil sales remained limited and part of their kernel exports a

product of gleaning[131]. An Adja on the north-western plateau told me, with some exaggeration, that they sold kernels but 'no oil' in the late 1930s or early 1940s:

> "A charcoal-driven lorry came to collect palm kernels after my first marriage. In those days we planted oil palms, but we did not yet have enough palm oil to sell. They forced me to make charcoal for the lorry; each day they obliged another person to make charcoal."[132]

In 1955 the Adja still produced relatively a much greater surplus of palm kernels compared to palm oil, than the Fon, according to administrators' estimations (although among both Fon and Adja the proportion of oil production had increased since 1905-1911).

Table 6.5: Estimated palm oil and palm kernel export production by the *Cercles* d'Abomey and d'Athiémé in 1942-43 and 1954-55, in tons[133]

| Year | Mono | | | Abomey | | |
|---|---|---|---|---|---|---|
| | Palm oil | Kernels | Kernels/Oil | Palm oil | Kernels | Kernels/Oil |
| 1926 | 1,877 | 4,631 | 2.5 | 2,765 | 8,057 | 2.9 |
| 1927 | 1,240 | 5,425 | 4.4 | 1,744 | 8,269 | 4.7 |
| | Athiémé | | | | | |
| 1942[1] | 382 | 3,162 | 8.3 | 609 | 4,638 | 7.6 |
| 1943[1] | 114 | 3,133 | 27.5 | 235 | 5,354 | 22.8 |
| 1954 | 900 | 8,636 | 9.6 | 3,800 | 10,127 | 2.7 |
| 1955 | 180 | 720 | 4.0 | 1,444 | 2,356 | 1.6 |
| Total 42-55 | 1,577 | 15,651 | **9.9** | 6,088 | 22,475 | **3.7** |

1 Oil exports by Abomey and other producer areas were exceptionally low in wartime. Excluding the war years, the *Cercle* d'Athiémé exported 8,7 times more kernels than oil and the *Cercle* d'Abomey 2,4 times more.

Sources: Rapport d'ensemble agriculture Dahomey 1927, AOM Aix-en-Provence; Rapport économique Dahomey 1943; Archives Abomey; Rapport économique 1ier semestre 1955, Archives Abomey; Bulletin économique vue d'ensemble Dahomey 1955, Archives Abomey.

How could the Ehwe-Adja between 1905 and 1911 embark 12 times more palm kernels than oil while the Fon embarked 'only' 8 times more? How could the *Cercle* d'Athiémé, largely inhabited by Adja, in 1942-43 and 1954-55 export almost 10 times more kernels than oil while the Fon's *Cercle* d'Abomey produced only 3.7 times more? They had the same (indigenous) oil palm varieties, with the same proportion of endocarp to kernels[134]. The economic report of 1955 gave three reasons. Two of these must have applied even to a larger extent in early colonial times: One the one hand, since the Adja's dense palms yielded less fruit than the Fon's, they consumed a larger fraction of their red oil. On the other hand, more Adja- than Fon women gleaned nuts in 'non-maintained' palm groves. Gleaning palm kernels would have been common Adja practice around 1955, and some elderly Ehwe-Adja women told me that they earned their first incomes with it:

> '*Dans le Cercle d'Athiémé la consommation et l'exportation vers le Togo absorbent une partie de la production [d'huile] (…). Les paysans (…) pratiquent en certains endroits le ramassage des palmistes aux pieds des arbres*.' (Rapport économique 1ier semestre 1955, Archives Abomey)

On the Fon plateau in contrast, as mentioned in 6.3.3, gleaning nuts went out of use and became prohibited around that time according to an elderly woman in Sahè:

> "When I was a young girl [in the 1940s] it was permissible to glean fallen nuts in other people's palm groves, but today you would be considered a thief if you do this." (Linsi Avohuinon, born around 1936, Sahè-Abigo 16-11-1990)

Among the Adja, gleaning palm nuts is still practised today but became a relatively rare[135] and low-status activity. Therefore it is possible that several elderly women 'forgot' that they did it in the past, but one who remembered was Kpénou Tossa:

> "When I was a girl I used to go into other people's oil palm groves to search palm nuts. I cracked them and sold the kernels in the Ouédémé and Azové markets. I contributed the revenues to my rotating savings and credit association. In turns, each member received a cloth from the association. My mother neither traded nor cultivated on her own account." (Kpénou Tossa, born around 1905 in Houetchihoué on the north-western Adja plateau, Djikpame 1990)

Kpénou's testimony and the export statistics suggest that after 1860 Ehwe-Adja women started to glean palm nuts under 'non-maintained' palms on a large scale. In contrast with Fon men, Adja men never challenged their women's rights to glean and sell kernels. During the Second World War the Fon and Adja had to pay a kind of palm oil and -kernel tribute to the *chefs de canton*[136]. One of the many Ehwe-Adja narratives about this episode states that part of the kernels they rendered in those days were a product of women's gleaning. It confirms that the *chef* knew kernels to be Adja women's and palm oil Adja men's property. Finally it indicates that each adult individual was – also culturally – expected to possess palm products. Palm oil and kernels did not (only) belong to Adja lineage- or compound heads.

> "During 3 years the *chefs de canton* Essoun and Alofa obliged us to give palm kernels and palm oil. Each woman had to give one large bag of cracked palm kernels, the large bags of ancient times. If you had no palm kernels in your room you went to search them in the bush. With much effort you found perhaps 2 *donhun* (ca. 5 kg) and gave them to the *chef*, but you received a beating because you should have given one bag. Each man had to give one *estagnon* of palm oil (ca. 20-21 l). Some people even purchased palm fruit to give it to the *chef*. Essoun and Alofa gave a little bit of money in return, but they gave maybe 40 francs for an *estagnon* whose value was 500 francs, or for a bag of kernels whose value was 1000 or 1500. If you did not give they came to seize some animals in your village. *Chef* Togbui was alive when these things happened." (Sonyonu Dɛngbɛnɛn, born 1900-1905, Edahoué 29-9-1990. Togbui died in 1944)

This account affirms that gleaning under 'non-maintained' Adja palms remained important until at least the Second World War, and that it was a labour intensive activity. Such trees were intergrown by – mainly woody – vegetation and were usually at a greater distance from the village, hence difficult to access. Also cracking nuts was labour intensive. These were probably reasons why Adja men, unlike Fon men, did not interfere with women's use of kernels. Today, Adja women occasionally still search fallen nuts in other people's oil palm groves (own interviews and observations).

When after 1860 demand for palm kernels rose, Adja women obtained for the first time in history the opportunity to enter commodity production without the need of a starting capital by gleaning kernels. Export statistics (Table 6.4 in Appendix 6) and oral evidence indicate that many of them did so. At the same time, Ehwe-Adja men remained only marginally involved in the palm oil trade. We may conclude that in contrast with what articulation of modes of production theories assert, as far as palm fruit products are concerned Ehwe-Adja men were less active in the commodity sector than their women. Evidence also shows that the Ehwe-Adja sold far less palm fruit products than the Fon. The question why Ehwe-Adja men produced so little palm oil for sale remains.

### *Women's palm oil business*

With the expansion of palm oil export production by the Fon, and later to a lesser extent by the Adja, women's workload in palm fruit processing certainly increased. This holds true even though Fon boys and male slaves came to help with processing during the later 19th and the early 20th century, and male wage labourers now help with pounding (see 6.3.3). However, also women's access to the oil they processed increased, and this in various ways. First, as mentioned in 6.3.3, some women tacitly kept part of the oil or money for themselves when they had to sell palm oil on behalf of a man. Not too much however, because the man knew how much fruit he harvested, and in the case of Adja women (Laarakker 1990:63) for fear of loosing future 'orders' to prepare oil and with these their access to the kernels. Second, gradually most Fon men started to reward the women who processed palm fruit for them with the gift of some oil that she could consume or sell. For example the Fon woman Ahinon occasionally received some oil from her husband when she prepared it for him in the later 1910s and 1920s (Wartena 2001:247; 6.3.3). Third, more and more Fon and Adja men sold their palm fruit rather than to entrust it to their women (and other dependents) to transform because of urgent cash needs; among the Fon this started already before 1910[137]. This enabled women to buy fruit and prepare oil on their own account. Fon women generally preferred to buy fruit rather than to process their men's for remuneration in kind. But Adja women preferred to receive transformation orders from the men in their house because they could keep the kernels. (Own interviews; Laarakker 1990:62). An Ehwe-Adja woman said:

> "In the early 20th century my parents in Houédogli both had their own palm oil business. When my father harvested palm fruit, my mother had to transform it into oil for him and received the kernels as a reward. On other occasions mother purchased palm fruit, prepared oil, and sold it on her own account. She also had a plot to cultivate maize and cowpeas for own consumption and for sale. She prepared bean cakes (*gawu*) and maize cakes (*εgblen*) from part of her maize and cowpeas and sold them on her own account." (Aya Zehu, born around 1915 in Meyehoué near Houédogli, Tchankada 1-10-1990)

Finally, a few women acquired own oil palm groves and hence access to palm fruit. Obichere (1983) mentions Fon cases in the late 19th century. I give here some examples of Fon and Adja women who purchased palm groves or land on which they planted palms, or received them from their family, in the early 20th century. Sometime between 1890 and 1940 Gboju's father's mother in the Fon village Zounzonme had an oil palm plantation in her position as a *vodunon* priestess. Later Gboju (born around 1920, see section 8.2) inherited the role of priestess as well as the oil palm plantation:

> "My paternal grandmother was a *vodunon*. In this position she had an oil palm plantation. At her death she first gave it to my father. But before she died she introduced me to the 'prayers' and so I became a *vodunon*, and they saw that I could be a *daa* (family head). Since I became a *daa* I supervise the palm grove. I use 2 *kantin* to grow annual crops for myself because I cannot cultivate more than that, and lend out the rest of the land to members of my father's family. But the palm fruit belongs to me. They harvest the fruit and make oil, and I go and receive my share of it. My elder brother's son supervises the plantation and renders account to me." (Gboju Lisanon, Lissazounme 19-11-1990)

> "My mother in Zouvou on the eastern Adja plateau had a field where she cultivated maize, cassava, cowpeas, lima beans (*Phaseolus lunatus*) and pigeon peas around the time that the Klouékanme well was constructed [1924]. Before the Second World War she also planted oil palms there. When she died after the War the family felled these palms and invested the revenues in her funeral." (Béade Kakpo, an Adja woman born around 1900, Zouvou 27-9-1990)

> "My mother helped my father with burning, sowing and harvesting, but not with ridging, in the 1910s and 1920s and received a plot of ca. 1 hectare in Gnidjazoun as a reward. There she grew mainly maize, some cowpeas and groundnuts, and was even allowed to plant some oil palms. Her husband's four sons (of four different wives) helped her with ridging. She sold part of her harvest, and also started to purchase maize and groundnuts from local farmers to sell them in Abomey, Bohicon, Cotonou and Accra. She used the revenues of her field and trade for the 'needs'[138] of her parents and children and to complement the food money given by her husband. In the 1930s I retailed fish and shrimps, and used the revenues to buy clothes, jewels and kitchen utensils in view of preparing for my marriage. (Asibanon, a Fon woman born around 1917, Gnidjazoun 1990)
>
> My mother in Zaffi-Kplogodohoué on the central Adja plateau prepared palm oil and cowpea cakes (*gawu*) in the 1930s and sold these mainly on the Klouékanme market. She used the revenues to buy oil palm plantations, and also farmed a maize- and cowpea field. (Domagbe Sodégla, born around 1925, Zaffi 1990)

In conclusion, even though Fon and Adja women had to manufacture palm oil for their men for a (small) reward in kind, this did not prevent them from selling palm products on their own account. On the one hand they could trade the reward in kind that they received. On the other hand, and this increasingly, women acquired the raw material for palm oil production – palms or palm fruit – themselves.

### 6.4.7 Status of trading women

Besides and in the orbit of women's palm oil and -kernel trades also other types of female commodity production and trade increased, in the beginning especially in the vicinity of Fon towns. Women with an own income spent it in part on clothes, jewellery, pottery (especially water jars and cooking pots) and other kitchen utensils for themselves[139]. Clothes, jewels, and big jars to store water in front of their houses became the main female status symbols (Van der Schenk 1988:14; Wartena 1988b:137).

Female status among the Fon, especially in the vicinity of towns, was soon associated with trade. Among the Ehwe-Adja, trade contributed only to a minor degree to women's prestige. This was an additional incentive for women, especially Fon women, to engage in business, how petty it might be. Farming came to be seen as non-befitting for Fon women, especially in the centre of the plateau. Herskovits (1938 I:57) was told in 1931 that 'almost half of the Dahomean women sell in the markets' and that they 'may tend their fields, but many women prefer not to do agriculture, buying whatever food they require for themselves and their children in the open market'. Though this statement by Herskovits' informant contains some urban and elite bias as I show elsewhere (sections 1.3 and 8.2 and Wartena 2001), it does reflect Fon esteem of female trade and their disdain of female agriculture.

More and more women in remote areas however, first on the edges of the Fon plateau and from about 1920 also among the Adja, wanting to acquire the same new female status symbols as their trading 'sisters', asked for land to cultivate crops for sale on their own account. This was an important driving force behind the rise of female farming, and supports Hofstee (1985) and Bourdieu (1979) in that people may adopt elements of the lifestyles, in this case status symbols, from those who enjoy the esteem of the group (see 2.5). But while the Adja came to value female farming as a good source of livelihood and prestige and often better than petty trade, and Adja women's own account agriculture rose until the end of my research, the Fon regarded agriculture an activity for women who lacked trade opportunities. Consequently, many Fon women switched again from agriculture to trade after some time. (See also Wartena 1997, 2001).

## 6.5 Fon and Adja styles of oil palm management and ecological change

Though the Fon- and Adja plateaux were originally covered with the same types of semi-spontaneous vegetation, namely a mosaic of sub-Sudanese clear forest mixed with sub-Sudanese savannah (see 4.2.3), this vegetation came to differ under human influence not later than during the palm oil boom. Here I will show how the Fon and Adja's styles of oil palm management contributed to this difference. This section will go beyond 1920 and also discuss how and to which extent vegetations and oil palm styles changed and creolised until today.

The fallow vegetation on the Adja plateau remained close to the original mixture of trees, shrubs and grasses[140], but the fallow vegetation on the Fon plateau became mainly the savannah grass *Andropogon gayanus*. The savannisation of the Fon plateau might have started already in the 17th or 18th century or before under the influence of the Fon's ridge tillage (section 9.2), but was certainly in place during the palm oil boom. Testimony of the traveller Norris (quoted in 6.2.1) suggests that woody fallow vegetation had disappeared from the central Fon plateau by 1772, for he described the country between Kana and Abomey as 'cleared of trees'[141].

The central Fon plateau was clearly described as savannah in 1856 by Repin (1863:102) (6.2.1). Travelling on the plateau from Abomey to the south, he noted 'prairies' with tall grasses alternated by fields with millet, cassava, yams and maize – as well as thickets of oil palms, *dragonniers* and kapok trees near villages -, but no bush fallow. Fon oral tradition confirms that the principal fallow vegetation in the 19th century consisted in the savannah grass *Adropogon gayanus,* a grass with rhizomes that stands bushfires better than *Panicum maximum* and than most trees and shrubs (Amanor 1993:37-39).[142]

In contrast, the Adja plateau was still covered with bush (*brousse*), thickets (*taillis épais*) and dense vegetation when de l'Albeca visited it in 1889 (5.3.2) and in early colonial days. In de l'Albeca's times bush around villages was still strategically grown to hide from enemies. Table 5.2 and section 6.3.2 show that the Adja plateau was still dangerous due to Fon invasions in the second half of the 19th century. On Adja fields beyond this fence of bush many natural species persisted due to the Adja's tillage techniques. The roads on the eastern and northern Adja plateau[143] were still encroached by thickets, tall grass, trees and thick bush land in 1905[144] and in 1924 according to administrators of the *Cercle* d'Abomey, who implicitly compared the Adja- to the Fon region.

> *'Du 26 au 29 Juillet l'Administrateur s'est, de nouveau, rendu dans le secteur Adja qu'il a visité, village par village, à pied (…) le long de sentiers impracticables à tout genre de locomotion, tant ils sont resserrés et envahis par des deux côtés par une brousse arbustive épaisse.'* (Rapport mensuel Cercle d'Abomey Juillet 1924, ANB Porto-Novo)

### 6.5.1 Adja oil palm cultivation

The Dogbo-Adja on the South of the plateau and the cultivators of the Mono valley seem to have had more palms[145] and sold more oil than the northern Ehwe-Adja, especially before 1920[146]. Until 1920 very few Ehwe-Adja, except for the slaves of Fon masters (6.3.2), systematically planted oil palms. The Southerners had several reasons to produce more oil than the Ehwe-Adja: They were physically and infrastructurally nearer to coastal markets[147] and the dangerous Fon plateau was farther away, which facilitated trade. The slightly longer

rainy season and the greater number of creeks and rivers in the South benefited oil production, for palms thrived better and produced more fruit in river valleys[148] and with longer rainfall. Besides this much water was needed for oil preparation.

Nevertheless, also some free Ehwe-Adja had oil palm plantations between 1889 and 1905, apparently mainly on the western Ehwe-Adja plateau but to a smaller extent also in the centre and east. In the west, where next to no slaves of Fon masters lived, dense oil palm plantations were observed by de l'Albeca in 1889 and by the colonial administration in 1905. De l'Albeca saw 'thick oil palm forests' all at long the road from Tohoun to Athiémé, that passed probably through the Ehwe-Adja villages Dekpo, Aplahoué, Zouzouvou, Sahou, and from there to the south (see quotation in 5.3.2). Colonial administrators surveyed in 1905 the major crops of seven northern and north-eastern Ehwe-Adja villages that belonged in those days to the *Cercle* d'Abomey[149], and described 'many young palm groves' at the westernmost of these villages, Avégame:

> *'On rencontre autour d'Avégamé beaucoup de jeunes palmeraies; les fruits n'en sont pas récoltés. Les indigènes abattent les palmiers quand ils ont 5 ou 6 ans pour en extraire du vin.'* (Rapport mensuel Cercle d'Abomey Octobre 1905, ANB Porto-Novo)

Most palms at Avégame probably grew in the valley of the Sahoua[150] and were exploited on the inhabitants' own account, for these had come as free men from Bè before 1700 (5.3.1, Table 5.1). They tapped and most likely sold palm wine, and might have made some oil with the help of the water of the Sahoua. It is however unlikely that they felled their palms as young as the colonial administration believed (5-6 years in the case of Avégame, 10-15 years in a report about the Adja in 1904 quoted below), except for thinning. Oil palms yield next to no wine before the age of 7; the best wine yields are obtained from palms of 20-25 years[151]. But if the palms were planted as dense as those that de l'Albeca saw they grew only slowly and must have looked younger than they were.

The colonial report of 1903 mentioned above (in the section on palm wine) affirms that the Adja 'cultivated' the oil palms that they felled for wine. Another report, written in 1904, adds that they planted them; they did not only fell wild palms:

> *'Chez les Adjas à l'ouest de la Colonie on plante aussi l'Elaïs guinéensis mais les indigènes de cette région ne font ces plantations, souvent importantes, que pour receuillir le vin de palme lorsque l'arbre atteint 10 à 15 ans; il ne s'occupent pas ou peu des fruits.'* (Service de culture rapport annuel Dahomey 1904, AOM Aix-en-Provence)

In the centre and east of the Ehwe-Adja plateau grew around 1900 not only the oil palms of slaves who had to render palm products to the Fon, but also a few belonging to free Adja families whom I interviewed. However, until 1920 palm grove owners in the centre and east seem to have remained a minority. Of 15 free Ehwe-Adja families whose crop- and fallow histories since the beginning of the 20th century I studied, of whom 11 in the centre and east[152], only two had oil palm groves before 1920. (Eight of these families had land on the red plateau soils[153] that are most suitable for palm fruit production, and the seven others, including the two with palm groves, had most of their land on the slightly lower grey soils[154]). To understand free Ehwe-Adja cultivation in the early 20th century I present here the cases of the two oil palm growing families, Henyon and Dɛngbɛnɛn, based on interviews and my own observation.

Both oil palm growers were young farmers with small children, not lineage heads as the first Fon oil palm owners. They or their father had settled in the area in the second half of

the 19th century, had no large lineages around to which they could have rendered account, and were hence socio-economically fairly independent. The two were neighbours of Asu's and Kpotokan's slaves, and might to some extent have followed the slaves' example to plant palms. But the two freemen planted them denser, probably close to the densities observed by de l'Albeca in the west.

In the first years of the 20th century Henyon and his two small sons in the Djakahoué ward of Atindehouhoué[155] had a mature oil palm grove near the village. Atindehouhoué was situated between Asu's and Kpotokan's slave-villages, but Henyon's father had come as free Adja from Adjahonme in the second half of the 19th century. Around the first decade of the 20th century Henyon's palms 'occupied the land' (*ede xo nyigban*)[156], which is the Adja expression for dense oil palm groves with a closed canopy where is not enough space and light for the cultivation of annual crops. Hence Henyon left the land under his palms fallow, moved 3 km to the northeast to farm on some unoccupied land at Lagbahome, and settled there with his sons Kiki (born 1880-1895) and Kudukui (born 1890-1900) and his two daughters. Having but little land at Lagbahome they cultivated only annual crops there until about 1933-35. Once in a while Henyon visited his palm grove at Atindehouhoué, harvested ripe bunches, and gave the fruit to his wife and daughters to make oil. The palms did not yield much fruit because they were planted densely and encroached by bush. The little oil was left after home consumption was sold on Henyon's account. His wife sold the kernels on her own account. Henyon and his sons had no other occupation besides farming. Around the time of Henyon's death in the late 1920s the family felled their palms at Atindehouhoué, tapped and sold the wine[157], and left the plot fallow for a few more years to allow the roots of the palms to decompose.

Around 1930-33 Henyon's sons Kiki and Kudukui cleared a plot under bush fallow near Lagbahome and divided it among themselves. From 1934 onwards they gradually also cleared the Atindehouhoué fallow. On each cleared plot they planted annual crops and after three years oil palms, helped by their sons. They continued to cultivate annual crops between their palms during six years. Then also these palms occupied the land because they were planted densely, and were left fallow. Kiki and Kudukui each harvested palm fruit from his own plot, and gave it to his own wives for consumption and to make and sell oil on his own account. From the later 1940s onwards both Kiki and Kudukui gradually felled some of their palms to create space for annual crops. At Lagbahome they felled whole plots at the same time; at Atindehouhoué they gradually thinned the plantation until 'only' 240 palms per hectare were left. In 1963 they also felled these last palms. Each of them tapped the wine of his own palms, distilled it and sold the distillate (*sodabi*) on his own account. On each plot that was cleared of palms, new ones were planted three years later.

Kiki and Kudukui's sons continued this regime. They sharecropped additional land from large landowners in Atindehouhoué and cultivated tomatoes for the Klouékanme market there. They each sold the palm fruit and *sodabi* of their own palms, only Kudukui's son Fiogbe sacrificed small parts of it to his personal *Fá* and his personal *vodun*. He did so inconspicuously in the privacy of his hut, with nobody present to observe[158] or to take part in the feast. (Own observations and interviews in Lagbahome with Fiogbe Kudukui, a.o. 19-7-1990; Marsaye Kiki, a.o. 13-6-1990; Idrisu Kiki, a.o. 15-6-1990; Kedalo Kiki, a.o. 16-6-1990)

Dɛngbɛnɛn (born 1830-1875) planted oil palms in Edahoué on the central Adja plateau between Houédogli and Dekime around 1909. His father had come from Tchikpè via

Bozinkpe. Dɛngbɛnɛn himself lived and farmed in Dodohoé in the valley of the rivers Mono and Klikou ca. 9 km northwest of Tado during some years before he finally settled in Edahoué at the end of the 19th century (see 5.3.2). The nearest hamlets around Edahoué were those of Asu's slaves, who produced palm oil for Abomey. Dɛngbɛnɛn cleared a 'forest' at a place called *gbedumɛ* ('among spear grass')[159] around 1906 or a few years later. After three years of cultivating maize in the first and beans in the second season he planted the first oil palms there. He continued to grow annual and bi-annual crops (maize, cowpeas, lima beans, pigeon peas, sweet potatoes and once cotton[160]) between these palms during seven years. Then the palm grove was left fallow during about 10-15 years, after which the palms were felled to tap wine. Around 1930 Dɛngbɛnɛn and his sons planted the land again with annuals and this time also with some coffee, and after three years with oil palms. Coffee was introduced to the Adja plateau in 1924[161] and expanded only very slowly among Adja farmers; Dɛngbɛnɛn was one of the very few Ehwe-Adja who grew it. He and his sons had no other occupation besides farming. (Sonyonu Dɛngbɛnɛn, several interviews in Edahoué in 1990)

From the fact that Henyon and Dɛngbɛnɛn's palms grew so dense that annual crops could no longer be cultivated after six years and the palms did not yield much fruit, I deduce that their density was at least 500-600 palms per hectare. Agronomists recommend 160 oil palms per hectare for optimal fruit production under average conditions (Ferwerda 1981: 5) and this is what the slaves who had to produce palm fruit for Abomey probably did. (On the Abomey plateau oil palm densities came close to the agronomists' recommendations, namely between 91 and 172 palms per hectare in the 1910s[162]). The high palm densities of Henyon, Dɛngbɛnɛn and at long the Tohoun-Athiémé road seem to have been normal for the Ehwe-Adja around 1900. Elderly Ehwe-Adja are convinced that the oil palm groves of their fathers were already denser than those of the Fon, though today many Adja palm groves are denser still. Research by Quenum (1988) and Kater (1993) confirms this.

> "We plant our oil palms densely because we learned this from our fathers. The Fon don't do this because they learned a different system. It is true that we plant even denser than our fathers. This is partly because we feel pity to uproot spontaneous seedlings; only those Adja who lack land uproot or cut their palms." (Madoï Egbo, born around 1940, Zouvou 27-7-1990)

The fact that the Henyon, Dɛngbɛnɛn and (apparently) the Adja at long the Tohoun-Athiémé road planted their palms so densely that they 'occupied the land' after six or seven years and did not yield much palm fruit, indicates that oil production was not their primary goal. The Adja knew that high palm densities are detrimental for the fruit but give a high palm wine yield per hectare and are better for the soil, at least if the palms are allowed to occupy the land during some years. I will come to this ecological advantage in 6.5.3. Dense palm groves in the 19th century might also have served to hide from enemies, and did not invite the Fon to raid palm fruit or oil, for they knew that they would not find much of these. It was difficult to steal large volumes of palm wine for reasons explained in 6.4.5.

The other 13 of the 15 free Ehwe-Adja families whom I interviewed on this matter planted their first oil palms in the 1920s and 1930s. They all planted them on individual fields or on the fields of small households, not on lineage commons – the latter did not exist in my Adja research villages. In this the Ehwe-Adja contrasted from my Fon research families on red soils and river land, who all installed palms on their lineage commons and many also on individual fields in the second half of the 19th century (6.2.1). Also in contrast with the Fon the Ehwe-Adja used only marginal quantities of oil for ritual purposes. In Adja- like

in Fon society however oil palm ownership conferred status, and soon to be a man was to have a palm grove. But why did so few Ehwe-Adja plant oil palms before 1920? And why did they plant them so densely that they could not harvest much fruit?

### *Lack of water to prepare oil on the Ehwe-Adja plateau?*

It has sometimes been argued that water was too scarce to prepare oil on the central and northern parts of the Adja plateau in pre-colonial and early colonial times (for example in the Rapport mensuel Février 1910 poste d'Athiémé, ANB Porto-Novo). The southern Dogbo-Adja had indeed more water and exported more palm oil than the Ehwe-Adja. However, this argument cannot explain why the Ehwe-Adja exported far less palm oil than the Fon (see Table 6.4 in Appendix 6 for an indication of the difference).

The Fon plateau was as arid as the Ehwe-Adja plateau. The majority of the Fon and Ehwe-Adja had to walk long distances to fetch water in distant rivers or dig holes to collect rainwater before the colonial government started to construct wells in the 1920s and 1930s[163]. Administrators described rainwater tanks dug by villagers on the central and north-eastern Fon plateau in 1905-1908, and I saw such old-fashioned unplastered tanks between 1985 and 1991 in some other Ehwe-Adja and Fon villages[164]. Administrators wrote about the region of Houawe that

> '*L'eau fait défaut partout. Les indigènes sont reduits à recueillir les eaux ce pluie dans des puits de 6 à 10 mètres de profondeur.*' (Rapport mensuel Novembre 1905, Cercle d'Abomey), and about the region of Tindji that there was '*pas d'autre eau que celle receuillie par les indigènes dans des sortes de citernes.*' (Cercle d'Abomey 1908, ANB Porto-Novo)

Pierre's testimony about his help with palm oil preparation in the 1920s (quoted above) indicates that the Fon in Lissazounme carried water from as far as the Couffo and Sahè rivers (12-13 km one way) to make oil. In the 19th century they probably did the same. Inhabitants of most other Fon plateau villages had to walk similar distances to rivers or dig rainwater holes. Apparently this did not stop them from producing palm oil for sale.

Ehwe-Adja women walked comparable distances as the Fon to fetch water in rivers surrounding the plateau until the 1920s and 1930s. Those who lived in the centre of the plateau (in the villages Houégame, Atindehouhoué, Dekime, Honsouhoué, Tchankada, Gbeko etc.) carried water from the river Kpako, about 8-15 km west of these villages[165]. The Adja of Zouvou went to the rivers Tokanme and Couffo, about 10-12 km northeast and east, until a well was dug in Klouékanme in 1922 (Sohungbe, born around 1900, Zouvou 27-7-1990). Asu's slaves lived 12-15 km from the Kpako but this did not keep them from preparing palm oil for Abomey in the time of Glele (see 6.3.2)[166].

The Adja at long the Tohoun-Athiémé road and at Avégame lived near rivers, were not far from the port of Ounkémé, and had plenty of oil palms. There was also nothing that prevented the Ehwe-Adja to dig more rainwater holes. Hence, lack of water can hardly have been the reason why the Ehwe-Adja sold less palm oil than the Fon.

Asked why they did not plant palms at the Fon densities and produce as much oil as the Fon, one Adja explained that this would be at the expense of maize production: "You cannot be satisfied by drinking only oil. If you plant oil palms in the way the Fon do you will not harvest enough maize." In Adja eyes, subsistence production was more important than oil production for the market. At present as in the past an Adja's primary goal is to be self sufficient in maize. The Fon in contrast, since 1850 if not before, did not mind acquiring

maize on the Adja plateau and to produce themselves commodities like palm oil, pottery, groundnuts and iron instruments instead (6.4). What was the connection between styles of oil palm management and maize yields? I will first discuss Fon styles of oil palm and vegetation management (section 6.5.2) and then the same for the Adja (section 6.5.3).

### 6.5.2 Clean weeding, a Fon strategy to prevent bush fires in palm plantations

During the dry seasons Fon hunters set fire to the tall grasses to drive game into a corner, also in other people's fallows. Burning to start game was probably an ancient practice of the 'Gedevi', who seem to have subsisted to a large extent on hunting, fishing and gathering until about 1600 (see 4.1.2)[167]. Hunting by fire was common practice on the Fon plateau in the later 19th and throughout the 20th century. In 1895 also the Fon enclaves Atakpame and Bedjrovi in South Togo were known for it, which suggests that Ewe and Adja hunters between Abomey and Atakpame burned less[168]. In 1906 on the Abomey plateau:

> *'Les indigènes allument des feux de brousse autant pour préparer leurs terrains de culture que pour chasser. A chaque instant ces feux se communiquent à des cases. C'est ainsi qu'au courant de janvier les villages d'Aladaho, Sogan, Za-Hála, ont été entièrement détruits. A Mougnon, trois groupes de cases ont été brûlées, à Ountondji, 2; à Ouaoué, 1; Lènseli, 6; Sinhoué, 2.'* (Rapport mensuel Janvier 1906 Cercle d'Abomey, ANB Porto-Novo)

The Fon on the Abomey plateau planted their oil palms in densities that permitted enough sunlight to penetrate for grasses to grow, namely between 91 and 172 trees per hectare in the 1910s[169]. The development of herbaceous fallow vegetation was further stimulated by the Fon's tillage techniques in oil palm groves. The Fon, aware that tillage benefits palm fruit yields, ridged the soil under their palms intensively, preferably annually. Deep tillage, especially in combination with frequent bush fires, inhibits the installation of woody fallow vegetation and favours grasses.

Bush fires were a problem for the Fon's palm oil business because oil palms do not stand fire. If the undergrowth of oil palms burns, their trunk risks to be damaged, and if the palms survive this, it reduces their yield in the coming years. Naturally oil palms do not occur in ecozones dominated by tall grasses, nor are they frequently cultivated with such undergrowth; their natural habitat is forest-savannah mosaic.

Not only Fon oil palm cultivators but also the colonial administrators of Abomey considered bush fires in oil palm groves to be a problem. Therefore the early colonial government issued a decree to forbid the lighting of fires in oil palm plantations.

> *'L'Administrateur (…) est allé passer quelques jours dans le canton de Tindji. (…) Il a constaté combien les indigènes prennent peu de soin de leurs plantations de palmiers. Les feux de brousse les abîment considérablement; les petits palmiers sont presque partout brûlés.'* (Rapport mensuel Février 1907 Cercle d'Abomey, ANB Porto-Novo)

> *'Le palmier à huile qui constitue la principale richesse de la Colonie a été l'objet d'un arrêté spécial en date du 28 Février 1909. Cet arrêté interdit rigoureusement d'incendier des herbes et broussailles sur pieds dans toutes les palmeraies et rend pécuniairement responsables les indigènes auteurs du feu.'* (Rapport d'ensemble Dahomey 1909, Service de l'agriculture, 14 Mi 1651 série 2G 9-16, AOM Aix-en-Provence)

The early administrators seem to have believed that the owners of the palms themselves lit the fires, thereby showing a lack of care for their plantations. But Fon oil palm owners had no influence on hunters who set fires.

Because of the fire-risk the Fon developed very peculiar tillage-, cropping- and fallow patterns in oil palm plantations. These patterns prevented fire damage to oil palms but impoverished the fallow vegetation and the soil. Indirectly, these practices were also detrimental for the productivity of the oil palms. Oil palm fruit yields are adversely affected by poor soil organic matter contents. In tropical soils, and in particular in the Nitisols of the Fon- and Adja plateaux, organic matter contents depend on vegetation cover or on green manuring. Therefore, soils under oil palms should be kept under vegetation cover. 'Clean weeding' must be avoided by all means (Comhaire 1968:41-42). Most Fon however, at present as in the past, keep their oil palm plantations free of weeds even if they do not cultivate any other crops in them in order to prevent fires. They argue that bush fires are in the short run worse than clean weeding because of the destruction of Nitrogen and the damage done to the palms by the fire.

Fon farmers developed two main strategies to eliminate fire prone grasses in their palm groves. The first is annual clearance of the grasses, the second permanent cropping. If no annual crops are cultivated under the palms the farmer clears the grass in the whole plantation every year before the onset of the dry season. In case of labour shortage he clears a circle of 2-3 meters around each palm. This was already common practice in the beginning of the 20th century and probably before[170]. The slain grass was left to cover the soil, in this position it was less likely to be burnt by hunters. This annual slashing suppressed the installation of woody species, already unlikely because of ridge cultivation, even more. Therefore, even if Fon oil palm plantations are not cropped the vegetation is only of poor quality.

Many Fon preferred to have their oil palm groves permanently cropped rather than to leave them to herbaceous fallow, and this not (always) because of land scarcity, for example Hunon in section 8.2. Through continuous cropping they first avoided the annual work of slashing the fallow vegetation. Second, Fon farmers say that ridging stimulates the production of palm fruit. Sowing the ridges with annual crops is considered to be little more work compared to the labour intensive slashing and ridging that is done anyhow. Therefore they regarded their land to be improved through continuous cultivation, at least initially. Not only palm groves near villages and on communal land were cultivated permanently, but also many individual plantations at greater distance from villages. In 1918 administrators observed that oil palm groves near Abomey were cultivated so intensively with annual crops that they contained hardly any fallow anymore, while land without palms was only cropped for 2-3 years and then left fallow for up to 10-15 years[171]. The practice to cultivate primarily in palm groves continued throughout the 20th century as shown by aerial photographs of 1954 and 1983, also by Fon who own fallow land elsewhere[172]. Those who are unable or unwilling to cultivate their groves themselves with the help of family- or wage labour, lend them out to strangers without asking anything in return; they hope at best for a gift of a few kilos of grain after each good harvest, which may be years in between if the soil is as poor as most soils around Lissazounme, as the cases in section 8.2 illustrate[173].

Fon plateau land is never rented out for money or a fixed share of the harvest, and if it is sold, this occurs almost exclusively with the purpose to build houses or plant fruit trees, or sometimes oil palms or timber, on it as a title deed and as a future asset. The latter is mostly done buy urban dwellers (for example my Fon interpreter in Bohicon and people from Kana who lived in Cotonou), who almost always lend the land under their trees to local cultivators to guard the land and trees against fires and against claims from others by planting annual crops; these urban dwellers do not expect any gifts of annual crops at all. Fon farmers who

lend out the land under their trees take the exportation of nutrients through the cultivation of annuals for granted.

This is remarkable, for on the other South Béninese plateaux land has become a commodity that is rarely lent out free of charge except sometimes to relatives and agnates[174]. Den Ouden (1986:24-25, 35, 42, 53-54; 1990), Lof (1987), Hinlopen (1986), Wartena (1987: 102-103), Biaou (1991, 1992, 1994:23, 1995), Fanou (1992:69-70), Dedehouanou (2003: 63-66) and Edja (2001) show that the commoditisation of land progressed rapidly among the Adja during the 20th century, who now stand out in South Bénin for their well developed market for farmland. If an Adja lends or rents out land he also prefers to grant a plot with oil palms, but this is to mark his property rights and – if the palms are planted at the usual Adja density – to make sure that the tenant will have to leave after a few years when the palms become too dense (section 8.3, Fanou 1992:136-137, Dedehouanou 2003:65), not to prevent bush fires.

Many elderly Fon and Adja farmers told me which species they found in their fields during different stages of the field's life, which gave me insight into interactions between management practices and vegetation succession. The methodology that I used to assess historical vegetation is described in section 3.2.9. These field histories clearly show the gradual replacement of woody species by grasses in permanently cropped Fon palm groves, and (in section 6.5.3) the rotational succession of herbs and shrubs in dense Adja palm groves.

The Fon Tobada, according to his great-great-grandsons Hunon and Danon, found shrubs and some grasses on the land that was allocated to him when he came to Lissazounme in the time of king Kpengla (1774-1789). Before his arrival, the land would have been cultivated by Adja and then by the Fon Sakla (see 5.2.2 and 6.2.1). All Tobada's fields were between 500 m and 2 km from the village. Hunon and Danon said:

> "Our father told us that Tobada found the following species on his land at Tosso around **1780**, in their order of importance:
> *Kpassa (Adansonia digitata,* tree)
> *Fan (Andropogon gayanus,* grass)
> *Sɛ (Imperata cylindrica,* grass)
> *Agla (Albizia zygia,* tree)
> *Xwɛnsin (Morinda lucida,* shrub)
> *Gbafla (Phyllantus discoideus,* shrub)
> *Ganganlisɛ (Paullinia pinnata* or *Bysocarpus coccineus,* shrub)
> *Ayadaha (Uvaria chamae,* shrub)
> *Honsukwekwe (Bridelia ferruginea* or *B. micrantha,* shrub)
> *Lɛtun (Holarrhena floribunda,* shrub)
> *Xɛtin (Zanthoxylum zanthoxyloides,* shrub),
> and some spontaneous oil palms."

From the mid-19th century onwards the Tobada brothers systematically planted oil palms and sold palm oil. During the first half of the 20th century eight Tobada 'brothers' (who farmed together) used to grow annual crops during four years, followed by one year fallow. At least on the Tosso field they cultivated permanently from about the Second World War onwards. Gradually the number of shrubs and trees declined first in favour of tall grasses, then of small grasses and herbs, and gradually all species became smaller and thinner. Hunon and Danon remember that they saw the following species in their father's fields, in their order of importance:

**1910s**

| Tosso field | Abime field | Vijinavo field |
|---|---|---|
| *Imperata cylindrica (*grass) | *Imperata cylindrica* | *Andropogon gayanus* |
| *Andropogon gayanus* (grass) | *Andropogon gayanus* | *Hymenocardia acida* (shrub) |
| *Paullinia pinnata* or *Byrsocarpus coccineus* (shrubs) | '*Agbakan'* (liana) | *Securinega virosa* |
| *Annona senegalensis* (shrub) | *Parkia biglobosa* (tree) | *Paullinia pinnata* or *Byrsocarpus coccineus* |
| *Lonchocarpus sericeus* (shrub) | *Paullinia pinnata* or *Byrsocarpus coccineus* | |
| | *Ficus capensis* (shrub) | |
| | *Daniella oliveri* (shrub) | |
| | *Anogeissus leiocarpus* | |
| | *Securinega virosa* (shrub) | |
| | *Newbouldia laevis* (shrub) | |

**1990**

| Tosso field | Abime field | Vijinavo field |
|---|---|---|
| *Imperata cylindrica* | *Imperata cylindrica* | *Digitaria spp*. (small grass) |
| *Digitaria spp*. (small grass) | *Digitaria spp*. (small grass) | *Daniella oliveri* |
| *Cyperus esculentus* (grass) | | '*Wotobiun*' (grass) |
| *Commelina diffusa* (herb) | | |
| *Sida acuta* (herb) | | |
| '*Wui*' *(Solanum nigrum?)* | | |

(Hunon and Danon Tobada, Lisazounme 30-5-1990)
(See Table 6.10 for the Fon names of these species)

Ahovi came to Lissazounme in 1894 and appropriated 6 hectare with oil palms near the village. Since this was not much land, he and his sons cultivated it almost permanently. According to his son Boniface, in 1914 and 1990 the 'weeds' under Ahovi's palms were, in their order of importance:

| **1914** | **1990** |
|---|---|
| *Andropogon gayanus* | *Andropogon gayanus* |
| *Digitaria spp*. | *Digitaria spp*. (small grass) |
| *Bridelia ferruginea* or *B. micrantha* | *Imperata cylindrica* |
| *Byrsocarpus coccineus* or *Paullinia pinnata* (shrub) | *Cyperus esculentus* (small grass) |
| *Phyllantus discoideus* (shrub) | *Ipomoea involuncrata* (herb) |
| *Lecaniodiscus cupanioides* (shrub) | |
| *Holarrhena floribunda* (shrub) | |
| *Imperata cylindrica* | |
| *Ipomoea involuncrata* (herb) | |
| *Parkia biglobosa* (tree) | |
| *Irvingia gabonensis* (tree) | |
| *Albizia zygia* (shrub) | |
| *Securinega virosa* (shrub) | |
| *Annona senegalensis* (shrub) | |
| *Zanthoxylum zanthoxyloides* (shrub) | |
| *Daniella oliveri* (savannah tree/shrub) | |

Therefore, to prevent bush fires and to raise palm fruit yields, crops are often sown even if the soil is so poor that these annuals will yield almost nothing, as is often the case in the centre of the plateau. But even there the palms still yield some fruit. Adjinacou (1987) calls this Fon oil palm management style the 'palmeraie Aboméenne' because of its close connection to values inherited from the Abomean kings which I described in section 6.2.

### 6.5.3 Adja 'wine' palm fallows

The Adja's dense oil palm plantations and their tillage techniques favoured the development of woody fallow vegetation, suppressed grasses, and prevented the occurrence of bush fires. In 4.1 and 5.3 I argue that the Adja practised slash and burn agriculture with minimal tillage since ancient times, and in 9.2 that they continue to till minimally until today. There I also explain Adja land preparation and weeding practices, and how their superficial tillage and controlled burning techniques encouraged the regrowth of young vigorous forest- and savannah trees, especially of those that do not stand repeated burning but do support to be cut back regularly. The principal fallow species on the Adja plateau became *Mallotus oppositifolius, Uvaria chamae, Zanthoxylos zanthoxyloides, Antiaris africana, Dialium guineense, Dracaena arborea* and *Dichrostachys glomerata*. Also the spots classified by the Adja as *zohuji* ('on the fire', land covered with fire-prone grasses when first cultivated, see 4.2) seem to have become more wooded. Under these conditions, bush fires had little chance on the Adja plateau. Here I will argue that the Adja's 'wine' palm management style further countered savannisation of their plateau. The palm groves of Dɛngbɛnɛn, Soton, Marsaye and Idrisu in Appendix 6 may serve as illustrations.

Dɛngbɛnɛn cleared a 'forest' at a place called *gbedumɛ* around 1906 as mentioned in section 6.5.1, planted the first oil palms there around 1909, let the palm grove fallow from 1916, felled the palms towards 1926, and cleared the bush undergrowth in 1930. The second oil palm grove was established around 1933, left fallow from 1939, felled around 1950, and the bush undergrowth cleared in 1953. The third grove was planted towards 1956, left fallow from 1963, and felled together with the bush around 1970. Dɛngbɛnɛn's son Sonyonu cultivated the land permanently and did not plant many oil palms anymore between 1970 and 1990. Hence from 1906 to 1970 cultivation periods of roughly 10 years were followed by oil palm fallow periods of 7-14 years. Sonyonu tried to name the species that he cleared and weeded at the end of each fallow- and cultivation period in their order of importance. On the basis of own observations and his father's testimony he also listed the species cleared in the 'forest' around 1906. Apparently there grew neither *Imperata cylindrica* nor other grasses in 1906 (anymore) but mainly trees, shrubs and liana's even though the place was called *gbedumɛ*. According to his memory, small grasses and herbs dominated the fallow vegetation at the end of each cultivation period. But each time woody species became dominant again after the oil palms 'occupied the land' for some years, see Table 6.6 in Appendix 6.

Soton and Tonu were born around 1880 and 1890 respectively as sons of the Ehwe-Adja big man Atindehu in the centre of the plateau (see sections 8.1.3 and 8.3). In 1900 the French appointed Atindehu chef de village. In the 1910s Soton and Tonu were already independent and had their own fields, situated between 300 m and 3 km from the village. Soton and Tonu each divided their own land into two parts and alternated between them. Soton used to cultivate each plot during roughly 10 years and then left it fallow for about 10 years. Tonu used to cultivate during 3-8 years and let the field rest during 6-12 years, depending on its fertility. They both planted yams in the first year and maize and cowpeas in the subsequent years after clearance. Tonu also planted a little cassava between the maize and protected semi-spontaneous tomatoes and capsicum peppers in the field. Though they classified the soils of their village-nearest fields as *zohuji*, the fallow of Soton's field around 1920 consisted mainly in shrubs, trees and some grasses according to his son Tchikpato (see Table 6.7 in Appendix 6) and the fallow in Tonu's field around 1925 mainly in edible herbs and some trees[175]. Soton and Tonu both planted their first oil palms around 1924,

assisted by their sons. They both cultivated annual crops between the palms during the first 6 years, let the palms (and spontaneous vegetation) occupy the land when the first palm fruits started to appear from 1930-31, felled the palms around 1942 and immediately planted new ones, which they felled again around 1961. Then they waited until about 1970 to plant new palms. Soton pruned them severely and cultivated between them until 1990, but Tonu let them under oil palm fallow in the 1980s. The semi-spontaneous vegetation in their groves followed the same cyclical pattern. It consisted mainly in small herbs before and mainly in shrubs after each oil palm fallow period, as can be seen from Table 6.7. (Several interviews with Tchikpato Soton and Fantoji Tonu and observations in their palm groves, Atindehouhoué 1985-1991.)

The Adja's dense style of planting oil palms further helped to suppress grasses and bush fires. From at least the late 19th century onwards Adja oil palms were planted so densely that the crowns touched each other by the age of 6-7, in Adja words *ede xo nyigban* ('the oil palms occupy the land'). This implied that the shade of the palms quenched grasses and did not allow bush fires to occur. The experience of Sonyonu Dɛngbɛnɛn and many other farmers has shown that Adja fields where grasses such as *Imperata cylindrica, Brachiaria deflexa, Cyperaceae* and *Digitaria spp*. grew after prolonged cultivation became free of grass again after a few years under *ede xo nyigban*.

Since bush fires did not occur in dense oil palm plantations, the Adja did not fear to leave their palm groves fallow. Since (at least) the early 20th century most Adja adopted similar rotations with oil palms as Henyon and Dɛngbɛnɛn. About three years after clearance the first palms were planted, 600-1000 trees per hectare. With such palm densities, annual crops can normally only be cultivated during the first six to seven years after planting the trees[176]. This period with annual crops is called *bogbudi* (field with oil palms). At the age of seven or eight (six years after transplanting) the palms enter into production and the farmer lets the plantation rest[177]. This is called *dekan* (oil palm secondary bush) or *ede xo nyigban*. The farmer does not till the soil in the *dekan* anymore, only once in three years he clears (with a cutlass) the natural vegetation between the palms in the *dekan* in order to facilitate the harvesting of the palm fruit; some few farmers do this every year. He leaves the clippings to cover the soil and to decompose. This permits woody species to grow. Farmers' experience has shown that soils that were cultivated continuously for 30-40 years, but tilled only superficially in the Adja style, still contain roots of trees and shrubs that regenerate under *dekan* within a few years (own survey 1990). At the age of about 20 years the palms are felled to tap wine. This wine or (since 1920)[178] its distillate is sold and provides a bulk sum of money to the farmer. Then the plot is preferably left under bush fallow for 1-3 more years to allow the trunk and the roots of the palms to decompose, and then planted again with annual crops, and (after some years) again with oil palms. Gradually Adja palm plantations tended to become denser still; during the 20th century densities of 1000-1600 palms, sometimes up to 2000 palms per hectare became more and more common[179].

Yields show that under *dekan* the soil restores its fertility to a certain degree. Average maize yields are considerably higher during 5-12 years[180] after clearing oil palms, especially in the second year[181]. Quenum (1988:120) measured higher maize yields in Adja fields after very dense palm groves than after relatively 'loose' groves during the first 3 years after felling[182]. Kater (1993:18) attributes this to the greater number of palms leaving roots and litter behind. Adja farmers claim that this litter can raise the fertility of the soil to a higher level than it had in its 'original' state, and add that the fertilising effect depends on the

number of years that the *dekan* has remained undisturbed. Adja farmers' priority was to be self-sufficient in maize and yams. Adja farmers believe that their own oil palm management style permits them to produce more maize than the Fon style does, due to the periodical regeneration of the fallow vegetation and of the soil fertility in the Adja style.

> "You cannot be satisfied by drinking only oil. If you plant oil palms in the way the Fon do you will not harvest enough maize." (An Adja farmer in Atindehouhoué, 1990)

The Adja's wine palm groves constituted not only an ecological but also a financial reserve. Mature palms when felled yielded a guaranteed amount of wine that could be sold at a good price. Felling palms thus provided a substantial sum at once to the owner. Adja farmers used their palm groves as 'savings accounts' for major expenditures or to meet unexpected cash needs.

Later in the 20th century Adja farmers with little land developed various strategies to stretch the cultivation periods of annual crops. Some plant their palms at relatively low densities and prune rigorously in order to have more space for food crops, others plant in extremely high densities and fell some trees every few years to have a regular income from palm wine and to allow the remaining palms to grow[183]. But no matter how little land an Adja farmer has he always tries to plant some oil palms on it and to let the palms and bush fallow 'occupy the land' for a period that is long enough to quench grasses and to allow shrubs and trees to grow. Kerkdijk's (1991: appendix E) interpretation of aerial photographs of the Adja plateau in 1956/57, compared with my own interpretation of similar photographs of 1986, suggest that the area under oil palm 'fallow' increased during this 30 year interval. My own interpretation of the same photos of 1956/57 however suggests that there was a decline in area but an increase in density of oil palm 'fallows' between 1956 and 1986 (see aerial photograph interpretation maps at the end of this thesis). Fifteen years later, Edja (2001:5) still signals that on the Adja plateau, 'land under food crops is constantly being encroached upon by palm groves. An increasing proportion of land, which is controlled by the elders, is tied up in palm production, used for distilling local alcohol …' This trend is contrary to Zeven's prediction that oil palms give way to food crops when human population densities increase. In all Adja styles, also in those of poor farmers who cannot afford long oil palm 'fallows', we observe a shift from oil to wine production, because fruit yields are more severely affected by pruning and high densities than wine yields. The Adja argue that 'The oil palm is our wealth' (Brouwers 1991), but surely this wealth is more in their wine and in their soil improving and status-conferring capacities than in their oil.

The Adja's 'wine palm' management style was not only remarkable because farmers deprived themselves of palm fruit that they could have harvested, but all the more because palm wine production was forbidden between 1909 and 1960[184]. The colonial government was never in favour of the Adja's 'wine palm' management style, for several reasons. First they feared that it would inhibit oil exports and the Adja's commoditisation. Second they thought that the felling of oil palms might cause the extinction of the species in the Adja region[185]. Third they considered oil palm fallows and 'wine' palm stands to be technologically backward and economically irrational. Fourth they worried that alcohol abuse would cause fights and accidents. Perhaps a reduction of tax income from alcohol imports was also dreaded. A decree was issued in 1909 to forbid the felling of oil palms, with the exception of old and unproductive ones and for the thinning of plantations that were 'too dense'[186]. Soon after it was launched 'numerous' inhabitants of the *Cercle* d'Athiémé were punished for violating the interdiction[187]. The otherwise so timid *chefs de village* of this *cercle* im-

mediately demanded the abolition of the decree. 500 farmers who lived not far from the administration marched upon the *commandant*'s compound to repeat this wish and to demand the liberation of a colleague who was imprisoned for felling oil palms.

> '*Profitant de leur présence à Athiémé, les chefs ont demandé au nom de leurs administrés l'intervention du Chef de Post auprès de l'Administrateur Commandant de Cercle, pour obtenir la permission d'abattre tous les palmiers qui, dans les plantations, gênent, par leur densité, la venue des plus robustes, seuls destinés à être conservés. Ils prétextent que l'obligation qui leur est faite par l'arrêté du 28 Février 1909 de venir demander une autorisation chaque fois qu'ils désirent abattre un palmier les arrête trop souvent dans leurs travaux.*
>
> *Deux jours après, le nommé Capo, du village d'Agbobada*[188]*, était puni de prison pour infraction à cet arrêté. Le lendemain de son incarcération, de nombreux indigènes du Canton d'Athiémé vinrent devant le poste pour protester contre cette incarcération. Le surlendemain, 500 manifestants environ, tam-tams et clochettes en tête, pénétraient dans la cour de la Résidence après y avoir été autorisés et priaient le chef de Poste de leur accorder la libération de Capo puis après avoir renouvelé les désiderata exprimés précédemment par leurs chefs (…) ils s'éloignèrent.'* (Rapport mensuel Juillet 1909 poste d'Athiémé, ANB Porto-Novo).

In spite of the interdiction to fell oil palms between 1909 and 1960 the Adja continued to do so. Local Adja *chefs* were often palm wine producers themselves and hardly ever denounced people who felled palms[189]. On the contrary, between 1920 and 1990 they gradually increased their oil palm planting densities, shifting more and more from oil to wine production. Now they mostly plant 1000 to 1600, sometimes up to 2000 palms per hectare. If also land without oil palms is taken into account, I estimate on the basis of aerial photographs that the Adja plateau's average oil palm density was about 300-700 palms per hectare in 1956/57 and about 500 palms per hectare in 1986 (see aerial photograph interpretation maps at the end of this thesis). This is much more than agronomists deem possible; the oil palm experts Zeven (1967:52-54) and Hartley (1988:13-17) think that the maximum is ca. 200 oil palms per hectare, and that oil palm density becomes lower than that when the human population density rises beyond 250 inhabitants per hectare due to a growing need for staple food crops. The Adja plateau had about 250 inhabitants per hectare in 1986 (Table 9.1); nevertheless the Adja fared well by their 'wine' palms. Their monetary returns from palm products (wine, oil and kernels) were comparable to the Fon's returns from oil and kernels (Wartena 1999), and their maize production and the quality of their fallows and soils were kept at much higher levels than the Fon's. For the Adja, who valued self-sufficiency in maize, this was more important than oil sales.

### 6.5.4 Creolisation of oil palm styles in the mid-20th century

Fon and Adja live close enough to each other to learn from each other. Did they do so? The Adja know the Abomean oil palm management style but reject it, as I have shown above. Most Fon on the red plateau soils around the ancient royal town of Abomey stick to their inherited values regarding oil palms: common property regimes, religious sanctions against individual men who plant trees, and – also for those individually owned palms which do exist – strong opposition against the felling of oil palms, even of old and unproductive ones. With this they cannot adopt the Adja 'wine' palm management style; besides they argue that their soils have become so poor that young palms (planted in the Adja way) would take too long to mature and that hence they prefer to keep their old ones (own interviews).

Some individual Fon who live alongside the Adja on the north-eastern Adja plateau, and some individual Fon on the fringes of their own plateau, developed intermediate styles by

creolising Abomean oil palm and Adja wine palm styles. Some younger Fon men in the frontier zone plant palms at the intermediate densities of 300-1000 palms per hectare and fell them to tap wine, but at an older felling age than the Adja do. Many private plantations on the south-western part of the Fon plateau start with 600-1000 palms/ha, but these are thinned (and tapped for wine) before maturity, to keep 300-500 palms/ha who enter fruit production. The farmer cultivates annuals on ridges between the palms almost permanently, alternated by short fallows consisting of tall grasses, because he argues that ridging benefits palm fruit yield. The remaining palms are felled between the age of 25 and 40 and the cycle begins again. A variation on this pattern, adopted by many Fon on the eastern Adja plateau, is to fell every year the least productive palms and to replace them almost immediately by young ones, so that the age of the plantation remains variable and the density constant at around 500-600 palms of all ages per ha. Fon farmers on the south-eastern slopes of the Abomey plateau, whose grey and pebble soils are less suitable for oil yields than the red plateau soils, plant palms at densities of up to 1200 palms/ha, fell some of them at the age of 15-16 and the rest at 20-25 years (own interviews; Adjinacou 1987:71-76, 88-89). The Fon in the frontier area say that they do not want to follow the Adja styles in their entirety because they yields so little oil, and label the Adja as drunkards. They themselves want wine and oil, and opt therefore for intermediate densities, continuous ridge cultivation, and higher felling ages. What is more, they neither introduced the Adja wine palm styles nor their own 'creole' styles to the central Fon plateau, in spite of the fact that most Fon on the north-eastern Adja plateau visit their villages of origin regularly, many of them have land on both plateaux, and some of them return to the Fon plateau in older age. Nor did these individual Fon in the frontier zone introduce Adja styles or creole styles to the communal oil palm plantations of their own lineages. All communal Fon palm groves, also those on the edges of the Fon plateau, are managed according to the 'traditional' Abomean style; there the inherited objections against killing palms prevail.

### 6.6 Discussion and conclusion

From 1840 onwards the Fon and the Adja had in principle the same opportunities to produce palm products for export. If styles of making a living were only determined by economic and technological possibilities, Fon and Adja styles should have become similar. The case studies presented in this chapter indicate that this was not the case.

Our findings enable us to critically reflect upon commoditisation as a compulsory process, or as an 'economic necessity' from which farmers would have no escape as it is described by commoditisation theory. This chapter has shown that Fon and Adja, though they had similar economic opportunities, followed different trajectories of commoditisation. Commoditisation was not a linear process; some Fon and Adja who used to exchange food against non-food items on the eastern Adja plateau decommoditised when Fon appropriated Adja land and started to grow food for their own subsistence. And even though the involvement of most Fon and Adja in local and global markets increased after 1840, Fon and Adja styles of making a living did not become similar. Though their physical distance to external markets were the same, the same commodities were demanded there, and the colonial government stimulated them to produce the same crops, they neither sold the same products nor engaged in the same non-agrarian income generating activities. In particular, from 1850 onwards the Fon produced and sold more palm oil and groundnuts than the Adja, until the 930s also more cotton, and engaged more in interregional trade, while the Adja sold more maize, beans and

palm wine. Fon women derived cash incomes from palm oil production and trade, Adja women more from gleaning palm kernels. Also women's farming on their own account rose during this period, first among the Fon and later also among the Adja.

Reasons for these divergences were the Fon and Adja's different livelihood goals. Contrary to Bernstein (1977/1982, 1986) and Gibbon & Neocosmos' (1985) assumption that the simple commodity producer's goal is reproduction, Fon commodity producers, using family and slave labour, were also motivated by short-term monetary profit maximisation, even if this made them dependent on food imports from, amongst others, the Adja. The Adja, though also producing some commodities, were more motivated by security of reproduction. Fon and Adja livelihood goals were not only material but also to socio-cultural ones. During the palm oil boom, new sources of income and status emerged, whose impact on Fon and Adja values seems to persist until today. For the Fon, starting with their lineage heads and slave-holding elites but rapidly trickling down to all adult Fon on the plateau, these new sources were mainly palm oil production and (inter)local trade, while for the Adja it was food crop farming also for sale to the Fon. In this chapter I argued that the Fon and Adja elite's success in acquiring status symbols through these different activities encouraged the common members of each language group to imitate the own elite's styles. For a long time, these vertical social network ties contributed at least as much to the development of divergent styles of making a living and styles of oil palm management than market opportunities and than horizontal ties between the neighbouring groups, which corresponds with Hofstee's (1985) findings and with Bourdieu's (1979) theory. During the 20$^{th}$ century however, neighbourly network relationships between Fon and Adja led to some creolisation of oil palm management styles among some individual Fon in the frontier zone.

Among the Fon in the beginning most oil palms belonged to lineage heads and members of the Fon upper class. Fon lineage heads sold large amounts of palm oil and –kernels, but had to spend part of the income on lineage rituals, to reward the women who made the oil, and for the bridewealth of their male dependents. Contrary to what is often assumed in the literature on Dahomey's pre-colonial palm oil trade however, the role of the Fon elite in the development of this export industry was more in setting an example than in producing and trading all the oil herself. Soon most Fon men and also many slaves from a certain age onwards were allowed to plant and exploit their own oil palms, and most Fon women were able to manufacture and sell some palm oil on their own account. The palm oil production styles of the Fon elite, but also new roles which oil palms acquired in Fon lineage rituals and beliefs were important Fon motivations to produce oil collectively. Rites such as those surrounding the *palmier du nombril*, the sacralisation of the oil palm under king Gezo, and taboos against injuring palms inhibited their felling. All these were incentives for common Fon to plant palms according to the elite's communal oil palm management styles. Fon palm oil commodity production started palm groves which were the common property of whole lineages, which shows that collective ownership may well allow simple commodity production if, as is usually the case, the distribution of the produce from common property resources is regulated in one way or another. This shows that Kahn (1978:113-114) errs in stating that individual ownership of means of production is a condition for commodity production, and also that commoditisation theory errs in assuming that commodity production leads to the frittering of productive units. Fon palm oil sales also challenge the view found in both commoditisation and commercialisation approaches that 'traditional values' such as kinship loyalties, ascription and religious value orientations would inhibit market incorporation (see 2.3.1). It was precisely the loyalty to the lineage, to its ascribed head, to

the ancestors, the *vodun*, and to other cultural and religious values that motivated the Fon to produce commodities for them.

The literature also errs in assuming that the Fon upper class, or even the king alone, would have controlled the whole palm oil commodity chain. From the beginning of palm oil exports through Béninese ports the largest part of the traded palm oil was produced and sold by common men and women on their own account.

Most Fon women from the second half of the 19h century onwards had own cash incomes through palm fruit processing or – especially in the proximity of towns – through petty trade, and some – especially in rural areas – through growing crops for sale on their own account. Cultivating women however also had to grow some crops for own consumption and women with own incomes had to purchase some sauce ingredients, which implies that Fon men withdrew to some extent from subsistence responsibilities.

Wealthy Fon employed slaves in oil palm- and food crop farming, so that the involvement of slaves and women in Fon agriculture seems to have increased in the second half of the 19th century. Farm work therefore retained its low status in Fon society. Combined with this, non-agrarian activities also remained important elements of Fon styles of making a living during the palm oil boom. Several of my research lineages continued to derive income from priestly activities. An increasing number of Fon men and women, also some slaves, engaged in local and interregional trades. Many Fon before and after 1840 were craftsmen, though there were some shifts in types of crafts.

Since at least the 1840s the Fon used to import maize and other staples from the Adja plateau because their own plateau did not produce enough food crops anymore, due to their own preference for palm oil and non-agrarian production. The Fon's style of oil palm management further impoverished both the spontaneous (fallow) vegetation and the land, which was detrimental for maize production. Oil palms and groundnuts however still thrived relatively well under these conditions. Some Fon appropriated Adja plateau land and grew their own food crops there. Subsistence agriculture was, according to Fon standards, relatively most important in the styles of making a living of this last group.

The Fon and Adja cases challenge common views on the role of States and taxation in the commoditisation of African livelihoods. Contrary to what is often assumed about pre-colonial Danhomɛ, taxes were no major reason for Fon farmers to plant palms. My research indicates that there was no strict obligation to render palm oil tributes, except for some slaves. The pre-colonial Adja who sold food crops were even less compelled by a State or taxation to do so. This falsifies Bernstein's (1977/1982) statement that pre-colonial African economies were 'natural' and produced only for subsistence, and that taxation was needed to oblige Africans to produce for sale. Rather, the Fon and Adja were motivated by their own elite's styles and the prospect to purchase prestige goods on the market through the sale of commodities.

Not all commodities were however grown on communal land. Junior Fon men obtained their own palm groves, Fon and to a lesser extent Adja women acquired their own palm oil and kernel business and other trades, and some obtained their own farms, where they worked with their own dependents. They did not acquire these means of production on the market, but received them as gifts or loans from their families or produced them themselves. Therefore, some privatisation of means of production occurred – alongside some communal commodity production with communal means – which resulted in the emergence of some small units of production even without dependence on the market on the input side. In this regard the developments on the Fon and Adja plateaux are better described by commercialisation than

by commoditisation theories. The Fon and Adja cases also show that Friedmann's (1980) definition of individualisation as the increased mobilisation of means of production through competitive market relations in replacement of social ties does not satisfy. I will come to some 20th century problems with the individualisation concept in Chapter 10.

The Fon's priority during the palm oil boom besides status considerations was to maximise immediate cash returns, irrespective of risks involved. Palm oil and -kernel sales were very profitable between 1840 and 1920. 'The oil palm is a source of wealth' became a Fon slogan that is still used today. They took the risk to specialise in palm oil and -kernel production and non-agrarian activities, to become dependent on food imports, and to manage their oil palms in ways which raised palm fruit yields in the short run but threatened the ecological environment and food crop yields in the long run. In the Fon oil palm management style the quality of the fallow vegetation and of soil fertility declined. Oil palms and groundnuts still thrived well under those conditions, but maize and other food crops did not.

The Adja show the following picture. Security remained their primary goal throughout the period from 1840 to 1920. This included physical security from human aggression, food security, and long term ecological and financial security. During the second half of the 19th century Fon invasions on the Adja plateau increased rather than declined. Danhomeans raided slaves, food, palm fruit and -oil, and appropriated land. To avoid this, the Adja continued to hide in inconspicuous houses in small villages surrounded by bush and by dense palm groves. Many Adja, especially those in the East, fled to safer areas. The Adja avoided travelling beyond their plateau except in westward direction. They refrained from dangerous long distance trade with the (north)-east and south. Other causes and at the same time results were that they had no trade capital and no trade networks and -knowledge there. Subsistence agriculture remained the primary activity of Adja men. It was each farmer's priority and pride to be self-sufficient in yams and maize. Only when the maize and yam harvest was assured the Adja planted other crops, especially food crops such as cowpea, pigeon pea and cassava. Also palm fruit was mainly harvested for own consumption. Only in the third place a few Adja grew commodities such as cotton, after 1917 castor bean, and sold some palm wine and -oil.

This does not mean that Adjaland between 1840 and 1920 should be classified as subsistence economy, but only that subsistence agriculture was the Adja's priority. They were not principally opposed to commodity production as long as it did not interfere with their primary (subsistence) production goal. They only sold what fitted in well with subsistence agriculture; consequently their commodities differed from those of the Fon. They mainly sold (staple) foods, especially maize, yams and beans, planted in the first place for food security, but sold if their harvest exceeded consumption needs. Still today Adja farmers only want to sell their maize when the maize harvest of the first rainy season of the next year is within reach[190] as I will show in Chapters 7 and 8. Also the small amounts of palm oil and -kernels that the Adja sold was rarely from palms planted with the intention to sell oil, but rather a surplus left after consumption needs were met.

If Adja farmers grew oil palms they managed them in ways that served the interests of ecological sustainability and of food crop production, at the expense of palm fruit yields. Bush fallow between palms and soil fertility were periodically restored. Non-agrarian income generating activities remained rare among the Adja until 1920, especially among Adja men. Palm wine trade is mentioned in several accounts as the only trade in which male Adja engaged.

Adja women engaged a little bit more in non-agricultural activities than their men. Several of these activities were commercial, but mostly remained small scale. Some Adja women earned monetary incomes from pottery, from making maize- and cowpea snacks and *flefi* spices for sale, from gleaning palm nuts and selling the kernels, and the like. As among the Fon, also Adja women with own cash incomes had to spend part of it on sauce ingredients and could buy clothes, jewellery and kitchen utensils with the rest.

Adja agriculture, in contrast with Fon agriculture, remained essentially free men's work. Adja women only helped with burning, sowing and harvesting, and the Adja did not have many slaves. Concomitant with this among the Adja the status of farming remained higher than among the Fon. The French image that the Adja were little involved in markets was probably partly inspired by the European blindness for food- and palm wine sales.

My analysis has shown that we cannot apply a single label to the Fon and Adja economies during the palm oil boom. They produced commodities but without dependent on markets for the acquisition of their means of production, as commoditisation theory thinks that they should do, except that some Fon had to purchase food. At the same time, socio-cultural values remained strong in spite of their involvement in markets. Some Fon and a few Adja also used some slave labour, and some had profit maximisation motives, which in orthodox Marxist terms belongs to feudal and capitalist economies respectively, and would be absent from simple commodity producing economies. Be this as it may, I do agree with Hopkins (1973:124-166) and Law (1977a:574, 576) that commodity production and -exchange among small scale Fon farmers increased considerably after 1840. The era of palm oil exports brought a significant change for them. But in contrast to what Hopkins (1973) thinks this did not trigger the commercialisation of Fon land, and hardly of Fon labour, before 1920. Adja food crop sales to hungry Fon show that commoditisation processes were not only driven by European but also by internal demand.

## Notes

1 Small quantities of West African palm oil were imported into Britain since at least 1588, but only at the end of the 18th century these quantities started to increase (Lynn 1997:12).
2 The earlier dates are given by Lynn (1997:22) and – for Régis – Soumonni (1979:58) and Manning (1982:51), the later ones by Law (1977a:571).
3 In the 1830s, new techniques for bleaching palm oil and for manufacturing stearic candles encouraged the use of palm oil in soap and candles. In the 1840s glycerine, a by-product of palm oil, began to be used extensively in medicine (Lynn 1997:29-30).
4 In regions where oil palms are present in the natural vegetation, agriculture usually creates an ecological environment that is more suitable for the development of oil palms (Vandereyst 1919; Hartley 1988:13).
5 Forbes (1851 I: 35, 111); Law (1977a:574-575); Luning (1986:30). Le Herissé (1911:86-87) and Herskovits (1938 I: 115-116) describe palm oil taxes as if they were levied from all oil palms in Danhomɛ. The last two authors must be taken with caution, for they derived their information from upper class informants, mainly princes (section 3.3.1), who tried to convince the colonial government (in which Le Herissé occupied a high position) that the royal family used to have large privileges that should be maintained.
6 See 5.1.5 for a fuller discussion of Coquery-Vidrovitch's (1971) thesis and my critique on it for the slave trading period.
7 Economics of scale existed, at best, in oil transportation to the coast (Lynn 1997:58).
8 Forbes (1851 I: 114-115, 123), Skertchly (1874:52, 89, 272). None of them gives the exact size of a plantation.
9 Law leans for this on Skertchly (1874:52, 89, 272), who describes a royal plantation near Allada.

10 Public Record Office, London: FO. 84/893, T.G. Forbes to H.W. Bruce, 18 Jan. 1852; FO. 84/886, 'Journal of Proceedings of My Visit to Abomey', entry for 13 Jan. 1852; FO. 84/886, L. Fraser, Occurrences, Gossip &c. at Whydah', entry for 16 Feb. 1852. Quoted in Law 1977a:575.
11 Chevalier (1983:160-164), Van der Ploeg (1980:71, 77, 79-80, 82-83; 1986:37-40, 48-50) and many others agree with such approach.
12 The latter especially on the Fon plateau itself, according to some of my Adja informants living in a Fon village on the eastern Adja plateau (Denis and Nicholas Adogan and the latter's mother, Kplakatagon 4-1-1991).
13 Or, according to Herskovits (1938 II: 250), under another tree if no oil palm was available; this probably applied only to the savannah area north of the plateau.
14 Rapport mensuel Cercle d'Abomey Octobre 1905, ANB; Rapport annuel service de culture Dahomey 1904, ANB; Rapport mensuel Poste d'Athiémé Juillet 1909, ANB Porto-Novo.
15 See myths of origin of the Adja markets Kisame, A*f*igame and Klouékanme in section 5.2.4 of this thesis and Rapport mensuel Poste de Parahoué Septembre 1905, ANB Porto-Novo.
16 Norris (1789/1968:83-84). Dalzel (1793/1967:119-120) has copied this part of Norris' diaries as if they were his own.
17 After that their stem becomes tall and bare and one can hardly speak of a thicket anymore.
18 I could not identify the exact location of Leflefun, but Burton's (1893/1966:171) description suggests that it was half way Kana and Abomey.
19 *Sols ferralitiques faiblement désaturés appauvris modaux sur sédiment meuble argilo-sableux.*
20 Soils with pebbles and grey soils (*Sols ferralitiques faiblement désaturés appauvris modaux sur matériau argilo-sableux remanié et grès sur sédiment crétacé*), with a lower water retention capacity than the red soils. Palms don't yield much fruit on the grey and pebble soils.
21 In the *régions* Ouémé, Lele, Mougnon, Douime, Tosota, Tovigome, Tindji, Pozoun, Fonkpame, Djoho, Ouaoué (Houawe), Zizonme (Zounzonme), Zanza, Zoumbo (Zoungbo), Kinta, Ouansougon and Akiza.
22 Literally 'fence-near field'.
23 Oil was sacrificed and also sold to purchase sacrificial animals and drinks. Rites and ceremonies were amongst others the *hwetanu* or *ahanbiba* (annual sacrifice to the ancestors), the *teđuđu* (sacrifice of yam first fruits), twin- and rain rituals, enstoolment ceremonies of *daa*. In 1990 only few palms remained on the *hɛnuaïkungban* of Tobada and on those of Lisanon (see next case), so the *daa* collected money for rites from individual lineage members.
24 Most Fon lineages manage these 'fence-near fields' as lineage commons.
25 Most *vodunsi* were women. According to Laure Lisanon (born 1966) the *Lisasi* in the 20th century worked mainly inside the *vodunkpamɛ* and did not farm the priests' fields, but they might well have fetched water, prepared palm oil and cracked palm kernels. Nevertheless, given the facts that Adja *vodunshi* in training and Ewe *trocosi* did and do farm for their priest, and that Fon *vodunsi* were in the past not always secluded but could visit the market freely (French 1997:4; Herskovits 1938 II: 182), I assume that the image of non-farming *vodunsi* was rather an anachronism or a modern ideal than historical reality. According to Herskovits (1938 II:177) also the *vodunsi*'s relatives tilled the priest's fields. (See also 5.2.3).
26 Already Ajalala's father Lisakpeze would have served at Gezo's court in the position of *kpamegan* (counselor, narrator of dynastic history).
27 He continued: "I gave daddy my profits and he clothed me and paid the bridewealth for my first wife. Two other healers of Gnidjazoun and me were friends of the famous healer and *vodunon* Sohunme of Lissazounme. I used to go to Sohunme to manufacture *bo* (magic charms) and to exchange them with him. But none of us was member of Awinon healer's association. Then I became a Jehovah's Witness and I lost my interest in healing."
28 Alfred Agblonon, member of Mawuhwe lineage (Cotonou-Gbegamey 22-3-1990). It was probably always so.
29 Alfred Agblonon, Cotonou-Gbegamey 22-3-1990.
30 Gbese, interview Gnidjazoun 23-2-1989.
31 *Hɛnugan* means head of a *hɛnu* (lineage). *Daa* means head of an *hɛnu* or a *hwedo* (lineage branch, compound). Since the title *daa* includes the *hɛnugan* I will speak of *daa* whenever both *hɛnu-* and *hwedo* heads are meant.

32 Villages in the proximity of the former Fon capital Abomey tend to be conservative as far as cultural practices from kingdom times are concerned, a phenomenon which is also observed in other African kingdoms.
33 He seems to have been *daa* of a *hwedo* (= compound, lineage branch, sometimes translated as 'house').
34 The ritual involves sacrificing a goat, sheep or pig. Own research (a.o. Atindehouhoué 21-9-1990); Feil (1991:309)
35 Own research; Adjinacou (1987:32).
36 Own interviews and observations 1989-91; Adjinacou 1987:31, 41. It was especially my observations on how the land and palms around villages were collectively managed in 1989 and 1990 which convinced me that the Fon's testimony about their lineage oil palm plantations in the past was trustworthy. I observed oil being used for rituals, people asking their *daa* for use-rights in part of the commons, how one lineage in Abomey sued their *daa* for selling lineage oil palms (testimony of Simplice Vodouhè). *Daa* Abihunje and his prospective successor Bernardin in Kana-Dodome paid taxes to the State for the whole inhabited *hɛnuaïkungban*, and Bernardin was prevented to build a church on the piece of the commons which bordered his own house by the other (animist) elders of his lineage. (Bernardin Abihunje, Kana-Dodome September 1989).
37 Simplice Gnagle gave a similar testimony: "Today the *daa* have hardly any personal gain from the *hɛnudeju* anymore. There is rarely anything left after paying the rituals." (Gnidjazoun 9-11-1990).
38 See Biaou (1994:22) on Fon and Ayizo fears of their ancestors' revenge in case of sale of ancestral land.
39 Direct exchange of women between two families, without bridewealth, became stigmatised as a backward practice of *nukanmenu* (see 5.4) among the Fon. Cross cousin marriages, which implied that a woman was returned a generation later, remained very popular, but were accompanied by bridewealth payments.
40 By Elwert (1973) and myself.
41 Ahovi was dismissed from being *chef* in 1913 (Wartena 2001:246).
42 Vagueness in economic relations was and is general practice in Danhomɛ. This applied for gifts to chiefs of the land (see Chapters 4 and 5), for gifts that Fon priests were expected to give to the king (see 5.2.3), and for gifts by the king to his officers (for example his warlords). There were no tax rates and no fixed salaries, only an obligation to give gifts. The king's gifts were interpreted as an act of kindness of the king rather than as payment for a service. The state's relationship with the Danhomeans remained therefore redistributive even if money was often involved.
Modern rulers and businessmen in Bénin seem to use the same methods as the former king. They cut formally contracted wages and tell their employees that they can't give more because of the economic recession. Beninese employees accept or even prefer this, as long as they can expect that the boss will help them beyond the formal salary in better times. Also my own research assistants preferred to have such a redistributive relationship with me. They did not mind if I paid them too late if I first had to go to Cotonou to collect money, and in one case lent me the money for the fare. But on other occasions they hoped that I would lend them money before payment day. Compare also Le Herissé (1911:82-83).
43 Lombard (1967a:74). Le Herissé (1911:55) thinks that this applied for children of two slave parents as well as for children of a slave mother and a free father, though the latter would share on the same base in their father's inheritance with their half-brothers of free mothers, while de former did not. Obichere (1983) contradicts himself on this point. On page 194 he argues that the children of slaves were slaves, on page 199 that they automatically became [free] citizens of Dahomey, and on page 197 that the children of a slave mother and a free father were free. The account of Gbotan's descendant in 6.3.2 supports that the children of a Fon master and his slave concubine were equal members of the family. The case of Tutujason's slave Nakenchi in 5.2.3 suggests that the children of a slave father and a free Fon mother could be absorbed into the lineage of the slave's master (in this case also their mother's lineage) and inherit land there, but that this did not happen automatically but was negotiated between the master, his free sons, and the slave and/or his free wife (the master's daughter). Also the descendants of Asu's male slaves became members of Asu's lineage; Asu was a Mahi who adopted Ehwe-Adja identity (see 5.3.3).

44 The soils around the kings' palaces in Kana were only marginally suitable for palm oil production, except for the river valleys. The royal slaves at Kana produced mainly food crops (own research in Kana).
45 See 5.2.2 on the origins of Sahè.
46 Rapport mensuel Août 1905 cercle d'Abomey ANB Porto-Novo; Le Herissé (1911:52).
47 Obichere (1983:191) repeats all these villages except Driridzé and Kpinkpandou. Adjahi Baï (1976) confounds Afomaï and the 'nearby Kinkpandan'.
48 Own fieldwork; Rapport mensuel Août 1905 cercle d'Abomey ANB Porto-Novo.
49 Adjahi Baï (1976).
50 Edja (2001:2).
51 King Glele.
52 See quotation in 5.2.3.
53 Everywhere else the colonial government allowed slaves to leave their masters. Those who choose to stay became tenants or family members.
54 This tribute in palm oil to the princes was higher than what 'tenants' on non-royal Fon plateau land used to give. Cultivators who 'borrowed' a plot of Fon plateau land used to give a few kg of its produce, vaguely related to the fertility of the soil, as a 'voluntary' gift to the owner. Though the soils at *Kufokpa* were quite fertile, the level of the 'rent' for them and its compulsory nature were exceptional on the Fon plateau.
55 Tax in kind, see 5.2.3 and 6.2.2.
56 According to a Fon account from Klouékanme the Adja Danji gave his land with meagre spear grass (*Imperata cylindrica*) to the Fon slave Gbotan. A third account by a descendant of Gbotan holds that Gbotan came of his own free will (Avohuinon Gbotan, Sahè 12-11-1990).
57 The Sahwè live near Bopa in the southern Mono.
58 Interviews with several Adja and Fon in the region (amongst others the Adja Paul Démè from Gnizoume, Porto-Novo 28-11-1988, the Adja Sohungbe (born around 1900), Zouvou 25-5-1990, and the Fon Martin Djènkè, Klouékanme-Djenkehoué 8-1-1991).
59 *Andropogon gayanus*.
60 *Panicum maximum*.
61 Interviews with Sohungbe (Zouvou 1-10-1990); many other informants agree with him.
62 See 5.2.4 for a myth on Gbotan's palm wine trade.
63 Tohosige Avohuinon from the family Gbotan owned too much land to farm it with his own family. Therefore he lent out land to Alinon Agbado. He the family history of Agbado and his son Alinon: At the end of the 19th century, Agbado at Tanta was a farmer and tailor, just like several other members of his lineage. He married a wife from Sahè. Around 1926 their only son was born, Alinon. As a boy Alinon helped his father on the field and learned tailoring from him. Alinon also earned some money with basketry and digging water tanks. He gave this money to his father Agbado, who paid the bridewealth for Alinon's first wife. Alinon settled at Tola in the Mono province as a tailor. When he saw that the soil is fertile there he borrowed a plot and farmed it. After 18 years Alinon in Tola settled with his mother in her village Sahè because of family responsibilities. His mother obtained a plot of almost 1.4 ha in Sahè, but it was covered with oil palms and too poor for Alinon to cultivate annuals in it. Hence he borrowed a field of almost 2 ha from Tohosige Avohuinon.
64 Slave. See 5.3.2 for a more detailed discussion of this concept.
65 Villages in the 'sectors' Ahassomé and Petchikoé in the valley of the river Klikou west of Tado.
66 A *deto* is a pit of about 50 cm deep and 1 m x 2 m wide, plastered with clay and/or stones.
67 Own interviews with Linsi Avohuinon from Sahè (16-11-1990), Valerie Lisanon from Agonly in the extreme east (16-10-1990), and with many Adja; Laarakker (1989:26; 1990:62)
68 It is possible that the owner of the palms harvested his fruit in other years and/or that he finally felled the palms and extracted their wine.
69 Palm fruit only falls by itself when the red pericarp (flesh) has become overripe or has decomposed.
70 According to Desanti (1945:153) all Dahomean women had the right to glean and crack palm kernels and to sell them on their own account.
71 Shells produced very hot fires and were the preferred fuel of Fon blacksmiths (Ederveen 1990).

72 "In my childhood it was permitted to glean fallen palm fruit and -kernels in other peoples' palm groves, but today you are considered a thief if you do this. Some women here in Sahè-Abigo and Sahè-Loukpè keep the kernels but give all the oil to their husband if he gives them palm fruit to transform." (Linsi Avohuinon, woman born around 1936, Sahè-Abigo 16-11-1990)

73 Own interviews, amongst others with Germain Tobada, Lissazounme 14-11-1990.

74 The colonial government constructed a well in Lissazounme in 1924 (Rapport mensuel Abomey Décembre 1923, Archives Abomey).

75 Two men and two women among the 16 Fon in Lissazounme whose activities I surveyed during one year (see time allocation survey in section 3.2.10) worked on a regular basis in palm oil preparation. They were a wealthy man, his third wife, his poor brother who produced some palm oil on his own account and pounded for others for a wage, and their wealthy sister in law. I also observed who worked for them. Palm fruit pounding labour from 1-4-1990 to 1-4-1991 was done as follows:
- For the wealthy sister in law: once by herself in a mortar, 63 times by male wage labourers.
- For the third wife: once by herself, 5 times by her 19 year old son (unpaid), 18 times by male wage labourers.
- For the wealthy man: once by his 19 year old son (unpaid), twice by his poor brother (probably for wages).
- The poor brother worked 36 times for wages for others (30 times for the three persons mentioned above, and 6 times for other women), and 12 times 'for himself', but probably some of these 12 times were in reality also for wages for others.
- When the sister in law was younger and stronger and not yet as wealthy, she pounded her palm fruit herself according to her daughter (Lissazounme 14-4-1990). Guillou (1987:216) observed male wage labourers pounding palm fruit with the feet in the Ouémé province in the village Mitro.

76 In Sahè-Abigo and Lissazounme I met many Fon who used to farm on the Adja plateau part time. Inhabitants of Sahè, for example Doha Zinflou (Sahè, 19-6-1990) claimed that most families in their village have some Adja plateau land: "Almost all inhabitants of Sahè have fields behind the Couffo."

77 About 90-170 palms per hectare; see the discussion on oil palm densities in 6.4 and 6.5.

78 The *chef de village* Godjo, father of the speaker, was not necessarily the first Godjo (from the times of Glele); he might have been his son or younger brother. *Daa* Godjo was a title that passed from the first family head to his successors. In 1966-67 Godjo Zanha was *chef de village* of Sahè-Abigo according to a colonial report (Remises aux chefs de villages sur le produit de la taxe civique 1967, Archives Abomey). See 5.2.3 on farm labour for *chef de village* Godjo to be exempted from labour to the colonial government, and 6.3.2 on palm oil tributes to him.

79 Also Pierre Ahovi from Lissazounme acquired land at Lanta. His mother would have purchased it for him in the early 1940s. In the 1970s or 1980s the Adja would have confiscated his field because he did not cultivate it anymore, according to his daughter. However I believe that Pierre, living in poverty in those days, might have sold the land (Wartena 2001). See also section 8.1.2 on Fon abandoning their Adja plateau fields.

80 But at the end of 1989 the Adja who had originally granted the 'more than 40 ha' in Lanta to Kandiko and to other strangers claimed their land back. The matter was brought to court, but a solution was not reached. The people were told not to farm the land until the issue would be settled, and Norbert went to farm in Dassa. (Norbert Segbeji, Lissazounme 21-6-1990, and several conversations with his sons and brothers).

81 I assume this because Zinflou descends from the *aïnon* (chief of the land) of Sahè and Aladasi belongs to the *akò* Guduvi Adjalenu, a Fon clan of Adja descent. Sahè was an Adja village before Akaba conquered it. After his conquest many of its Adja inhabitants adopted Fon identity, see 5.2.2.

82 In the 1920s or 1930s her adolescent son used to grow ca. 0.1 ha of maize and a few beans and groundnuts which he gave to his mother for home consumption and for sale on his account. (Daa Aladasi, born 1900-1913, Sahè 18-10-1990)

83 *Kerstingiella geocarpa*.

84 Especially the sacrifices to the lineage ancestors (see 5.2.3).

85 Ayonu Amajivo: "We had a fertile field behind the Couffo, and a camp in the field there. My parents told me that before I was born there was no bridge over the Couffo, and sometimes they came to the Couffo and saw that the water level was too high and hence had to return home. All the soils on the other side of the Couffo were 'always' more fertile than those on the Abomey plateau, so we carried

agricultural products from there to Sahè. When I was a girl [the 1910s] I often carried loads over the Couffo bridge; this was in the time of *chef* Fiogbé." (Ayonu Amajivo Lisanon, Lissazounme 16-10-1989). The bridge was built in 1906, Fiogbé died in 1922.

86 Interviews 22+29-9-1989, 16-10-1989 and 18-12-1990 with Amajivo's daughter Ayonu (born around 1905), 15-8-1990 and 18-10-1990 with his son Daa Aladasi (born 1900-1913) and the latter's wives and children, and observations among Aladasi lineage in Sahè.

87 In this way they maintained family ties and their claims on Fon plateau land.

88 Rapport mensuel Juin 1907 Cercle d'Abomey, ANB Porto-Novo. Herskovits' (1938 I:56) description of a typical market woman in 1931 suggests that commodity flows were still the same in that year: 'Thus a woman of Abomey may take pots to the market at Adja and there buy maize, returning home with the maize the same night to sell it the next day in the Abomey market.'

89 This export bounty was promised by the following decree:

*'Attendu que le cercle d'Athiémé produit en abondance les graines et végétaux nécessaires à la nourriture des indigènes, mais que par suite de l'insouciance des populations qui jusqu'à ce jour, n'ont pas su pratiquer le commerce d'échanges, cette richesse est inutilisée; qu'une grande partie des terres cultivables n'est pas mise en valeur et que, cependant, une quantité importante des produits du sol demeure perdue, à chaque saison, par suite du manque de consommateurs;*

*Considérant que la région autour d'Athiémé n'est pas encore suffisamment pénétrée par notre influence et que meilleur moyen d'assurer cette pénétration paraît être d'établir des relations commerciales entre les habitants de cette partie de la Colonie et ceux qui sont déjà en contact avec notre civilisation;*

*Attendu que les indigènes de la côte et notamment ceux du Cercle de Grand-Popo, manquent totalement de graines et végétaux comestibles, qu'ils sont obligés d'aller chercher sur des marchés parfois fort éloignés de leurs centres d'habitation et parfois même à l'étranger;*

*Considérant que si l'on parvient à mettre en relations de commerce les indigènes des deux régions d'Athiémé et de Grand-Popo, il en résultera un avantage immédiat pour chacune d'elles et que le commerce de la Colonie en général bénéficiera du nouvel état de choses;*

*Mais, attendu que, pour atteindre ce but, il est nécessaire, au moins dans les premiers temps, de créer un intérêt matériel facilement et immédiatement appréciable par les indigènes, et que ce résultat ne peut être obtenu, en la circonstance, que par l'allocation de primes d'encouragement;*

*Attendu qu'il est possible d'assurer le service de ces primes sans ouverture d'un crédit spécial, en y consacrant le produit des amendes perçues dans les cercles de Grand-Popo et d'Athiémé et qu'il y a lieu d'espérer que l'augmentation des échanges commerciaux amènera une élévation du produit des taxes de consommation;*

*Le Conseil d'administration entendu;*

*Arrête:*

Art: 1.- Tout indigène du cercle d'Athiémé qui apportera sur le marché de Grand-Popo des maïs, ignames, maniocs et tous autres graines ou végétaux comestibles aura droit à une prime de 5 francs par tonne de produits apportés.

*Art: 2.- Cette prime sera payée par l'agent spécial de Grand-Popo sur le vu d'un ordre de payement délivré par l'Administrateur de Grand-Popo, l'arrivée des produits et leurs quantités étant certifiées et vérifiés par les agents du service des Douanes sur les passavants délivrés à l'importateur.*

*Art: 3.- Le Service des primes sera garanti par le produit des amendes perçues dans les cercles de Grand-Popo et d'Athiémé, ce produit étant spécialement affecté à leur payement.*

*Art: 4.- Le Secrétaire Général est chargé de l'exécution du présent arrêté qui sera communiqué, enregistré partout où besoin sera et inséré au Journal officiel de la Colonie.'*

*Porto-Novo, le 29 Août 1900. Signé par le Gouverneur Pascal.*

(Dahomey XIII dossier 5, série géographique, AOM Aix-en-Provence).

The governor motivated this decree with the following words: '*Présentation d'un projet d'Arrêté instituant une prime d'encouragement en faveur des indigènes du Cercle d'Athiémé qui apporteront certains produits sur le marché de Grand Popo. M. le Gouverneur donne quelques explications sur la nécessité d'attirer à nous les indigènes de la région Nord d'Athiémé qui, jusqu'à présent, faute de relations avec la Côte, n'ont pu écouler qu'une très faible partie de leurs produits agricoles. Ces primes ne manqueront pas de provoquer chez les indigènes, une émulation des plus bienfaisantes pour le commerce de Grand Popo et d'Athiémé.*' (Extrait du registre des délibérations du Conseil

d'Administration, séance du 29 Août 1900, Dahomey XIII dossier 5 série géographique, AOM Aix-en-Provence).

90 In that year the administrator of Athiémé proposed to revive the decree to encourage commodity production by the Dogbo-Adja: '*La paresse est leur grand défaut, et s'ils n'aiment guère payer l'impôt, c'est parce que, vivant au jour le jour, ils ne cherchent pas à se procurer de l'argent par de grandes cultures; ils cultivent juste ce qui suffit à leurs besoins ou laissent pourrir sur pied très souvent le surcroît des récoltes. Ne pourrait-on pas les encourager aux cultures en faisant revivre un ancien arrêté relatif à l'attribution de primes aux indigènes qui amèneraient à Grand-Popo les produits du sol nécessaires à l'attribution des habitants de la côte?'* (Rapport mensuel Décembre 1905 Poste d'Athiémé, ANB Porto-Novo).

91 In 1908 Ehwe- and Dogbo-Adja yams were noted on the markets near Athiémé: *'Les marchés de la région voient affluer le maïs et les arachides, dont le prix commence à baisser quelque peu; les ignames des Houés et des Dobos font leur apparition autour d'Athiémé, au prix élevé de 1f25 les cinq tubercules moyens. En prévision du paiement de l'impôt, les gens des glétas* (field in Fon) *s'empressent de troquer des produits sur les marchés afin de réaliser les sommes nécessaires, aussi poulets, moutons, chèvres, maïs etc. donnent lieu, en ce moment, à d'importantes transactions.'* (Rapport mensuel Juillet 1905 Poste administratif d'Athiémé, ANB Porto-Novo).

92 The colonial report mentioning the 1913 maize exports to Togo erroneously states that the 'West' until 1911 never exported any maize: '*Si la frontière Ouest n'a pas produit de Maïs en 1911 et les années précédentes, ce n'est pas que le terrain ne se prête pas à la culture de cette denrée, mais que les indigènes plus indolents que ceux des autres contrées se laissaient vivre, et préféraient pour quelques sous à se procurer une alimentation. En 1913, ce n'est plus ça; non seulement la Côte Ouest a exporté comme je viens le dire 1431 tonnes de Maïs sur ce chiffre figurent 137 tonnes passées au Togo, alors que jusqu'ici c'était le contraire qui se produisait. Toute la partie Ouest comprenant le le (sic) Mono est très riche, on s'en apercevra aisément quand le Chemin de fer de Grand-Popo à Lokossa sera construit.*' (Rapport d'ensemble Dahomey 1913, AOM Aix-en-Provence).

93 French early colonial descriptions of the Adja were opportunistic and loaded with value judgments. They used to label the Mono region, especially the Ehwe-Adja, as backward, lazy, cultivating only little and with bad techniques, but in the context of the famine they called the region *'la plus riche sans contredit dans tout le Dahomey'* (Rapports politiques Dahomey 2ieme trimestre 1910, 14 Mi série 2G 10-23, AOM Aix-en-Provence).

94 Comparing the degree of commoditisation of the Fon and Adja and comparing the Adja-Abomey to the Adja-Ouansougon road, their administrator wrote in 1907: '*L'action des rois du Dahomey puis des Résidents a établi des relations surtout administratives avec les Adjas et a eu pour résultat de faire converger vers Abomey tous leurs sentiers. L'action commerciale, elle, ne partira point d'Abomey mais bien plutôt de Ouasougon comme l'indique un simple regard sur la carte. C'est donc tout un nouveau système de routes à créer.* (…) *La région des Adjas qui dépend d'Abomey a été jusqu'ici fort délaissée. Les habitants cultivent tout juste pour se nourrir. Aucun doute que le commerce en pénétrant chez eux leur créerait des besoins et ne les aiderait à sortir de leur sauvagerie'* (Rapport mensuel Novembre 1907 Cercle d'Abomey, ANB Porto-Novo).

95 The Abomey market was described as important: '*Le marché d'Abomey devient de plus en plus important, le cauris n'a presque plus cours.*' (Rapport commercial et administratif Cercle d'Abomey Juin 1900, Rapport sur la situation agricole dans le Cercle d'Abomey Février - Novembre 1900, ANB Porto-Novo).

96 The speaker started with an account about Gezo's and possibly Glele's early reign that "The Fon did not know how to cultivate. Therefore they came to us for yams. They bartered salt for yams, tobacco for yams, pottery for yams, because they knew how to make pottery. This was before the Fon came to fight against us." (See quotation in 5.2.4).

97 One of the commodities of the Ehwe- and Dogbo-Adja that appeared on the markets near Athiémé, hence Lokossa and Ouédémé, were yams, see footnote just above.

98 This estimation, though based on the genealogy of her descendants, is probably too early. More likely she was born around 1900.

99 Den Ouden (1986; 1990; 1991) studied family histories of Adja entrepreneurs in two 'rich' and one 'poor' southern Adja villages, including Koffi's village that was known for its trade. He found no other important Adja traders, neither male nor female, besides Koffi before 1925.

100 Law (1994:155).

101 Plehn, R. (1895) *Beiträge zur Völkerkunde des Togogebietes*. Phil. Dissertation, Halle (quoted in Pazzi 1979:82, 93) observed this trade in the early 1890s.

102 Alexandre de l'Albeca (1895): Le Dahomey en 1894, *Bulletin de la Société de Géographie*, 7e série, XVI, p. 207 (cited by Law 1994:164).

103 In 1909 the Adja were reported to sell palm wine to Togo (Rapport mensuel poste d'Athiémé Avril 1909, ANB Porto-Novo).

104 Rapport mensuel poste de Parahoué Février 1905, ANB Porto-Novo; Extrait du rapport mensuel cercle du Mono Février 1917, ANB Porto-Novo; Rapport annuel 1918 du service de l'agriculture du Dahomey, AOM Aix-en-Provence).

105 Tohoun belonged to the Colony of Dahomey until 1912, then it was given to Togo (Wartena 1988b: 260). Though Nolténius & Paul argued in 1910 that the transport of cotton to the coast was too expensive, in 1911 they purchased 10 tons of cotton around Tohoun: '*Il y a lieu de signaler l'exportation sur le Togo de 10000 kgs de coton provenant de la région de Tohoun (secteur Parahoué). Ce coton a été acheté par la maison Nolténius et Paul qui l'a expédié sur Sagada.*' (Rapport mensuel Août 1911 poste d'Athiémé, ANB Porto-Novo).

106 Probably Tohoun.

107 Zaffi on the central-eastern Ehwe-Adja plateau consists in several hamlets. One of them was listed among Asu's slave villages by one of my informants, see 5.3.2. Whether the speaker's ancestors were slaves is unclear.

108 One of my informants in Kana claimed that his fellow villagers in the early 20th hid on their ceilings to avoid military recruitment. Whatever the truth might be, the argument that young Fon plateau men were trading on the coast was plausible enough for them to give it as an excuse and for the administrators to believe it. This suggests that young Fon men of the time were known for their long distance trade.

109 '*Les produits ensemencés sont surtout les arachides, le Maïs, qui trouvent un écoulement facile. (…) Dans deux mois, au moment de la récolte des arachides, le commerçant qui viendrait s'établir à Abomey ferait certainement de l'argent. Les habitants réclament une maison de commerce*.' (Rapport commercial et industriel, Abomey Juin 1900, ANB Porto-Novo).

110 French traders introduced a new groundnut variety to the colony in 1897. Next to no farmers adopted it, except for the Fon on the plateau (Meuleman 1990:32). Also one administrator of the *Cercle* d'Abomey encouraged groundnut cultivation, but it is unlikely that the expansion was only due to him: '*Où l'effort des habitants a porté surtout, c'est dans la culture du Maïs et des Arachides. Voyant que l'année dernière plusieurs commerçants étaient venus à Abomey pour acheter cette dernière denrée j'avais conseillé aux Indigènes de la cultiver. (…) Des milliers de sacs d'arachides sont à l'heure actuelle récoltés, beaucoup ont été déjà transportés à la côte. (…) La récolte des palmiers est très importante cette année. Celle du coton laisse un peu à désirer*.' (Rapport commercial et administratif, Novembre 1900 Cercle d'Abomey. Rapport sur la situation agricole dans le Cercle d'Abomey Février - Novembre 1900, ANB Porto-Novo).

111 The Adja had an indigenous cotton variety since at least 1901, when it was observed in the savannah just north to the Adja plateau (Rapport mensuel Parahoué 22 Décembre 1901; Wartena 1988b:97).

112 '*Une autre quantité importante de coton a été utilisée dans les régions d'Abomey, Djougou, Moyen-Niger par les tissages locaux. Une autre quantité a été prise par les caravanes. Partout les surfaces cultivées ont été augmentées*.' (Rapport d'ensemble Dahomey 1926, AOM Aix-en-Provence).

113 In Wartena (1988b:137) I quoted an Adja woman who occasionally dyed and sold cloth in the 1910s and early 1920s. Though I wrote that she wove the cloth herself, this was probably a misunderstanding.

114 The centre of the plateau and the Kana area appeared to be unsuitable for cotton (Rapports mensuels Cercle d'Abomey Février, Mai, Juin & Juillet 1905, Juin 1907, Rapport Cercle d'Abomey 1908, ANB Porto-Novo).

115 About 80% of the cotton seed distributed in 1914 in the *Cercle* d'Abomey went to the northern cantons Dona and Oumbegame. Dona was entirely in the savannah, Oumbegame for about 50% but the seed was probably destined largely for these savannah areas (Rapport mensuel Juin 1914 cercle d'Abomey, ANB Porto-Novo).

116 Certainly Tohoun.

117 See myths in 5.3.3, 6.3.2, 6.4.2 and 6.4.7. Besides that it was impossible for the Fon to profitably export the Adja's wine, in contrast with palm fruit it was also difficult to raid palm wine in the field, for felling a palm was a hard and noisy occupation and extracting wine from it takes several days.

118 Béninese farmers argue that their palms would not survive if they were tapped alive (own interviews).

119 Pre-colonial travellers' accounts mention sales of alcoholic beverages by women in Whydah, Allada and on the Abomey plateau (Bosman 1704/1967:342; Dalzel 1967:120; Dapper 1676 II: 115-116); some Adja women probably did the same. Between the Second World War and the mid-1950s Akuwa and her mother from the Adja village Zouvou purchased palm wine, mixed it with water and sold it on the Klouékanme market. Akuwa used her profits to buy cloth and kitchen utensils to prepare for her marriage, the mother used hers to buy salt and other sauce ingredients and water jars. (Akuwa Gbenaza, born 1935-37, Zouvou 27-9-1990).

120 Among 151 Adja women whose economic activities I studied through interviews with themselves or – especially if the woman was no longer alive – with one of their daughters or sons, only two (mother and daughter) traded palm wine: 'Around 1950 my mother and I traded palm wine. We bought it, diluted it with water and then sold it on the [Klouékanme] market. I spent my profits on cloths and kitchen utensils, my mother spent hers also on sauce ingredients and water jars." (Akuwa Gbenaza, born in Zouvou 1935-37, Zouvou 27-9-1990). The myths of origin of markets might slightly exaggerate the importance of male compared to female palm wine sales in order to credit males for founding the market.

121 Since 1847 German merchants shipped large quantities of cowries – now from Zanzibar rather than the Maldives – to Ouidah, apparently in the deliberate attempt to cause their devaluation. Silver dollars were used in the slave- and pound sterling in the palm oil export trade since the mid-19th century (Manning 1982:47, 55, 75). Although the French banned the use of pound and dollars from 1890 (Manning 1982:157), *pund* and *dola* are still the Fon monetary counting units: 5 francs = *dola dokpo* (one dollar); 10 francs = *dola we* (two dollar); 15 francs = *dola atòn* (three dollar); 20 francs = *dola ɛne* (four dollar); 25 francs = *pund dokpo* (one pound); 30 francs = *pund dokpo dola dokpo* (one pound and one dollar); 35 francs = *pund dokpo dola we* (one pound and two dollar), etc. This suggests that the Fon acquired a large stock of dollars and pound sterling before 1890.

122 '*Si autrefois, l'Indigène ne cultivait que strictement ce qui lui était nécessaire pour subvenir aux besoins de sa famille, il n'en est plus de même aujourd'hui. Les cultures se sont agrandies d'une façon prodigieuse et les régions qui ne possèdent presque pas de palmiers arriveront sans aucune difficulté à payer l'impôt. Le marché d'Abomey devient de plus en plus important, le cauris n'a presque plus cours. Dans deux mois, au moment de la récolte des arachides, le commerçant qui viendrait s'établir à Abomey ferait certainement de l'argent*.' (Rapport commercial et administratif, Juin 1900 Cercle d'Abomey. Rapport sur la situation agricole dans le Cercle d'Abomey Février - Novembre 1900, ANB Porto-Novo).

123 Gosu Djaho, market priest of Azové interviewed by B. Ensing in 1984, is of the opinion that this applied in general for the Azové market (Wartena 1988b:63).

124 Among the informants were Gbono Klabeshi, an Ehwe-Adja woman born around 1901 who traded *akoto, gawu, ɛgblen,* palm oil and hand-woven indigo cloth on the Azové, Klouékanme and Dogbo markets (Wartena 1988b:136-137), and several other Ehwe-Adja.

125 Own interview with Martin Djènkè, Klouékanme-Djenkehwe 8-1-1991.

126 If, as the myth asserts, palm oil and groundnuts were already traded in Lalo while they were not yet sold in Klouékanme, this was probably due to the presence of Fon slaves around Lalo. These slaves had to produce palm oil for their masters, and apparently also sold some of it.

127 Rapport mensuel Poste de Parahoué Novembre 1905, ANB Porto-Novo; Wartena 1988b:98.

128 This was the only port on the Mono river at the level of the Adja plateau. To the south of the Adja plateau palm oil and kernels were embarked in the ports of Tokpli, Medenta, Athiémé, Djonougoui, Adame and Ahoho on the Mono river and Bopa on Lake Aheme. Between 1905 and 1911 these southern embarkations were on average 736 t palm oil and 2015 t palm kernels annually. The road network and local oral testimony suggest that these southern ports handled the commodities of the Dogbo-Adja, Waci, Sahwè, and possibly some products of the (southern) Ehwe-Adja, while the port of Ounkémé handled the goods of the Ehwe-Adja only. If some palm products of the Ehwe-Adja were exported through the southern ports and/or by railway, this probably applied for oil and

kernels to the same degree, hence the conclusion that the Ehwe-Adja specialised relatively more in kernel- compared to oil sales than the Fon remains standing.

129 Given the fact that the populations of the Fon- and Ehwe-Adja plateaux were almost the same and transport costs by waterway probably slightly cheaper than by railway, the shipments and railway transports also suggest that the Ehwe-Adja exported little palm fruit products even though Ounkémé was not their only outlet.

130 Castor beans (according to Ayonu the Europeans called them *kasua* and the Fon *gbogbosokui*) were a commodity of the Ehwe-Adja from 1917 onwards but did not grow well on the Abomey plateau (Wartena 1988b).

131 Desanti (1945:153) also describes palm kernel gleaning as a normal activity of Dahomean women and children in his days.

132 (Fandegla Evo, born around 1900, Gnonfinhoué 25-9-1990). Fandegla's first son, born around 1940, was present at the interview and did not know the lorry; therefore I assume that Fandegla spoke about the 1930s or early 1940s.

133 Some kernels exported by the *cercles* might have been imported from Nigeria instead of produced locally according to the report. Estimated total palm oil and -kernel production by the *Cercles* d'Abomey and d'Athiémé in 1955 was, on the base of controls at checkpoints of the *Service de conditionnement*:

| | Oil | Kernels | Oil/Kernels |
|---|---|---|---|
| Abomey | 8.597 t | 11.101 t | 1,3 |
| Athiémé | 5.148 t | 6.822 t | 1,3 |

Source: Bulletin économique vue d'ensemble Dahomey 1955, Archives Abomey.

134 If all fruit would be transformed into oil and kernels, the kernel/oil rate would be 1.3, see previous note.

135 During my field visits I observed only once an elderly Adja woman doing it (I did however not search for it very actively). In Hoogervorst's (1987:10, 36) sample of 27 Ehwe-Adja women (of whom 10 over 45 years old) none gleaned palm kernels.

136 Many Ehwe-Adja narratives mention 'three years' during the early 1940s as the only time (after 1900) that *chefs* claimed a tribute in palm products. For example: "Essoun and Alofa came and claimed palm kernels, pigs, goats, cocks and palm oil. The white men had sent them to buy these, but they did not pay. They entered the women's huts and fetched all the palm kernels. This happened between 1942 and 1944. In those days many fled to Togo." (Marsaye Hovo, Sodéglahoué 5-10-1990). "During the Second World War our *chef de village* Kɛsɛhunton and our *chef d'arondissement* Lofonsohu (who were under the *chef de canton* Essoun) collected from each household, even from each economically independent married or unmarried man (i.e. a man who farmed in the first place his own rather than his father's field), one *estagnon* palm oil and also palm kernels. The quantity did not depend on the size of the field but had to be 'satisfactory': about one woman's headload." (Nicholas Adogan, Kplakatagon 4-1-1991). During the Second World War the French colonial government obliged each *cercle* to export certain quota of agricultural products (Wartena 1988b:174-175) and established from September 1943 *marchés controlés* to stimulate palm oil exports (Rapport économique Dahomey 1943, Archives Abomey; Lettre du Gouverneur du Dahomey à Monsieur le Président de la chambre de commerce 3 Avril 1944, ANB Porto-Novo; Wartena 1988b:178-179).

137 Germain Tobada, born around 1910, Lissazounme 14-11-1990.

138 In Fon terminology, the 'needs' of a woman's own family comprise financial assistance in times of hardship and financial contributions to funerals. The 'needs' of children are food, clothing, medical expenses, school fees etc.

139 Soon women with an own income were also made responsible for some subsistence expenditures that used to be at the men's charge, especially sauce ingredients, but they could still spend part of their income as they liked.

140 The most common grasses in the plateau ecozone of South Bénin were *Panicum maximum* and *Imperata cylindrica* (Adjanohoun 1989:34).

141 Norris was used to fields under tree cover between Whydah and Allada (Dalzel 1967:2), and seems to have been surprised to see an open landscape on the centre of the Fon plateau.
142 If the plateau soils become very poor the tall grasses tend to be replaced by small herbs such as *Cyperus spp, Digitaria spp, Ipomoea involuncrata, Brachiaria deflexa,* and finally *Striga spp*, see section 9.2.3.
143 This part of the Adja plateau belonged in those days to the *Cercle* d'Abomey.
144 Rapport mensuel Octobre 1905 Cercle d'Abomey, ANB Porto-Novo (quoted in 6.4.2).
145 Adam (1910); Manning (1982:62). In 1903 the 'Dobos' were called '*très riches en palmiers*', apparently compared to the other inhabitants of the *secteur de Parahoué et celui d'Athiémé* (Correspondances des cercles Grand Popo, rapport annuel 1903, ANB Porto-Novo).
146 736 t palm oil and 2015 t palm kernels were embarked, on average, annually between 1905 and 1911 in the inland ports to the south of the Adja plateau, namely the ports of Tokpli, Athiémé, Medenta, Djonougoui, Adame and Ahoho on the river Mono, and in Bopa on lake Aheme. These ports served mainly the Dogbo-Adja, Waci and Sahwè. The embarkations in these southern ports were not only outweighed greatly those in the northern port Ounkémé and in the Fon's railway stations, but also consisted to a much larger proportion in palm oil (compared to kernels), certainly because the southern rivers facilitated oil manufacture. (Rapports mensuels poste d'Athiémé 1905, 1906, 1907, 1910 & 1911, ANB Porto-Novo; Correspondance cercle de Grand-Popo subdivision de Parahoué 1908-1910, ANB Porto-Novo.
147 From Athiémé southward the river Mono was navigable the whole year round, but between Athiémé and Ounkémé only in the rainy season.
148 As also on the eastern Fon plateau oil palms grow better in river valleys.
149 Namely Adjahonme, Avégame, Djotto, Hondjin, Yenawa, Tokanme Aliho and Tokanme Kpodji.
150 In 1990 I saw many palms in the valley near Avégame.
151 And are best if the palm has not been pruned too much (Quenum 1988:142).
152 Of these families, 9 lived on various soil types in the centre (in Atindehouhoué, Lagbahome, Dohodji, Veha) and 2 on red soils in the East (in Zouvou near Klouékanme). The other 4 lived on red soils in Lokogba near Azové, and claim to have planted their first palms in the 1920s and 1930s.
153 *Sols ferralitiques faiblement désaturés appauvris modaux sur sédiment meuble argilo-sableux*, that were more suitable for palm fruit production than the lower grey soils and soils with pebbles, see 6.2.1 and 4.2.1.
154 *Sols ferralitiques faiblement désaturés appauvris modaux sur matériau argilo-sableux remanié et grès sur sédiment crétacé*, that were less suitable for palm fruit but better for palm wine production than the red soils.
155 See 5.3.3 for myths of origin of Atindehouhoué and Djakahoué.
156 Own research; Brouwers (1993:71-72).
157 Need of money for a (palm owner's) funeral was often a reason to fell palms.
158 This contrasts sharply with the Fon's conspicuous rituals. Only a small child, my interpreter and I observed his sacrifice of yam first fruits in 1990.
159 *Imperata cylindrica*. See Table 6.6 in Appendix 6 for the other species which he cleared.
160 The cotton would have been planted in the same year as the young oil palms, probably in 1909 or a few years later, according to Sonyonu Dɛngbɛnɛn (born 1900-1905). Also in 1909 and 1910 the administration experimented with distributing cotton seed from a neighbouring region to some Adja *chefs*, but this was at first not a success (Wartena 1988b:89, 103; see also 6.4.3).
161 From the research station at Niaouli on the Allada plateau (Wartena 1988b:125-126; 197-198).
162 Rapport annuel, Service de l'agriculture et des forêts Dahomey 1918, Archives d'Outre-Mer Aix-en-Provence (In 1990 I measured 80-130 palms of all ages on Fon plateau fields).
163 Groundwater was found at 50-60 m depth from the surface of the plateaux.
164 Tchankada in the centre and Djikpame in the north-west of the Ehwe-Adja plateau, Aoundome in the south east of the Fon plateau. The water of these unplastered tanks is now used for animals and for irrigation.
165 According to testimonies of Asu's great-great-grandson Lofa Sokposu, born around 1917 (Dekime 21-5-1990) and of several elderly women (Anna Bojo Mebonu, born 1910, Gbeko 1-10-1990; Aya Zehu, born around 1925, Tchankada 1-10-1990; Yaba Kandé, born around 1930 in Houégame, and others).

166 It is possible – but not sure – that sometimes, in rainy seasons, there was some water in the – now dry – valley between Honsouhoué and Tchankada before 1900. Sonyonu in the neighbouring village Edahoué thinks that the valley contained water when his grandfather settled there in the later 19th century, but since his own birth around 1900 neither he nor any of my other informants from neighbouring villages ever saw any water there (Sonyonu Dɛngbɛnɛn, Edahoué 29-9-1990, and others).

167 The ancient 'Gedevi', who did not mine iron on their plateau, might also have used fire (instead of iron tools) to clear fields for cultivation.

168 Dier (1895-1896), reviewed in Seige & Liedtke (1990:109) travelled from Little Popo to Atakpame and specifically mentioned hunting by fire in connection with these Fon enclaves. Fon settled in the area after Gezo's victory over Atakpame in 1850 (see 5.2.4 and 5.3.2). In the early 20th century the German colonial government forbade burning (Seige & Liedtke 1990:158).

169 Rapport annuel service de l'agriculture et des forêts Dahomey 1918, Archives Aix-en-Provence. Around 1990 Adjinacou (1987:65, 69, 71) and myself measured about 80-300 palms of all ages per ha on the Abomey plateau.

170 Own interviews; Manning (1980:56).

171 Rapport annuel service de l'agriculture et des forêts Dahomey 1918, Archives Aix-en-Provence.

172 Own research 1989-1991; Adjinacou (1987:66-67, 89).

173 For more fertile Fon land (on the plateau edges), and also for Ayizo and Gun land in the *départements* Atlantique and Ouémé (Biaou 1994:14; 1995:19), non-kin borrowers give a gift after almost every harvest in order to maintain good relations with the landlord, but the latter never sets a minimum volume nor asks questions if no gift is given. However, roughly 10-30 kg of grain per hectare seems to be an appropriate gift for fertile land.

174 Biaou (1994, 1995) and Edja (2001) show that borrowing land in exchange for 'free' gifts has become rare in most plateau villages in the Atlantique and Ouémé provinces, with the exception of land owned and planted with fruit trees by (urban) strangers in some villages in the South and near Allada, which is land out to local farmers in a similar way as on the Fon plateau.

175 According to his son Fantoji in their order of importance *Lactuca taraxicufolia, Talium triangulare, Amarantus spinosus, Corchorus oliturus, Momordica charantia, Portulaca meridiana, Momordica cissoides, Combretum hispidum, Adansonia digitata, Chlorophora excelsa, Bombax costatum, Lecaniodiscus cupanioides, Antiaris africana, Albizia zygia, Mallotus oppositifolius, Securinega virosa, Spondias mombin, Millettia thonningii, Holarrhena floribunda*, wild *Capsicum futescens* or *C. annuum* (chilly pepper), wild *Solanum lycopersicum* (tomato), '*kpafin*' (a shrub) and '*bolo*' (a herb). I refer for the translation to Table 6.10 in the appendix.

176 From the fourth or fifth year onwards the palms already have to be pruned to create space for the crops.

177 Later in the 20th century farmers who lacked land continued to prune their palms for some more years and to cultivate annuals between them.

178 The technique to distil palm wine was introduced to South Bénin during the First World War by Sodabi, a soldier who fought in the war. The distillate was named after him.

179 Densities depend on the farmer's goals: lower if he wants or needs an annual income from oil, higher if he wants to save for a future expenditure (Own research 1989-1991; Quenum 1988).

180 About 5 years according to Quenum (1988), 6 years according to Brouwers (1993:71), 8-12 years according to Dobbelsteijn (1992:21).

181 This is because in the first year some palm roots are not yet decomposed. Maize yields of 1500-2000 kg/ha were measured around 1990 in the second year after felling oil palms (Koudokpon, Brouwers, Versteeg & Budelman 1994). Average maize yields on the Adja plateau in the 1980s were 700 kg/ha (Brouwers 1993:55).

182 During the first 3 years after felling oil palms Quenum measured 1000-1700 kg maize/ha (with 1500-2000 kg in the second year) after 1500-2000 palms/ha, and 1100-1500 kg maize/ha after 500-700 palms/ha.

183 Own interviews; Quenum (1988); Kater (1993:14).

184 Later distilling was also banned. The Adja reacted by hiding their distilleries in their palm plantations. In 1960 the interdiction to fell palms was replaced by a tax for felling. Distilling was never legalised but most local authorities now close their eyes to it. (Kater 1993:5)

185 They were wrong; palm wine production had exactly the contrary effect of increasing oil palm numbers.

186 Rapport d'ensemble Dahomey 1909 Service de l'agriculture, 14 Mi 1651 série 2G 9-16, AOM Aix-en-Provence; Wartena (1988b:99).

187 Rapport mensuel Avril 1909 poste d'Athiémé, ANB Porto-Novo.

188 4 km east of Athiémé.

189 Kenon Tchidi, *chef de région* of Aplahoué, pursued some oil palm fellers in 1927. The *Cercle*'s administrator found this so remarkable that he protected Kenon Tchidi against accusations to have fined some of his subjects for not cleaning roads in time: '*Proces-verbal contre Tchidi après plaints de ses administrés du 10-10-1927. Tchidi avait reclamé 100 frs à plusieurs cultivateurs qui n'avaient pas nettoyé leurs routes. 3 jours il les a remis quand les routes étaient nettoyés. Il a confiscé les fusils de plusieurs de ses sujets et les a envoyé à Abomey. (…) Le chef de la region de Parahoué s'est montré très actif ces temps derniers dans la recherché des fusils dans la subdivision de Parahoué, sur plus de 600 fusils parvenus dans le cercle, à lui seul, il en a fait render près de 400. De plus, il a fait poursuivre plusieurs indigenes qui s'étaient livrés à l'abattage des palmiers à huile. Il n'y a donc pas lieu, dans ces conditions, de s'étonner que les nombreux ennemis qu'il a dû se creér ainsi cherchent à se venger. Je suis personellement heureux de constater qu'après l'enquête discrète à laquelle j'ai procédé, il ne reste rien de la lâche accusation don til a été l'objet.*' (L'administrateur Commandant le Cercle à Monsieur le Gouverneur, Abomey le 24 Novembre 1927, ANB Porto-Novo).

190 The first rainy season usually provides the principal maize harvest. Only when confronted with unexpected urgent cash needs some poor Adja farmers nowadays sell some maize at an earlier date.

# 7

# Homogenising policies and differential responses in the 20th century

> The Adja king's child died, but the market went on as usual.
> He said: the market transforms big things into small ones.
> (*Aja àxosù vi kù, bo axì jɛ. E đo: axì no só nu đaxó hwè*)
> (Fon[1] proverb)

From 1900 onwards the Fon and the Adja have been submitted to the same central administration, the same economic policies, and the same education and extension programmes. Throughout the colonial and post-colonial period their production and marketing opportunities were in principle the same. Most grand socio-economic theories would expect a uniforming effect on popular behaviour of similar market opportunities, similar policies, and the impact of science, as discussed in section 2.3.

This chapter will present the socio-economic policies and programmes and the principal supra-local market opportunities in 20th century southern Dahomey, later Bénin, and will analyse the Fon and Adja's response to them. It will be limited to those products for which some state and Para-state programmes and an international market existed, and will discuss these mainly from a general and external point of view. This relatively distanced or reserved perspective is useful to analyse state and market forces and to allow a general comparison of how they worked out in practice. In discussing Fon and Adja reactions, some inside information about their values and strategies regarding the programmed products will be provided. In contrast, Chapter 8 will zoom in on some individual Fon and Adja actors of two lineages, and present their practices rather from their own point of view.

We will show that Fon and Adja styles of making a living are only to a very limited extent *reactions* to central policies and to supra-local market opportunities. They were largely endogenous developments, resulting from endogenous ingenuity, without external support, often even discouraged by the government, and mostly ignored by official reports and statistics. These endogenous strategies can only be understood from local sources which give a voice to the actors themselves.

In fact, structuralist approaches to socio-economic development, to which I reckon modernisation, structural-functionalist and (neo)-Marxist theories, would expect homogenisation to take place. These structuralist theories predict that commercial or commodity production increases under the impact of market opportunities or sometimes of politico-economic pressure, and that world market incorporation fundamentally transforms social and productive relations, which become increasingly shaped according to market logic[2]. A worldwide homogenisation of culture, of social relationships, and of technology would occur, firstly because all cultures, societies and technologies become instrumental to economic profit maximisation through the same world market. Secondly, because the best technologies (and the knowledge of how to use them) would spread through the world market. Thirdly, because States and consumers demand standardised products, and powerful firms and polities see to it that these are produced. Several branches of modernisation- and neo-Marxist theories also have a strong belief in the power of policy and legislation to bring about the desired 'economically rational' behaviour. Hence, similar governance would bring about uniform production styles. The

spread of 'scientific' knowledge through schools, agricultural extension, supply services and commodity chains too would homogenise production processes. These grand socio-economic epistemological views have important policy implications. If markets, scientific knowledge and legislation determine production processes, then economic and legal instruments and education can bring about desired behaviour and lead to economically and ecologically optimal styles of making a living. It would just be a matter of time and of applying the right instruments for the Adja's assumed economic- and both plateaux ecological poverty to disappear. Gradually, Fon and Adja heterogeneity would cancel out.

However, if cultural and psychological behaviour would persist under all circumstances, as the early colonial administrators quoted in Chapter 1 assumed and many practitioners still assume today concerning the Fon and Adja, then we can expect little historical change. But it would imply that people are captives of their own customs, behaviour and history and that we would deny them their agency to transform their livelihood conditions, even when these are no longer rational from economic or ecological points of view. Colonial administrators and development practitioners in the early 20th century were trained in evolutionary anthropological thinking and in static images of culture. Often, but not always, these images portray 'cultural' or psychological traits in pejorative terms. Later, evolutionary thinking became outmoded in anthropology, but its influence on development practitioners has remained strong.

In 1900 the French exiled the Fon king Agoli-Agbo and the Adja's *nyigbafio* (chief of the land) Kpoyizun and installed several *chefs de canton*, who were directly submitted to the French administration instead. Ever since, the colonial and postcolonial governments applied rather consistent policies throughout Dahomey, later Bénin. Administrative structures on the Fon and Adja plateaux were identical. Economic policies and extension in both areas were mainly geared towards the production of the same exportable crops on both plateaux; other livelihood activities were neglected and sometimes discouraged by the State. Extension messages were basically identical on both plateaux and echoed external 'scientific' insights; the State encouraged similar cultivation and processing techniques in the whole South. Homogeneous government services and infrastructures such as roads, markets, schools, agricultural inputs and -services were provided everywhere. School curricula were modelled on those in France until 1975 and then became a variation on these, but still homogenous throughout the country, which implied that the same textbooks were used and the same questions asked at exams[3]. Market opportunities were also similar for the Fon and Adja plateaux, especially since transport by rail and river was more and more replaced by road transport after 1920. From about the same time the Adja gave up their violent opposition to colonial rule, as the Fon had done 25 years earlier already. Hence the external political, economic and ideological influences on the Fon and Adja under colonial and postcolonial rule were similar, especially from 1920 onwards, and continued to be so until at least the end of my research.

This begs the question whether Fon and Adja styles of making a living also became more homogenous after 1900 and especially after 1920? Now that the Fon and Adja had the same transportation facilities, did they start to produce the same crops, the export crops that the State encouraged? Now that both groups were on speaking terms with the administration, did they both accept the technological packages provided by the extension service? Did they start to use the same production methods? If so, their incomes, their economic failure or success would depend on their access to the means of production only. If so, their styles of

making a living would now impact their ecological environments in similar ways. Or were the early administrators, whom I quoted in Chapter 1, right that nothing would change? That the 'rude', 'savage', 'independent', 'un-submissive' (to the administration) and 'non-commoditised' Ehwe-Adja would always remain the same? In the 1980s the popular opinion that the Adja were backward subsistence producers was still frequently voiced. Both the homogenisation and the static culture theses will be challenged in the present chapter and the next.

Throughout the twentieth century, State and Para state policies mainly aimed to stimulate the production of the same agricultural commodities by the entire southern rural population, including the Fon and Adja. True, the State encouraged school education of rural children, but this was with the intention that they become commercial farmers and use 'modern' scientific technologies after graduation. The Fon and Adja's incorporation into agricultural export markets was the government's main goal. An important task of this chapter is therefore to describe which crops the State stimulated and how much the Fon and Adja produced and sold of each of these. This description has wider theoretical interest, for most grand socio-economic theories expect processes of socio-economic and technological development in general and of socio-cultural and technological homogenisation in particular to occur as a result of market integration, as discussed in Chapter 2. An important question then is whether the Fon and Adja's socio-technological organisation standardised. The external sources which give information on kinds and volumes of exports (trade statistics, government and extension service reports etc.) and which I therefore use extensively in Chapter 7, give only a very superficial insight into local socio-cultural and technological issues. Chapters 8 and 9 will provide an inside view on these on the basis of my own fieldwork.

Farming is, with some hunting and gathering, the Fon and Adja's livelihood generating activity which interacts most with the ecological environment. It is an economically important activity for most Adja and many Fon. These are enough reasons to give due weight here to agricultural policies and Fon and Adja reactions to these. However, farming is only one activity in the Fon and Adja's livelihood portfolio. Already in the 18$^{th}$ and 19$^{th}$ centuries the Fon and Adja lived on more than the natural resources of their plateaux alone. They all engaged to some extent in economic activities like (barter) trade of salt, iron, religious services and other 'commodities', and the Fon of the kingdom also lived on slave raiding beyond their plateau. In the 20$^{th}$ century Fon and Adja livelihoods continued to depend on a variety of sectors, of which agriculture was only one. Their styles of making a living can only be understood through a holistic study of all practices. Therefore, the case studies in Chapter 8 will compare the importance of various livelihood generating activities of the 20$^{th}$ century plateau Fon and Adja, and will show how choices in favour of one livelihood activity rather than another were embedded in social networks.

Following the definitions in section 2.3.1, I will call any good or service that is sold for money a commodity. Commodities may be edible or non-edible crops, craft products, commercial services such as trade, hairdressing, divination and the like, and wage labour. It is important to underline that food crops may also become commodities; in fact most Fon and Adja agricultural commodities are foods that figure in local diets. Commodities are labelled as such only when the sale actually takes place, intentions are not enough. Cash crops however are, from the modernisation perspective, produced with the intention of sale. The cash crop concept is not very useful here because only very few minor Adja- and no Fon products are without local use value and can only be sold (or wasted)[4]. I will use it only sporadically when

I speak from administrators' perspective, about crops that these officials want and believe to be grown for sale. Commercial production is assumed by commercialisation scholars to take place with the intention and outcome to sell. While I label a production process as commodity production only after the product is sold[5], I will speak of commercial production whenever a producer strongly desires, expects, and mostly succeeds to sell, bearing in mind that Fon and Adja intentions are often ambiguous and sometimes deviate from outcomes. Subsistence goods in my definition are goods produced and consumed by the producer himself or 'exchanged' in a non-market relationship, and subsistence production does not exclude that the same producer also sells or purchases commodities (see 2.3.1).

Chapter 7 partly covers the same time span as Chapter 6. The first 20 years of the 20th century were a period of transition. Palm oil prices and transportation infrastructure were in many regards still more akin to the 19th than to the 20th century. Adja-French relations were marked by violent conflicts until the end of the First World War, but became relatively peaceful thereafter. 1920 was an important turning point on the Bight of Benin in general and among the Adja in particular, for several reasons. The end of the First World War launched a period of relative political stability. Internal socio-political institutions had been in turmoil during the first 25 years of colonial rule, especially among the Adja, but started to stabilise, taking new forms. Some macro-economic changes affected the whole region. The French demand for castor beans from 1916 onwards and the introduction of a distilling technique by a Dahomean who had served in the French army during the First World War opened new commodity production opportunities. Palm oil and cotton prices were still high in the early 1920s, but began to decline compared to those of Dahomey's major imports from the later 1920s onwards (Circulaire du Gouverneur aux commandants de Cercle 15 Octobre 1925 Archives Abomey; Desanti 1945:150-151[6]; Manning 1982:231-243; Wartena 1988b:146e-h). The introduction of automobiles starting in the 1920s brought a transport revolution, and had replaced shipments and most of the railway transport from the plateaux by about the 1930s[7].

Also from a research methodological point of view, 1920-1990 differs from the previous periods. For this period I received more eyewitness accounts because many of my respondents had reached the age of understanding and of active socio-economic life around 1920. The value of colonial reports for the period 1920-1990 lies mainly in describing the activities of administrators and extensionists. After 1940 also statistics are provided. Colonial administrators after 1920 were less preoccupied with describing the livelihoods of their subjects in qualitative terms than their predecessors.

Chapter 7 will start with a presentation of the context in which Fon and Adja made a living between 1900 and 1990. First the political environment is dealt with: the colonial administration on the Fon and Adja plateaux, relationships of the administrators with the Fon and with the Adja, major socio-economic policies, infrastructures, agricultural extension and other services provided by the State. Section 7.2 will introduce important external economic developments, namely urban and world market demand, prices and the activities of inter-regional traders on the Fon and Adja plateaux. Some climatic fluctuations that occurred will be mentioned.

Section 7.3 discusses State and extension efforts regarding the production and sale of particular crops, and the extent to which the Fon and Adja responded to these efforts. The section starts with an analysis of administrators' and extensionists' descriptions, supplemented by insights gained from my fieldwork among the Fon and Adja. In section 7.4 I summarise

the major styles and draw up the balance sheet on whether they moved towards each other and towards the model proposed by the State.

## 7.1 Policies

After a brief attempt to rule the South of their new colony indirectly through 'protected sovereigns'[8], in 1900 the French installed administrators and appointed *chefs indigènes* throughout the territory. From 1894 to 1900 the French recognised *nyigbafio* Kpoyizun as 'king of the Adja' and Agoli-Agbo as 'king' of the plateau Fon, but in 1900 they exiled both sovereigns. The system of *cercles*, *subdivisions*[9], *canton*s, administrative *villages*, French administrators heading the *cercles* and *subdivisions*, and *chefs indigènes* heading the cantons and villages was in principle the same throughout the colony, though it worked out differently among the Adja and the Fon. I studied in particular the *subdivisions* Parahoué and Abomey, but in some cases I considered the whole *cercles* to which they belonged.

### 7.1.1 General policies, differential administrator-Fon and -Adja interactions

The Fon area north of the Lama Depression and south of the rivers Wo, Zou and Ouémè became the *Subdivision* d'Abomey. Together with the small *Subdivision* de Zagnanado[10] (between the Zou and Ouémè and inhabited by Agony) it formed the *Cercle* d'Abomey. The *Subdivision* d'Abomey, also called *Subdivision Centrale* or simply *Cercle* d'Abomey, included until 1931 the eastern Adja plateau because the French believed that this region belonged to the Fon kingdom. This belief was obviously based on Fon accounts, and for the Adja village Adjahonme also on the simple fact that its *chef* in 1900-1901 frequently visited Abomey (Poste de Parahoué 13 Avril 1901 Dahomey et dépendences, ANB Porto-Novo). However, my analysis in 6.3 shows that even at the time of Gezo, Glele and Gbɛhanzin most Adja on the eastern plateau were free farmers cultivating their own land, and that the Fon appropriated only some land there (to cultivate it themselves or with the help of slaves). After 1931 this eastern Adja plateau became part of Parahoué Canton Nord.

The borders and designations of the Adja units changed frequently, but during most of the colonial period the Adja- and Waci area between the rivers Mono and Couffo was called *Cercle* d'Athiémé[11], with the *Subdivisions* Athiémé and Parahoué[12]. Athiémé was inhabited by Dogbo-Adja, Tchikpè-Adja and some Waci, and Parahoué by Ehwe-Adja and until 1912 also Tado-Adja; then the Tado-Adja cantons were ceded to German Togo (Archival documents of that period; Kakpo 1981:98; Manning 1982:164-167).

The *Subdivision* d'Abomey had until 1935 eight cantons, and in addition the town of Abomey as separate unit with six *chefs de quartier*. These cantons were Dona, Tindji, Oumbegame, Allahè, Cana, Sahè, Sinhoué and Zogbodome (Archives Abomey, Porto-Novo, Aix-en-Provence; Ahanhanzo Glele 1974). In 1935 the number of cantons was reduced to five (Lombard 1967b:236, 244). With de-colonisation, the *Cercles* d'Abomey and Savalou were merged for administrative purposes into the *Département* du Zou[13], in 1974 renamed into *Province* du Zou. The former area of the *Subdivision* d'Abomey was divided into *districts,* from 1974 to 1978 three and thereafter six: Abomey, Bohicon, Zogbodome, then also Agbangnizoun, Djidja and Za-Kpota. From 1991 the provinces were again called *département*, and towards 2000 each of them was split in two. The former *Cercle* d'Abomey (including Zagnanado) now became the *Département* du Zou and the former *Cercle* de Savalou (previously in the *Province* du Zou) became the *Département* des Collines.

The *Subdivision* of Parahoué had until 1913 eighteen cantons: Houétan, Aplahoué, Azové, Kpatohoué, Houégame, Tchikpè, Djikpamè, Avonouhoué, Sokouhoué, Djakotome, Toviklin, Sahou, Adjintime, Kpoba, Agohoué, Agouna, Tado and Tohoun (Renseignements sur les villages du secteur de Parahoué 1910, ANB Porto-Novo). The latter two were ceded to German Togo in 1912[14] or 1913, and Agouna was incorporated into Canton Dona of the *Cercle* d'Abomey not later than 1917[15]. The other fifteen remained until the end of the First World War. Of these fifteen, twelve had their headquarters in the West of the plateau on or near the Athiémé-Aplahoué road, in spite of the fact that the East and Centre of the plateau were almost as densely populated as the West. This was probably because the early colonial administrators underestimated the central and eastern Adja population (more than they underestimated the Fon- and western Adja population) either as a consequence or as a result of the fact that they still ignored the existence of many Adja hamlets in the Centre and East. Circles of bush around Adja villages (see 5.3.2) probably misled them. From the early 1920s until independence the *Subdivision* de Parahoué had only three cantons: Canton Sud with Houégame and from 1955 Djakotome as headquarters, Canton Nord with a chief in Kinkinhoué (also named Essouhoué after its long-standing *chef* Essou[16]), and canton Lonkly which consisted of the savannah area to the north of the Adja plateau[17]. With de-colonisation, the former *Cercles* d'Athiémé and du Mono were merged into the *département* du Mono[18], from 1974 to 1991 *province* and from 1991 to 2000 again *département* du Mono. The *province* was divided into districts, of which Aplahoué, Klouékanme, Djakotome and Toviklin corresponded to the former *Subdivision* d'Aplahoué, and Dogbo and Lalo to the northern half of the *Subdivision* d'Athiémé. In 2000 these six districts became the *Département* du Couffo, while the South remained *Département* du Mono. This implies that the former *Subdivision* d'Athiémé was split in such a way that its Adja areas joined the *Département* du Couffo and its Waci, Mina and Sahwè areas the *Département* du Mono.

Though governor Desanti (1945:85) states that cantons were composed of villages of the same race, until 1931 all the villages on the eastern Adja plateau – Adja, Fon and mixed ones – were included in the Canton Sahè of the *Cercle* d'Abomey. After 1931 the eastern region became part of Parahoué Canton Nord.

The *Subdivision* d'Athiémé had several cantons including three that were mainly or partly inhabited by Adja: Canton Dogbo was mainly Adja, Canton Lalo for its larger part, and Canton Lokossa had a sizable Adja minority (Sodokin 1984:36; Wartena 1988b:74a; D 48 Affaire déserteur Sévo, Cercle du Mono, ANB Porto-Novo).

All Fon and (most) Adja cantons had temporarily the *région* as a further administrative layer between the canton and the village[19]. The *régions* were however soon considered an unnecessary stratum and left, from 1906 onwards, to disappear by not replacing *chefs de région* when they died or were deposed for misbehaviour. The latter happened for example to the *chefs de région* of Allahè in 1906, of Lissazounme in 1913, and of Aplahoué in 1932.[20]

### *Chefs*

The early colonial government required *chefs* to be chosen on the base of local custom and installed after being accepted by the administrator, though the latter's voice was very influential in this matter in practice. *Chefs de canton* should belong to families that ruled in pre-colonial times, and former slaves should not be admitted to the position of *chef*. From 1917 onwards, Governor-general Van Vollenhoven allowed that in non-hierarchical societies

if there was no suitable aristocrat candidate, an indigenous civil servant or an outsider could become *chef de canton* (Lombard 1967b:127, 135; Desanti 1945:85). If possible the French preferred literate members of ruling families. In the *Subdivision* d'Abomey most *chefs de canton* and *de région* and many *chefs de village* were sons of the last three Fon kings, most *chefs* kept their position for lifetime, and *chefs de canton* were normally succeeded by a son or brother.

Box 1: *Chefs de canton* of the *Subdivision* d'Abomey

Seven of the eight *chefs de canton*, four of eleven *chefs de quartier*, half of the 26 *chefs de région*[21] and 21 of 40 official (French-recognised) title holders in the *Subdivision* d'Abomey in 1900 were princes (Banégas 2003:323). For *chefs de canton* this percentage remained more or less the same. Abomean *chefs de canton* whose names I know were[22] Princes Aho Glele (1900-1925), Dadaglo Glele (1925-1928) and Justin Aho Glele (1928-1960) in Oumbegame, princes Ahehehenou (1900-1912), Ahouagbe Béhanzin (1913-1917) and Langanfin Glele (at least 1925-1960 in Kana, princes Zodéougan glele (1900-1926) and Louis Zodéougan Glele (1926-1960) in Zogbodome, prince Degan Glele (from 1900) in Tindji succeeded in 1934 by his sons Gaspard Yemabou Degan[23] (in Tindji-Za) and Germain Degan (first only in Tindji-Adjokan but from 1940 in the whole canton), prince Houdohoué Gezo (1900-1907[24]) succeeded by Zokoudagba or Tokoudagba (1908-1917), princes Ahouagbe Béhanzin (from 1917 to at least 1929), Robert Danha Béhanzin (from the 1930s) and Camille D. Béhanzin (in the 1950s) in Allahè, Binahi (from 1900) soon succeeded by princes Agbidinoukoun Glele (until about 1920) and Houegbello Agbidinoukoun (from about 1920) in Sinhoué, prince Azifan Gezo (from 1900 until at least 1937) in Dona, and Fiogbé (1900-1920) succeeded by prince Houdohoué Gezo (1920s) and then Agassoussi Fiogbé in Sahḛ̀.

In contrast in the Adja *subdivisions*, especially in the beginning, only few high-ranking *chefs* were Adja – hence long before Van Vollenhoven legalised this in 1917. Several Adja cantons and *régions* were headed by Fon princes, others by former slave-masters of the Fon. If a *chef* was Adja he was never of noble blood (the French saw to it that *nyigbafio* Kpoyizun's relatives did not access political power after the latter's deportation in 1900[26], but were chosen among a village's many seniors (*megan*). Consequently, Adja *chefs* had to share their power with their fellow seniors. These situations were full of conflicts. Adja *chefs* were frequently deposed[27].

Box 2: *Chefs de canton* of the Adja regions

The Fon's slave-master Assou Ganmefio (grandson of Kpotokan, see 5.3.2) and his son Vifɛn Alofa headed the canton of Houéganme (later called Canton Sud) until 1955[28]. Vifɛn's son Pierre Alofa was *chef de région* until 1957[29]. The Fon's slave master Ahamada was *chef de canton* of Lalo and from 1901[30] to about 1920 also of Dogbo; in the latter canton he was succeeded by Fon prince Robert Danha Béhanzin until about 1930-193131. Fon dignitary Zola was *chef de canton* of Lokossa from 1900 until his death in 1907; he was succeeded first by Sogan (1907-1909) who descended from the founder of the village, and then by Fon prince Kakaï Glele (from 1909 and again from 1931)[32].[33] The Adja in the canton Sahè were invariably ruled by Fon *chefs de canton* and *de region*[34]; in this ethnically mixed region even *chefs de village* seem to have been mostly Fon[35]. Among the Adja *chefs*, Gouta was *chef de canton* of Aplahoué in 1910[36] and (again) from 1913 to 1915[37], Daïr and Kenon Tchidi were *chefs de région* of Aplahoué from the late 1910s until 1932[38], and Adolphe Kpatoukpa *chef* of the canton Aplahoué Sud from 1955 onwards[39].

The *chefs*' tasks were to provide demographic figures, to collect taxes, to recruit wage workers, forced labourers and soldiers, to judge minor cases, to encourage school attendance, to transmit administrators' messages to the people and to call villagers for meetings whenever administrators or extensionists wanted to address them in person, to make farmers meet the export quota during the World Wars, and to act in general as mediators between the coloniser and the people. They were rewarded with a percentage of the taxes they collected[40]. *Chefs de canton* received fixed salaries instead from about the First World War onwards. The principal tax was the *impôt de capitation* (head tax), which everyone between the age[41] of 10 and 65 was held to pay. Tax rates were the same on the Fon and Adja plateaux[42]. Quota for exports, labourers and soldiers were of the same order. Yet, the Fon and Adja reacted differently to these regulations.

In pre-colonial times Adja villages were led by a council of village seniors *mɛgan* (5.3.3). Colonial Adja *chefs* still had to share their authority with the other *mɛgan*, which complicated the implementation of French rule[43]. Administrators of the *Cercle* d'Athiémé, who called the *mɛgan* 'notables', complained about this situation in the following terms:

> '*Les chefs ordinaires*[44] *sont, pour la plupart, des nulletés. Placés sous la tutelle du conseil de notables ils n'ont d'autre autorité que celle qu'on veut bien leur laisser prendre. Par ainsi ceux qui, sous notre impulsion, seraient tentés de réaliser quelque progrès dans leur village se heurtent au mauvais vouloir de ces notables, ennemies irréductibles de tout ce qui pourrait affranchir les esprits et les dégager de la férule sous laquelle les tient le fétiche et les autres croyances.*
>
> *La docileté de la population permet justement le maintien de cet état de choses. Il semble que 12 ans d'administration régulière n'aient donné aucun résultat au point de vue moral. A l'entour d'Athiémé les gens fuient encore à l'approche du blanc. Nous avons pu assurer la tranquilité du pays, ouvrir des routes, des marchés, faciliter les transactions et par conséquent augmenter considérablement la richesse publique, mais les esprits n'ont pas évolué - Les richesses que nous avons fait naître ne profitent pas, en général, à la partie la plus nombreuse de la tribu, celle qui travaille - L'argent amassé par les membres d'une famille va se perdre dans les mains du chef de la communauté, le notable comme on l'appelle, qui l'enterre et le destine à ses funérailles.*
>
> *Nous n'avons donc rien à attendre des notables. Les palabres ne doivent pas être faites à eux, mais à la population tout entière. (…) Ceux-là n'y tiennent pas, ils écartent toujours les curieux. Ils ne veulent pas que nos paroles soient entendues de la masse, cela leur permet de les travestir, et de faire de nous un épouventail.*' (Rapport mensuel Avril 1906 Poste d'Athiémé, ANB Porto-Novo)

> '*Les chefs sont pleins de bonne volonté, malheureusement ils n'ont qu'une faible autorité sur leurs administrés, et ils l'avouent assez ingénument. Pour le moindre petit ordre à faire exécuter dans les villages ils demandent immédiatement un garde, parce que disent-ils: 'Si tu n'envoies pas un garde, les gens ne nous croiront pas'. (…) Le nombre d'imposables est encore au dessous de la réalité, un certain nombre d'habitants ne sont pas déclarés par les chefs de cases. Si les chefs de villages et de cantons n'avaient pas cette crainte inexplicable de leur gens (…). Ils préfèrent laisser faire, comprenant fort mal leur rôle en ceci et ne prenant guère leurs intérêts, leurs remises sur l'impôt étant diminuées d'autant. (…) La perception c'est faite sans amener aucun incident particulier. Bien entendu il a fallu envoyer des gardes se montrer dans chaque village pour que les indigènes versent leur cote. Ceci du reste se passe paisiblement, la présence du garde étant suffisante.*' (Correspondances cercle Grand-Popo subdivision de Parahoué 1908-10 no. 285 du 31-10-08, ANB Porto-Novo)

> '*Le chef du Poste de Parahoué se plaint régulièrement de l'indolence des chefs de son secteur, qui manquent d'autorité, et de l'extrême indifférence de leurs sujets qui restent insensibles aux punitions.*' (Rapport mensuel Novembre 1910 Poste d'Athiémé, ANB, Porto-Novo)

Unwilling to accept the new rule, Adja villagers frequently rebelled against their *chefs* or asked for their replacement. Administrators sometimes protected *chefs* in an attempt to enhance their authority and their utility for the French cause. In other cases they deposed Adja *chefs* who failed to implement colonial rule, or even incarcerated[45] *chefs* who appeared unwilling to implement it. Cases in the villages Tchankoué[46], Adjahonme, Zoungamé, Dogbo-Holodo, and in the cantons Patohoué and Ouétan illustrate these different possibilities, and suggest that they occurred quite frequently in early colonial years. Also the influential *chef de canton* Essou had to appear before a colonial disciplinary council in 1923[47]. Later, Adja *chefs* seem to have gained slightly more power and a better relation with the French, but several of them still were deposed, some even imprisoned, as the cases of the *chefs* of Houégame, Atindehouhoué and Houédogli in 1955-1958 will show below. The problems in Ouétan (Houetan) followed a tax rise from 1.25 francs in 1906 to 2.50 francs in 1909.

> '*Depuis quelque temps, le village indépendant de Tchankoué était divisé en deux camps dont l'un, hostile au chef, ne voulant plus reconnaître son autorité, partait contre lui des accusations ou invoquait des raisons dont il n'a pu faire la preuve. (…) Il ne faut pas oublier que le Houé est très menteur. (…) Le seul motif, résidait dans cet esprit d'indépendance des indigènes dont j'ai souvent parlé et qui les pousse à se diviser le plus possible chacun, voulant se gouverner soi-même et n'obéir à personne.*' (Rapport mensuel Janvier 1910 Poste d'Athiémé et Grand-Popo, ANB Porto-Novo)
>
> A little later in Tchankoué: '*après avoir temporisé longtemps dans l'espoir de voir la situation s'améliorer dans le village de Tchankoué, (…) je me suis vu dans l'obligation d'employer des moyens plus énergiques (…). Le chef du village m'ayant signalé trois chefs de quartiers qui refusaient de lui verser leur impôt, j'ai fait appeler les indigènes en question (…). Je me suis cependant contenté d'infliger à chacun quatre jours de prison pour entravers à la perception de l'impôt. (…) Avant la mort du vieux chef Ayoko (27 Janvier) le village indépendant de Tchankoué (584 habitants) était divisé en deux parties hostiles. On pouvait espérer que son successeur Danhicou, élu par la majorité des notables, réussirait, étant plus jeune et plus actif, à affirmer son autorité sur ces administrés. Il n'en a rien été. L'esprit d'indépendance des habitants de Tchankoué et les menées d'Abalo fils de l'ancien chef entrenaient la discorde. (…)*
>
> *Ouénou, chef du canton de Patohoué, est en but aux attaques d'individus étrangers au cercle (…). L'instigateur de ces attaques est, à n'en pas douter, parce que dans ces différentes lettres on parle trop de lui pour en dire trop de bien, un n^e^ Abou, ancien chef du canton de Patohoué, condamné à une peine de prison (…) pour exactions et remplacé par Ouénou. (…) C'est une habitude de l'indigène de ce pays ci de vouloir changer de chefs le plus souvent possible.*' (Rapport mensuel Août 1910 Poste d'Athiémé, ANB Porto-Novo)

> '*Quelques indigènes du secteur de Parahoué et appartenant au canton de Ouétan, ayant à leur tête l'ancien chef de canton Haholou envoyaient depuis de nombreux mois une serie de lettres anonymes contre leur chef actuel Yéto poussaient les gens à la désobéissance et l'accusaient d'avoir voulu voler l'argent de l'impôt. (…) [H]Aholou déclare qu'il se plaignait de Yeto parce que celui-ci avait pris sa place et il lui avait voué une très forte haine. D'autre part il l'accusait d'avoir indûment perçu l'impôt parce que lui étant chef les habitants ne payaient que 1^fr^25 au lieu de 2^fr^50. (…) L'aministrateur a puni disciplinairement chacun des indigènes de 15 jours de prison et de 100^fr^ d'amende.*' (Rapport mensuel Août 1911 poste d'Athiémé, ANB Porto-Novo)

> '*Bien que m'efforçant de tout obtenir par la douceur et la persuasion, j'ai été obligé plusieurs fois d'employer la force envers des villages récalcitrants: Dépo, Tchanhoué, Adjahomé, Bozipé. (…) Je ne parle pas d'Adjahomé dont le chef est actuellement détenu à Grand Popo. Les habitants ont jusqu'ici refusé d'exécuter les ordres que je leur avais donnés. J'espère donc que l'année prochaine l'impôt pourra être perçu et sans difficulté dans toute la région. Si tous les gens ne paient pas, c'est que l'argent leur fera défaut.*' (Rapport mensuel Parahoué le 22 Décembre 1901, no. 153, ANB Porto-Novo)

> '*Non content de troubler le pays des Dobos, Aolou-Begnon*[48] *a fait appeler un de ses parents, Alozonhoué, chef du village de Zoungamé, près de Locossa, et lui a ordonné de ne pas payer l'impôt; Alozonhoué s'est fait interprête de cet ordre dans son village et se rendait chaque jour à Dobo-Ouémé; il est actuellement sous les verrous, à Athiémé, en compagnie de l'ancien chef de Dobo-Holodo (destitué par moi l'an dernier pour concussion) qui était aussi un des agents les plus zélés d'Aolou-Begnon.*' (Rapport mensuel Août 1905 Poste aministratif d'Athiémé, ANB Porto-Novo)

Comparing the Fon with the Adja and other groups, the administrators praised the 'Danhomean order'[49] and 'discipline'[50] and the great authority of the Fon *chefs*[51]. They believed that Fon *chefs*, in contrast with those of other ethnic groups, defended the French interests faithfully and were obeyed by their people.

> '*La famille (…) a été elle-même profondément ébranlée et ce n'est pas sans quelque raison que les indigènes nous chargent de la responsabilité d'une situation dont nul ne tire avantage. Les chefs des cercles de Porto-Novo, d'Allada, de Zagnanado, du Borgou, de Savalou et du Moyen-Niger - m'intretiennent constamment des difficultés qu'ils éprouvent du fait du manque d'autorité des chefs. La situation est plus déplorable encore chez les populations qui à aucun moment n'ont joui même d'un semblant d'organisation sociale: (…) chez les Adjas, les Houés et les Dobos qui peuplent le cercle du Mono. Seuls les pays de pure race Dahoméenne ont conservé une certaine hiérarchie, ébranlée toutefois.*' (Rapport politique du 1ier trimestre 1910, Dahomey, 14 Mi 1657 série 2G 10-23, AOM Aix-en Provence)

The French praise reveals that they and their administration depended strongly on these *chefs*, and explains why they granted many privileges to those that seemed loyal, thereby enhancing the *chefs'* authority. In conflicts between *chefs de canton* and the people the administrators mostly chose the *chefs'* side[52]. Le Herissé (1911:4, 271-273), *commandant* of the *Cercle* d'Abomey from 1904 to 1908[53], testified to his close and friendly relationship with twelve '*chefs et notables'*[54], and admitted that the largest part of his book was based on these *chefs'* information[55]. Governor Desanti (1945:85, 91-92) motivated the appointment of Fon princes at the head of most cantons and of many *régions* by that they would be the customary rulers and by that since colonisation '*les biens de la couronne étant passés à l'État Français, la famille royale est devenue de droit et de fait la plus pauvre du royaume. C'est ainsi que des princes d'Abomey ayant été dotés de commandements, l'administration dut les aider à se constituer un patrimoine personnel leur permettant de vivre décemment*'. The Fon royal family from its side strategically capitalised on the French support while most other Dahomeans rather avoided the State (Manning 1982:188). The princes actively aspired chiefly positions as one of the few occupations befitting to their status, which suggests that the appointment of princes was also a result of princely pressure on the French:

> '*A signaler aussi une grande guerre parmi les membres de la famille royale qui ne sont pas investis de fonctions administratives. Combien d'entre eux sont venues à la Résidence*[56] *demander de l'ouvrage! Un enrôlement comme terrassiers à l'infrastructure leur est offert, mais l'orgueil de ces gens est si grand qu'ils préfèrent rester oisifs dans leurs cases aux crochets des plus riches de leur famille, plutôt que de gagner vingt sous par jour par un travail réservé jadis aux esclaves.*' (Rapport mensuel Septembre 1905 cercle d'Abomey, ANB Porto-Novo)

Princely *chefs de canton* had themselves installed with reinvented royal ceremonies, encouraged by the administration (Banégas 2003:323). *Chef de canton* prince Justin Aho Glele would have become 'the greatest and most controversial' of all chiefs, gained considerable influence both in the colonial State and over the Fon royal family, and convinced Akinjogbin (1967:6) that he was the rightful heir to the Fon throne[57]. More and more Fon *chefs* had a

good formal school education and often also military training, which enhanced their influence on their own people and on the French. While in other regions *chefs* had to compete for power with animist priests, this was not the case among the Fon whose most influential *chefs* were *vodunon* themselves (own interviews; Rapport politique Dahomey 1945, Archives Abomey). The level of instruction of Adja *chefs* however remained low; those whom I interviewed were either illiterate[58] or spoke and wrote only poor French[59]. At independence, the *chefs de canton* were allowed to retain their title, their status and the privileges which the people used to grant them. They had however no administrative tasks anymore and the State did not appoint successors when they died (Banégas 2003:326). Nevertheless the families of several *chefs* remained influential, especially among the Fon. The lineage of the Fon *chef de région* Soglo provided two national presidents: Christophe Soglo (1963-1964, 1965-1967) and Nicéphore Soglo (1991-1996). The huge compounds of the Fon *chefs de canton* still stand today and the locations of their vast oil palm plantations are known (own interviews and observations, Lombard 1967b:87) and testify that these *chefs* accumulated capital- and prestige goods. Among the Ehwe-Adja only the long standing *chef* Essou in Kinkinhoué had such a huge compound[60]; the abodes of the *chefs* of Parahoué canton Sud, Alofa in Houégame and Adolphe Kpatoukpa in Djakotome, are of more modest size (aerial photographs 1986 and own observations on the ground).

At the time of my research many villagers believed that the *chefs*, especially Fon *chefs*, abused their power and enriched themselves in unorthodox ways between 1900 and 1974. This belief was also stimulated by the 'Marxist' government (1974-1990), which labelled *chefs*, in particular those of Fon royal blood, as feudal lords[61]. I encountered stories about bribery to be exempted from labour recruitment for the colonial State (colonial documents confirm that this occurred in the *Subdivision* d'Abomey, see 5.2.3)[62], forced labour on *chefs*' fields (wives, children and other family members of *chefs,* as well as colonial documents[63] confirm this for both Fon and Adja), and *chefs* claiming more taxes than they were due[64] (colonial documents confirmed that at least one Fon *chef de canton* did so[65]). Adja farmers also spoke about *chefs* who appropriated land or were bribed to avoid military recruitment and Fon about bribery to win the *chef*'s favour in court. Kamille, a Fon whose life history I will present below (8.2), gave an account to explain the bad character of two of his sons as being inherited from their mother. But the account also implies a critique of *chefs de canton*:

> "The sons of my inherited wife caused me a lot of trouble. Ernest never comes home from Lagos. Yves falls into crime again and again every time that he comes out of prison, he steals and violates. In 1973 he has stolen my radio-cassette player and even my son Fernand, who was a baby in that time, to sell him in Nigeria, where people trade in human organs. I beat him a lot but in vain. Bandits often gave their daughters in marriage to the *chefs de canton* to gain their help in court. These girls gave birth to bandits. Therefore there are now many bandits among the sons of the *chefs de canton*". (Lissazounme 3-10-1989)

Though some of those narratives that lack external confirmation might have been exaggerated, there can be no doubt that colonialism empowered the higher ranking *chefs*, especially among the Fon (Manning 1982:268-270, 273; Sodokin 1984:36).

### *Taxes*

From the very beginning that the colonial government levied head taxes (*impôt*), i.e. 1899 (Rapport annuel Cercle d'Abomey 1912, Archives Abomey; Ronen 1975:52; Cornevin

1981:413-414; Kakpo 1981:68), the Fon of the *Cercle* d'Abomey plateau paid it promptly, within a few days. The Adja in contrast evaded tax payments in various ways, sometimes with success, until the end of the First World War and again during the earlier 1930s and late 1950s.

> '*La perception commencée le 15 Juillet était terminée le 26 au soir, sauf pour quelques commerçants originaires de Ouidah peu habitués à la discipline dahoméenne. (…) Chaque chef de case a apporté lui-même le montant de ses cotes et l'a versé à un des agents de la Résidence en présence de ses chefs de canton, de région et de village*.' (Rapport mensuel Juillet 1907 Cercle d'Abomey, ANB Porto-Novo)

Among the Adja's strategies to avoid the *impôt* were underreporting numbers of inhabitants[66], hiding in the bush, migration to Togo especially in those years that tax rates were lower there[67], demanding delay, armed resistance, demonstrating in front of the administrator's residence[68], avoiding public places such as markets where administrators checked who already paid his tax[69], and simply refusal. Between 1905 and 1909 the chief–priest of the land of the Dogbo-Adja, *aholu Gbegnon*, led seven Dogbo-Adja villages in boycotting the *impôt* in arms, arguing that it would not rain anymore if they paid[70]. A few months delay were sometimes granted, but resulted in lower salaries for those *chefs* whose cantons paid late. The Adja delayed in general more than the Fon, especially in early colonial years[71] but also in the 1930s and late 1950s, as I will show below in the context of Fon and Adja involvement in national politics from the 1950s.

Colonial tax rates were identical in the *Cercles* d'Abomey and d'Athiémé, but differed at times between Dahomey and Togo. Relationships with Togo were more important for the Adja than the Fon. In 1910 the Togolese tax rate was three times that of Dahomey, so that Dahomeans who had fields in Togo, which applied for many Adja (see also 8.1), became reluctant to cultivate them (Manning 1982:166). But when a doubling of Dahomean tax rates was announced for 1916, Mono *chefs* expected an exodus of those who had relatives in Togo (Rapport politique Dahomey 3e trimestre 1915, AOM Aix-en-Provence). During the economic crisis of the 1930s, when Dahomean taxes were very high compared to the prices for the Fon and Adja's commodities, many Adja- and some Fon men from the families whom I studied had indeed migrated to Togo (section 8.3). Some did so to avoid the *impôt*, others to earn money to pay it for themselves and for their parents[72]. The Fon and Adja, especially the latter, resented that both men and women were taxed in Dahomey, while women in Togo were not (Holonou 1980:77). Some Adja migrated to Togo for this reason. Promises to abolish women's tax became a major theme in the campaigns of political parties at the approach of independence[73].

### *Labour requisition*

Another task of *chefs* was to recruit labourers for the construction and maintenance of roads, government buildings and the railway, carrying commodities and the hammocks[74] of chiefs and administrators, etc. The special case of mercenary recruitment for the First World War will be discussed further on in this chapter. Some work was voluntary, but the French colonial regime also practised forced labour requisition. It set quota of labourers to be furnished by each administrative unit and expected *chefs* to assign labour duties to their villagers in turns (Fall 1993:67, 143, 157-162, 201-203). Fon and Adja *chefs* however often recruited labourers on other grounds, for example status or relationship with the *chef*[75]. From 1912

onwards, forced labour requisitions were officially restricted to a few days and to 5 km from the home village[76]. Voluntary and some forced labourers were paid, others not – especially for tasks that the administration considered to be to the benefit of their community, for example the construction of the Vodome-Lokossa-Athiémé road in 1909 by inhabitants of the *poste* d'Athiémé in the case quoted below. Several Fon and Adja today believe that *chefs* kept wages for themselves instead of handing them to the workers. Official wages between 1895 and 1911 for porters in the AOF, voluntary as well as forced ones, were 0.25-0.5 francs per day[77]. Railroad labour was paid in Dahomey in 1900 with 0.50 franc plus subsistence items at ca. 0.15 franc per day[78]. Between 1905 and 1911 the official wage was 1 franc for 9 hours work, which equalled the average daily income from maize- and oil palm farming or palm fruit processing (Pfeiffer 1988:35, 38). Also 'voluntary' wage labourers were often recruited through the *chefs*. Whatever the levels of coercion and payment, labour for the colony sometimes opened career possibilities later on.

The Fon were the most willing wage- and forced labourers of the colony, the Adja – especially until about 1920 – belonged to the most reluctant. As early as 1900 the inhabitants of the Abomey plateau performed large quantities of labour for the state, and hoped for even more job opportunities in the government and private sectors. The railway from Cotonou to Bohicon, passing through Kana, was built between 1900 and 1905. Forced and voluntary labourers worked together on it but had different tasks according to railway employee Bernardin Abihunjɛ (see below). Colonial documents also distinguish between voluntary and other railway workers:

> '*Les habitants du cercle fournissent actuellement une somme de travail qui avait été, je crois, rarement atteinte jusqu'à présent. On peut en effet évaluer à 1500 ou 1800 le nombre d'indigènes employés actuellement tant au service du Chemin de fer qu'à la préparation des travaux de la résidence et au transport des matériaux qui seront employés pour cette construction. (…) Les travaux entrepris vont jeter dans le pays, au moins deux fois la valeur totale de l'impôt. (…) J'ai réuni tous les Chefs le 24 au matin et je leur ai demandé de me trouver, pour travailler au chantier du chemin de fer de Cana, 100 travailleurs volontaires, qui seront les seuls manoeuvres pris par la mission jusqu'à la fin des récoltes*.' (Rapport politique Résidence d'Abomey Mai 1900, ANB Porto-Novo)
>
> '*Les habitants réclament une maison de commerce et sont disposés à lui faciliter les moyens de portage*.' (Rapport commercial et industriel, Abomey Juin 1900, ANB Porto-Novo)
>
> '*Une autre tournée a été faite dans la région de Sinhoué. Là (…) le Résident a parlé (…) longuement de la future station agronomique et des travaux qui allaient y être entrepris. Les indigènes ont paru satisfaits, surtout lorsqu'on leur dit que l'on aurait besoin de travailleurs et qu'ils gagneraient de l'argent*.' (Rapport mensuel Cercle d'Abomey Mars 1907, ANB Porto-Novo)

It is noteworthy that the Sinhouéans on the relatively fertile south-western edge of the plateau were more interested in wage labour than in an agricultural research station – the first one on the Abomey plateau and in the entire region. They apparently did not expect much from agricultural research. Though nobody fancied working far from home, especially not in enemy territory, in 1911 the Fon were the only group of South Dahomey willing to work on the railway from Porto-Novo to Sakété and for the *tiralleurs Sénégalais*:

> '*Dans les cercles de Savalou, Abomey, Ouidah, où règne cependant une complète tranquillité, l'indigène répond aisément aux demandes justifiées par les travaux à effectuer dans la région qu'il habite; (…) le recrutement des manoeuvres nécessaires au prolongement du Tramway de Porto-Novo à Sakété fut parfois assez difficile (…). Le manoeuvre dahoméen redoutait bien le*

> *séjour en pays nagot (…) malgré un salaire raisonnable. (…) Néanmoins des hommes furent fournis. (…)*
>
> *Le recrutement de tirailleurs présenta d'autres difficultés. (…) Les premiers appels faits aux cercles du Bas Dahomey rencontrèrent un médiocre succès. Seuls les pays Fons fournirent des hommes excellents, qui partirent avec assez d'entrain.*' (Rapport d'ensemble Dahomey 1911, 14 Mi 1661 série 2G 11-14, AOM Aix-en-Provence)

Several members of the Fon families that I studied worked for the early colonial government. In 6.2.1 I mentioned Célestin, son of Ahehemɛ Segbeji in Lissazounme, who worked as a carpenter at the French administrative *residence* in Abomey in the 1920s[79], and members of Mawuhwe lineage in Kana who worked at the railway. Abihunjɛ, born around 1895-1900 as the eldest son of the *hɛnugan* of Mawuhwe lineage in Kana, asked towards 1915-20 for a job at the rail and remained a railway employee for the rest of his life. Later he introduced his son to the company, see section 8.1.2. Boniface, born around 1904 as the sixth son of the *chef de région* of Lissazounme (dismissed in 1913) worked at the railway station in Cotonou from 1924 to 1931; then he returned to Lissazounme to farm and trade[80]. Abihunjɛ's younger 'brother' Agblonon's appetite for government employment was aroused by his brother's job. In the 1920s or early 1930s went to work on the wharf of Cotonou, founded a family there as early as the 1930s, had all his children grow up in Cotonou, and obtained work at the port for two of his sons.[81] The snowball effect that Célestin's, Abihunjɛ's and Agblonon's skills and work relations had in their families and villages will be further discussed in section 8.1. Their and other Fon's run on government employment yielded their group many influential positions. It is generally agreed that 'the Fon have been very upwardly mobile and during the colonial and postcolonial periods occupied a high percentage of the civil service and professional positions' as Decalo wrote about Dahomey in 1976.

The early colonial Adja in contrast avoided working for the colonial administration. On the ethnically mixed north-eastern Adja plateau until 1905 only the Fon performed forced labour, with the exception of a few inhabitants of Adjahonme. The *chefs* of Djikpame and Zogbedjigan on the western Adja plateau as well as those of other parts of the *poste* d'Athiémé 1909 and 1910 were either unable to recruit labourers, or if these turned up they deserted quickly again.

> '*Jusqu'ici les Adja ne participent à aucune corvée du cercle. Ils étaient réputés comme difficiles à diriger. Le village de Honme en a fourni cependant quelques-uns pour le transport des pierres nécessaires à la construction de l'école et aussi pour les travaux d'infrastructure du chemin de fer.*' (Rapport mensuel Octobre 1905 cercle d'Abomey, ANB Porto-Novo)

> '*Situation politique Parahoué. (…) Le 22 avril, me trouvant à Djikpamé, je prévins le chef du canton, Capo, qu'il devait remettre en état certaines parties de la route de Parahoué à Ounkémé envahie par les herbes. Huit jours plus tard, ce travail n'étant pas fait, Capo fut menacé d'une amende. (…)*
>
> *Ayant besoin de faire réparer un sentier presqu'impraticable qu'empruntent les indigènes pour chercher de l'eau, je donnai l'ordre au chef de village de Grand-Sobedji*[82] *qui est chargé de l'entretien du chemin, d'envoyer des hommes pour travailler en même temps que les prisonniers. Trois jours après la date fixée, et sur nouvel ordre, il envoya cinq hommes qui firent acte de présence pendant une demi heure et ne revinrent plus. = 25 francs d'amende.*' (Rapport mensuel Mai 1910 poste d'Athiémé, ANB Porto-Novo)

> '*Quelques chefs ont été punis pour négligence dans leurs fonctions, en ce qui concerne le recrutement des porteurs.*' (Rapport mensuel Mars 1905 Poste d'Athiémé, ANB Porto-Novo)

> '*Les indigènes qui exécutent les travaux de réfection de la route Vodomé - Locossa - Athiémé ne se rendent pas volontiers sur leurs chantiers respectifs. (…) la majorité des travailleurs de ces équipes profitant de la nuit pour disparaître et rentrer dans leurs villages. (…) Les indigènes questionnés au sujet de ce mécontentement très marqué répondent franchement qu'ils ne peuvent travailler sur les chantiers trop éloignés de leurs villages respectifs sans être nourris et rétribués.*' (Rapport mensuel Juillet 1909 Poste d'Athiémé, ANB Porto-Novo)

No member of the Ehwe-Adja families I studied performed voluntary wage labour before 1930; the first ones were those who migrated to Anecho and Lomé during the economic crisis mentioned above.

### *The culmination of the administrators' conflicts with the Adja and co-operation with the Fon during the military recruitment of 1914-1919*

A particular form of labour was that for the *Tirailleurs Sénégalais*. This French African army was until the 1912 conscription law totally recruited from freed and runaway slaves, mainly from Senegal[83], but from 1914 onwards the French called for large numbers of warriors from all *cercles* of Dahomey and their other colonies. The military recruitment of the First World War caused the Adja-French conflicts of the first 25 colonial years to escalate. The Adja revolt of 1918-1919 entered the literature as one of the most disturbing events of Dahomean colonial history (Decalo 1976:69, 125-126[84]; Manning 1982:216). During the same period the Fon-French relations remained harmonious; the Fon willingly obeyed their *chefs*, and the *Cercle* d'Abomey provided even more *tirailleurs* than the required number (D'Almeida-Topor 1973:213, 235).

Table 7.1: Number of *tirailleurs* recruited in the *Cercles* Abomey and Mono from 1914 to August 1918

| | *Cercle* d'Abomey | *Cercle* du Mono[1] |
|---|---|---|
| First call in 1914 | 1500 | 300[2] |
| End 1914 to mid 1915 | 126 | 119 |
| Oct. 1915 to April 1916 | 1204 | 79 |
| April to August 1918 | 408 | 265 |
| **Total** | **3238** | **763** |

1 The *Cercle* du Mono consisted of the subdivisions Aplahoué (Ehwe-Adja and some Fon), Athiémé (Dogbo, Waci, Fon, Mina) and Bopa (Sahwè).
2 Recruited by *chef* Ahamada in the mixed Fon-Adja cantons Lalo and Dogbo, probably most recruits were Fon.
Source: D'Almeida-Topor 1973:198, 239.

From 1914 to 1919 the Dahomean government repeatedly called for soldiers and made financial promises to them and their families. Families of *engagés* would be granted tax exemptions and a monthly allocation of 15 francs, and the *tirailleurs* themselves a bonus of 200 francs. The French set quota for every *cercle*, and in those *cercles* where the promises did not attract the required number of men, attempts were made to design '*appelés*'[85].

At the first call for warriors in 1914, the *chefs* of the *Cercle* d'Abomey immediately presented 1500 men, while on the Adja plateau it was only the Fon *chef* Ahamada of the mixed Fon-Adja cantons Lalo and Dogbo who came with 300 warriors (D'Almeida-Topor 1973: 198). From then onwards the population of the Mono increasingly resisted recruitment. The Adja refused to be enlisted, hid in the bush or in Togo[86], killed some of their *chefs* and even

administrator Grange of Athiémé (Garcia 1970:162, 177), bribed other *chefs* (by working for them) to avoid recruitment, or deserted on the spot[87]. Only few Adja effectively embarked for the battlefield, for example Akpa and Kutawo. Some elderly Ehwe-Adja remember:

> "Sticks and clubs were given to people who cached men to fight in the First World War, but they did not come to our village because we had a *chef* here. The people of our village stayed indoors to avoid being captured, and inhabitants of other villages came to hide in our village and to work for our *mɛgan* so that they were not cached. However, Akpa from the ward Djakahoué and Kutawo from the village Aname went to the War. I was about 6-8 years old in those days." (Akwenon Klakla, Atindehouhoué 29-5-1990)[88]

> "When we heard the sound of the war we hid in the bush until 'they' were gone." (Gbono, an Ehwe-Adja woman from a small village near Atindehouhoué, Atindehouhoué 17-1-1985).

> "During the first World War they sent me to Aplahoué to enlist me. But when I arrived there they rejected me." (Kpadonu Tabo, Tchankada 18-5-1990)

Administrators took their reports on the Adja revolt as another occasion to label the Adja as backward, underdeveloped and shady people whose 'spirit of independence' had to be repressed with force.

> '*Cercle du Mono. Une agitation (…) a été produite dans cette circonscription par les opérations du recrutement: des chefs se sont déclarés absolument impuissants à nous aider en cette occurrence (…). Depuis qu'il a été publié dans tous les villages que le recrutement était terminé les habitants dont la majeure partie se cachait dans les champs sont revenus peu à peu et ont repris leur existence normale. (…) Au dernier jour du trimestre 67 engagements seulement avaient pu être obtenus, mais il faut tenir compte de ce que le cercle du Mono, malgré le caractère ombrageux d'une partie de sa population, a déjà fourni 119 recrues, il y a six mois.*' (Rapports politiques Dahomey 2eme et 4ieme trimestre 1915, AOM Aix-en Provence)

> '*Parahoué. (…) De jour en jour le recrutement a présenté plus de difficultés, la plupart des chefs ne s'y prêtant pas mieux qu'au commencement et les indigènes ayant organisé dans la brousse des groupes armés. La dernière semaine il y a eu un peu partout de violents incidents, les fugitifs n'hésitant pas à se défendre avec leurs couteaux, coupe-coupes etc. Malgré tout le contingent a été fourni.*' (Rapport mensuel Mai 1918 cercle du Mono, ANB Porto-Novo)

> '*Subdivision de Parahoué: (…) Après l'assassinat du chef de canton de Patohoué Ouénou, les indigènes de quelques villages ont pris la brousse. Quant aux autres accompagnés de Dogbos ils vont par petits groupes piler et brûler les cases. Les villages sauf ceux des cantons de Lonkly et de Djikpamé sont donc vides. Les chefs des cantons de Kpoba et d'Adjintimé ont été chassés par leurs gens et restent à Parahoué de même que ceux des cantons d'Azové, de Patohoué, Houégamé et Djakotomé plusieurs fois poursuivis par de petits groupes de rebelles. (…) Au cours de ce mois ci le mouvement des rebelles ayant fait fuir la presque totalité des indigènes dans la brousse, les terrains préparés le mois dernier pour recevoir les haricots n'ont pu être ensemencés. Pour la même cause, les quantités de ricin apportés ce mois-ci au Poste ont été presque nulles. (…) Les marchés sont vides.*' (Rapport mensuel Octobre 1918 cercle du Mono, ANB Porto-Novo)

Finally, a large military force was sent to the *Cercle* du Mono not only to put down this rebellion but also in the explicit intention to bring an end to 20 years of Adja 'backwardness' and insubordination (Garcia 1970:152; D'Almeida-Topor 1973:226). Towards the end of 1918, after the loss of four *tirailleurs* and one European sergeant (nothing was written about Adja losses), the Adja rebellion was finally put down (Garcia 1970:177).

> '*Les Cercles du Mono et de Grand-Popo ont été mis en état de siège et les opérations militaires sont actuellement en cours. (…) la répression (…) aura un effet vraiment salutaire (…) les populations dont il s'agit, obligées de se soumettre, se verront enfin forcées d'abandonner*

*cet esprit d'indépendance qui en rendait l'administration si délicate. (…) Le détachement de tirailleurs (…) c'est rendu dans le cercle du Mono (Locossa) où il stationne actuellement. - Le maintien des tirailleurs dans cette région pendant quelque temps encore au milieu des populations encore peu évoluées, me paraît nécessaire.*' (Rapport politique du troisième trimestre de l'année 1918, Dahomey, AOM Aix-en-Provence)

'(…) *la compagnie Cholchy (18 Octobre) est envoyée à Parahoué par l'itinéraire Abomey - Koulikamé. (…) Les opérations actives sont poursuivies avec deux compagnies venues en renfort de Dakar. (…) Le pays est parcouru en tous sens par des colonnes légères. La soumission et le désarmement ont été obtenus cependant avec assez de peine pour nous convaincre qu'il était prudent d'employer dans cette affaire des effectifs relativement importants. (…) Les chefs de canton de Patohoué, Azové, Djakotomé, Houégamé ont regagné leurs villages, mais dans les cantons de Kpoba, Adjintimé et Sahou-Sohoué la situation reste stationnaire.*' (Rapport politique du troisième trimestre de l'année 1918, Dahomey, AOM Aix-en-Provence)

The recruitment was another occasion for the administrators to compare the Fon positively to the Adja and to praise the Fon's order, loyalty, willingness to serve the colonial government as *tirailleurs* and carriers, and the commitment of the Fon *chefs* to help the French administration. It was also an occasion for them to reward several Fon *chefs de canton* with medals[89] and all of them with the gift of oil palm plantations of rebellious Holli[90].

'*Abomey: La situation politique de cette circonscription demeure excellente. En Octobre la population et le personnel administratif ont été entièrement absorbées par le passage et la mise en route vers le Mono de 3 compagnies de tirailleurs et de leur état-major. En cette circonstance, le cercle a fourni un nouvel et important effort en donnant malgré l'épidémie de grippe de nombreux porteurs ou hamacaires.*' (Rapport politique du 4. trimestre Dahomey 1918, AOM Aix-en-Provence)[91]

'*M. Noufflard a également pensé qu'il y aurait intérêt a déposséder les Hollis d'une partie de leurs palmeraies dont ils ne tirent, en général, que du vin de palme, pour les donner aux chefs de canton d'Abomey, toujours prêts à seconder nos efforts et dont le dévouement s'est manifesté d'une façon toute particulière à l'occasion du dernier recrutement de troupes indigènes. L'exploitation de ces réserves serait assurée par des groupements dahoméens qui viendraient s'installer dans la région (…). Au cours de sa dernière tournée à Abomey, en Novembre, le Lieutenant-Gouverneur a entretenu les Chefs de canton de ce projet et ils avaient laissé espérer que la proposition serait acceptée.*'(Rapport politique et administrative du Dahomey 4$^{eme}$ trimestre 1915, AOM Aix-en-Provence)

An after-result of service with the *tirailleurs* was that it opened career opportunities. The French preferred men with military service for influential positions in the administration (Lombard 1967b:135; Manning 1982:269, 328), and Hundé became *chef* of Atindehouhoué for this reason. Also in the private sector *anciens combattants* profited from the knowledge of the French language and culture, and of other cultures, which they had acquired in the army. Some of the most innovating farmers I met were *anciens combattants*.

### 7.1.2 Schools and Fon eagerness to become *akowe* (literate or white collar employee)

One category of activities gained particular importance after colonisation in terms of numbers of people engaged in it, and also as a source of livelihood and prestige, namely that associated with writing. The principal shift compared to the Danhomean era was that this intellectual rank was more and more obtained through French school education rather than in other ways which I will describe below. Therefore, school attendance is a good measure for the prestige that Fon and Adja parents attached to education and intellectual work. Literacy

rates are considerably higher among the Fon than among the Adja. More schools existed until recently on the Fon- than on the Adja plateau (Table 7.2 in Appendix 7), but this was rather a response to the different demand for education than a conscious difference in policy.

Since at least Agaja's time (1608-1632) literacy was desirable to the Fon. Muslims enjoyed a high status in his kingdom for their writing skills (Dalzel 1793/1967:48), which the Fon, Yoruba and Adja did not possess themselves. Also the *Fá* divination system was prestigious partly because it involved 'writing' down symbols. Fon mythology calls *Fá* 'the *nùwlánwlán* of *Mawu*' (writing of God)[92]. Learning to read and write as well as learning *Ifá* divination is called 'opening the eyes' and 'enlightenment' in Fon and Yoruba (Desanti 1945:139; Quenum 1938; Barber 1987:23; 1997:352). Literate Fon are called *akowe*, a word of Yoruba origin, meaning scribe in this language (Desanti 1945:140; Ségurola 1988:41). The Fon also associated *akowe* with the culture and power of Europeans, and attributed significance to the fact that in the Fon language *ako-we* can be understood as 'the white clan' (*akò* = clan, *we* = white) (Banégas 2003:40). Another Fon concept for literacy was *sɛ wema* (knowing white leaves). (See also 5.2.4).

In the 19th century the largest group of Danhomean *akowe* were the so-called 'Brazilians' or *Agudanu*, creoles of Brazilian or Portuguese origin. Most of them descended from African slaves who had been exported to Brazil and were allowed to return to the West Africa from about 1800. I will call them 'Brazilians' in quotes to distinguish them from citizens of Brazil. They lived in the Fon enclave Whydah and other towns on the West African coast, were europeanised, literate in Portuguese, mostly formally catholic, specialised in trade, and several of them worked as guides and interpreters for Europeans. The wealthiest 'Brazilians' exported slaves, palm oil, cloth and kola to Brazil in exchange for tobacco and rum, and produced palm oil with the help of slaves. One of them, Francisco Felix da Souza I, helped Fon prince Gezo to seize power in 1818, and was rewarded with the new office of *chacha* (chief customs collector) and governor of Whydah and with an export monopoly on the king's slaves. After the first *chacha*'s death in 1849, Gezo granted the title to Da Souza's sons and the primacy on exporting his slaves to another 'Brazilian', Domingo Martinez[93]. Throughout the 19th century the 'Brazilians' remained wealthy, influential and were highly regarded by the Fon. The pre-colonial Adja, who had less contact with Muslims, Yoruba, 'Brazilians' and Europeans seem to have had less appreciation for literacy. Convinced of the importance of formal education, the 'Brazilians' ran small schools in their homes until 1860. From 1861 the *Société des Missions africaines de Lyon* served the 'Brazilian' demand for schooling and for catholic rites, accepting even – albeit reluctantly – to teach in Portuguese. (De l'Albeca 1895; Foà 1895:240-241, 278; Decalo 1976:31; Pazzi 1979:128; Kakpo 1981:104; Codo & Anignikin 1982:332; Manning 1982:46-48, 55, 211). In what is today South Togo and Ghana, German missionaries taught from 1855 onwards in the Ewe language[94] (not to be confused with the Ehwe-Adja of Bénin) and from 1884 also in English and in German. The Ewe were recorded to be eager for instruction and for the prestige and employment opportunities that went with knowing English (Seige & Liedtke 1990:48, 187, 191, 202, 205, 327, 376-379), but these developments did not reach the Adja.

After 1894 the colonial government required French as the language of instruction and from 1914 also the State's curricula to be taught in all schools, but it could not stop the mission from opening new schools in the interior, amongst others in Abomey (1900) and in Athiémé (1899) (Manning 1982: 211-212). Contrary to government fears however, the presence of mission schools stimulated rather than threatened the local appetite for secular

education. The early colonial State established most of its own schools near to those of the church rather than in areas without schools (Garcia 1971:61). Governor Desanti (1945:139) admits that schools tended to be built in response to demand[95]. Therefore, the fact that the colonial government and the Catholic Church built and staffed slightly more schools on the Fon plateau than on the Adja plateau reflects the Fon's greater interest in formal school education, especially until the 1980s. From 1975 the number of Adja schools gradually caught up, but their quality continued to lag behind that of many Fon plateau schools until the end of my research.

In 1902 the colonial government established a public school in Abomey (Table 7.2), next to the existing catholic one[96]. In 1911 two new schools were opened on the plateaux, in Bohicon and in Aplahoué, which was the first school among the Adja. Until then the schools nearest to the Adja were those in Abomey, Lokossa and Athiémé[97]. In 1911 the Aplahoué school was only visited by 11 sons of civil servants and of employees of trading companies[98], most if not all probably non-Adja[99]. In 1915 the Abomean school was classified as *école régionale mixte*, that of Bohicon as *école de village*, and that of Aplahoué as *école de poste* (Rapport d'ensemble Dahomey 1915, AOM Aix-en-Provence), suggesting a hierarchy in quality and/or equipment. In 1918 the only teacher of the Aplahoué school, an interpreter of the administration, left and the school closed for probably at least 3 years[100]. At the end of the same year the Abomey and Bohicon schools still had seven teachers. In 1922 the Aplahoué school was open again with one teacher (the only one in the *subdivision* de Parahoué), while there were four teachers on the Fon plateau (Annuaire de l'AOF 1922, AOM Aix-en-Provence). By 1925 another school existed in Adjahonme on the north-eastern Adja plateau, where many Fon lived alongside the Adja. In the 1930s there would have been an agricultural college in Abomey according to an Adja informant who attended it; possibly he referred to the vocational training in carpentry, forging and bricklaying that Abomey offered to graduates from the primary school from 1939 onwards[101]. More schools followed in the 1940s, 1950s and 1960s in both *cercles*, in that of Abomey also some higher level ones[102]. Until at least the 1970s the number of schools and school attendance remained considerably higher on the Fon- than on the Adja plateau and other adjacent areas. In 1967-68 the *Sous-préfecture* d'Abomey had 40 public primary schools, more than twice as much per inhabitant as the rest of the *Département* du Zou[103] (Ayo 1983-84:42).

From the first colonial years the French actively recruited the sons of *chefs* for their schools, and by 1900 several Fon *chefs* as well as king Agoli-Agbo sent some of their children to school. In other parts of the colony some *chefs* would have preferred to send the sons of their slaves (Ronen 1975:60), but the Fon sent their own sons, and the Adja sent neither their own nor slaves' kids. Having a French speaking son, Agoli-Agbo believed, would assure him of a trustworthy translator and spy among the French[104]. Already in pre-colonial times the Fon knew the strategic importance of foreign languages. 19th century Fon kings had their personal linguists and scribes[105]. In later colonial times most Fon *chefs de canton* were well educated and nurtured their reading skills and political knowledge by subscribing to newspapers such as *France-Afrique* and *France-Dahomey*[106]. At the same time most Adja *chefs* remained illiterate or wrote only poor French, even those who were raised in the expectation that they would become *chef de canton*.

In colonial times the position of *akowe* became a new role model for the Fon. It was added to the Fon's list of prestigious positions to which that of trader, weaver, blacksmith, priest, diviner, chief and *daa* already belonged. The Fon, Gun and 'Brazilian' eagerness for

formal education as well as the quality of South Dahomean schools, especially the catholic ones, stood out in the French colonies[107]. Due to them Dahomey soon had the highest school attendance rate of French West Africa[108], obtained the reputation of being *le quartier Latin de l'Afrique*, and staffed the most important posts in the colonial administration of other French colonies[109]. This, together with the socio-cultural prestige of literacy, provided the Dahomean *akowe* a status and power in their societies and in West Africa as a whole that went beyond that of intellectuals of other colonies (Banégas 2003:32).

Becoming a teacher was one option for graduates of secondary schools; my case studies and a survey among graduates of Abomean schools suggest that it was the most popular option. (Of 154 who graduated from Abomey town's primary schools between 1912 and 1951, 32% became teachers, 30% traders, 18% clerks in various offices, 11% agricultural extensionists, and 10% medical doctors and nurses, see Table 7.26 in Appendix 7). In the Fon lineages whom I studied in Lissazounme, Kana and Aoundome, many more men became teachers than in the Adja lineages from Atindehouhoué[110] (see Tables 8.7 to 8.10 in Appendix 7), and the same difference applied for the female lineage members. Consequently, many teachers on the Adja plateau were Fon who could not speak (much) Adja, while most teachers on the Fon plateau were either Fon or could speak Fon because it was the major trade language in the South (own observations). This disadvantaged Adja pupils compared to their Fon age-mates.

From 1975 the Marxist government built and staffed schools in areas were they did not exist before and designed new curricula[111]. Poor secondary school students could obtain fellowships until 1986[112]. University students (1975-1978) and young *baccalaureat* holders (from 1978) had to teach in village schools for a year, and holders of the BEPC (four years secondary school) could do so for two years, after receiving only two months teacher training. This did not suffice to make up for the lack of qualified teachers, which was aggravated by the migration of good teachers to neighbouring countries, where teacher's salaries were higher (Allen et al 1989:43, 106-107; Godin 1986:160). Young and untrained teachers generally started their career in new schools in remote villages. Ten years from their retirement senior teachers could apply for posts in town or near to their home villages, which were in many cases on the Fon plateau. According to some informants, including a 40 year-old Fon teacher who was stationed near his home village (Lissazounme), to have sick family members to care for, relationships with people in power, or bribes were also reasons to teach at home. His and other cases suggest that more Fon than Adja teachers fulfilled these conditions. The Adja plateau had more young inexperienced teachers. I heard more Adja than Fon complain about the low quality of education and a lack of commitment of teachers[113].

At the time of my fieldwork the primary school density on the Adja plateau approached that on the Fon plateau and most children had a school at walking distance from their home. Secondary schools existed in most district headquarters, which was so far that most pupils had to rent a room there. Most Adja schools had walls from palm branches and sometimes clay after 1975, while the Fon plateau had many pre-1975 schools from more solid materials. Lissazounme's well-plastered primary school was built in 1958[114]. The primary school of Atindehouhoué was built in 1972, just before Kérékou's reforms, and in 1985 had three classrooms from clay and corrugated iron (still without doors and not plastered) and three from palm branches. Honsouhoué and Lagbahome had no schools until the end of my research in 1991. When the number of schools increased on the Adja plateau from 1975 onward, more and more Adja parents sent their children to school. Nevertheless Adja school attendance remained lower than Fon school attendance until 1991.

Tables 7.3 and 7.4 in Appendix 7 show that at all times until the end of my research more boys from lineages in Lissazounme than in Atindehouhoué went to school. For girls from these lineages there was no clear difference (Tables 7.5 and 7.6; in Atindehouhoué school attendance rates seem to be quite similar for boys and girls since the 1950s). In those of the Adja villages that had no primary school literacy rates were much lower.
Also official statistics show that in 1966-67 and 1979 school attendance and the degree of literacy were higher in the *Département du Centre* (later Zou province) than in the *Département Sud-Ouest* (Mono province). The difference between the Fon and Adja plateaux was even larger, since in both provinces literacy was higher in the South.

Table 7.7: School attendance and degree of literacy per *département*/province, 1966-1969 and 1979

| Years | | *Département du Centre,* later Province du Zou | *Département Sud-Ouest,* later Province du Mono |
|---|---|---|---|
| 1966-1967 | School attendance rate[115] | 28 % | 23 % |
| 1969 | School attendance rate[116] | 26.1% | 23.7% |
| 1979 | Degree[117] of literacy[118] | 22.2% | 17.3% |

Even though Adja children started to catch up on school education, qualitative as well as statistical data from my research villages indicates that until 1990 less Adja than Fon boys were able to study beyond grade 4 of the secondary school. At the end of grade 4 were the BEPC exams, for which about 99% of the Adja plateau pupils failed at the time of my fieldwork. BEPC failure rates were lower on the Fon plateau and in the coastal towns. The BEPC gave access to grade 5, teacher training, agricultural- and other colleges.

### *Disadvantaged Adja pupils: filial respect in father's fields not in 'sitting lazy'*

Adja pupils were in several regards disadvantaged. Firstly because of the lower qualifications of their teachers, secondly because their parents did not understand that success in school depends on more than attending classes alone, and thirdly because of their materially and intellectually less supportive environment. Adja parents typically argued that if they allowed their children to attend school five days a week, these children should help on the farm at least the other two days. The Adja showed filial respect mainly by working on the father's farm, and children not working there were labelled as disobedient and lazy. Seated work was seen as idling by the Adja even more than by the Fon, see 5.4.1. Adja parents were also little prepared to provide study materials to their children, and Adja pupils had fewer relatives who understood the utility of such materials and who were willing to pay for them.

> Kedo Egbo, an Adja farmer in Zouvou (1 km from the mixed village Klouékanme) explained: "Adja children respect their father but Fon children don't, because Fon fathers do not value respect, they rather value school. Fon children progress better in school because they don't go to the field with their father, while Adja pupils still have to help their father on his fields. Adja children learn more crafts than Fon children." (Kedo Egbo, Zouvou January 1991)

> Nicholas Adogan, an Adja in the final years of secondary school in the mixed village Kplakatagon: "Adja pupils owe to help their father in his fields every Saturday and Sunday. Father says to them: 'Five days you are in school; you have only two days in seven to work for me.' The

> parents think that Saturdays and Sundays are holidays from school; they don't understand that there is homework to do. They say that their son is lazy if he wants to work in his exercise-books during the weekend, and threaten to take him from school if he does not want to assist in the fields. Therefore, Adja children do not progress well in school. Fon pupils do not work in their father's fields. They disobey their parents. If their father asks for help, the pupil insults him. Fon parents accept this, because they understand the importance of school education. In spite of the fact that Fon pupils insult their parents, they receive more support for school. Many Fon have elder brothers who are civil servants and pay their school equipment. In contrast, most Adja parents are cultivators who neither have the means to support their children in school nor understand need for this support.
>
> Fon pupils are more successful in their careers. They don't stay too long in school, but quickly search employment in the administration, where they hold influential positions and can obtain bribes. The fact that they have elder brothers who are already there also helps them. Adja pupils in contrast like prolonged education, and spend a lot on this, but find no employment afterwards. In our village, Adja children now go as much to school as Fon children. But when the scholarships for the secondary school were abolished in 1985, many Adja withdrew their children from school." (Nicholas Adogan, Kplakatagon 11-2-1991)
>
> When my Adja interpreter's younger brother, a schoolboy and 16 years old, wanted to become a Christian in 1984, he asked his father for permission. The latter replied: "Then become a Catholic. Their services are shorter than those of the other churches, so that after church you can still work in my fields!"
>
> Konyanu Kohunde, an Adja farmer in another mixed village, was aware of the 'weekend problem': "Fon children go more to school than our children. I need some of my children to farm and to continue my enterprise, therefore I don't want all my children to go to school. But now I also understand the importance of school education; therefore some of my children go to school and don't need to assist me in the weekends." (Konyanu Kohunde, born around 1926, Djihami 13-2-1991)

Since early colonial times not only parents but also administrators understood that (Fon) school children fled agriculture. School education contributed to the disdain of agriculture and the preference for non-agricultural occupations among the Fon (Desanti 1945:140; Ronen 1975:68-69). The Fon-Yoruba word *akowe*, literally 'scribe', became the general title for all literate people, civil servants and other white collar workers, by which they distinguished themselves from those who did manual work. Though some Fon farmers sent their children to school, others were reluctant to do so because this would contribute to the disrespect of parents:

> '*quand nos enfants savent lire et écrire, disaient les agriculteurs, ils ne nous obéissent plus. Non seulement ils 'cassent' le pays, mais ils 'cassent' aussi nos familles. Ils nous quittent, ils s'engagent comme interprètes ou employés de commerce, ils ne travaillent plus pour nous.*' (Rapport du 3e trimestre Cercle d'Abomey, s.d, ANB Porto-Novo)
>
> '*les jeunes gens instruits fuient l'agriculture pour chercher leur voie dans le commerce, ils deviennent les intermédiaires entre le producteur, le traitant et la maison d'exportation; cette vie facile et rémunératrice les attire de plus en plus, le mercantilisme étant inné dans les caractère des populations du Bas-Dahomey.*' (Rapport annuel service de l'agriculture et des forêts Dahomey 1918, AOM Aix-en-Provence)

From 1986 government employment became less guaranteed and less rewarding for graduates. Until then all university and many college graduates were enrolled by the State (Bierschenk & Mongbo 2000), but now they had to search for work themselves. During 1987 and 1988 the government reduced salaries of civil servants and often paid them with several months delay. From early 1989 to early 1990 all Béninese schoolteachers went on

strike for a whole year to protest against these delays in payment and to demand the Kérékou government to step down. During this year many pupils, Fon and Adja, set up their own enterprises, found employment, or started an apprenticeship for a craft. When the schools opened again in March 1990 a good number of pupils did not return but preferred to continue their new occupation. Béatrice Zonvidé (former extensionist in a mixed Fon-Adja village), Nicholas Adogan (see quotation above) and I had the impression that (in the villages we knew) a higher percentage of the Adja than of the Fon returned to school.

> "The Fon engage more in school attendance, trading, carpentry and other crafts, odd jobs in Cotonou (especially the school leavers), and resting under the tree than the Adja. The Adja make more *sodabi* and engage in jobs in Nigeria. More Fon than Adja parents send their children to school. But during the teachers' strikes in 1989, many Fon and also Adja pupils have abandoned school and searched employment in Cotonou. Most of them now work in the Dantokpa market as retailers or ticket controllers. In the past the Fon were rich [here], but everybody agrees that now the Adja are richer. The Fon don't want to do anything, especially the men, therefore they pauperize." (Béatrice Zonvidé, Akwevɛadja 13-2-1991)

This seems to have been partly due to the Fon's greater ease to find employment through their social networks and partly to the Adja's greater optimism or naivety about the longer term utility of education. In the words of Medo Fanu, Adja farmer in Lokogba: "I would send all my children to school if I had money, even though educated children are disobedient and don't help their father on his farm. Schooling will always pay off; in any case it is better to be educated!" (Lokogba 15-2-1991).

### *Fon careers in national politics*

Given the Fon's better relations with the French administration and the greater number of Fon with school- or military training; it comes as no surprise that throughout the 20th century more Fon than Adja held influential positions in national politics. Only the Gun and 'Brazilians' rivalled with the Fon in this regard. From the First World War mostly Fon, Gun and 'Brazilian' intellectuals were elected in the national *Conseil d'Administration* (which had three Dahomean members since the mid 1920s) and edited critical newspapers such as *La Voix du Dahomey, Le Phare du Dahomey, Courrier du golfe de Bénin* and *Les Rayons solaires*. Some nationally influential Fon of the 1920s and 1930s were Victorin Féliho, Jean Adjovi and *chef de canton* prince Justin Aho, all with school education and at least the last two with military service as well. In 1946 the *Conseil d'Administration* was renamed into *Assemblée Nationale* and several candidates established political parties to support their election campaigns. Leading candidates between 1945 and 1972 were Justin Ahomadegbe (a Fon of royal blood), Souro Migan Apithy (Gun), Emile Derlin Zinsou ('Brazilian'), Hubert Maga (a northerner) and Alexandre Adandé (Yoruba) (Manning 1982:264-279). All of them were briefly head of State between Independence and Kérékou's coup in 1972, with the exception of Adandé who held 'only' three ministerial posts. The only others on the Dahomean/Beninese presidential throne until today were the princely Fon general Christophe Soglo[119] (1963-1964, 1965-1967), his relative Nicéphore Soglo (1991-1996), and during a few months the northerners colonel Maurice Kouandété, colonel Alphonse Alley, and Yayi Boni, who is President since April 2006 (Cornevin 1965/1970:75-82; Decalo 1976:2, 8-10, 13-14, 79-80, 114; De Jong 1986:18-19). The Fon until 1972 also dominated in ministerial positions as well as in professions such as medicine, law, literature, education, and the army[120]. Kérékou's coup and 'revolution' in 1972-75 were explicitly motivated as an assault on the

'Abomean feudal power' that had dominated Dahomean society until then (Banégas 2003: 46, 70), but also in his military government no Adja played a significant role. The Adja had no sizeable influence on supra-local politics until at least the late 1990s.

The first occasion for the Adja to be mentioned in national politics was their involvement in the Parti Communiste du Dahomey. This party, founded in 1977, had its national strongholds around Djakotome on the Ehwe-Adja plateau, in Boukoumbé in North Bénin, and in the University (own interview in Atindehouhoué 21-4-1990; Banégas 2003:94-96). It was until 1990 the only group that openly opposed Kérékou's government, which reacted by banning and persecuting the PCD. One PCD member from Atindehouhoué would have escaped to France for that. The PCD's underground activities however seriously upset the government's balance in 1989, leading Kérékou to accept presidential elections in 1991 – the first ones in 20 years.

In 1991 for the first time an Adja was a candidate for the presidential elections (among 13 candidates – the PCD chose not to participate[121]): Bruno Amoussou from the Djakotome area, former director of the national bank BCB. Although Amoussou never became president of the Republic, his star gradually ascended. He obtained about 4% of the votes for the presidency in 1991, ended fourth with 7.76% of the votes in 1996, was again fourth with 8.59% in the 2001 elections, and ended third with more than 16% of the votes in the 2006 elections (Le Meur 1995:99; Esch 2001; Banégas 2003:231, 245-246; oral communication Esaïe Gandonou 2006). At the elections for the Assemblée Nationale he was more successful: he became third with 12% of the votes in 1991 (Banégas 2003:186) and was elected president of the Assemblée from 1995 until 1999. Since 1999 he is the *Ministre d'Etat chargé du plan, de la prospective et du développement* (Benin Expansion 2003 n° 5) and is called the *Dadjê national* in the Béninese media (Magnidet 20-7-2004; 4-8-2004; Houngbedji 13-9-2004). *Dajɛ* is the Adja concept for a strong young man in the prime of life and capable to work (see Table 5.4). President Kérékou in contrast was called *Le vieux* by the Béninese people, and Nicéphore Soglo was nicknamed *Nicéfaible* since he fell during his election in 1991, and continued to suffer from bad health as long as he was president. He was said to be victim of magic called *cakatu* against which he had no defence because he was not very religious[122], see also Chapter 10.

One should neither deny nor exaggerate the role of ethnic clientilism in Dahomean and Béninese politics. Personal strife, political considerations and clever opportunism were sometimes reasons for the Fon and Adja to support politicians from a region other than their own. Nevertheless, the Fon in late colonial and post-colonial times mostly favoured the Fon candidates Ahomadegbe and Soglo (own interviews; Lombard 1967b:244-248; Glélé 1974: 251-254; Decalo 1976: xxix, 8; Manning 1982:279; Banégas 2003:245-246). Initially, when there were no Adja candidates, most Adja voted for a Fon (Decalo 1976: xxix, 8). From 1991 the Adja's electoral support gradually shifted from Soglo to Amoussou, and some voted for the PCD when it participated in the elections in 1996.[123]

### 7.1.3 Agricultural policies and stigmatisation of Adja cultivation techniques

Agricultural policies were similar on the Fon and Adja plateaux, especially until 1964 when agricultural programmes were formulated at national level. From then onwards the agricultural services of the various *départements* received a degree of autonomy, but since each

service mostly continued in its trodden path this did not greatly alter agricultural intervention practice. Nor did the frequent changes in political philosophies and national political regimes during the 20th century – whether colonial, early independent, military 'Marxist', or democratic – have much impact on agricultural policies. These proved to be remarkably persistent[124]. Intervention was of an extremely paternalistic nature until at least the end of my research, and continued to concentrate mainly on products that had an overseas market, though the emphasis switched over the years from oil crops and stimulants to cotton. Extensionists consistently ignored farmers' knowledge and socio-cultural values. Throughout, agronomists and administrators tended to label the Adja's farming practices as irrational and backward and those of the Fon as more sophisticated and advanced.

The Adja's flat tillage, their 'wine' palm cultivation, and their low degree of commoditisation were for colonial and post-colonial administrators and agronomists a sign of backwardness. Ignorant of the importance of natural vegetation – labelled as 'weeds' – for the maintenance of soil fertility, they displayed incomprehension for the Adja's flat minimal tillage and for their oil palm 'fallows'. Instead, they valued the Fon's ridge tillage and their clean weeding or permanent cropping in oil palm plantations as 'good agricultural practices'. The abundant re-growth of 'weeds' and shrubs in Adja fields were in French eyes not a sign of soil fertility, but a sign of laziness and of lack of commitment to agricultural commodity production. (See Chapters 6 and 9 on Fon and Adja tillage and oil palm management styles)

> '*Les cultures des Adjas sont des simples débroussements. Les indigènes ne tracent aucun sillon, ne retournent même pas la terre; ils se contentent de gratter le sol pour le débarrasser des mauvaises herbes et l'ensemencent après cette opération.*' (Rapport mensuel Cercle d'Abomey Octobre 1905, ANB Porto-Novo)[125]

> '*Les populations que nous avons visitées sont très sincères, la paresse est leur principal défaut; ils n'ont pas d'énergie suffisante pour débrousser leurs champs, à l'approche des pluies, autrement que par le feu. (…) Un seul village, celui de Dohoun*[126]*, soigne véritablement ses palmiers.*' (Rapport mensuel Février 1905 Cercle de Mono Poste d'Athiémé, ANB Porto-Novo)

Ridge tillage continued to belong to the agricultural services' standard recommendations in the whole of South Bénin. From 1985 to 1991 extensionists still advised Adja farmers to ridge their soils before sowing (own interviews with extensionists, amongst others Edou Gnagnimon in Atindehouhoué 1985 and Béatrice Zonvidé in Akwevɛadja 13-2-1991; Neefjes 1986:101). But I get the impression that they did not insist very much, knowing that the Adja would not listen to this recommendation. In 6.5.1 and 6.5.3 the administrators' and agronomists' disapproval of Adja oil palm fallowing and the colonial decree of 1909 to forbid the system were already discussed. Also the Adja's cotton cultivation techniques in 1913 were labelled as defective, even though the Adja realised a 'beautiful' harvest[127]:

> '*Dans le Nord du cercle du Mono, aux environs de Loncly, de nombreux terrains sont maintenant accordées au cotonnier, la récolte est belle, mais là encore les pratiques culturales sont défectueuses. Le démariage à 1 ou 2 plantes n'est pas pratiqué et d'un seul paquet on voit souvent émerger 6 à 7 plants maliques et non ramifiés, donnant peu de capsules.*' (Rapport annuel 1913 Service de l'agriculture Dahomey, 14 Mi 1671 série 2G 13-18, AOM Aix-en-Provence)

Numbers of grains per plant hole, intervals between plant holes and thinning were continuous points of disagreement between extensionists and farmers, Adja farmers slightly more so than Fon farmers. The Adja sowed 4 and the Fon 3-4 grains of cotton, maize, and cowpea per plant hole, with intervals of ca. 70 × 70 cm between holes of cotton and maize and of ca. 70 × 40 cm

between cowpeas, and thinned only some weak plants in pockets of 4 that fell automatically into their hands during weeding. The agricultural services however recommended and still recommend intervals of 60 × 40 cm for cotton and maize and to sow or thin to 2 plants per hole. The Adja also sowed 'too many' castor seeds per hole. In the later 1960s and early 1970s the agricultural services tried to let Mono and Zou cotton farmers use a *roulette* to make plant holes for cotton at regular intervals of 40 cm, but quickly gave up their attempts in the *Département* du Mono, firstly because the fields there were 'insufficiently' tilled and could not be pierced with such a tool, secondly because farmers feared that dense cotton plants would produce only few lateral branches and hence yield little (SATEC 1971:127; 1973:73; Hodonou 1976:348), and thirdly because farmers (rightly) found it too time consuming to sow with *roulettes*, especially since too few *roulettes* were available to let all farmers use them fast enough after it rained (own interviews). Characteristic for Hodonou's paternalistic 'expert' attitude is not only his derogatory label for the Adja's 'insufficient' (flat) tillage, but also that he deplored that farmers proved capable to sow at 40 cm at eyesight without the services' sophisticated tool. Reduction of maize intervals and -seeds per hole remained a major theme in extensionists' messages[128], but the farmers consider this too risky because not all grains germinate, because lower intervals would in many years cause nutrient and water stress, and because systematic thinning would be too much work compared to the small potential yield increase. Agronomists probably did not consider the tall size of local maize varieties, the degraded soils, and (for maize) the marginal rainfall of the Fon and Adja plateaux.

Initially the Adja sold much less to export companies than the Fon, which also yielded them criticism from the French. Le Herissé, *Commandant* of the *Cercle* d'Abomey from 1904 to 1908 (including the north-eastern Adja plateau), summarised the early colonial disdain of Adja farming when he commented on the myth of origin of the name 'Fon' which I presented in 5.2.3. In this myth, the *kakɛ* tree (*Prosopis africana*) represented the Adja and the *fon* bush (*Vitex doniana)* the Fon. Le Herissé (1911:48-49) described the *kakɛ*'s wood as too hard to make anything from it, and continued

> '*Cette prédiction allégorique s'est réalisée, semble-t-il. Les Adja vivent encore comme des sauvages. Quand on visite ceux qui dépendent du cercle d'Abomey, on reste étonné de les voir, presque nus, habiter de misérables huttes encerclées d'épais buissons épineux. Ils ne labourent pas leurs champs et ne connaissent pas la jachère comme les Dahoméens; ils se contentent d'un défrichement sommaire par le coupe-coupe et le feu et ils ensemencent sans même retourner la terre. Au lieu de cultiver le palmier pour trafiquer de ses fruits, ils l'abattent pour s'enivrer de son vin. Si, d'aventure, un Européen ou même un noir étranger se risque chez eux, hommes, femmes, enfants se sauvent dans les forêts. En un mot, rebelles à toute pénétration, les Adjas n'ont jamais eu aucune action dans l'histoire du Dahomey; ils sont comparables au kaké qui peuple leurs forêts et dont ils n'ont pu jamais tirer aucun parti, parce que son bois ébrèche leurs haches.*'

Le Herissé erred in calling the *kakɛ* tree (and the Adja's practices) useless. *Prosopis africana* is one of the most valued African trees precisely because of its hard wood, which gives the best charcoal for iron smelting and forging as well as for other purposes. The Adja also made a spice from its fruits, *flefi*, which was one of their first commodities according to their oral traditions (see 6.3 and Fifa, Afokui and Navi in the Adja case study in 8.2).

Agricultural intervention in Dahomey/Bénin concentrated mainly on those products that could be exported overseas. The national and departmental agricultural services were aided in this by some commercial enterprises who contributed research and extension on, inputs for

and marketing of particular products. Emphasis switched over the years from palm oil and -kernels (but no palm wine), castor, cocoa, coffee, copra and groundnut to cotton, tobacco and some rice. In general, all regions were encouraged to grow all those crops that the State and companies favoured at that moment, with few exceptions. Only a few attempts were made to introduce 'improved' varieties of crops for domestic consumption (maize, rice) and 'improved' techniques for maize cultivation. But these disregarded both the crop qualities that the farmers desired and farmers' locally often more adapted technological knowledge (Abdoulaye 1986: iii; Neefjes 1986:94-95).

In 1923 the colony was divided into four *circonscriptions agricoles* and different export crops were attributed to each of them, though in practice they were encouraged to grow other export crops as well. The second *circonscription*, to which the Adja plateau belonged, was supposed to develop coffee, cocoa and coconut production. The third *circonscription*, including the Fon plateau, was destined to specialise in cotton. Cotton research stations were established in Abomey and Savalou, a cocoa and coffee research station in Niaouli on the Allada plateau[129], and a coconut palm research station in Cotonou. Later in the 1920s and 1930s, research on castor and groundnut was also attributed to the third *circonscription*, that on oil palm to the second and to a research station in Pobè, and the *Cercles* d'Athiémé and d'Abomey were encouraged to grow all these crops (Dissou 1970:42-44, 50-51; De Lange 1987:10). No research station was ever opened in the Adja area until the end of my fieldwork. Not that this made much difference for local agricultural practices, because the impact of research stations on these remained marginal anyway, but it probably contributed to agronomists' lack of understanding of Adja livelihoods. Most of the extension work was done by indigenous *moniteurs de service agricole* and the government's administrators. One European agronomist who resided in Whydah, a coastal Fon town where ridge tillage was practised, headed the second *circonscription* but rarely visited the Adja plateau. The third had two European staff members in Savè (Dissou 1970:49-50), who certainly frequented the Fon plateau to see the Abomean research station, to buy provisions, and on their way to the coast. Also this must have contributed to the agricultural service's greater comprehension of and regard for Fon compared to Adja styles of farming.

Until the late 1970s the Dahomean State's income depended mainly on palm oil and -kernel exports[130], and for a good proportion on import duties on alcohol[131]. Its oil palm policies can be seen as a classical example of a top down approach, based on a belief in the superiority of universal scientific knowledge and on-station trials, which disregarded local knowledge and -conditions. Until the 1970s it favoured oil palm fruit production, and labelled the Adja's 'wine' palm management style as 'backward' and agro-economically irrational. It issued a decree to forbid the felling of oil palms and production of palm wine as early as 1909 and forbade distilling (Mondjannagni 1977:253-254). Symptomatic for expert's lack of interest in Adja styles and -knowledge is that until at least 1987 they ignored the densities of Adja oil palm groves. While each Adja child knows that their fathers and elder brothers plant 600-1600 palms per hectare since several decades already, and I measured the same densities, the literature pretends that it is only 200-600 palms (De Lange 1987; Segalla 1999:16). From 1946, to boost palm oil and -kernel exports which had fallen below those of maize during the War, the State banned the export of maize (Desanti 1945:150, 170; Pfeiffer 1988: 40). In 1921 it set up an oil palm research station in Pobè, in Dahomey's region with the best soil- and rainfall conditions for oil palms. This station selected a hybrid palm variety, called Tenera, with potentially high oil-, average kernel-, but relatively low wine yields. But

it required better soils and more rain (1200 mm per year) than the indigenous Dura variety (1000 mm), and more than normal rainfall on the Fon and Adja plateaux (1050-1100 mm) (De Lange 1987:4; Wartena 1999:16). Dahomey's agronomists recommended to plant 80-143 Tenera palms/ha (Dissou 1970:16, 71; De Lange 1987) or not more than 80 if grown in association with food crops (Segalla 1999:18). This was far too little for the Adja, for good wine yields per hectare, for quenching grasses and for preventing bush fires in South Bénin's relatively dry climate. Consequently, bush fires damaged the palms in the State's plantations (Dissou 1970:87). Based on on-station trials, experts promised 7-8 tonnes of fruits annually per hectare of Tenera palms with 1200 mm rain (De Lange 1987:4)[132].

In the 1940s and 1950s the agricultural service distributed young Tenera trees and bounties to plant them to farmers. Initially some Fon and Adja accepted them, especially *chefs*, and each year the greatest planter(s) received a price consisting of money and a document stating that they were the department's farmer of the year, which they proudly framed and hang in their living room[133]. But soon farmers appeared incapable to afford the fertiliser that the hybrids required before fruit-bearing age according to Dissou (1970:84). 56% of the plants in farmers' fields died before entering the production stage (De Lange 1987:10), partly due to the plateaux' aridity (Rapport agricole Dahomey 1950, AOM Aix-en-Provence; Agriculture 1958, Archives Aplahoué). By 1954 Fon plateau soils in particular were found to be so poor that organic manure would have been required in addition to counter palm mortality[134]. Tenera fruit yields in farmers' fields also turned out much lower than promised. De Lange (1987:4) estimated them at 1.4 tonnes per hectare, but it is again symptomatic for agronomists' disinterest in farmers that nobody seems to have measured their Tenera yields. Segalla (1999:16, 18) thinks that without constant fertilisation the hybrids yield less than the indigenous palms[135]. Farmers lost interest, which experts such as Dissou (1970:14) and de Lange (1987:10) labelled as '*absence d'initiatives des masses paysannes*' and '*résistance de la population rurale*'.

Agronomists also recommended felling the hybrids at the age of 30 because yields would drop thereafter and to purchase new Tenera seedlings from certified nurseries. Planters who tried hybrids in Atindehouhoué from the 1950s to 1970s however did not want to purchase new trees because they found these too expensive[136]. Another reason why the *chef de village* did not replant was that he needed his land for his sons who married around the time that he felled the hybrids. Fon farmers refrained from 'killing' palms of only 30 years old and to plant new hybrids on their poor soils, where they would take long to mature and yield very little.

From the 1960s, the State made no effort to distribute palms to farmers anymore but set up State plantations, so-called 'cooperatives', in the three southernmost *départements* instead. One was between Houin and Agame on the southern edge of the Adja plateau, but none on the poor Abomey plateau soils (Dissou 1970:14, 16). To establish the plantations all the local landowners were forced to render their land to the 'cooperatives' and to enlist as members. The cooperatives' management was in the hands of 'experts' of the agricultural service SO.NA.DER[137]. All members resented the loss of control over their land[138]. They were allowed, but not obliged, to work in the plantation for a wage that was less than half of the average earnings on small private farms[139], but had to apply the SO.NA.DER's 'improved' techniques. The resulting lack of plantation labourers led to the introduction of ox ploughing from 1969. To counter bush fires, plantation workers were no longer allowed to plant food crops between the palms, but they were granted separate plots for annuals

(Dissou 1970:87), and had to maintain pastures for (draft) cattle between the palms instead. Ploughing, just like ridging, implied deep tillage and uprooting of woody vegetation, leading to soil depletion when fertiliser was no longer available (see also 9.2 and Kokuhu's opinion in section 8.3). The plots for annuals were too small for sustaining soil fertility and the workers' livelihoods at the same time. (Pfeiffer 1988:51). These remained sceptical about the 'improved' techniques (Dissou 1970:93). Most importantly, the yields in the 'cooperative' groves appeared to be only 23% of those expected on average during the first 18 years after entering into production (Pfeiffer 1988:52) or only 0.6-3.8 tonnes per hectare (De Lange 1987:19). According to Gbehi (oral communication 7 September 2004) State plantation yields were lower than those of private farmers' hybrid palms, especially in the Atlantique and Mono provinces[140]. Finally, also the State became so disappointed that it did not rejuvenate its Tenera plantations anymore and dismantled its palm oil factories in the late 1970s and 1980s (De Lange 1987:13, 18). Palm oil and kernel exports immediately fell to almost zero. By 1995 the groves hardly produced anything anymore (Le Meur 1996: 313). Declining palm oil prices on the world market contributed to the State's disappointment. In spite of this it continued to disapprove of the Adja's wine palm management style and to forbid distilling, though the prohibition to fell palms was replaced in the 1960s by a fee for felling. Exports of oil from the indigenous Dura trees declined already since 1956 and those of kernels since 1964. Reasons were that soil depletion reduced the yields, the growing local population consumed a greater proportion of the oil and paid a better price than export firms, and from at least 1964 the official kernel price was mostly lower than the local market price. (Own research; Prudencio 1976:246, 249-250; Sedjro 1980:10).
Groundnut, castor and tobacco were crops whose export production was mainly supported by French companies, who also engaged in research and extension in Dahomey. The groundnut company however ceased its activities in the early 1960s, the castor company (Organico) in 1968 and the tobacco company CAITA (Compagnie Agricole et Industrielle des Tabacs Africains)[141] in 1973 (SATEC 1972:81). Castor cultivation stopped immediately, that of groundnut and tobacco continued to meet West African demand. Government attempts to nationalise the groundnut and tobacco trade remained quite unsuccessful, the State managed to market only small portions of the harvest[142]. The only commodity whose trade remained under State control was cotton, because there was hardly any local demand for it since manual weaving had been squeezed out by cheap industrial tissues after the Second World War[143].

After 1963 the agricultural services' favour switched more and more to cotton, partly because the World Bank sponsored its cultivation in the three northern *départements* and partly because the cotton trade monopoly provided them income (Neefjes 1986:79). Since that year, subsidised fertiliser and insecticide on credit and a new cotton variety were made available to cotton growers, and the largest part of extensionists' labour time has been devoted to this crop. The new cotton variety 'Allen' has a short growing cycle but demands a fertile soil, making it suitable for the Adja – but not for the Fon plateau. Consequently the extension service lost interest in the Fon plateau. Its staff spent almost all its time in cotton growing villages and had no time for the others[144]. During my fieldwork I rarely saw extensionists in Fon- but quite frequently in Adja villages. With the extension service's attention the Adja also received easier access to fertiliser and had more opportunities to exchange ideas on other issues with extensionists. Gradually, local extension workers' understanding of Adja styles of farming and their appreciation for Adja commodity production (of cotton) started to increase, though their disdain of Adja flat tillage and wine palm management persisted until the end of my research.

Until 1964 the policies for all *circonscriptions* or *régions agricoles* were co-ordinated by the national *Service de l'agriculture*. Since then the departmental services received more freedom, but I will show that this did not lead to great differences between their programmes for the Fon and the Adja plateaux. In 1964 the limited nature of the national financial resources incited the Dahomean government to hand over part of its agricultural programmes to foreign organisations. From 1964 to 1973 the design and funding of agricultural development in the *département* du Zou was entrusted to the French SATEC (Société d'Aide Technique et de Coopération), that of the *département* du Borgou as well as that of cotton production in the whole country to the CFDT (Compagnie Française pour le Développement des fibres Textiles), and that of tobacco research and development to the IRAT and the CAITA[145]. Agricultural programmes in the *département* du Mono remained the national government's affair. Agricultural development intervention in the *département* de l'Atacora was entrusted to the French BDPA[146], that of the *départements* de l'Atlantique and du Ouémé remained in national hands though with assistance of the German FED by the early 1980s. This division made Béninese bureaucrats refer informally to these provinces as French, German or World Bank territory respectively (Mongbo 2001:8). The foreign organisations disposed of the staff and material equipment of the former *Service de l'agriculture* but were semi-autonomous in their policies. This implied that the SATEC in the Zou disposed of larger financial means than the agricultural service in the Mono, except for cotton and tobacco development which were funded by the CFDT and the CAITA. SATEC's formal objectives were to advise farmers on 'improved' maize, groundnut- and cotton cultivation techniques, to provide agricultural credit, and to market various agricultural products, but in practice it concentrated on cotton. Also the Mono's agricultural services' did little else than providing inputs, advice and marketing boards for cotton. (Dissou 1970:74-84; Mongbo 1985:52-53; Neefjes 1986:26-27).

In an attempt to develop the Mono in a more integrated way, in 1969 the CFDT and the *Service de l'agriculture* of this *département* as well as their staff, were absorbed by one new Dahomean organisation called CARDER (Centre d'Action Régionale pour le Développement Rural). The CARDER Mono's mission was to give advice on various crops for domestic consumption and for sale, to start with especially maize, cotton, rice, tobacco and groundnut (Dissou 1970:109-110). Emphasis was on cotton; Mono extensionists received orders to visit each farmer 15 times annually to illustrate cotton cultivation and 5-7 times for maize, but according to my own and Neefjes' (1986:112-113) observations in Adja villages their visits for other crops than cotton numbered next to zero. The CARDER Mono started with 120 permanent and 95 temporary agricultural staff, all Dahomeans[147]. The 95 temporary *aides-encadreurs* saw to it that cotton was sown at the 'proper' density. SATEC's number of permanent agricultural staff that year was 137, including 4 expatriate *chefs de secteur*, 3 Dahomean *chefs de secteur*, 19 *moniteurs agricoles* and 111 *encadreurs*. The CAITA continued to work with its own staff. (Dissou 1970:78, 97-104).

In 1973 Kérékou's military government decided to take over the marketing of export crops, especially cotton and tobacco, expelled SATEC, CFDT and CAITA from the country, replaced them in 1974 by the SONACO (Société Nationale pour le Coton) and from 1975 by the CARDER-Zou. The marketing of cereals to stabilise domestic prices and to establish security stocks was another government objective. Nevertheless, the CARDER Zou continued to limit itself to cotton even though it was supposed to stimulate and market all crops, especially maize, rice, beans, tobacco and groundnut. Contrary to the military government's

objectives the marketing of groundnut and tobacco came more and more into the hands of small private traders. (Mongbo 1985:53-57, 65, 70; Dissou 1970:81, 105-106; SATEC 1972:81; Neefjes 1986:50-70, 74-89, 112-116; Rapport 1974 opération de développement intégrée de la province du Zou).

Agricultural intervention in the Zou and Mono provinces was based on a belief in the superiority of external 'scientific' knowledge, farm modernisation and rationalisation in stages, and a top down extension approach until at least 1991. Consequences of this were fairly standardised policies for large territories. Policy makers ignored local knowledge, wishes, and practices, and regarded these as irrational and irrelevant for their choice of 'themes to extend to farmers', of quantitative and of qualitative objectives (Neefjes 1986: 101).

The SATEC and the CARDER's of the Zou and Mono prescribed standard extension themes and –stages of development that all farmers in their departments/provinces were supposed to pass through. Fixed themes and stages in the Mono around 1969-1970 were sowing in lines at proper dates and densities, weeding in time (stage 1), fertiliser application (stage 2), and ploughing (stage 3). Stage 1 was supposed to last two years, stage 2 two to four years and stage 3 one year (Dissou 1970:109, 121). In choosing these themes the planners obviously ignored that Adja farmers knew proper sowing and weeding dates and sowed in lines since at least the early 20th century, and that the CARDER itself withheld fertiliser and hence stage 2 from non-cotton growers. Probably it did not even intend to 'admit' non-cotton growers to stage 2. When Dissou (1970:108) remarked that Adja farmers had 'already acquired the first elements of modern agriculture', namely sowing in lines at proper density, he seemed to assume that this was the CARDER's achievement. During the 1970s several dozen southern Béninese farmers including the *délégué* of Atindehouhoué accepted a pair of oxen on credit, which were granted only to those who dug out all the roots of trees and shrubs from their fields (CARDER Zou 1983:48, 50). But in 1982 only 44 of 120 distributed pairs were still working because this uprooting degraded the soils, the southern climate was unhealthy for the draft animals, and veterinary services were lacking according to Pfeiffer (1988:51)[148]. The *délégué*'s oxen were still alive in 1985, but other villagers and I observed that grasses invaded his fields and that his soils depleted more rapidly than

Table 7.8: Pairs of draft oxen possessed by Fon farmers, 1973-1988

| District | Pairs received 1973-77 | Pairs still existing 1977 | Ploughs existing 1983 | Farmers who started uprooting their fields by 1983[1] | Pairs existing 1985 | Pairs existing 1988 |
|---|---|---|---|---|---|---|
| Djidja[2] | 7 | 2 | 7 | 8 | 4 | 17 |
| Abomey | | | – | – | 2 | 2 |
| Bohicon | 2 | 1 | 4 | 2 | – | – |
| Za-Kpota | | | 2 | 4 | 2 | 1 |
| Zogbodome | 1 | 1 | 6 | 6 | 1 | 1 |
| Agbanizoun | | | 1 | – | – | – |
| Zou total | 182 | 132 | | 138 | 94 | 118 |

1 Making a start with uprooting trees and shrubs was a condition for receiving oxen on credit.
2 In the savannah north of the Fon plateau.
Sources: Rapports annuels CARDER Zou 1977-78:49; 1983:48-51; 1985-86:41; 1988-89:53.

those of his neighbours (own interviews and observations 1985-1991; Wartena 1987:118). By 1986 the CARDER Mono replaced the 'ploughing' theme in stage 3 by phytosanitary treatment, harvesting, storage and conservation (Neefjes 1986 annexe 8.2). The CARDER Zou however continued to advocate ploughing until at least 1990 although also the Fon plateau's climate was unhealthy for the oxen (own observations; CARDER Zou 1977-78: 49; 1983-84:48). Fon plateau soils however did not degrade or savannise more from ploughing than they were already from ridging. Ploughing Fon farmers used in addition ox-drawn ridgers (CARDER Zou 1983-84:51).

In the 1970s and 1980s SATEC and the CARDER Zou worked with 3-4 *stades d'intensification de la culture* whose contents were basically similar to those in the Mono. They included sowing at proper dates and densities, weeding in time (stage 1), light use of insecticide and of fertiliser on cotton, on 'improved' groundnut varieties, and (in the 1980s) on 'improved' maize varieties (stage 2), heavy use of fertiliser and insecticide (stage 3), and (from 1973) ploughing (stage 4). SATEC and the CARDER Zou promised that yields of maize, cowpea, groundnut and cotton and monetary incomes from these crops would double from stages 1 to 4. (Dissou 1970:82-83; SATEC 1972:82-83; CARDER Zou 1977:49; CARDER Zou DSEI 1988). Fon farmers in my research villages however believed that the yield increases on their degraded soils would be too small to justify the heavy financial investments in the higher stages (own interviews). Prices of a pair of draft oxen gradually increased from 32.250 FCFA in 1973 to ca. 144.000 FCFA in 1985[149] and the price of a plough from 35.130 FCFA in 1985 to 43.450 FCFA in 1987[150].

In analysing crop production in 7.3 and Chapter 9 I will present agricultural policies relating to particular crops in more detail. I will show that administrators and agronomists until today considered the Adja's minimal tillage, wine palm and fallow system, and their emphasis on assuring their own food security before selling crops useless. In Chapter 10 I will discuss the question to which extent they were right.

## 7.2 Market demand, policies and trade: hidden growth of interregional food trade, declining sales overseas

Fon and Adja plateau markets were connected to regional and international markets since at least 1600, but this relation became stronger in the 20th century. Under the influence of regional and international demand, local prices and export destinies changed. The principal trend during the second half of the 20th century was a gradual shift in European demand for palm oil, kernels, castor and groundnuts to a regional West African demand for palm oil, cereals, groundnuts, roots, tubers, beans and vegetables. Cotton sales and destinies fluctuated. This means that castor was the only commodity that disappeared from the list; it was replaced by foods that figured in local diets. For the Fon and Adja's important commodities palm oil, maize and groundnuts the major change was a shift in destiny rather than in volume. I refer to Appendix 7 for local market and export prices and price indices of palm oil, palm kernels, cotton, groundnuts and maize from about 1890-1900 to 1987-88 and *gari* from 1950 to 1987.

However, the change in destiny of the Fon and Adja's commodity production and sales tended to be underestimated or misinterpreted by (socio) economists, depending on the research methodology used. Most farmers were hardly aware of what happened to their products after their sale, so that researchers who relied on farmers' information only painted a static situation. Official export statistics however portrayed a decline in agricultural business because trans-

actions with neighbouring countries were underreported, especially cross-border flows of food. According to INSAE's (2002:36-37) official trade statistics for example, cotton, tobacco and cement were Bénin's only noteworthy exports to Nigeria between 1992 and 1994 (that is each of the commodities of which Bénin exported for more than 100 million FCFA CAF annually). With an aggregate value of 44.1 milliard FCFA of Nigeria's official imports from Bénin between 1992 and 2001, Nigeria ranked only eight among Bénin's customers; but INSAE admits that it would rank third or higher if informal trade were considered. This means that Bénin exported informally for ca. 32-150 milliard FCFA annually to Nigeria, hence probably more than it sold formally (INSAE 2002:16-17)[151]! Also interregional trade statistics, for those years that they existed, tended to underreport private traders' activities, because any counts were usually linked to taxes, so that understating benefited traders or tax collectors or both. Finally, some researchers assume that field products' sales are mainly overseas and simply neglect sources on local trade. All these types of research portray an image of an impoverishing agricultural sector whose productivity declines and/or is more and more for subsistence only. For example Bruinsma/FAO (2003), on the base of official statistics, concludes that the world's total agricultural trade over the last 50 years barely kept pace with the growth of global economic output, and that it lagged far behind the growth in manufactures trade. He argued that many developing countries successfully protected their borders and that their import substitution and/or domestic support policies inhibited agricultural trade. I find this hard to believe, for it is common knowledge that almost everywhere both poor and rich farmers become increasingly dependent on the market, and that smuggling, especially across terrestrial borders, is difficult to control. Also the case of South Bénin casts doubt on Bruinsma/FAO's conclusions. My multiple-methodological study shows that Fon and even more so Adja agriculture remained market oriented and more productive than a single-methodological study would suggest.

The cases of five crops, of which four were once exported in large quantities, will illustrate how production for local markets more and more overruled overseas sales. Local Béninese and export price indices of maize, groundnuts, palm oil, palm kernels and cotton (with export prices of 1904, 1907, 1910 or 1921 as basis), and prices of *gari* from 1950, show that local food commodity prices in general rose more than prices of non-edible commodities, see the figures in Appendix 7. Most obvious is the strong deterioration of the palm kernel index compared to the indices of all the other commodities from 1972 onwards. Clearly, also the indices of maize and groundnuts generally improved compared to those of palm oil, kernels and cotton[152] after 1930. The degrees of these improvements varied slightly over the years depending on which year is chosen as a baseline. Indices with the years 1904, 1907 and 1910 as a baseline show a systematic improvement of maize prices after 1930 compared to those of palm oil[153]. After 1950 the profitability of maize and *gari* production increased much more than that of cotton and palm kernel production and also than palm oil and groundnut sales to official marketing boards. Only palm oil and groundnut sales to private traders remained interesting.

### *Oil palm products: from overseas to interlocal sales*

First the case of palm oil prices and demand. Official export figures mask that since about the later 1950s local consumers paid better prices for palm oil than the export companies and purchased the largest part of South Bénin's palm oil (Table 7.10). The quantities of oil that Fon and Adja sold overseas dwindled rapidly from around that date (Table 7.34 in Appendix 7)[154]. Already in 1955 administrators complained that part of the Adja's palm oil was sold to

Togo (see quotation in 6.4.7 from Rapport économique 1ier semestre 1955, Archives Abomey). Nevertheless, until 1978 palm fruit products (palm oil, kernels, and from 1965 also kernel oil and kernel cake) continued to be Dahomey/Bénin's principal export commodity each year both in value and in tons (Manning 1982:365-369; 382-385; Sedjro 1980:23-24; INSAE 2002:49). But since 1960 the exported palm oil was almost exclusively that from the State's plantations. The first 10 years after the State's oil palm groves and factories started production, during the 1950s, the country exported oil from both farmers' and State palms and of both manual and industrial manufacture (Table 7.9 in Appendix 7). During that decade Fon and Adja farmers also sold some of their palm fruit to the oil mills[155]. But from about 1960 they felt that the fixed palm fruit price offered by the government was lower than the price they obtained on the local market or by processing the oil manually themselves; according to Prudencio (1976:166) 10% lower. Mondjannagni (1977:437) also mentioned high palm oil demands and imports by Togolese and Nigeran consumers around the 1960s, and Igué (1985:60) by Nigerian consumers in the 1970s and early 1980s. These exports were probably not recorded in Dahomey's official statistics. The State however exported oil overseas to obtain foreign exchange even if prices were bad. Other reasons to sell the industrial oil in Europe and the rest on local markets were that local consumers preferred the taste of home-made oil[156] while overseas factories that used palm oil as raw material preferred industrial oil, which had a lower free fatty acid content (ibid; Lynn 1997:46-49). Only some tropical food shops in Europe sell 'village palm oil' as a special delicacy, but this is a very small niche market (own observations in Brussels and Wageningen in the 1980s and 1990s). Export companies graded most of Bénin's manually produced oil as low quality. A comparison of local-, export- and low grade F.O.B. palm oil prices and price indices shows that the local ones rose at a faster rate than the others from 1950 and that they left these far behind from 1975 onwards (Table 7.32 in Appendix 7). According to the agricultural service, between 1950 and 1970 the total rural (manual) palm oil production was already about twice the total volume of official palm oil exports[157]. More than two thirds[158] of the manually produced oil was sold on local markets rather than consumed at home or sold to the State's marketing board (Table 7.9 in Appendix 7). During the 1980s and 1990s palm oil exports dwindled even more. From 1992 to 1994 even part of the official palm oil exports went partly to West African customers (in Cameroon)[159]. Palm oil and -kernel price indices also developed less favourably than those of maize from the 1920s until at least 1976. From that date local palm oil price indices approached those of maize again, especially on the Adja plateau where maize tended to be cheaper and palm oil more expensive than on the Fon plateau[160]. During the 1940s and 1950s palm oil export price indices were also slightly lower than those of groundnuts (for which France paid more than the world market until 1965), but there was no clear difference in local price indices of palm oil and of groundnuts from World War 2 onwards[161].

Of the Fon and Adja's commodity price indices, those of palm kernels developed in the least profitable way, especially official kernel price indices. These started to lag slowly behind from the Second World War onwards, and dropped sharply after 1972. Palm kernels however figured only marginally in local diets except very occasionally in those of the poor. They were mainly used in local soap production, but the demand for this soap was limited. Consequently, palm kernels continued to be exported during a longer time than palm oil, from 1965 increasingly in the form of kernel oil and kernel cake (Table 7.34 in Appendix 7). This supports that more and more red oil was consumed locally. But even palm kernel's local market prices and -price indices rose during the 1950s and 1960s more rapidly than the official government price, which deteriorated especially after 1972 in comparison to

the indices of most other agricultural commodities. The State responded to farmers' declining palm fruit sales to its oil mills by dismantling these from the late 1970s onwards, and consequently also official palm kernel-, kernel oil and kernel cake exports became marginal (Sedjro 1980:23-24; INSAE 2002:35, 49-50). By the 1970s also transit exports of kernels from Nigeria (which occurred in the mid-1950s) ceased[162] and Dahomean kernel oil seems to have been exported informally to Togo instead. 1984-1985 saw a brief rise of palm oil and kernel prices, which encouraged middlemen' to purchase large quantities of kernels to sell them to the SONICOG. But when SONICOG started its kernel trade season in 1986 it suddenly reduced the kernel price from 95 FCFA to 16 FCFA, then 30 FCFA per kg, which was insufficient to cover transportation costs from the Adja plateau to Cotonou according to the traders (Dandjinou 1986:89). Adja women around Azové preferred to transform their kernels manually into kernel oil and sell it to Togo, where kernel oil fetched 70 FCFA/kg in 1986 (ibid:98). Some women I interviewed in Lokogba, Tchanhoué and Kpatohoué near Azové specialised in kernel oil production since the (early) 1970s, but towards the East this industry was rare[163], which suggests that informal kernel oil exports to Togo occurred since at least that time. Also Nigeria's (official) palm kernel exports declined in the 1980s in spite of rising production (Egg & Igué 1993:65-66, 72), pointing at increased domestic consumption.

### *From official groundnut exports to informal and clandestine regional sales*

Groundnuts were another commodity that was exported overseas in large quantities in colonial times, but from the 1960s it was increasingly sold to local consumers, who started to offer higher prices than the export companies. Government attempts to ban local trade and to stimulate overseas exports could not prevent this. During the 1950s and first half of the 1960s France was Dahomey's only groundnut customer and paid more for them than other European countries (39% more in 1957-1958). The colonial government fixed guaranteed groundnut purchase prices, while several large and small firms exported the nuts. Dahomean groundnut (export) price indices from 1945 to 1965 were high compared to those of palm fruit products, which encouraged Adja and especially Fon farmers to grow groundnuts. From 1965 the newly created European Common Market imposed world market prices on its groundnut imports, but still granted gradually declining subsidies to Dahomean groundnut farmers from 1965 to 1970. Things started to change in 1966, when the Dahomean government officially gave OCAD (Office de Commercialisation des produits Agricoles du Dahomey) the monopoly on purchasing groundnuts (Dissou 1970 I: 17-18). OCAD's prices were often lower (in spite of the subsidies) than those of private traders who sold the groundnuts to West African consumers. Another reason for not selling to OCAD was that this office refused to buy first season groundnuts because these would be too humid and acid, as already the SIOFA had done since 1957. From 1957 the State labelled first season groundnut trade as illegal. (Dossier Arachides, Archives Aplahoué). Fon and Adja farmers reacted by selling their first season harvest, which was often superior to that of the second season, either to private traders or at the end of the year to SIOFA or to OCAD, pretending that it were second season ones. Hunayiji and Ajidé's dependents in Lissazounme admitted to me to have used the second strategy (see 8.2), and in 1957 a colonial report deplored the same practice on the Adja plateau[164]. When OCAD became aware of this it accepted to buy first season groundnuts at a lower price than second season ones in 1969, but in 1971 it insisted again that it would not buy the first harvest.

Official production and trade statistics suggest that the market share of the official companies SIOFA and OCAD declined during the 1960s and 1970s, especially in the *Cercle* d'Abomey and in the Zou province, but to a lesser extent also in the *Subdivision* d'Aplahoué and the *Cercle* d'Athiémé. Grubben (1970 quoted in Mensah 1980:63) estimated that only 15% of the national groundnut production was exported, the rest consumed locally of which 60% as manually produced oil and 25% in other forms. In 1974 OCAD estimated to have purchased 2% of the groundnuts produced in the *Cercle* d'Abomey and less than 4% of those of the Zou province as a whole. Private traders would have bought 'more than 6%' in the Zou, and 'more than 90%' would have been used for family consumption and seed. This auto-consumed percentage however seems far too high, even though Abomean yields were quite low that year. The CARDER Zou blamed farmer's non-utilisation of 'improved' varieties and fertiliser for (presumably) low yields, causing low sales to OCAD, and for (presumably) high rates of auto-consumption (SATEC 1968:25, 27-28; 1969:161-162; 1971: 127; CARDER Zou 1974:129-130; Mongbo 1985:65, 70). Probably the CARDER really wanted to downplay the percentage purchased by private traders. Mongbo (1985:65, 70) and the farmers and extensionists whom I interviewed confirm that the Fon and Adja sold an increasing part of their groundnuts to these traders. They in their turn retailed the groundnuts to women who transformed them into oil and snacks (boiled or roasted groundnuts, snacks from groundnut cake called *kulikuli* in Fon and *gangodi* in Adja, etc.) for sale to local and regional consumers. Groundnut consumption rose not only with local palm oil prices, but also because the South Béninese favoured groundnut oil in rice dishes and in many of the

Table 7.11: Groundnut production and official sales in the *Cercles* d'Abomey and d'Athiémé 1962-1974, in tons per year

| Years | Cercle d'Abomey | | | Subdivision Aplahoué | | | Cercle d'Athiémé | | |
|---|---|---|---|---|---|---|---|---|---|
| | Production | Official sales | Off. sales/ production | Production | Official sales | Off. sales/ production | Production | Official sales | Off. sales/ production |
| 1961 | 12690 | | | 3920 | | | | | |
| 1962 | 11449 | 5500 | 48% | 2455 | 1455 | 59% | 2800 | 1550 | 55% |
| 1963 | 13350 | 4750 | 36% | 4160 | 2630 | 63% | 4437 | 2668 | 60% |
| 1964 | 11030 | 4475 | 41% | 3215 | 1400 | 44% | 3425 | 1415 | 41% |
| 1965 | 16530 | – | | 2978 | – | | | | |
| 1966 | 13850 | 3858 | 28% | 784 | – | | | | |
| 1967 | 17648 | 6500 | 37% | 2115 | – | | | | |
| 1968[2] | 19692 | – | *Zou:16%* | 2625 | – | | | | |
| 1969[3] | 20196 | – | *Zou:16%* | 2160 | – | | | | |
| 1970 | 20356 | – | | 1462 | – | | | | |
| 1971 | 17681 | – | | 678 | – | | | | |
| 1973 | 17953 | – | | – | – | | | | |
| 1974 | 8026 | 178 | 2% | 1611 | 600 | 37% | | | |
| 1975 | | | | 5845 | | | | | |
| 1977 | 235 | | | | | | 3598 | | |
| Averages[1] | 12559 | 4210 | **34%** | 2860 | 1521 | **53%** | 3554 | 1878 | **53%** |

1 Averages of the years for which official sales data are available.
2 OCAD purchased 4.800 t (16%) of the Zou province's estimated groundnut harvest of 30,000 t.
3 OCAD purchased 5.100 t (16%) of the 31,911 t produced in the Zou.
Sources: Rapport agricole annuel Dahomey 1962; Rapport agricole annuel Dahomey 1963; Rapport agricole annuel Dahomey 1964; Situation agricole du département du Zou 1966, Archives Abomey; Rapport annuel 1974 CARDER Mono; Rapport 1974 opération de développement intégrée de la province du Zou; Rapport annuel 1975 CARDER Mono; Mondjannagni (1977:240); Mongbo 1985:65, 70.

snacks that petty traders sold – they considered rice with palm oil a tasteless combination[165]. Also *kulikuli* or *gangodi* were a common complement to *gari*. Rice, street- and fast food (including *gari*) and hence groundnut consumption expanded all over South Bénin, Togo and Nigeria under the impact of urbanisation and commercialisation. Local groundnut price indices were more or less comparable to those of palm oil from the Second World War onwards. My sources suggest that they were slightly lower than those of maize between 1950 and 1966[166], and similar to these between 1984 between and 1987. (Own interviews and observations; Dossier Traite de produits – Arachides 1957, Archives Abomey).

### *Decline and rise of cotton sales*

Cotton demand, -prices and price indices fluctuated, both locally and overseas. Local demand dwindled gradually; overseas demand first declined and then went up again. Prices in the *Cercle* d'Abomey and in the port of Cotonou were high between 1907 and 1931. Cotton growers in the *Subdivision* de Parahoué however received much less for their harvest than Abomean ones until 1924 or 1925, partly due to higher transportation costs to Cotonou from Lonkly than from Abomey and partly due to Adja farmers' ignorance of prices before that date[167]. From 1932 local as well as export cotton price indices dropped until the Second World War, only the indices of palm oil and kernels dropped more than that. During the War local manual weaving surfaced temporarily[168] while export companies paid relatively little for cotton to local farmers compared to its export value (my sources indicate local prices paid by export companies, not prices paid by local weavers). The Fon, who had more experience with weaving and supra-local trade of cloth than the Adja in pre- and early colonial times, also took more advantage of these new business opportunities, as my case studies and surveys suggest, see for example the case of Kamille in 8.2. Elderly Adja testified that they purchased cloth from Fon weavers in those years[169]. Cotton export prices (FOB and CIF) were always a multiple of what exporters paid locally to farmers, due to transportation and other costs, but the multiplication factor varied over the years: 3-4 times during the 1920s, 5-10 times during the 1940s and 1950s, and roughly 5 times in the mid-1990s. Because of these fluctuations, cotton export prices and -price indices are not a good indicator for the profitability of cotton growing. Local cotton price indices dropped below those of maize from about 1950 onwards (1946 or 1953, depending on which year is chosen as a baseline). From 1973 to 1980 the State's cotton marketing boards paid very little compared to world market prices (Baar 1986:111) and cotton production dropped (Mensah 1980:63). After 1980 Béninese cotton prices improved, but my sources suggest that until the later 1980s cotton remained less profitable than maize and groundnut cultivation[170]. The only products whose official export price indices remained lower than cotton, from 1920 until at least the 1970s, were palm oil and -kernels. Local palm oil price indices probably outdid those of cotton during the 1980s. Manual weaving went out of use again after 1945, and until 1990 virtually all cotton was exported overseas. During the 1990s however the cotton trade was liberalised. Since then prices differed slightly between West African countries (Table 7.9), and Bénin exported every year between 1992 and 2001 some cotton to the neighbourhood, amongst others to Togo, Nigeria, Gambia, Niger, Ivory Coast, Sénégal, Guinée Bissau and Mali (INSAE 2002:36, 52-53, 65). The first two years after the devaluation of the FCFA in February 1994, local cotton prices increased more than food crop prices in north-east Bénin, but less than the general inflation rate of more than 40% and less than cotton insecticide

and fertiliser. Nevertheless, Béninese cotton areas expanded, according to Brüntrup (1996: 85-87) because the guaranteed cotton price gave farmers more security than the strongly fluctuating prices of local foods.

Table 7.12: Prices for crude cotton (first grade)1 in FCFA/kg to farmers in some West African countries

| Country | 1993-94 | 1994-95 | 1995-96 |
|---|---|---|---|
| Bénin | 100 | 140 | 165 |
| Sénégal | 110 | 150 | 170 |
| Togo | 110 | 145 | 165 |
| Guinée Bissau | 108 | 155 | 170 |
| Ivory Coast | 105 | 150 | 165 |
| Niger | 100 | 100 | – |
| Mali | 98 | 125 | 125 |
| Burkina Faso | 85 | 112 | 145 |

1 Most Béninese cotton was classified as first grade. In the 1990s it was known as French speaking Africa's best cotton.
Source: INSAE (2002:50, 53).

### *Interlocal food sales rise against trade bans*

Over the whole 20th century the purely African foods increased most in profitability among the Fon and Adja's crops. Local price indices of maize bypassed those of cotton from 1930 and those of palm oil from the 1920s; only after 1976 the palm oil index might have approached that of maize again on some local markets such as those of Azové. Maize price indices were probably also higher than those of groundnuts between at least 1950 and 1966, but similar to these between 1984 and 1987. *Gari* prices rose even faster than those of maize from 1950 onwards, the date that official documents started to record them. While in 1950 *gari* was half as cheap as maize, around 1990 their value is more or less the same. There are hardly any written data on local vegetables, but my qualitative research shows that their market value and -demand increased considerably. This should come as no surprise after I have shown that also palm oil and groundnuts more and more ended up in West African bellies.

Several factors boosted the local demand for food. Annual population growth rates of Dahomey seem to have increased from the middle of the 20th century, and South Dahomean urbanisation accelerated from the 1950s onwards (Mondjannagni 1977:335; Pfeiffer 1988: 55). Soil fertility and food crop yields continued to decline especially on the Fon plateau. From the 1950s the agricultural service reported increasingly on Fon plateau shortages of food, in particular of maize and *gari*, caused by nutrient depletion and compaction of the soils. Maize shortages were aggravated from 1951 to 1955 by the maize blight that affected southern Dahomey[171] and in 1956 and 1958 by droughts. From 1964-65 Dahomean State reports signalled food deficits in its own towns, and from about the same time Mondjannagni (1977:434) explained maize price variations between different Dahomean markets by '*des spéculations abusives*' with neighbouring countries such as Nigeria, Niger, Togo and Ghana. During the 1970s and early 1980s the rapidly industrialising Nigeria imported large amounts of staples from Bénin. But not only the Fon plateau, also other rural areas occasionally imported food in years when the own harvest had been low due to pests or adverse climatic conditions.

Local dietary preferences hardly changed. Maize, palm oil[172] and chilly peppers (*Capsicum frutescens* and *C. annuum*) remained essential elements of South Béninese cuisine. In Fon,

Adja, Gun and Ayizo eyes a 'real meal' consists of at least these three ingredients. Usually it is complemented by other local vegetables (tomatoes, garden eggs, green vegetables, and okra, also called ladies fingers (*Hibiscus esculentus*)) and a little fish or sometimes meat, especially a real evening meal. Pearl millet went out of use and yams (except in the northern savannah) were more and more reserved for snacks and special occasions[173]. *Gari*, cowpeas and other pulses, boiled or fried tubers, boiled or roasted cassava, rice dishes accompanied by groundnut oil, bread and pastry from wheat flour were considered snacks that could be eaten for breakfast or lunch. They were purchased from street vendors or – with the exception of wheat flour dishes – prepared at home or in the field. *Gari* had the additional advantages that it was relatively cheap in years of famine because cassava yields were hardly affected by climatic and soil conditions, and that it could be stored and eaten without cooking. It was mainly eaten in between meals or when there was no opportunity to cook, diluted in cold water with some sugar or with groundnuts. Therefore its popularity increased in particular in town. Rural Fon and Adja stigmatised *gari*, if eaten in large quantities, as food for the poor and for lean years, but in town it was more and more consumed and accepted as convenience food (own observations; Mondjannagni 1977:436). In lean seasons the Fon also substituted or complemented maize by sorghum or by flour from dried cassava roots, called *fenyenlibo*. The latter was occasionally also eaten by the Adja, but both sorghum and *fenyenlibo* were stigmatised as poor man's food. Flour from dried yams, *telibo*, was a feast which especially the Fon and Yoruba valued (own observations; Egg & Igué 1993:125), and also rice with groundnut oil was a dish for special occasions. Though street food, rice and wheat consumption expanded under the impact of commoditisation, particularly in town, the vast majority of Southern Béninese continued to eat a home made evening meal from maize and palm oil. 92% of the Béninese dinners were taken at home in 1992 against only 3% outdoors (Thuillier-Cerdan & Bricas 1996:14), and even if they dined outdoors most Fon and Adja chose a maize and palm oil dish there (own observations). The market demand for vegetables increased due to a decline of wild and semi-domesticated vegetables in fallows and of vegetable subsistence gathering, which was not met by an equal increase of subsistence home gardening. Consequently, the demand for maize and palm oil remained high and that for *gari*, red peppers and other local vegetables rose over the years.

The increased demand for *gari* was reflected in its price. While the price of maize roughly tripled between 1950 and 1990, that of *gari* multiplied by about six and now equals that of maize (Tables 7.36 and 7.37 in Appendix 7). During the Second World War[174] and more structurally from the 1950s, administrators signalled the extension of *gari* consumption, especially on the Fon plateau and in the coastal towns (Mondjannagni 1977:436). In 1954 for exemple: '***Manioc***. *Cette culture s'étend d'en année en année tant en raison de la faveur accrue don't elle est joint dans l'alimentation quotidienne que du fait des possibilités de vente sur certains marchés, Cove, Bohicon en particulier.*' (Rapport économique Cercle d'Abomey 1ier semestre 1954, Archives Abomey; underline in original).

After the maize blight of the early 1950s the Dahomean government became concerned about urban and rural food security and started to report on local staple supplies. They noticed frequent food shortages on the Abomey plateau and in the coastal towns. The Adja plateau in the 1950s and 1960s had more often food surpluses than deficits. I follow their attention for these areas. Since the 1950s agronomists regularly complained about the low fertility of the Fon plateau soils, arguing that these were not only too poor to grow hybrid oil palms and cotton (see 7.1.3), but also sufficient maize, cassava and tomatoes. The south-eastern slopes of the plateau still produced slightly more maize and also okra[175] and could often sell

part of these to the plateau itself. But in most years the Fon also acquired maize, *gari* and tomatoes from the Adja plateau and maize, *gari*, sorghum, yams and cassava roots from the North – the yams and cassava often in dried form for the production of flour[176]. The Adja plateau also sent maize, *gari*, tomatoes and other foods to the coastal towns; it was in fact Cotonou's principal tomato provider. (Own observations and interviews with farmers and extensionists; Pfeiffer 1988; van Lohuizen & Warner 1988:30-32; Lutz 1994:45-49)

In the blight and drought years 1951-1958 the SOPA (Société de Production d'Abomey) purchased 'each year' sorghum and other staples from the north and other regions to complement local food deficits (Correspondance SOMONI[177] à SOPA 1958, Archives Abomey. In 1953 the *Cercle* d'Abomey imported 2500 t maize while its own production was 5700 t, auto-consumed its entire sorghum-, pearl millet-, cowpea-, yam and cassava harvest, and sold only a little palm oil[178]. Indicative for the Fon plateau's soil poverty is that the service labelled its' second season maize yields of 300-500 kg/ha in 1954 as 'satisfactory', given the blight[179]. That year both the Fon and Adja plateaux imported maize from the South and ate their entire cowpea harvest, and the Fon again their entire pearl millet, sorghum and cassava harvest[180]. Nevertheless the Ehwe-Adja would have sold some maize and *gari* to the plateau Fon, who also imported sorghum from northern Dahomey (Rapport subdivision centrale premier semestre 1954, Archives Abomey). The Fon plateau's maize production continued to be deficient from 1955 to 1958 even though the maize blight had almost disappeared. Discouraged by their poor soils, Fon farmers more and more substituted maize[181] by the less demanding sorghum, in 1956 also by cowpeas due to a late start of the rains during the first season, and imported maize from neighbouring regions, especially from the northern Adja- and Allada plateaux[182]. The Fon's beans did quite well in 1956, so that they (and other southern Dahomeans) ate cowpeas and *gari* instead of maize and exported 300 t beans (of a harvest of 2450 t) to Togo and Niger. Only the south-eastern slopes of the Fon plateau continued to grow sufficient maize. In 1958 the *Cercle* d'Athiémé and Aplahoué not only sold large volumes of maize and *gari* to Abomey and Cotonou[183], but also to the famine-stricken northern Dahomey, while the *Cercle* d'Abomey could not send any to the North. (Rapports agricoles Cercle d'Abomey 1956 and 1957, Archives Abomey; Etat des cultures mois de décembre 1956, Archives Abomey; Agriculture 1958, Archives Aplahoué; Disette région agricole centre Septembre 1958, Archives Abomey).

Concerned about both urban and local food security and food prices, the government tried from 1960 onwards to record local prices and the quantities of maize, *gari* and sometimes other staples that each *cercle* or *sous-préfecture* sold beyond its own borders. It paid particular attention to the high maize and *gari* demand in the coastal towns and in Abomey[184]. The *Cercle* and *Sous-préfecture* d'Athiémé and d'Aplahoué were among the areas that 'exported' maize and *gari* to the needy towns in 1961, 1962, 1963 and 1965. Abomey exported only a little maize immediately after the first season harvest and some sorghum after a good harvest of this crop in 1965, but no *gari*[185].

Price indices of maize, groundnuts, palm oil, palm kernels and cotton with export prices between 1904 and 1921 as base, and prices of *gari* from 1950, show in general that from the middle of the 20$^{th}$ century food production for local consumer markets became more rewarding than official exports. Djagoun (1982:289-292) came to the same conclusion for the years 1970-1977. Food crop price indices (maize, cassava, cowpeas, yam, paddy, sweet potatoes and groundnuts) over this brief period ranged from 1.75 to 2.50, but those of cotton, palm kernels and tobacco from 1.25 to 1.55, only sorghum and pearl millet had the relatively

low index of 1.50[186]. Djagoun (1982:290) also argues that consumers more and more turned from luxury to local foods because salaries lagged behind food price indices.

Each South Béninese region tended to specialise in particular staples for Cotonou's consumer markets. The Adja plateau provided most of the tomatoes and a good part of the *gari*. Cotonou's maize came in most years mainly from the Allada plateau, northern Ouémé and northern Zou and only to a smaller extent from the Adja. The northern Zou also furnished more *gari* than the Mono, at least in the (mid) 1980s. Until the later 1980s the Zou province sent the cheapest cowpeas to Cotonou. Adja plateau farmers complained about cowpea insect pests since the early 1980s[187], and in 1989-1990 pests also inhibited cowpea production on the Fon plateau (Own observations and interviews with farmers and extensionists; Pfeiffer 1988:56, 64; van Lohuizen & Warner 1988:30-32; Lutz 1994:45-49; Thuillier-Cerdan & Bricas 1996:32). The above were general trends since about 1960; climatic fluctuations, policies and world market conditions were responsible for some variations over the years.

It is often argued that colonial and post-colonial African governments only encouraged the production and sale of typical export crops, and neglected those of food crops. The Dahomean and Béninese governments however did show some interest in their people's food security from early colonial times and in particular from the 1950s. I have shown in 7.1.3 that the agricultural services had maize production programmes for the Zou from 1964 and for the Mono from 1975, be it that little was done to implement these programmes, which disregarded farmers' wants and -knowledge. From about 1970 the Dahomean State tried to regulate food distribution too, but also these policies were beside the mark and not very effective. Food distribution programmes were in essence attempts to bring food trade under State control by fixing prices and setting up food marketing boards. Dahomey seems to have been a trend setter in this regard, after 1974 more developing countries adopted similar policies (see below).

Since at least the 1960s Dahomean scholars, for example Dissou (1970:98), Mondjannagni (1977:432, 436) and Djagoun (1982:260-261), believed that private (female) food traders formed cartels to keep rural food prices low and urban ones high and in doing so exploited farmers and urban consumers alike. Such beliefs were commonplace in those years (Honfoga 1986:108). Later studies have shown that Béninese food traders did not form price-settling organisations except on the local markets of Kétou and Pobè, but operated in a highly competitive and risky environment where profits were erratic (Den Ouden 1991; Lutz 1994: 85-86; Van Tilburg 1987/90:55-56; 59-60; Van Lohuizen & Warner 1988:57-65, 88). The profitability of maize and *gari* trade around Bohicon for example would have been quite high from 1984 to 1987 but declined when more and more small traders entered the business (Lohuizen & Warner 1988:62). Nevertheless such beliefs, combined with urban food deficits, encouraged the State to frown upon private enterprise and to charge the OCAD (Office de Commercialisation Agricole du Dahomey) with trading cereals from 1967 onwards (Honfoga 1986:110; Fanou 1994: 13). From at least 1971 it did not only fix official palm fruit, -kernel and groundnut prices, but likewise set official prices of 'all' food crops and in any case of maize, cowpeas, cassava, sorghum, yam, rice and *gari*, until 1980 or 1981[188]. During the Sahelian famine of 1972-74, but even more so in 1976, 1977 and 1982-83 also Dahomey/Bénin suffered from droughts (Albersen 1985:7). Between 1977 and 1983 the country imported maize not only through informal channels but even officially[189], and local maize and cowpea prices rose far beyond the official ones, so that the State was incapable to purchase maize and to fulfil its maize export commitments to Nigeria

(Igué 1985:62). Following the Sahelian crisis and the World Food Conference of 1974 it became fashionable for developing States to strive for self-sufficiency in food and set up food marketing boards, encouraged by donors and by international discourse (Klaasse Bos & Neefjes 1987:405-406; Adegbidi 1994:6). In this ideological and meteorological climate, Bénin continued its food intervention policies even though it was not as food insecure as the landlocked Sahelian countries. The world wide failure of food marketing boards, also of Bénin's (Djagoun 1982:260), was obvious and international discourse and preferences turned towards food trade liberalisation from the later 1970s onwards (Hesp & van der Laan 1985:6-8, 13-14, 20-23, 27; Idachaba 1985:151-166; Klaasse Bos & Neefjes 1987: 407-408), but this escaped Bénin's government attention for some time. Its five-year plan of 1983 re-emphasised self-reliance and auto-centred development as important objectives, and targeted in particular self-sufficiency in food (Neefjes 1986:6-7). The government still believed that self-sufficiency was best achieved by banning food exports and nationalising food trade. In 1983 it created the O.N.C. (Office National des Céréales), whose mission was to purchase cereals from farmers, set up security stocks, stabilise prices, sell cereals to the population and to local industries, and to control cereal imports. O.N.C. accepted free market prices, but because of its poor organisation it could only lay holds on marginal quantities of maize (Neefjes 1986:53-60; Fanou 1994:15). Private local food trade was permitted, but businessmen and -women officially had to acquire an expensive licence to purchase food, called *carte d'acheteur des produits vivriers*. The vast majority of them however traded without licence (Van Lohuizen & Warner 1988:61-62, 67).

Bénin's big neighbour Nigeria strongly influenced the politico-ideological and economic climate. From the later 1970s to at least mid-1980s it was fashionable among Béninese officials and scholars to complain about huge but unspecified volumes of food grown on Béninese fields being smuggled to Nigeria, arguing that this would endanger Bénin's food security. Djagoun (1982:257, 260) lamented in the same vein about Bénin's food exports to all its neighbours. Mongbo (1985:84-86) observed in September 1981 that Nigerian trucks loaded large quantities of maize, cassava, yams and beans on the Ouèssè and Glazoué markets in the northern Zou province. He argued that Nigerian demand on these 'producer' markets and on that of Djidja caused prices to rise more rapidly there than on the urban market of Abomey because smugglers preferred remote markets in spite of higher prices in order to go unobserved[190]. The high prices and relative scarcity of maize in Béninese towns during the drought of 1977-1978 would have been caused by exports to Nigeria rather than by low maize yields (Adegbidi (1994:6-7). Codo (1986:14) feared that the re-opening of the Nigerian border, which had been closed from April 1984 to March 1986, would inflate food prices in Bénin and cause social unrest.

From about 1970 to at least 1986 Nigeria indeed imported large quantities of food from Bénin, mostly illegally. Informal cross-border trade with Togo and Nigeria was neither a new phenomenon nor recorded by customs[191], but well informed sources show that Nigeria's food imports expanded considerably during the 1970s and first half of the 1980s. Reasons were the oil boom, high urban incomes, agricultural (marketing board) policies which discouraged Nigerian farmers, and the cheapness of (food) imports from neighbouring countries due to the comparative strength of the FCFA since the creation of the Nigerian Naira in 1967. (Idachaba 1985; Egg & Igué 1993:34-38, 50)[192]. Prices of agricultural products multiplied by five in Nigeria between 1974 and 1979 (Baar 1986:6). Mensah (1980:172) wrote about the 1970s that *Dans l'ensemble constitué par le Bénin, le Togo et le Nigéria, c'est au Bénin que les produits agricoles sont bon marché aux yeux des consommateurs, avec une*

*différence de prix allant de 10 à 25 FCFA par mesure*[193]. From the late 1970s until at least 1986 Nigeria's oil income dwindled but its food shortages persisted[194]. The gap between the official and the parallel Naira-FCFA exchange rates boomed and the Naira's value dropped even more from 1983 to 1986 (Egg & Igué 1993:11, 44, 52-53). Therefore, while Nigeria's imports of 'luxury' goods (such as cigarettes, cloth and alcohol) declined, those of food continued unabated (ibid:43). Nigerian bans on maize, rice and other 'luxury' imports[195], on fuel exports by private traders, the complete closure of the Nigerian borders from April 1984 to March 1986, only squeezed out some smaller smugglers who could not afford the bribes, but did not stop the food trade[196]. Conscious of their country's dependency on food imports from Bénin, Nigerian soldiers would even have escorted food smugglers from the Béninese border until the Nigerian urban consumer markets (Igué 1985:60). Béninese food exports to Nigeria would mainly have consisted in rice, maize, dried yams (also called yam chips), dried cassava, *gari*, palm oil, 'red' peppers, and *egusi* melon seed (*Colocynthis citrullus* or *Cucumeropsis edulis*)[197]. Of these rice (imported from Asia and the USA) was the most important, followed by maize and dried yams, thinks Igué (1985:60-64). Egg & Igué (1993:42, 124) add to these *gari* and palm oil. But Igué's diagrams and estimations suggest that both maize and rice exports were on average ca. 25.000 tons per year in the late 1970s and early 1980s[198]. In 1975 Nigeria could even absorb 'potentially' 150.000 tons of Béninese maize according to Mongbo (1985:63), and in 1976 the Béninese government signed a bilateral agreement to sell maize to its Nigerian counterpart (Igué 1985:62). Neefjes (1986:1) estimated that around 1980 up to 15% of Bénin's food production was exported unofficially to neighbouring countries, especially Nigeria. Nevertheless, Béninese food prices in the 1970s and the first half of the 1980s were remarkably low compared to those of Togo and Nigeria in spite of repeated droughts and continued smuggling (Mensah 1980: 172; Codo 1986:14). Bénin as a whole, the Mono province and the Adja plateau were self-sufficient in maize from 1984 to 1986 according to FAO (1987, quoted in Lutz 1994:45). Thuillier-Cerdan & Bricas (1996:54) found that Cotonou's food needs were almost entirely met by the very dynamic Béninese local food chain, proving that an African city can be fed by local (i.e. national) agricultural production. Therefore I contend that Béninese complaints about food exports were also a justification of State attempts to control internal and external (food) trade.

The ban on food exports from Nigeria was temporarily lifted from 1986 to 1990 in the context of structural adjustment, but reinstated again following Nigerian shortages of staples in 1990 (Egg & Igué 1993:57, 73). More importantly, the Naira was devalued and its official exchange market partly liberalised in 1986, so that the gap between the official and the parallel Naira-FCFA exchange rate started to close, making cross border trade from Nigeria more- and that to Nigeria less profitable (ibid:51-54, 110). Also Nigeria's food crop production programmes started to bear fruits (ibid:57-65, 75). From about 1984-85 to 1989 northern Béninese food prices tended to decline: maize, sorghum and yams from 1984, and millet, cowpea and groundnuts from 1985 (Brüntrup 1996:79-80). Adegbidi (1994:31) thinks that low North Béninese and Nigerian food prices continued to squeeze local maize out of South Béninese markets. Between 1987 and 1990 Nigeria exported *gari* to its neighbours and occasionally some maize to Bénin, for example in the lean season of 1987 and in 1990, but these maize flows were too small (10,000-15,000 t in 1990) and too intermittent to compete with Béninese production[199]. In 1988 Nigerian maize prices were high and stricter border controls limited smuggling operations, so that only Lagos sent a little maize to Cotonou,

even though that year South Bénin, this time including the Adja plateau, was short of maize again due to adverse climatic conditions (Lutz 1994:49-50). In 1988 the Fon plateau acquired maize in the North-Zou, the Mono in North Bénin, and Cotonou also in the North-Ouémé (ibid). Lutz' mentioning maize smuggling in 1988 is surprising, because that year neither Bénin nor Nigeria prohibited maize ex- or imports. Possibly, Lutz' informants believed that cross-border trade was still illegal; according to him farmers and traders throughout Bénin ignored that the ban on maize exports had been replaced by customs duties (almost 16% for imports and exports)[200]. Customs officers capitalised on this ignorance and fostered it by 'officially' banning food imports and exports, which allowed them to have free reign (Lutz 1994:83-84). Maize and *gari* merchants from Bohicon avoided trade with Kétou near the Nigerian border in (early) 1988 because they feared the police hunting for smugglers according to Van Lohuizen & Warner (1988:83). These examples also illustrate why neither import and export figures nor local informants suffice as source to study international trade, especially food trade, but multiple sources and triangulation should be used to neutralise biases.

## 7.3 Agricultural subsistence and commodity production: the Adja bypass the Fon

This section focuses on agricultural livelihood generating activities of the Fon and Adja in the 20th century. Were the administrators right that the Adja produced and would continue to produce next to no agricultural commodities, while the Fon grew a big amount of them? On the other hand, most socio-economic development theories attribute major roles to either demand, or government policies, or both, in processes of market incorporation. Agricultural product prices and policies to stimulate the commodity production of particular crops were similar for both plateaux as shown above, hence one might also expect all Fon and Adja to grow and sell the same things. This section will analyse Fon and Adja responses. Which crops and how much of each of them did each group grow over the years, which volumes did they sell? What were their relationships with markets in all this?

### 7.3.1 Official statistics and farmer's data compared

I will now compare the production and sale of the Fon and Adja's major agricultural products, namely maize, cotton, groundnut, castor, tomato, oil palm products, cassava, oranges, capsicum pepper and other vegetables, beans, peas, tubers, sorghum and pearl millet on the base of farmers' and if available official data. I will first consider the official information. Their value lies for the 1920-1990 period mainly in describing administrators and extensionists' activities. Colonial administrators after 1920 were less preoccupied with describing the livelihoods of their subjects in qualitative terms than their predecessors. After 1940 also statistics are provided. Local quantitative differences are also shown to be related to agricultural production techniques and to social relations in production. The extension service however hardly described the cultivation or sales of those crops which it did not stimulate, not even local oil palm varieties. For these I will rely mainly on farmers' information.

Wherever possible I will compare the official view with Fon and Adja own accounts about the 20th century. Many people whom I interviewed in 1985 and 1990 had reached the age of understanding and of active socio-economic life around 1920 and provided me valuable inside information. They gave more information on food crops, the organisation

of production, gender differences, and differences between sub-groups than the official data. Limitations of inside accounts were that informants' memories were fallible, some gave socially desirable public accounts, and very few villagers had visited the neighbouring plateau. In contrast with administrators most Fon and Adja informants were not inclined to compare the two plateaux or ethnic groups, and those who did often based themselves on shallow information. Therefore the comparative analysis is mine.

### *A government statistician's self-criticism: 'Tout est faux!'*

For 1925-1940 I found fewer administrative reports than for the periods before and after. The colonial administrators probably believed that the local peoples' societies and economies were already sufficiently described by their predecessors, or their efforts were distracted away from report writing to the economic crisis, or the reports were simply lost. After 1940 more administrative reports were written or preserved. From the 1940s the administration's ambition to present regional statistics of exported volumes, areas grown etc. increased, but their ambition to provide qualitative descriptions was lower than before 1920. Official descriptions and statistics are richest regarding those crops whose production and sale the State stimulated.

From the early 1950s onwards the agricultural service estimated annually the number of hectares devoted in every region to each annual crop[201]. Until then, only occasional guesses were made for some crops, for example in 1903 an administrator of the *Cercle* d'Abomey estimated the relative importance in area and harvest of the *Cercle*'s principal crops. These would be in declining order maize, *mil blanc* (probably pearl millet), oil palm, yam, various beans and peas, sweet potatoes, cotton, groundnuts and *Parkia biglobosa* trees[202]. Since about 1950 local extensionists had to provide figures for their locality each year. These figures were aggregated per district, *sous-préfecture* and *cercle*, published in the agricultural services' annual reports, and displayed (at least at the time of my research) in up to 5-7 cm large letters on the walls of its offices.

In April 1985 I saw such figures for my research villages Atindehouhoué and Honsouhoué in the notebook of the local extensionist and asked him with surprise – because I had not yet seen him in 'my' villages since my arrival mid December 1984 – how he had obtained these figures. He explained: "I visited 5 fields on the roadside, and then guessed on the base of last year's figures." Probably most statistics were obtained in similar ways, possibly with the exception of cotton, for which the extension service provides all the inputs and keeps records of areas grown by each farmer. Several external studies conclude that the CARDER Mono underestimated food crop areas by up to 50% during the later 1970s and early 1980s (Neefjes 1986:37). Tables 7.19 to 7.21 give the official statistics of those years for which I found reports.

The advantage of the administrative statistics is that they provide a general (but superficial) impression of the difference of Fon and Adja commoditisation. Statistics of the subdivision d'Aplahoué (Ehwe-Adja) and the *Cercle* d'Abomey are easy to compare because the area and the population of the two units are in the same order and because they were often presented in standard formats. However, the comparison is rough first because statistics only take the sales through the major trade routes and by the larger export companies into account. Second because transit exports are veiled, and finally because records were not always precise. It is likely that the approach of the extenisionist of Atindehouhoué and Honsouhoué to guess

rather than measure the local figures which he had to provide to his superiors in 1985 was common practice among lower level civil servants ever since 1950.

Even if counts and measurements were made, these tended to be error prone. One honest administrator who was expected to present a statistical report wrote as an introduction to it:

> '*J'ai écrit chaque année ou presque ce que je pensais des "statistiques" et des chiffres alignés. TOUT EST FAUX. Il y a évidemment des productions facile à estimer, telles que: celle de l'huile de palme. Les palmistes étant intégralement vendus et en se basant sur les rendements théoriques huile palmiste (8/6) on obtient la "production". De cette production on soustrait le chiffre "Exportation" et l'on obtient le chiffre "Consommation", à condition toutefois que le chiffre exportation soit juste. Or, le Cercle d'Abomey signale pour le* ***coton*** *exporté 193,8 t, contre 232,6 t (chiffres marchés contrôlés et Usine CFDT). Le cercle de Savalou signale pour le tabac exporté 122,4 t contre 370,5 t (chiffre communiqué par la SOCOTAB). Il faut reconnaître que les chiffres sont fournis mensuellement par les maisons de commerce, et avec quelques omissions qu'on dépiste parfois, soit par les renseignements fournis aimablement par des organismes tels que SOCOTAB, CFDT, soit par les contrôles du conditionnement (marchés contrôlés coton), le total annuel est faux. Les statistiques sont alors à la même échelle et pour finir, TOUT EST FAUX!*' (Rapport annuel secteur agricole centre 1954, Archives Abomey).

### *Farmers' views on their own agricultural subsistence and commodity production*

Through interviews with plateau cultivators I know the crop histories of more than 120 Fon and 190 Adja farms or fields. These histories were obtained from the cultivators themselves, or if he/she was no longer alive, through interviews with their son or daughter[203]. The results are presented in Tables 7.22 to 7.25 in Appendix 7[204]. These data are a valuable complement to official statistics because they give us an inside view of the changes in the relative importance of crops around the research villages. They also go further back into history than the official data, and distinguish between men and women's fields while the official statistics are gender blind. My field data, in contrast with those of the extension service, also contain the oil palm and fallow areas of most farmers, but mainly for the sake of comparison with official figures, oil palms[205] and fallows are omitted in Tables 7.22 to 7.25.

The relative decline of pearl millet, cassava, pigeon pea and cotton cultivation on the red Fon plateau soils is clearly seen in the farmer's figures. Also the rise of groundnut, sorghum, and – on women's fields – vegetable cultivation can be observed on the red soils as well as in the Zado area. The Fon groundnut and sorghum interview data however should be taken with caution, for groundnut especially those of the early years and for sorghum especially those of later years. During my fieldwork I saw more sorghum and fewer groundnuts in the fields than what the farmers themselves declared. Also official statistics indicate that after 1975 less groundnuts[206] and after 1980 more sorghum were grown than declared by the farmers. This is probably due to the status of these crops (high for groundnuts, low for sorghum), and for the early years also due to anachronism and the image of the 'good old past'. Though many men stated not to have grown sorghum during the past few years, they all confirmed that with the decline of soil fertility sorghum cultivation in general increased[207]. My sorghum figures suggest a strong shift of sorghum cultivation from men to women after 1980; whether this reflects reality would deserve further research. Oil palm coverage of men's fields is underestimated because I lack information on the oil palms of several men.

Of particular interest are male-female comparisons. The official crop statistics do not distinguish between the genders but my survey did. My in-depth case studies confirm the

truth of farmer's thesis that men grew in all decades systematically more groundnuts than women. Farmer's own declarations also indicate that, probably rightly so, women planted systematically more cowpeas, cassava and vegetables than men. Especially the women of the Zado research village Aoundome grew many vegetables, mainly okra, for sale. But also some women in Sahè grew greens for sale in the Couffo floodplains. Lissazounme men did not plant any vegetables and hardly any cassava.

Bambara groundnuts and oil palms on the other hand are typical male crops. The two women with palms in the sample for this survey were the female head of household Elise, who managed her absentee husband's and son's oil palms, and Gboju, who inherited a small oil palm plantation in her position as female *daa* and *vodunon*; both women will be presented in section 8.1. The same gendered difference between cowpea-, cassava- and oil palm cultivation pertains to the Adja. On the Adja plateau however, large scale commercial vegetable cultivation is mainly a male affair.

Most farmers sell the largest part of their groundnuts, vegetables and oil palm products (oil and kernels by the Fon, *sodabi* by the Adja), but irregular percentages of their other crops. Tables 7.24 and 7.25 therefore suggest that Fon men sell more crops than Fon women since at least since the middle of the 20th century.

### *Official and farmers' data compared*

Official statistics are in line with my own survey data, showing a relative and absolute decline of pearl millet, yam and cotton cultivation on the red soil Fon plateau as well as in the *Cercle* d'Abomey as a whole. Likewise, extensionists' statistics suggest a relative and absolute increase of sorghum cultivation after the mid-1960s in the *Cercle* d'Abomey as a whole. According to these statistics sorghum continued to expand in the Zado area during the 1970s and 1980s, but on the red soil plateau and in the savannah of Djidja sorghum stagnated between 1974 and 1985. As already mentioned the latter is not confirmed by Fon plateau women I interviewed, who continued to grow more sorghum each year until the end of my research. But it is confirmed by Lissazounme men about their own fields, who would have expanded their sorghum areas after 1930 and decreased them again after 1980. Men and women's own declarations taken together show a slight decrease of sorghum cultivation after 1980.

Official Adja maize figures are slightly lower than Adja farmers' figures, especially for first rainy seasons, men and women alike. I have no explanation for this other than that first season maize cultivation is prestigious in Adja but not in extensionist' eyes.

The official Fon plateau statistics show smaller groundnut areas after 1975 than those declared by Fon farmers, especially than by male farmers. Extensionists' figures and women's information about their own fields agree that groundnut areas expanded until the late 1960s and then started to decline, they even consent on the degree of the decline. Male Fon respondents however pretended to have continually expanded the proportion of their land under groundnuts, also after 1970. This might be due to the social status of groundnuts.

Among the Adja it is the other way round, official groundnut figures are higher than my respondents' declarations. My sample is probably not representative in this regard, for it contains relatively many central Adja plateau farmers, whose greyish soils are less suitable for groundnuts than the red soils in the east and west.

Extension service statistics show significantly smaller areas of vegetables than my own survey among Fon women, especially if the savannah area (where none of my respondents

had fields)[208] is disregarded. My sample includes two villages on the edges of the plateau, Sahè and Aoundome, whose women specialised in vegetable production on low lying land; on the Fon plateau itself grow hardly any vegetables. On the other hand, gender blindness and disinterest in vegetables might have depressed the extensionists' figures. Official figures on Adja vegetables agree quite well with Adja farmers' declarations.

My own survey, in-depth interviews and observations and the official statistics all agree that more cassava was grown in the Zado region and in the savannah than on the red soil Fon plateau. But the official statistics mention much larger areas under cassava in all these ecological zones than my respondents declared. According to them the soil had become too hard and compacted and pigs, which destroy cassava crops, too numerous in the research villages for successful cassava cultivation. Adja farmers planted cassava since 1920, women roughly twice as much as men according to their statements and my observations. Extensionists think that female cassava acreages are representative for all Adja fields, which seems to be an overestimation from their side. Unless some Fon and Adja plateau areas which I neither visited nor surveyed nor heard about (which I don't find very likely) specialised in cassava, the extensionists might have based their figures on the belief that 'on poor soils farmers grow cassava'[209].

Quite surprising are the 'high' cotton areas of the official Fon plateau statistics, even if the cotton growing savannah area is excluded, compared to farmer's own statements. Cotton figures should be the most reliable ones since the extension service provided all the inputs for cotton crops and supervised cotton cultivation closely. I am confident that my respondents did not understate their cotton areas for cotton cultivation conferred status. All Fon farmers and extensionists agreed that Fon plateau soils had become too poor for successful cotton cultivation. During my stay on the Fon plateau I did not see a single Fon farmer's field with cotton, but only one trial plot of a research station, and there were some fields of Adja settlers in Abomey district. Perhaps several savannah cotton fields were registered in Abomey or Bohicon district if their planters applied for inputs or sold their harvest in those towns instead of their own village, or extensionists overstated Fon plateau cotton areas in order to please their superiors.

The cotton acreages of the male Adja farmers whom I interviewed are slightly higher than the official figures, not because the farmers would have overstated (I cross-checked the declarations of each individual respondent in Atindehouhoué and Honsouhoué with the records of the cotton marketing board about his or her cotton fields in 1983, 1984, 1985 and 1990) but rather because my sample included many central Adja plateau farmers whose greyish soils were more suitable for cotton than for groundnuts and tomatoes.

The official Fon statistics suggest larger yam areas than my survey, but this difference no longer pertains if the savannah area is excluded (except in 1968-69; before 1968 no separate figures are available for the savannah). Women grew more cowpeas than their men according to their information, Fon women at least since 1920 and Adja women since their men's cowpea areas declined from ca. 1960. Extensionists seem to think that male cowpea figures are representative for all plateau fields. Unfortunately, official pigeon pea data are only available for very few years; they do suggest a decline in the 1980s.

Let me summarise my opinion, based on in-depth interviews and observations, about the differences between official statistics and farmers' data. Fon farmers probably overstated groundnuts and understated sorghum areas in recent years, and Adja farmers might have slightly overstated maize due to status reasons. Official statisticians seem to have Adja

women's cowpea fields. Official Fon plateau figures seem to include cotton fields which do not belong to local Fon farmers there. Extensionists probably considerably overestimated cassava areas. For most other crops, official and farmer-based statistics regarding their relative importance over the years do not differ very much. Fon farmers and extensionists' estimations seem to agree about the relative importance of important Fon crops such as maize, pearl millet, cowpea, and before 1975 respectively 1980 also groundnut and sorghum. These are encouraging observations.

Comparisons between Fon and Adja figures, from official sources as well as farmers themselves, also bring out clearly that the Fon sowed more groundnuts, bambara groundnuts, sorghum and pearl millet throughout the 20th century and since about 1960 also slightly more cowpeas than the Adja. The Adja on the other hand plant more maize, cassava, cotton, tomatoes, pigeon peas, sweet potatoes, soybean, and tobacco than the Fon since at least 1920, and the lead that the Adja have in growing these crops tends to increase. This shows, firstly, that the Fon and Adja's crop choices did not become similar in spite of homogenising agricultural policies. Secondly it reveals that most Fon and Adja crops were not the ones that the State desired. In the next section I will discuss how fared the – equally uniform – government policies to encourage Fon and Adja participation in agricultural export markets.

### 7.3.2 Adja maize exports more and more exceed the Fon's

In 6.4.2 I argued that maize was the Ehwe-Adja's principal commodity between 1850 and 1920, but that they mainly sold it to Fon, Mina and Togolese consumers and traders and only rarely directly to French export companies. So the Adja's maize sales of this early period are veiled in the statistics; some of them are probably recorded as Fon plateau sales.

After 1920 administrators became aware that the Adja were among the colony's largest maize export producers, far ahead of the Fon. During the 1930s and 1940s they described this in qualitative terms, from the 1950s also in statistics (see Table 7.13 in Appendix 7). In almost all years the Adja exported more maize than the Fon. Maize export fluctuations depended largely on local rainfall variations, which could differ considerably from year to year and within the same year between the plateaux, and on external demand.

Between 1917 and the early 1930s the *Cercle* du Mono was the only Dahomean maize exporter according to administrators. The Mono and the Holli regions also stood out in that they cultivated and stocked large quantities of a local maize variety that was hard enough to resist storage pests. This must have been the long-cycle and high yielding variety *Bogan*, cultivated by farmers who prioritised on self-sufficiency in maize. The other regions abandoned maize exports because of declining world market prices and because their soft, pest-prone maize was not in demand in Europe[210].

Adja maize exports developed in spite of erratic colonial maize policies. In some years the administration encouraged, in others it discouraged or even forbade maize exports. Already in 1909 the colonial *Rapport sur le déboisement, ses causes et ses conséquences dans la Subdivision de Parahoué* held Adja maize cultivation primarily responsible for deforestation and for desiccation of rivers, but as I argued in 2.2.3 this accusation was apparently not based on observations but on the administrator's preconceived ideas. In 1917 colonial plans advocated to levy heavy export duties on maize in order to limit its cultivation to subsistence needs. Pretending that maize was 'continually' planted on recently cleared forest and bush fallow and would hence enhance desertification, the plan proposed to stimulate the production

of 'richer' crops such as cacao, coffee, cola, castor and *pourghère* (*Jathropha curcas*)[211] instead. From 1946 maize exports were forbidden, again under the pretext (echoed by Dissou 1970:12) that maize depletes the soil, but the real reason was to boost the declining palm oil and -kernel exports (Rapport économique Dahomey 1947, Archives Abomey; Desanti 1945:150, 170; Pfeiffer 1988:40). The export crops that the State favoured in 1917 were more often planted on recently cleared land than maize, and were at least as demanding to the soil as maize. Since the AOF-wide forestry survey of 1909, deforestation was apparently a major concern of administrators and a welcome pretext to ban maize.

> '*La culture du maïs constitue un danger pour la conservation forestière, établie continuellement sur défrichement de forêt ou de haute brousse, elle demande, chaque année, des superficies importantes qui ne sont occupées que pendant 2 à 3 ans par des plantes vivrières. Le maïs étant la base de l'alimentation des populations du Bas-Dahomey, on ne saurait en interdire la culture d'une façon absolue, mais cette dernière doit être limitée à son rôle indispensable de culture vivrière.*
>
> *Il importe donc de supprimer progressivement le maïs d'exportation, si on veut conserver aux régions les plus intéressantes du Bas-Dahomey leur climat si favorable à des cultures plus riches.*
>
> *La culture du maïs demande peu de peine et peu de soin à l'indigène, mais elle donne un produit pauvre et de conservation difficile, sinon impossible. Ce serait donc une erreur économique que de la conserver avec toutes ces conséquences déplorables sur le déboisement, au détriment de la multiplication d'essences plus riches, comme la cacaoyer, le caféier, le colatier, la pourghère, le ricin, qui occupent pendant longtemps le terrain sans influer sensiblement sur le régime climatique général.*
>
> *Le maïs est un produit d'exportation auquel il faudra renoncer avant peu, dès que les besoins de la Défense nationale cesseront de présenter un caractère de priorité devant lequel toutes considérations doivent disparaître. Il suffira pour cela de lui appliquer un droit élevé à la sortie.*' (Anon 1917:29)

During the early 1930s however Dahomean farmers were encouraged, and during the World Wars they were even obliged to export maize. As already mentioned in the 1930s the Adja and the Holli were he only groups who willingly did so. The Adja and the Holli were reputed in South Dahomey for their autarkic lifestyle and for selling their maize only when the new harvest was assured (Elwert 1983:280-281). Apparently the Adja and the Holli distinguished themselves by securing subsistence production before commodity production. Other ethnic groups were in a hurry to sell their maize immediately after the harvest, which was probably related to their pest prone short cycle tender varieties and to their lower emphasis on self-sufficiency in staples. The Second World War maize mainly went to Senegal.

The hard maize variety that the administration noticed in the *Cercle* du Mono must have been the Adja's variety *Bogan* which matures in 4 months, has a higher yield and can be stored during a longer period than the varieties *Gbogbui* and *Jakpɛ* which mature in 3 months. At present as in the past, Adja families use to sow their principal field with *Bogan* unless they can not permit themselves to wait for the harvest of this slow variety (Wartena 1987). Fon plateau farmers planted throughout the 20th century mainly tender short cycle varieties. Those of Atchia and Aoundome grew until 1930 only the soft variety *Bo* which was prone to mould; Meuleman (1990:27) thinks that they mainly grew it in the second season when moulding risks were lower and because in the first season pearl millet was their principal cereal.

In World War times Dahomean farmers were obliged to export maize, but from 1946 exports were again forbidden (Dissou 1970:12). Fon consumers however continued to

purchase Adja maize. The testimony of some Adja farmers, born between 1910 and 1920 in Atindehouhoué, give insight into the maize trade between Adja and Fon areas in the 1940s, into merchants' strategies to boost maize sales, into Fon dominance in interlocal trade in those years, and shows how some Adja farmers, starting with a colonial *chef*, gradually also entered the trade. Their family history in sections 8.1 and 8.3 will reveal the snowball effect which their new trading skills had in their village.

> "Firmin and François were traders in Azové. They gave credit to Hundé, son of our *chef de village*, to purchase maize in our village. Then Firmin and François came to put the maize into bags and to fetch it by car. I sold maize to Hundé several times. He ceased to purchase maize when he became *chef de village* himself in 1943, he did not have time anymore. When he abandoned his trade the Fon came to buy our maize in the small Godohou market; until then the Fon only purchased maize in Azové. We regretted very much that Hundé abandoned his maize trade because the Fon exploited us. I tell you the truth; they only paid 2.5 F for one *donhun* of maize. When we became aware of this, some of us went to Abomey ourselves to sell our maize. I also went several times to Abomey to sell my maize to the people from Djidja and Savalou, who paid 4-5 F for one *tohungolo* of maize (2½ *tohungolo* = 1 *donhun*). We had finally understood that the Fon sold our maize to the people from Djidja, who cultivated only yams themselves. After the eclipse of the sun (May 1947) a disease fell on our maize like dew, it looked like ash on the leaves." (Own interview in Atindehouhoué 22-5-1990). Hundé also told me himself and written reports in the colonial archives of Aplahoué confirm that he engaged in such trade.

Official maize 'export' statistics after 1945 try to show sales from one *Cercle* to the other (Table 7.13 in Appendix 7). These statistics suggest that in most years of the mid 1950s and early 1960s the *sous-préfecture* d'Abomey did not 'export' any maize at all, but the *sous-préfecture* d'Aplahoué did. Also Fon and Adja testimonies and my own observations underline that throughout the 20th century much Adja maize was sold on the Fon plateau and that from about 1950 an increasing number of Adja, especially women and teenage girls, transported small quantities of maize by car to sell in Cotonou. The official figures probably underestimate maize 'exports', since maize sales on major Dahomean or Béninese markets and transports over major roads were only occasionally, and if so, incompletely, counted. Small traders deliberately hid their commodities from civil servants to avoid taxation, especially when passing the various toll gates on the main roads.

Administrative reports comment that in the 1950s maize blight raged in South Dahomey and Abomey did not export any maize at all, but rather imported[212]. This was certainly the disease 'like dew' which the Adja farmer mentioned above. The *Cercle* d'Athiémé however exported considerable amounts in spite of the blight. These comments were based on qualitative administrative observations and probably close to the truth. From the 1970s the maize sales of the Fon plateau fell to almost zero, while those of the Adja plateau continue to be important. Extensionists' estimations of cropped areas indicate that the Adja not only sold but also grew more maize than the Fon in most years since at least the 1950s.

Farmers' and official figures of comparative areas under maize all agree on one important point, namely that the Adja grew more maize than the Fon not only in absolute terms but also in relative terms compared to their other crops (Tables 7.14, 7.20, 7.22 and 7.23 in Appendix 7). My Adja respondents declared to have planted slightly larger fractions of their fields with maize than extensionists think they did. Seasonal figures[213] show that the difference is largest for the first seasons: Adja farmers, men and women, claim to have sown between 80% and 94% of their cultivated land with maize in all first seasons for which I have data, while the agricultural service estimated that this was only 59% - 75%. This is

probably due to the Adja subsistence ideal: "A good Adja sows maize to assure food (read: maize) security before anything else. Only when self sufficiency in maize is secured for the rest of the year he may plant other things" (see also Fanou 1994:48-49). For the second seasons however my Adja respondents declared smaller maize areas (0-29% for men, 17-25% for women) than the agricultural service (22-43% for the whole area of the former *Cercle* d'Aplahoué). It was Adja farmers' ideal to grow other crops than maize in the second season, especially on plots were they had grown maize in the first, because they believed that crop rotation was better for the soil, that a varied diet was better for their health and also tastier, because certain other crops could fetch high prices, and to spread risk. Growing maize again in the second season on plots that had borne maize in the first was seen as only permissible for those with little land or if the first season maize harvest had failed. Since my respondents mostly declared maize for the first season, they felt that they had to declare something else for the second. However, my own field observations in 1985, 1989 and 1990 gave me the impression that at least in those years the seasonal maize figures of the extension service, especially those for the second seasons, were closer to the truth than those of the farmers. The official annual maize figures on the Adja plateau however might have been underestimated.

Curiously, both official and farmers' figures suggest that the relative importance of maize on Adja fields peaked from the mid-1970s to the mid-1980s. If this is not just an accidental fluctuation, it might reflect a response to the drought and famines of the mid-1970s. Many Adja farmers told me that these famines made them painfully aware of their need for food security.

Also Fon farmers' seasonal maize declarations deviate from the official figures, but exactly the other way round as in the Adja case. Fon farmers told me in 1990 to have grown about the same areas of maize in the first as in the second seasons each year since 1930[214]. Official figures however attribute more Fon maize to the first (23-55%) than to the second seasons (13-31%) in all years from 1960 to 1986[215]. My Fon respondents' declarations might have been influenced by the experience of late rains in 1989 and 1990 which held up their first season maize. In both years I observed that they cultivated at least as much maize in the second as in the first season to make up for the loss. Late rains were a greater problem in the Fon's slashed and ridged fields than in the Adja's minimally tilled ones because slashing and ridging takes more time and more moisture is needed for crops to take root in ridges. Fon farmers tend to sow later after the onset of the rains than Adja farmers, as I will discuss in Chapter 9, which was probably another reason for them to prefer the short cycle but low yielding varieties. In the second half of 1990 many Fon said that "it is better to sow maize in the second season since it is difficult to grow it in the first." This and other Fon statements reflect a more pragmatic attitude to maize and to food security. Though the Fon also valued maize as primary staple, food security for them could be reached in various ways and not only by cultivating maize in the first place. This is also reflected in the fact, on which all figures agree, that the Fon devoted a smaller percentage of their land to maize than the Adja.

It is true that the Adja's only staple cereal was maize while the Fon had two others in addition, namely sorghum and until about 1960 also pearl millet. However, also if sorghum and pearl millet are included the Fon's cereal areas are smaller than the Adja's according to all figures.

It is often argued that African women would be responsible for subsistence cultivation while African men grow crops for sale (see Wartena 1997 and 2001 for a discussion and

critique of this thesis), and many equate South Béninese subsistence with maize. Farmers' own declarations however indicate that Adja men and women devoted the same percentage of their land to maize, namely about 50-60%. Fon women stated to have sown little bit more of their land with maize than their men, but this is compensated by the larger pearl millet and sorghum areas of the Fon men. These declarations agree with my impressions when visiting their fields.

However, there is no clear separation between subsistence and commodity production because many farmers, especially Adja as shown above, also sold maize. This also applied for women as I have shown elsewhere (Wartena 1997; 2001). Maize from their own fields always belonged to Adja women's principal commodities, partly because perennial crops were controlled by men, and was the principal motivation for Adja women to borrow land and enter own account cultivation from the 1920s onwards.

To summarize, the Adja grew and also sold more maize than the plateau Fon throughout the 20th century, and their predominance in maize sales gradually increased in spite of ambiguous and often hostile government attitudes to maize exports. Reasons are the greater soil fertility of the Adja plateau, the greater ability or willingness of the Adja to grow long-cycle varieties, and the Adja's strategy to secure subsistence production, resulting in maize surpluses which they could sell. It reveals their capability to develop a commodity chain which was discouraged rather than stimulated by the State. It also shows different Fon and Adja responses to similar maize prices.

### 7.3.3 The Fon and Adja exchange roles as cotton cultivators

In Chapter 6 I argued that in early colonial decades the Fon of the *Cercle* d'Abomey produced and sold more cotton than the Adja. But not later than the mid 1960s the Adja largely overtook them. This was related to soil degradation on the Fon plateau and the introduction of the high yielding but demanding short cycle variety 'Allen' in 1963.

During the First World War plateau farmers were forced to sow cotton seed that was distributed to them[216]. After the war, in the 1920s, cotton prices boomed and Fon farmers immediately continued and expanded cotton cultivation. Adja farmers were at first reluctant. Though the administrators increased their efforts to distribute cotton seeds to Fon and Adja farmers and to convince the Adja to plant them, only in the mid-1920s the Adja willingly started to grow cotton (Table 7.16 in Appendix 7). While, according to administrators, in 1923 and 1924 the Fon extended their cotton fields and the 'majority' of the inhabitants of Abomey town went to the countryside to grow cotton, the Adja wasted the seeds that were distributed to them.

> *'Parahoué. Les indigènes ont laissé perdre une grande partie des graines de coton qui leur avait été remises. La variété du Togo n'a donné que peu d'interessantes résultats.'* (Rapport mensuel Février 1923 cercle d'Abomey, ANB Porto-Novo).

> *'Cercle d'Abomey. (…) Nous avons vu cette année que les indigènes ont étendu la culture du coton beaucoup plus que l'année dernière et cependant la récolte ne sera pas abondante: 1) les pluies de la 2. saison ont commencé tard et cessé trop tôt, 2) une maladie des feuilles de nombreuses cotonniers (…).'* (Rapport 4. trimestre 1923 cercle d'Abomey, ANB Porto-Novo).

> *'le prix élevé que les maisons de commerce donnent au coton a encouragé les vrais planteurs à agrandir leurs champs et engagé presque toutes les cultivateurs à semer le coton en culture intercalaire. La plupart des indigènes d'Abomey-ville sont allés s'installer dans des fermes pour cultiver le coton.'* (Rapport mensuel Avril 1924 cercle d'Abomey, ANB Porto-Novo).

> *'Du 26 au 29 Juillet l'Administrateur s'est, de nouveau, rendu dans le secteur Adja (…) et sans avoir à leur recommander d'intensifier leurs cultures vivrières, déjà si développées, fit valoir tous les avantages qu'ils pourraient tirer d'une culture des textiles beaucoup plus étendue.'* (Rapport mensuel Juillet 1924 cercle d'Abomey, ANB Porto-Novo).

Official cotton export figures are probably not far from the truth because most cotton was sold through well-known channels. However, for most years the administrative statistics mask the fact that until the 1950s cotton was mainly cultivated in the savannah areas to the north of the plateaux, and only to a very small extent on the plateaux themselves, because the long growing cycle of the old cotton varieties better matched the rainfall pattern of the savannah. The figures for the years 1924, 1968-1969 and 1979-1986 reveal this regional difference. These as well as farmers' and administrators' qualitative descriptions indicate that in the 1920s the savannahs sold about twice as much cotton than the plateaux; the proportion in the 1930s and 1940s seems to have been similar. In the 1950s cotton exports declined because of unfavourable prices[217]. Production in those years, especially those of the Adja, would have been mainly for local use (most figures until the 1950 only state exports), which was not much because hand weaving went out of fashion after the Second World War.

In 1963 the new cotton variety 'Allen' was introduced. Allen had a shorter growing cycle, which made it suitable for the plateaux with their bimodal rainfall, and a higher yield potential than the previous variety 'Mono'[218]. But it was prone to pests and demanded a fertile soil and additional labour for insecticide and sometimes fertiliser application and for harvesting (see section 9.2). Consequently, in the 1960s production in the savannahs picked up again, and started from 1963 also on the Adja plateau, but not on the Fon plateau because its soils would be too poor. Cotton prices were again unfavourable in the 1970s. In the 1980s they improved and cotton production boomed on the Adja plateau. Some Adja even started to grow cotton on the Fon plateau, while the Fon themselves only planted it in the savannah and on the relatively fertile eastern slopes of their plateau[219] as regional figures and qualitative written and oral information show. This begs the question how the Adja managed to harvest cotton from the poor Fon plateau while the Fon themselves did not; I will give provide local farmers' and extensionists' answers to this question below. In 1986 the Adja plateau produced even 60% of the Adja's cotton. On the Adja plateau cotton grew everywhere but especially in the centre and north. The central-northern Adja plateau had a more favourable rainfall pattern and was inhabited by Ehwe-Adja who valued farming higher and were more willing to work for their socially senior family members without immediate payment than the southern Dogbo-Adja.

The shorter growing cycle made it possible to sow Allen in July, hence at the end of the first rainy season, between the rows of a first season maize or tomato crop. After the harvest of the maize or tomatoes the cotton remained alone in the field. This relais-cropping enabled the farmer to obtain two crops from his plot in one year; both crop densities were the same as in monoculture.

Chemical fertiliser was made available in Béninese villages together with the cotton variety Allen from 1963 onwards. Until 1986 in practice only cotton cultivators and cooperatives could buy it there[220]. Cotton cultivation was already abandoned on the Fon plateau before the 1960s. The extension service obliged 'Allen' growers to apply insecticide and allowed them to buy chemical fertiliser on credit, up to a maximum of 150 kg fertiliser per ha 'Allen' sown (after 1986 up to 200 kg per ha). Many Adja plateau farmers however successfully grew Allen without fertiliser. The service contracted with the cotton growers to buy their

entire harvest at a price fixed at the beginning of the year, and withheld the costs of the insecticide and fertiliser used from the price paid for the cotton[221].

On the red Fon plateau soils 'Allen' did not do well. According to the extension service in 1968 cotton cultivation on the degraded Fon plateau would only be possible with 200-300 kg fertiliser per ha, while farmers were only allowed to buy 150 kg! Cotton yields and prices however would not justify this investment[222]. The service wrote about the Fon region:

> *'Les terres de barre: Aussi longtemps que la fertilité de ces terres ne sera pas redressée par des apports de l'ordre de 200 à 300 kg d'engrais, la culture cotonnière y est exclue.'* (SATEC 1968:21)

In the mid-1980s, Adja plateau cotton yields were about twice as high as Fon plateau yields as Table 7.15 in Appendix 7 shows, which may serve as an indication for the potential of the different soils.

Local data of the 1980s show that in mixed Fon-Adja regions on the eastern Adja- and the western Fon plateaux it were mainly the Adja who grew cotton, and the Adja also applied more fertiliser to their cotton than the Fon[223]. All the cotton of Abomey district in the 1980s was produced by Adja who lived in the Fon plateau village Détohou and by a few Fon at 'Agbokpa', that is along the river Agbo on the plateau-savannah border. This also implies that part of the cotton that figures in official statistics as a product of the *Cercle* d'Abomey, was in fact a product of Adja not of Fon farmers! Vice versa, the Fon farmers in the ethnically mixed villages Akwevɛadja and Tchikpè on the eastern Adja plateau cultivated less cotton in the 1980s than their Adja neighbours, according to the local extensionist (own interview 13-2-1991).

> 'Before 1988 we did not sell much fertiliser in the *secteur d'Abomey* because nobody grew cotton there. Only Adja immigrants at Détohou and immigrants from Djidja at Agbokpa have accepted to plant cotton. In 1988, some inhabitants of Djidja acquired fertiliser in Abomey for their fields in the *secteur* Djidja.' (Intendant Abomey 19-10-1990)

The soil fertility in these ethnically mixed villages did not differ very much. Many Adja there rented, sharecropped or purchased impoverished Fon land; others had their own family fields. Fon and Adja farmers and extensionists in these regions do not mention soil fertility, but rather skills, knowledge, 'custom' and industriousness in agriculture as reasons for the Adja's greater interest in cotton cultivation. An Adja farmer in a mixed village whom I quote in section 9.4.2, Konyanu Kohundé, argued that their Fon neighbours where less knowledgeable in cotton cultivation and farming in general. In section 9.2 I will show that Adja labour organisation and work ethics enabled them to grow cotton where most Fon could not. Adja men could mobilise more family labour, especially from women and young men, than their Fon counterparts. Much (female) labour was needed for harvesting Allen. Adja women usually received a reward in kind for this, and prided themselves more in being good and hard working farmers while most Fon had different ambitions.

### 7.3.4 Castor, an Ehwe-Adja commodity

France started to demand Dahomean castor beans (*Ricinus communis*) in 1916. It remained the only buyer, but ceased to purchase the product in 1963 (Desanti 1945:164; Wartena 1988b:117). Though the Adja still had the reputation of producing only for subsistence, they sold much more castor than the Fon from the very start. The Ehwe-Adja plateau and the Savalou-Savè-Dassa hills appeared to be the only regions in the colony where castor

bean produced well. The *Cercle* d'Abomey never sold any castor; its soils were probably too poor[224].

Castor bean was a semi-spontaneous plant that grew on piles of garbage behind houses and was used for medical purposes in parts of the colony as early as 1906, but had virtually no local market[225]. The Fon in Sahè named it *gogozo*[226]; the Adja named it *kasua* after the English castor, probably under the influence of English or Ewe traders. From 1917 several attempts were made to introduce varieties which were easier to decorticate[227], but none of these did well. The indigenous variety had a high yield (800-1500 kg/ha both in the first and again after ratooning in the second year), but required a fertile soil and a lot of labour, especially for weeding, harvesting, drying and decorticating[228] (Traitement ricin par S.P. 1957-58, Archives Aplahoué). The latter three were female tasks.

During the First World War the French government imposed export quota of castor beans and other agricultural products on its colonies (Wartena 1988b:117). After the War the Ehwe-Adja willingly continued to cultivate castor bean for sale, according to many administrators-, Fon and Adja testimonies (see for example the eye-witness description of Adja women selling castor beans at Klouékanme around 1918-1925 by the Fon woman Ayonu in 6.4.7). For several decades castor remained one of the Adja's main export crops. Desanti (1945:163) erred in stating that Dahomean farmers only cultivated castor bean if they were compelled to do so because the beans were not consumed locally; this did not apply for the Adja except perhaps at the very beginning.

Several elderly Ehwe-Adja men mentioned castor bean among the crops that they grew in the past. The castor areas that they declared to me for the period 1940-1955 are similar to those of the official statistics for the mid 1950s, namely around 5% of the land devoted to annual crops. For the period before 1940 my sample was probably either too small to include castor fields or my respondents forgot their castor due to anachronism, or castor cultivation on the plateau was still too marginal. (More castor was grown in the savannah north of the Adja plateau than on the plateau itself. Castor occupied the field during the whole year. Most planters in Atindehouhoué and neighbouring villages left 8-10 m between their rows of castor and sowed maize in between in the first and cowpeas in the second season (own interviews with Ada Mideji and Tchikpato Soton in Atindehouhoué and Sowahuji Dahwe in Dohodji). Sadiku on the central Adja plateau discussed his castor crop with me:

> "In the 1950s I cultivated castor beans; the white people came to buy them. But I don't know what they did with them. You are white, can you tell me?" I replied that I ignored what the French did with castor beans but that some Europeans used such beans for medical purposes. The farmer appeared satisfied. "Yes that might be possible." (Sadiku Aliu, Dédahoué 24-6-1985)

None of the Adja women or Fon that I interviewed grew castor.

Though castor cultivation was an affair of Adja but not Fon farmers, castor trade was in the hands of Fon and other outsiders according to the oral information that I obtained. The Fon woman Ayonu in 6.4.7 described such trade at the river Couffo for the 1910s and 1920s. Adja testimony about the 1940s and 1950s on the central and western Adja plateau suggests that also then and there castor trade was controlled by Fon and European traders. An Adja farmer born around 1916-20 in Atindehouhoué, said:

> "I started to trade castor beans in the 1940s, when the white people started to purchase them in the small market of Godohou. They lent me 8000 francs to purchase castor, palm kernels and in the later 1940s (between the birth of my two sons) also *gbododuiku (Jathropha curcas)*[229] in the villages for them. With this amount I could buy 1½ tons of castor or 1½ tons of palm kernels or

> 8 tons of *gbododui* grains. The white people came from Cotonou and had an interpreter from Abomey, who trusted me and also some other men in the village enough to grant us such a loan. I started this trade before my marriage and continued until the white people first ceased to purchase *gbododuiku*, around 1950, and then also castor. About one year before independence I also abandoned my palm kernel trade." (Lofi Seboka, 10-7-1985)
>
> "Our (Fon) husband settled in Lokogba on the Adja plateau [not later than the Second World War] to trade castor bean, palm kernels and other commodities for the whites, and to dig wells. He settled on the river Kpako 3 km to the south of Azové and Aplahoué, near the village Lokogba. He never farmed much because he preferred to stick to the Fon custom to trade rather than to compete with the Adja in farming. Therefore he only purchased 2 plots here, where he grew maize, cowpeas, groundnuts and oil palms with the help of wage labourers.
>
> We his four wives are all Adja. When he married us he gave us a trade capital, according to Fon custom, and forbade us to farm or to engage in long distance trade. We were content with this." (4 wives of Mahunu, Lokogba 15-2-1991)

Statistics and official reports indicate that the Ehwe-Adja's share in Dahomey's castor exports increased steadily compared to Savalou-Savè-Dassa's share[230], see Table 7.17. In the 1950s the Adja's castor was purchased partly by the export society Organico and partly by private traders, who offered a higher price than Organico in 1956-1957[231], but this was short-lived. Castor export production stopped soon after Organico ceased to buy this product in 1963[232].

### 7.3.5 Groundnut, the only crop where Fon continue to lead

Groundnuts were the only Fon commodity whose production expanded almost every year. Gradually groundnuts became the principal crop on the centre of the Fon plateau, ahead of the basic staple maize. Groundnuts suit the Fon plateau's ecology and Fon agricultural techniques. As a leguminous crop, groundnuts are able to grow on the impoverished Fon soils. The Fon ridge tillage makes sowing and harvesting easier and facilitates the growth of the pods. In Chapter 9 I will show that growing groundnuts on flat Adja land is roughly three times more labour intensive than on ridges, which gives the Fon a comparative advantage for this crop.

Although the Adja also started to export some groundnuts after the Second World War, neither their official sales nor their production ever came close to those of the Fon (Tables 7.11 and 7.18-7.20 in Appendix 7). What is more, the Adja never adopted the Fon style of groundnut cultivation on ridges but continued to grow them on the flat, with the exception of some, but not all, Adja in the mixed Fon-Adja region east of Klouékanme.

### 7.3.6 Cassava, an Adja women's commodity

Cassava is a crop for which farmers' own reports differ considerably from those of the agricultural service. Farmers' figures are much lower than the official ones. Fon farmers declared to have grown virtually no cassava on the plateau since the 1960s, and only little in the Zado area of Zogbodome district. My own observations in 1989-1990 confirm this. Official statistics agree that Zogbodome had more cassava than the Fon plateau, but still attribute much more cassava to the plateau than my respondents. According to Fresco (1986: 58; 1992:5, 32), overestimation of African cassava areas, based on agronomists' beliefs that 'on poor soils farmers plant cassava', is a common error in official statistics.

It was general knowledge in South Bénin that most of the *gari* consumed on the Fon plateau was an Adja plateau product. Several Fon and some Adja whose life histories I studied

traded *gari* from the Adja to the Fon, never the other way round. On the roads I saw much *gari* being transported from the Adja to the Fon plateau but not in the other direction. The official statistics agree that slightly more cassava grew on the Adja than on the Fon plateau if one excludes the savannah and the eastern (Zogbodome) slopes. Nevertheless, also my Adja respondents declared smaller cassava areas than the agricultural service attributed to them.

Fon plateau farmers argue that their soils have become too hard for successful cassava cultivation. It is easy to observe that the clean-weeded Fon soils are very compact and form a crust under the impact of rainfall, runoff, and sunshine. This is encouraged by the fact that the Fon (almost) always make their ridges up and down the slope. The superficially tilled Adja fields usually bear more weeds, are thus better protected against runoff and sunshine, and conserve a looser structure. Adja plateau farmers plant more cassava than their Fon counterparts according to both respondents' (quantitative) assessment of their own farms and to my own field observations.

Adja and other Béninese farmers however neither view cassava as a crop for poor soils, nor do they often plant it last before fallow. Rather they believe that cassava raises the soil quality for the following maize- or other crop. "Cassava leaves give *vitamines* to the soil when they fall", "cassava produces much biomass, this is good for the soil", "the closed canopy of cassava cools the soil", "we observe many earthworms in cassava fields, they indicate that the soil is fertile", "cassava brings the deep nutrients up", "harvesting cassava loosens the soil", "maize planted after cassava has greener leaves and higher yields than other maize", etc. They often plant cassava in the middle or second half of a cropping period (own research, Breusers 1990:115), and sow maize after it. To enhance the fertilising effect some farmers leave the cassava plants in the field for 1½ - 2 years (own observations; Brouwers 1993:74; Saïdou et al 2004:359-360, 362). Recent on farm trials have confirmed that cassava cultivation brings up nutrients from deeper soil layers, encourages mycorrhiza development, loosens the soil structure, improves maize yields, and quenches grasses like spear grass (*Imperata cylindrica*). The latter effect however is shorter lived after a cassava crop than after an oil palm 'fallow' of several years.

A second reason that Fon farmers advanced for not planting cassava was the increasing numbers of pigs in most plateau villages. Pigs, which were allowed to roam freely during large parts of the year, uprooted and ate cassava in village-near fields. But pigs did not keep Adja farmers from cassava cultivation farther than 400-500 m from the village, in spite of the fact that Adja pigs tended to be confined less strictly than Fon plateau pigs. In addition, some Fon plateau villages were pig-less but even there grew no cassava. Pigs were taboo in riverside Fon villages because the local river *vodun* did not tolerate these water-polluting animals. Indeed I did not see any pigs in Kana, Aoundome and other riverside villages that I visited. But also Kana farmers grew no cassava. Those in Aoundome, a village on the Zado-plateau border, planted only about 1% of their fields with it according to their own declarations, much less than the official statistics for the Zado area and than Adja farmers.

I have no reason to assume that farmers intentionally under- or overstated their cassava areas. Cassava cultivation had no particular status. Though eating cassava regularly as the main dish (rather than as snack) instead of maize was considered a sign of poverty in rural South Bénin, cassava cultivation did not suffer from this stigma because it was to a large extent for sale. *Gari*, a cassava product, was more and more appreciated as convenience

food because it could be eaten uncooked, especially in town. If eaten for convenience it was not stigmatised as being poor man's food.

Adja farmers' own declarations suggest that female farmers have always cultivated slightly more cassava than men. The same holds for Fon plateau farmers. In my small sample of male farmers in the Zado area however, some men grew fairly much cassava, more than the surveyed Zado women. The female predominance in cassava cultivation is first related to the fact that *gari* production is a female business. Most men sell their cassava crop or -harvest to women who manufacture *gari* for sale. By planting cassava themselves, *gari* producers try to obtain (part of) their raw material without spending cash. Second, cassava is in the eyes of Béninese farmers a soil improving and spear grass-quenching crop that, contrary to oil palms and other trees, may be planted by women and others who do not own the land which they cultivate.

### 7.3.7 *Sodabi* and the Adja's oil palm management style

*Sodabi*, palm wine distillate, was invented at the end of the First World War. Distilling was formerly unknown to the South Dahomeans. *Sodabi* was presumably introduced by a Dahomean *tirailleur* who had learned distilling while serving in the French army during the First World War; the distillate would have been named after him (see Chapter 6; Feil 1991:306; Kater 1993:4).

The distilling technique rapidly spread in South Bénin and the Adja adopted it on a larger scale than any other ethnic group. Not only did the Adja distil more, their *sodabi* also became renowned as the best *sodabi* of the Bight of Bénin and found a ready market in the whole region (Fanou 1994:133). Being a local product, *sodabi* was cheaper than imported liquors and successfully substituted part of these.

Already before 1920 the Adja harvested more palm wine than palm fruit from their oil palms, and sold this wine on local markets (6.4.7, 6.5). Palm wine could only be conserved for a few days, therefore its production and trade was limited. Distilling was a way to conserve the wine. The Adja took more advantage of this new commodity production opportunity than the Fon.

The Adja had an initial technological advantage over the Fon to enter *sodabi* production, for they had more young oil palms. Young oil palms between the age of 15 and 25 yield more palm wine than older ones (Kater 1993:28). The Fon in contrast had mainly older oil palms. But the old age of their oil palms was not the main reason for the Fon not to produce *sodabi*. They refrained even from felling those young palms they had, for two reasons. First, during the last 70 years palm oil had obtained a high cultural value in Fon society, in addition to an economic value. A Fon norm demanded that one should not 'kill' an oil palm which might still yield some oil. Second, many Fon oil palms were common lineage property, and the felling of common property was prohibited. Hence the Fon had created for themselves a cultural obstacle to *sodabi* production (sections 6.2 and 6.5).

The Adja's advantage in *sodabi* production soon became larger when they expanded their own 'wine' palm plantations. Many of my elderly Ehwe-Adja respondents helped their father in the 1920s to fell virgin forest and to plant 'wine' palms there. For most of them this was their father's first important oil palm plantation. Many elderly Ehwe-Adja men I interviewed remember to have planted from the 1920s oil palms for their own father, or occasionally for their uncle or elder brother. Some married men whose father was still

alive and who had been given temporary land rights were allowed to plant and fell oil palms there 'in their father's name'. This indicates that the Adja actively created their own *sodabi* commodity producing opportunities. In spite of the Adja's flourishing *sodabi* industry, the plateau Fon did not follow in their footsteps. Only some individual Fon on the edges of their own plateau and on the north-eastern Adja plateau developed intermediate oil-wine palm styles as I have shown in section 6.5.4.

### 7.4 Fon and Adja styles of making a living compared: historical biases reconstructed

At the beginning of this chapter we started to find out why at first sight the Fon appear to be economically more successful than the Adja, and why a closer look reveals Fon decline and Adja success. The reason why has become a bit clearer in the process of deconstructing the biased archival documents which I consulted especially for the period before the First World War, a period for which few insiders' accounts are available. My attempt to understand the administrator's worldview and position, and consequently their perspective and the likely colour of these archival sources, helped to understand how prejudices about the Fon and the Adja, which are still common today and which I had believed myself at the beginning of my research, had been created.

This chapter has described the homogenising effect of colonial and post-independence agricultural policies and market opportunities for the Fon and Adja and their reactions during the 20th century. One question raised in the introduction was whether Fon and Adja styles became more similar to each other and increasingly in line with external scientific insights, with capitalist market logic, and with government plans. This is what would have happened if structuralist and evolutionary approaches to economic development were right. I argued that official economic policies on the Fon and Adja plateaux throughout the 20th century mainly aimed to stimulate the production of agricultural export commodities such as palm oil, palm kernels, cotton, groundnuts, coffee and – until 1963 – castor bean. Also, that agricultural extension proposed standardised cultivation techniques which were closer to those that the Fon than to those that the Adja already practised. Therefore, the question arises whether the Fon and Adja grew ever more of those agricultural commodities and with the same technologies that the State demanded? This would imply that the Adja's style made a greater move and the Fon's a smaller move towards that what the external 'specialists' proposed.

An alternative hypothesis, raised by an early colonial administrator, was that the Adja remained in what he called their 'rude and savage' culture of 'independence' from markets, from the administration and from each other. Until 1920 the Adja's priority was indeed to be self sufficient in maize, while the Fon's strategy was to maximise their income from trade, crafts, religion, until 1894 also from warfare, and from 1850 onwards also from commercial palm oil and groundnut production, as I have shown in Chapters 5 and 6. Did this same difference between the ethnic groups continue after 1920?

None of the two scenarios proposed by external specialists turned out to be right. The Adja neither stayed away from markets nor adopt the State's advice as far as oil palm, groundnuts and coffee cultivation and the technologies for most other crops were concerned. They developed their own agricultural commodities and technologies instead. Nor did the Fon keep up agricultural commodity production, with the exception of groundnuts. Instead, the Fon diversified ever more into non-agricultural activities, especially from the 1930s onwards,

as I will show in Chapter 8. Fon and Adja styles of making a living hence did not become similar to each other, in spite of similar external influences. None of the Fon and Adja styles moved consistently into the direction desired and stimulated by the State, namely application of the extension service's technologies, production of cotton, coffee, groundnut, palm oil and -kernels, and their sale to official export traders. Rather, Fon and Adja styles continued to develop into divergent directions, following their own endogenous dynamics. Each group used its own production styles and technologies that were ridiculed by extensionists or even forbidden by the State, for example *sodabi* and first season groundnut production, poaching, and forging traps for this. Each produced its own different goods which the State did not stimulate and sometimes even strongly discouraged, and sold them largely through informal or even clandestine channels. Chapter 8 will provide more examples of informal and illicit non-agricultural products.

I have shown in this chapter that the Adja continued to give priority to having sufficient maize production on their own fields to assure their households' basic staple needs outside the market. The status of the Adja household head strongly depended on the maize areas in his or her fields in the first season and on how well s/he provided for the household. Initially this applied only for male Adja heads of households. Women before 1920 did not have fields to cultivate on their own account but only helped with the 'traditional' female tasks of burning, sowing and harvesting on the household fields. Elsewhere (Wartena 1997, 2001) I have shown that from about 1920 onwards more Ehwe-Adja women asked their husbands, fathers or brothers for plots to grow some crops for sale on their own account, which they were granted in the tacit expectation that they would also sow some maize for their own and their children's subsistence. Soon not only Adja men but also Ehwe-Adja women prided themselves in planting enough maize to meet their dependents' consumption needs. Dogbo-Adja women followed from the mid 20$^{th}$ century onwards. Henceforth in Adja eyes 'a responsible man or woman sows maize in the first season to assure food (read: maize) security before anything else. Only when self sufficiency in maize is secured for the rest of the year he or she may plant other crops and eventually sell the surplus of maize'. It is important to underline that, though Adja men transferred a part of their responsibility for subsistence farming to Adja women after 1920, they also continued to provide maize to household consumption. We have proven the thesis of Meillassoux (1977:11, 147-148, 167-169, 175-177) to be false, who state that when African 'domestic' modes of production become articulated to a capitalist mode of production, men would withdraw from subsistence cultivation and leave this task to women. Large maize areas in the first season, providing maize to one's dependents, and selling maize only when the next harvest is assured continued to be the mark of responsible and wealthy Adja men and women. Because of this, many of the Adja whom I interviewed on their crop areas overstated their maize in the first seasons at the expense of maize in the second and of other crops. My observations as well as official statistics indicate that first season Adja maize areas were indeed substantial, and larger also than the Fon's, though not as large as my Adja survey suggests.

With this strategy, Adja with sufficient land frequently had a surplus of maize that they could sell. It must be said that more male than female farmers were in this position, but also many women sold of their maize or other crops on their own account, as my three generation studies show (Chapter 8, Wartena 1997, 2001). This again refutes Meillassoux (ibid) and Rogers (1980) thesis that African women only grow subsistence crops for household consumption and cannot produce commodities.

Official statistics, Adja life histories, Fon testimonies and my own observations confirm that the Adja plateau exported important amounts of maize to the coast and to the Fon plateau in most years between 1920 and 1990. Hence maize was one of the Adja's principal commodities.

While for most Fon the pursuit of non-agricultural livelihood activities conferred status and was a goal in itself, for Adja men and women livelihood diversification was only a secondary goal, after having assured maize security. The desire for a cash income was an increasingly important part of this diversification strategy. The vast majority of the rural Adja diversified primarily within arable farming and to a lesser extent animal husbandry. As shown in section 7.3, the Adja continue to grow a much greater range of crops than the Fon, whose crop diversity has gradually declined during the 20th century. Adja farmers diversify their crops, especially in the second season after having assured maize security, because they value the taste of a varied diet and believe that it is healthier than a monotonous one, to spread economic and climate risks, and because they believe that crop rotation is better for the soil. Adja non-agricultural activities however, though their importance increased slightly over the years, remained secondary to agriculture in virtually all Adja lineages. In all years, average Adja families like those of Atindehouhoué, Honsouhoué and Lagbahome also engaged less in non-agricultural activities than most lineages of Fon plateau villages such as Lissazounme, Sahè, Gnidjazoun and Kana, borderline villages like Aoundome exempted, as I will show in Chapter 8. The Aoundome style seems typical for the eastern slopes of the plateau. Differences in Fon and Adja styles of making a living are mainly rooted in secondary, non-agricultural, activities.

At present as in the past most other crops are grown both for own consumption and for sale. Only coffee and castor bean were entirely for export, palm kernels were largely until recently, and cotton still largely is. Cowpeas, pigeon peas, yams and the flesh of palm fruit (from which palm oil could be made) were probably eaten by their producers for the large part throughout the 20th century, but palm kernels, palm wine distillate (*sodabi*) and all the other crops were largely sold. Other edible crops than maize however were not regarded as staple food but as luxuries in the diet. In contrast with maize they did not contribute to food (read maize) security and could therefore be sold without reproach from family members at any time. Therefore, most Adja planted other crops partly as a strategy to earn cash, while maize was hardly ever planted with this intention. Even these were mainly consumed on the Fon plateau and in coastal towns rather than exported; the Adja plateau became known as the granary and vegetable garden of South Benin. Official statistics mainly showed exports and hence obscured the majority of the Adja's local sales. Adja women planted a greater proportion of their land with cowpeas, cassava, pigeon peas and on the western plateau Spanish peppers than men. Adja men planted more yam, tomato, castor bean, trees, and also slightly more cotton than women. For maize and groundnuts there was no clear gender difference. The main reasons for these different crop choices of Adja men and women were land ownership and the connected rights to plant trees, gender differences in yam cultivation and cassava processing skills.

Since kingdom times many plateau Fon valued high status and high monetary incomes over self sufficiency in basic staples. Status and high incomes were in those days obtained through warfare, forging, weaving, priestly and divination services, and trade – until the

mid-19th century mainly slave trade and from then also trade in palm oil and kernels. Also working as a translator and scribe for the trading elite conferred prestige. Agriculture was left to slaves and became despised in Fon eyes, oil palm ownership and commercial palm oil production exempted. Fon plateau fallow and soil qualities declined during this period, and the plateau Fon produced but little food. Since at least 1850 they imported maize and other food from the Adja plateau.

These trends continued to increase during the 20th century. Formal school education flourished more among the Fon than among the Adja until the economic crisis of 1988-1990. But when in 1989 teachers went on strike and government employment became less guaranteed for young graduates, many Fon students became traders or craftsmen and did not return to school when these opened their doors again in 1990. Adja students returned in greater numbers, more optimistic about the future value of school education, possibly partly due to Adja ignorance of the weakness of the labour market. Consequently, the number of Fon with white collar jobs continues to outnumber that of the Adja, due to their better education and to their greater capacity to obtain jobs through family- and ethnic networks.

Chapter 8 will show that Fon and Adja migration to rural areas outside the own plateau took place since at least the 19th century and continued throughout the 20th, but the motive for such migration tended to shift among all Fon and Adja from agriculture to crafts, trade and teaching in primary schools. Processing field products and local trade were the first and remained the principal non-agricultural activities that the Adja engaged in. Women cracked palm kernels, made some palm- and groundnut oil, prepared local snacks from maize, cowpeas etc. for sale, and transformed cassava in to *gari*, a staple food with a growing urban and Fon plateau demand. From 1920 onwards men distilled palm wine into *sodabi* for sale in spite of government interdictions to do so. Men retailed *sodabi* and domestic animals and women all kind of things on local markets. In some Adja villages, for example Atindehouhoué and Adjohoué, a few men became middlemen who purchased maize, palm kernels, castor bean etc. in local villages on behalf of export companies. Gradually also some Adja men and especially women started to transport commodities to and from Cotonou and the Fon plateau, a business that until 1920 only Fon engaged in.

Agriculture remained at all times more important than non-agricultural livelihood activities in all Adja lineages in terms of labour time and subsistence gained from them. This certainly applies for total subsistence in cash and kind, but for most Adja also if cash income is considered alone. Most Adja earned more money from the sale of agricultural products than from non-agricultural activities, in spite of the fact that most non-agricultural livelihood activities were market oriented. I showed that most agricultural commodities of the Adja were edible crops that also figured in local diets. Their production and sale was not stimulated and sometimes actively discouraged by the State and the extension service. The urban and Fon plateau demand for the Adja's food commodities was fairly predictable given climate conditions, and food crop prices fluctuated less over the years than the prices of pure export crops like cotton and castor bean[233]. Adja farmers abandoned cotton and castor cultivation when the price or demand for these products fell, but their production of other crops did not fluctuate much over the years, except that cassava and vegetable cultivation gradually increased after 1950 with growing demand. This falsifies (neo)-Marxist theories that describe commoditisation as an externally determined process that occurs only under political pressure. My research also exposes the error or arrogance of modernisation scholars who think that 'backward' subsistence cultivators need external support in terms of extension, technology

and other services to develop commercial agriculture. Finally, it also shows that we should not assume that 'food crops' are always for self consumption, that only typical 'cash crops' are sold, and that 'cash crops' are not consumed by local people.

It is true that soil fertility declined a little, but not too much due to the Adja's minimal tillage and style of oil palm management. Adja styles of making a living were therefore fairly sustainable over the years. They yielded a fairly stable, though not very high, livelihood in cash and kind. With the exception of those farmers who inherited only little land or who had losses due to personal mischief, the Adja were able to reach their goals of food security and a sufficient cash income. Hence Adja styles of making a living were fairly sustainable over the years and sufficiently performing in the eyes of the Adja, even if this was not the viewpoint of the State's extension service.

On the other hand, Fon styles of making a living were overshadowed by declining yields of virtually all crops and their experience of declining soil fertility. This led farmers to reduce their areas of all crops except for groundnut and sorghum, which were able to grow on poor soils. Most Fon tried to make up for the loss mainly by expanding their non-agricultural activities. A few also started to farm part-time off the plateau, as wage labourers or on their own account.

According to Fon farmers they continually reduced their areas with staple cereals, in the beginning mainly pearl millet and later also maize. They compensated this a little by growing more sorghum, but their total cereal areas reduced. What declined even more were yields. As a result, Fon farmers in my sample who had reasonable amounts of land were still self sufficient in maize and millet in most years of the first half of the 20$^{th}$ century. But the number of months of the year during which they could feed themselves from their own cereal harvest declined steadily. From the 1950s none of my Fon respondents harvested enough cereals anymore to feed his household, as also the Fon case study in section 8.1 will illustrate, even though they rarely sold cereals except in some cases of unexpected cash needs. Towards 1990 the average period of the year for which their cereal harvest lasted ranged from 2 weeks to 5 months. Besides cereals, only cowpeas were largely eaten by their planters themselves, but Fon farmers refrained less from selling these than from selling cereals in times of cash needs. Cowpea areas were fairly stable over the years. They occupied a larger proportion of the fields of Fon women.

Fon production of palm oil, palm kernels and cotton, which belonged to their principal commodities, declined after 1920. Soil depletion, aging of oil palms combined with social and cultural obstacles to replace them, high labour declining prices (for cotton between 1930 and 1983), and high labour requirements for cotton were the main reasons, as Chapter 9 will show. Fon oil palms, mostly planted in the later 19$^{th}$ and early 20$^{th}$ century when palm oil prices were high, became too old to yield much fruit, but the Fon had a sacred reluctance to fell and replace them since king Gezo declared them a *vodun,* and because on poor soils new young oil palms would take very long too mature. Many Fon argued that they could not afford to wait for that, but needed the immediate cash income from the little bit of fruit that their old palms still yielded in order to buy maize. Declining access to labour to protect distant palms against bush fires, common property rights in village-near palms, and slightly declining palm oil and –kernel prices after about 1930 also discouraged planting. Consequently, Fon farmers harvested less and less palm fruit, ate an increasing proportion of it themselves, and sold steadily less oil. Fon plateau farmers abandoned cotton when its

price fell around 1930. In contrast with the Adja, Fon plateau farmers did not sow cotton again when its price increased from 1983 onwards because their soils had become too poor for the new cotton variety.

Groundnut was the only crop besides sorghum whose area expanded steadily on the Fon plateau. A few Fon women on the slopes of the plateau specialised in commercial vegetable cultivation. Groundnuts were largely sold, until the 1960 mainly to export companies and from then onwards, often in the form of oil, to consumers in South Beninese towns. Fon men planted slightly more groundnuts in their fields than Fon women, but both sold them largely on their own account. Since the 1930s therefore the Fon's only field products from which they derived a monetary income were groundnut, palm fruit for men, and vegetables for a few women on the slopes of the plateau. Groundnut was, with oil palm, the only crop about which Fon cultivators spoke with some pride and whose area they tended to overstate when I asked them how much they grew.

During the first half of the 20th century some of my Fon respondents still acquired farmland on the Adja plateau; until the 1930s apparently free of charge through (sometimes non-related) Fon from the same village who had appropriated land there under Glele, and in the 1940s for money. Others acquired land in the savannah to the north of the Fon plateau, initially for a few bottles of alcohol and later on a more commercial base. In the 1970s and 1980s however, several of my respondents judged Adja plateau cultivation to be too much drudgery compared to the harvests obtained, and sold, rented or sharecropped their land there to Adja farmers, who obtained better yields from the same plot. During the ridging and harvest seasons, agricultural wage labour was in high demand in the savannah and better paid than on the plateaux, but only young men from Aoundome, the most 'agricultural' of the Fon villages I studied, went to ridge for wages there before they returned to till their family fields. Some very few Fon women from Lissazounme harvested cotton for wages in the savannah. The other Fon I asked feared the drudgery of this wage labour.

Most Fon presented their non-agricultural livelihood activities as more important than their agricultural ones. This holds true even for those of them who declared to devote about equal labour times to each type of work. But their non-agricultural activities often provided more cash (even if it was little) and more status than their agricultural ones. They tended to value cash and status more than income in kind and food security. Among the Fon's non-agricultural activities, some were fairly sustainable at a low or average level of productivity and income. This applied for most petty trades and many crafts. Others were more risky, with unpredictable or fluctuating incomes, for example – given the political and economic climate – government employment, some forms of trade, and also the healing and divination business that many men from Lissazounme specialised in as I will show in Chapter 8. Farmers, most traders and many craftsmen learned their skills largely from kinsmen or neighbours. Actor's social networks, and the specialisation and style of their lineage or village, were consequently often more important for their livelihood choices than economic returns. As a matter of style and prestige, most Fon preferred to derive their identity from their non-agricultural occupation, even if the economic income from this occupation was low. In general, Fon disdain for agriculture was strongest in the centre of the plateau and declined towards the edges.

In this chapter I have analysed commoditisation processes among the Fon and Adja during the 20th century. Fon and Adja commoditisation processes had many ups and downs. Not only the absolute amount of commodities produced but also the relative degree of commodity

production of one ethnic group compared to the other changed rapidly. In most historical periods the Fon specialised in different agricultural commodities than the Adja. This occurred in spite of similar external political, economic and ecological conditions. The Adja rarely responded to government pressure to produce those commodities which the state desired, and before 1920 did not provide the wage labourers nor pay the taxes which the government required, while the Fon did all this initially without pressure. Gradually however, the Adja sold more and more agricultural products though not the ones which the State desired. The Fon at the same time ceased to sell agricultural products altogether except for some groundnuts, and focused on non-agricultural livelihood activities which the State did not really welcome either. This shows that commoditisation should not be seen as a linear and externally determined process. It also shows that styles of making a living have quite some autonomy and should not simply be seen as a product of (degrees of) commoditisation.

We have seen in this and the previous chapter that some elements of Fon and Adja styles of farming were much more stable than degrees of commoditisation or than which commodities they produced. Fon and Adja styles of oil palm management hardly changed. The choice whether to produce palm oil for sale or not, and whether to produce *sodabi* for sale or not, was rather guided by the oil palm cropping patterns than the other way round. Likewise, the Adja's choice to give priority in acreage and in timing to maize cultivation, and even their choice to sell much maize, were no matters of market opportunity and even less of government demand, but rather a side effect of their style of self sufficiency in maize. On the other hand, the Fon's persistent advantage in groundnut cultivation over the Adja, and their clandestine sales of the nuts to informal traders after 1957, were facilitated by their ridge tillage style as I will further elaborate in Chapter 9.

Given the relative stability of Fon and Adja styles of farming and their internal dynamics in commodity production it is difficult to see how commoditisation could have determined styles of farming. Therefore I do not see commoditisation as an external element. On the contrary, decisions on which commodities to produce and which relationships to commoditise were themselves part of the Fon and Adja's styles of making a living.

## Notes

1 In the Adja version of the same proverb it is the child of Allada's king who died. Mourning customs demand to abstain from farming and trading for a number of days – 41 according to Fadairo (1986: 590-591), and this applies for the whole people in case of a royal death.

2 Examples of modernisation scholars who postulate the latter are Hirschman (1958/60:11-12); Smelser (1963/1976:78-82); Parsons (1964); Rogers (1969:25) etc. In the neo-Marxist camp this applies for Friedmann (1980:165-16, 1986a:47, 188); Chevalier (1983:160-161); Bernstein (1986) etc, and among the other structuralists Myrdal (1958, 1968:54-74, (especially page 60), 1970).

3 A law enacted in 1914 stipulated that private schools had to follow the same curriculum as the public schools, which were until Kérékou's reforms modelled on pre-1968 French curricula (Ronen 1975:64, 142). See also Hofstede (1986:303) on the prescriptive character of French school curricula. Though village schools in most years also devoted some time to cultivating school fields, the same knowledge was required everywhere at exams.

4 The only two pure cash crops of the Adja are coffee, which was grown on (in most years far) less than 1% of Adja land, and *Jathropha curcas* seeds which were briefly exported in the 1940s and had no local use at all. Castor was exported from the 1920s to the earlier 1960s but was also of some indigenous medicinal use.

5 In a historical description such as mine it is no problem that this is often not yet known at the time of production.

6 Palm oil price fluctuations after the First World War and declining prices in the early 1930s continued to discourage oil producers to such an extent that they neglected to harvest their palms, except during the brief period from 1942 to 1945 that the colonial government rendered palm fruit harvesting obligatory, according to Desanti (1945:150-151).

7 (Pazzi 1979:80, 82-83; Manning 1982:238). In 1933, only from 6 tonnes onwards transport by railway would be more profitable than by lorry (Rapport agricole Dahomey 1933, AOM Aix-en-Provence), and probably only near railway stations.

8 See also Journal officiel du Dahomey 1 Jan. 1893; Ronen 1975:43).

9 The *subdivisions* were called *postes* during the first colonial years and *sous-préfectures* in the 1950s.

10 The Kétou region on the east banc of the river Weme was (after a brief period as independent *Cercle* Holli-Kétou) part of the *subdivision* de Zagnanado (from around 1940?) until 1947, then Kétou became a *subdivision* of the *Cercle* d'Abomey in its own right (Rapport politique Dahomey 1947, Archives Abomey; Population du Dahomey, Archives Abomey).

11 The *Cercle* d'Athiémé was on and off an independent *cercle*, and at other times, for example from 1902 (Kakpo 1981:62) to about 1920, from 1924 until at least the later 1930s and again in the 1950s it formed a single *cercle* together with the unit of Grand Popo, first under the name *Cercle* de Grand Popo, from 1934 under the name *Cercle* d'Athiémé, and in the 1950 under the name *Cercle* du Mono. With de-colonisation it was renamed into *département* du Mono (Dissou 1970:60-61). Parahoué was briefly part of the *Cercle* d'Abomey from about 1911 to 1920 and then again until 1934 (in September 1910 it was part of the *Cercle* de Grand-Popo, in 1921 of the *Cercle* du Mono, but not in 1922). (Correspondance Cercle de Grand Popo subdivision de Parahoué 1908-1910, ANB Porto-Novo; Rapports mensuels Cercle du Mono 1916, ANB Porto-Novo; Rapport trimestriel Cercle du Mono 4 trim 1922, ANB Porto-Novo; Rapport trimestriel Cercle du Mono 4 trim 1934, ANB Porto-Novo; Cornevin 1981:416-417).

12 From 1898 to 1900 the later *subdivision* de Parahoué consisted in two *subdivisions*, namely Tado (with Kpoyizun as *chef*) and Lalo (with Ahamada as *chef*). The villages Sahouéto, Azové, Aïssanhoué, Azokpo, Zoungeme and Tandji constituted the border between them. (Kakpo 1981:57).

13 The agricultural service's *région agricole Centre* corresponded to the *département* du Zou. Dissou (1970:60-61) gives 1958 as date for the administrative change, but agricultural statistics suggests that the *régions agricoles* became effective only in 1963.

14 Kakpo (1981:98).

15 Dossier Abomey-Agouna, ANB Porto-Novo; Correspondances diverses 866, 11 Mars 1921 M. l'Adm commandant cercle d'Abomey, ANB Porto-Novo; Wartena (1988b:74a)

16 Essou was *chef de canton* from at least 1923 to 1950, the year in which he received a decoration (Rapport mensuel Juillet 1923 Cercle d'Abomey, ANB Porto-Novo; Dossier chefs de canton, Archives Abomey).

17 A wall painting, made around 1958, in the building that served as the administrator's office in Aplahoué shows that the three cantons consisted in the following regions. Parahoué-Nord: Kinkinhoué-Patohoué, Adjahomé, Ouetan-Keletomé, Koulikamé. Parahoué-Sud: Djikpamé, Houégamé, Djakotomé, Toviklin, Sahou-Sokouhoué, Adjintimé, Kpoba. Lonkly: Atome Avégamé, Foli Latadji (own observation in 1991).

18 Corresponding to the *région agricole du Sud-Ouest*.

19 The Abomean cantons had initially 2-4 *régions* each (Rapports mensuels from the *Cercle* d'Abomey 1905-1907, ANB Porto-Novo; Ahanhanzo Glele 1974). Several cantons of the *Subdivision* de Parahoué were turned into *régions* when the number of cantons was reduced to three. This gives the impression that the title *chef de région* was mainly created as a consolation prize for former Adja *chefs de canton* and for Fon princes who were not selected as *chef de canton*.

20 (Rapport mensuel Cercle d'Abomey Juillet 1906, ANB Porto-Novo). Desanti (1945:86) claims that only the *Cercle* d'Abomey had *régions*, but administrative reports from Aplahoué show that also this *Subdivision* had some *regions*: Daïr Tchidi was *chef de région* of Aplahoué until 1920 and his brother Kenon Tchidi from 1920 until his destitution for misbehaviour in 1932 (Fiche signalétique Tchidi chef de la région de Parahoué, ANB Porto-Novo; Abomey 1926-1932 Tchidi chef de région Parahoué, ANB Porto-Novo). Houndé Djodto was *chef de région* of Atindehouhoué, Guidé Aballo of

Sahouhoué, and Pierre Alofa of Houégame from 1955 onwards, but the three *régions* were abrogated in 1957 because they would have been created in contradiction with decree 1628/APA of November 1934, and their *chefs* demoted to *chefs de village* (Chefs - Décision portant l'abrogation de nomination de Chefs de région Cercle d'Athiémé 25 Septembre 1957, Archives Aplahoué; Chefs - Affaire Pierre Alofa 1957-1958, Archives Aplahoué).

21 This applied amongst others for the *chefs de région* Kpleli (Lissazounme), Dadaglo (Gboli) and Soglo (Houawe), all sons of Glélé (No 34 Partage du cercle d'Abomey en cantons et villages, de la ville d'Abomey en quartiers, avec le nom des chefs placés à la tête de chaque de ces unités Abomey le 13 Mars 1900, ANB Porto-Novo.

22 Among those not listed as princes some might have been of royal blood as well.

23 Gaspard Degan started his career as sergeant of the *tirailleurs Sénégalais* and as his father's secretary, and was from 1931 to 1934 *chef* of the canton Lama in the *Cercle* d'Allada. He was deposed in 1940. Correspondances diverses Cercle d'Abomey 1914, 1921, 1930, 1934-36, dossier Yémabou Gaspard Degan; Archives Abomey).

24 He was imprisoned from about 1908-1910.

25 Sources a.o: Chefs de canton, Archives Abomey; N° 34 Partage du cercle d'Abomey en cantons et villages, de la ville d'Abomey en quartiers, avec le nom des chefs placés à la tête de chaque de ces unités Abomey le 13 Mars 1900, ANB Porto-Novo; Correspondances diverses Cercle d'Abomey N° 6 Abomey le 5 Janvier proposition d'honorer Aouagbe Behanzin, Archives Abomey; Le Herissé (1911: 4); Desanti (1945:85); Ahanhanzo Glele (1974:231-232).

26 In 1901: '*La famille de Pohizon continue à se bien conduire et à donner le bon exemple. Sans compter les nombreux esclaves Houés vendus autrefois par Pohizon et rachetés ces derniers temps sur mon ordre.*' (Rapport mensuel Parahoué le 22 Octobre 1901, ANB Porto-Novo). In 1913: '*Je ne pense pas que dans les circonstances actuelles, la famile Pohizoun puisse se grouper autour d'un seul chef. A mon avis, il faut assurer à chacun des indigènes Mélékou, Foli et Assodji tous trois refugiés en territoire français, le commandement sur la partie de la famille qu'il a su grouper autour de lui.*' (Followed a list of Kpoyizun's brothers, sisters, sons and daughters with their residence and occupation) (Famille Pohizoun au 1er Janvier 1913 Dossier Pohizoun et Ideou, ANB Porto-Novo). In 1923 the *'féticheur Alopeto de race royale Adja'* lived in Aniame near Lonkli in the savannah north of Aplahoué (Rapport mensuel *Cercle* d'Abomey Octobre 1923, Archives Abomey). Alokpeto succeeded Kpoyizun as *nyigbafio* of Tado until 1957.

27 I mainly encountered conflicts with and disposal of Adja *chefs*. Fon *chefs* tended to be respected by the Adja and appreciated by the administrators. Therefore for the Adja case I cannot confirm Lombard's (1967b:143) statement that '*Au Dahomey, certains fils de chefs de canton d'Abomey, issues de la dynastie royale, furent placés à la tête de circonscriptions voisines. (…) leur comportement autoritaire, qui était admis par leurs sujets [Fon] accoutumés à une certaine discipline, fut considéré par leurs administrés comme abusif, ce qui créa de nombreux conflits avec les populations, habituées à des modèles d'autorité différents.*'

28 Assou was *chef* from 1900 until his death in 1924, Vifen from 1924 until his death in 1955. Sources: Own interviews with Pierre Alofa and several of his former subjects in Atindehouhoué, Honsouhoué and Lagbahome 1985-1990; Lettre 11-10-1957 de Pierre Alofa à Mr. l'Adminstrateur de la F.O.M. chef de subdivision d'Aplahoué, Archives Aplahoué; Renseignements sur les villages du secteur de Parahoué 1910, ANB Porto-Novo; Rapport mensuel Cercle d'Abomey subdivision de Parahoué Avril 1924, ANB Porto-Novo; Rapport politique trimestriel 4 trim 1935 Cercle d'Athiémé, ANB Porto-Novo; Chefs Affaire Pierre Alofa 1957-1958, Archives Aplahoué; INSAE Calendrier historique province du Mono).

29 In 1957 the *chefs* of the *régions* Houégame, Atindehouhoué and Sahouhoué were demoted to *chefs de village* (Chefs - Décision portant l'abrogation de nomination de Chefs de région Cercle d'Athiémé 25 Septembre 1957, Archives Aplahoué). Pierre Alofa, son of Alofa Vifen, was born in Houéganme in 1925. His mother was Fansi Assogba. Pierre Alofa first became *chef de région*, probably at the death of his father Vifen in 1955, but not later than the end of 1957 he was demoted to *chef de village*, under the *chef de canton* Adolphe Kpatoukpa who lived in Djakotome. Nevertheless Pierre Alofa continued to pretend that he was *chef de canton*. On 25 December 1957 he organised a meeting in Houédogli, where he announced that Ahomadegbe installed him, Pierre Alofa, as *chef de canton* instead of Adolphe.

Around the same time Pierre Alofa deposed several *chefs de village* in the area and appointed others against the will of Adolphe Kpatoukpa. Pierre Alofa was punished by imprisonment in 1958. (Chefs - Affaire Pierre Alofa 1957-1958, Archives Aplahoué).

30 Anon (s.d.:95). According to the Rapport mensuel Août 1905 Poste aministratif d'Athiémé (ANB Porto-Novo) from 1900 to 1901 Tossou from Dogbo-Foncome was briefly *chef* but '*détesté de tous, fut remplacé en Aôut 1901, avec le consentement d'Aolou-Begnon, par un étranger au pays, Hamadah, chef de Lalo*'. Tossou was probably the same as Sossou from Abomey, the Fon kings' agent in Dogbo-Tota, whose presence there displeased the population according to Anon (s.d.:95). The hamlets Dogbo-Tota and Dogbo-Foncome are only separated by a road; 'Foncome' suggests that it was a Fon hamlet.

31 At one point between 1929 and 1932 Robert Danha Béhanzin was succeeded in Dogbo by Sogbossi, former *chef* of the canton Ouédeme (south of Lokossa) whose ethnicity I ignore (Cercle du Mono Dossier au sujet de l'agression du chef de canton Sogbossi par les fils du chef de village de Ayomi 1932 + Déserteur Sevo arrêté par le chef de canton Sogbossi 1932-1933, ANB Porto-Novo). Around the same time Robert Danha Béhanzin became *chef* of the Abomean canton Allahè (see above).

32 Zola from Abomey was the Fon king's *yovogan* ('minister of white men's affairs') and Sogan's ancestor came from Allada according to Anon (s.d.:93). Kakaï Glele seems to have been deposed after some time but was reinstalled again as *chef de canton* of Lokossa in 1931. (INSAE, Calendrier historique Province du Mono).

33 Own interviews; Sodokin 1984:36; Chefs Affaire Pierre Alofa 1957-1958, Archives Aplahoué; D 48 Affaire déserteur Sévo Cercle du Mono, ANB Porto-Novo.

34 Fiogbe, king Gbɛhanzin's 'minister of Mahi and Nago affairs' (Garcia 1988:21, 247) and Houdohoué were *chefs de canton* of Sahè. Djehounkè, a descendant of the Fon 'refugee' Djènkè mentioned in 6.3.2, was *chef de région* of Klouékanme (Rapport mensuel Octobre 1923 cercle d'Abomey 1923, ANB Porto-Novo). Prince Ouanilo Glélé was a *chef* with the special task to subdue the Adja of canton Sahè (Correspondances diverses No 3482 Lettre officiel Porto-Novo le 15 Septembre 1924 Lieutenant-Gouverneur à Administrateur Abomey, ANB Porto-Novo).

35 Akwevɛadja and Kplakatagon, my principal research villages on the eastern Adja plateau, had a mixed Fon-Adja population but Fon *chefs de village*, except in Akwevɛadja during a brief period under the first Kérékou government. The Fon *chefs* of this village descended maternally from king Glele (interviews in Akwevɛadja 9-1-1991 with 6 elderly Fon including 3 from the *chef*'s family Huntin, and 9-2-1991 with the Adja *chef* (1975-90) Mahougbe Kanvi).

36 The other *chefs de canton* of the *subdivision* de Parahoué that year, whose ethnicity I ignore, were Sébio (Adjintime), Attingossou (Agohoué), Assogba (Avonouhoué), Djedji (Azové), Tangbe (Tchikpè), Fambo (Djakotome), Kakpo (Djikpame), Dahoué (Kpoba), Eto (Houétan) Ouenou or Ouensou (Kpatohoué), Yakpa (Sahou), Yaouvi (Sokouhoué), Amoussou (Tohoun) and Dokui (Toviklin) (Renseignements sur les villages du secteur de Parahoué 1910, ANB Porto-Novo).

37 Own interviews in Bozinkpe 1989; INSAE Calendrier historique province du Mono.

38 Fiche signalétique Tchidi chef de la région de Parahoué, ANB Porto-Novo; Tchidi chef de région Parahoué Abomey 1926-1932, ANB Porto-Novo; INSAE Calendrier historique province du Mono.

39 Own interview with Adolphe Kpatoukpa and his wife in Djakotome 27-11-1990; Chefs Affaire Pierre Alofa 1957-1958, Archives Aplahoué.

40 See also Lombard (1967b:138-140). The French justified taxation and giving part of the taxes to the *chefs* with the argument that the Fon State used to tax its people (*kuzu*) and that Fon chiefs kept part of the taxes for themselves: '*Devenus maîtres du Dahomey par droit de conquête, nous sommes parfaitement en droit d'exiger des habitants ce que les anciens rois exigaient autrefois, sans que personne n'ait rien à dire. En établissant l'impôt, nous avons voulu supprimer les lourdes charges que vous aviez (…). Ce n'est donc pas au nouveau système établi qu'il faut rattacher le petit soulèvement qui vient de se produire, mais bien au mécontentement de plusieurs souschefs qui, chargés autrefois de percevoir le droit du couzou, sur lequel ils réalisaient de gros bénéfices (…) ont essayé d'exiter plusieurs villages à la rébellion*.' (Rapport politique Septembre 1899 cercle d'Abomey, ANB Porto-Novo).

41 All children taller than 1.10 m were defined as older than 10 years.

42 Some rates of the *impôt* and of remittances to *chefs*:

| Years | *Impôt* per person > 10 years | Remittances to *chefs* |
|---|---|---|
| 1899-1906 | 1.25 francs | 0.25 fr per *impôt* collected (0.10 according to Manning) |
| 1907-1908 | 2.25 francs | 4.5% to *chefs de village*, 5.5 % to *chefs de canton* |
| 1909 | 2.50 francs | |
| 1910-1914 | 2.50 fr per person > 8 years | |
| 1916 | 5 francs | Fixed allocation to all *chefs* and bonuses to loyal ones |
| 1926 | 18 francs (Holonou) or 22 francs (Pfeiffer) > 15 years | Fixed salary to *chefs de canton* (2100 fr/year in one case) |
| 1927 | 22 or 24 francs | |
| 1930-1931 | 30 francs | |
| 1932-1933 | 26 francs (Holonou) | |
| 1933 | 22 francs (Pfeiffer) | |
| 1934-1935 | 23 francs | |
| 1937 | Payment from age 16 | |
| 1938 | Payment from age 14 | |
| 1945 | | *Chefs* received a fixed salary depending on the 'importance' of their rule and their years of service, plus a bonus depending on their performance. *Chefs de village* received a percentage of the *impôt* they perceived depending on the date it was paid (Desanti 1945:87). |
| 1958 | Women of the 6. Category are exempted from *impôt* | |
| 1966-1967 | | *Chefs de village* received 10% of the *impôt* perceived before 1 April and 7% of the *impôt* perceived between 1 April and 1 July. |
| 1959-1988 | All women are exempted, *impôt* relatively lower than in colonial times | |

Sources: Own interviews with Akwenon Klakla in Atindehouhoué 1990 about the mid-1930s; Rapports mensuels Poste de Parahoué Octobre et Novembre 1905, ANB Porto-Novo; Correspondance des Cercles Grand Popo 1908-1910, ANB Porto-Novo; Rapport politique Dahomey 3e trimestre 1915, AOM Aix-en-Provence; Rapport d'ensemble Dahomey 1926, AOM Aix-en-Provence; Fiche signaletique du chef de canton Dadaglo, ANB Porto-Novo; Chefs - Affaire Pierre Alofa & Proces verbal Plainte de Mr. Fidegnon Ministre des Travaux Publics contre Adjoton Koessi Antoine, Archives Aplahoué; Holonou 1980:30 (for 1914-27); Kakpo 1981:68; Cornevin 1981:414; Manning 1982: 169-171 (for 1899-1910); Remises aux chefs de villages sur le produit de la taxe civique 1967, Archives Abomey; Pfeiffer 1988:42, 44, 57).

43 See also Klein (2001a:50, 57 etc.) on the dependency of local administrators of French colonies on local chiefs, interpreters, dignitaries, clerks, guards, messengers and *maîtresses*.

44 *Chefs de village*.

45 This happened to amongst others the *chef* of the Ehwe-Adja village Adjahonme and the Dogbo-Adja *chefs* of the villages Zoungamé and Dogbo-Holodo: '*Bien que m'efforçant de tout obtenir par la douceur et la persuasion, j'ai été obligé plusieurs fois d'employer la force envers des villages récalcitrants: Dépo, Tchanhoué, Adjahomé, Bozipé. (…) Je ne parle pas d'Adjahomé dont le chef est actuellement détenu à Grand Popo. Les habitants ont jusqu'ici refusé d'exécuter les ordres que je leur avais donnés. J'espère donc que l'année prochaine l'impôt pourra être perçu et sans difficulté dans toute la région. Si tous les gens ne paient pas, c'est que l'argent leur fera défaut*.' (Rapport mensuel Parahoué le 22 Décembre 1901, no. 153, ANB Porto-Novo). '*Non content de troubler le pays des Dobos, Aolou-Begnon a fait appeler un de ses parents, Alozonhoué, chef du village de Zoungamé, près de Locossa, et lui a ordonné de ne pas payer l'impôt; Alozonhoué s'est fait interprête de cet*

*ordre dans son village et se rendait chaque jour à Dobo-Ouémé; il est actuellement sous les verrous, à Athiémé, en compagnie de l'ancien chef de Dobo-Holodo (destitué par moi l'an dernier pour concussion) qui était aussi un des agents les plus zélés d'Aolou-Begnon.*' (Rapport mensuel Août 1905 Poste aministratif d'Athiémé, ANB Porto-Novo).

46 Probably Tchanhoué, 3 km east of Azové.

47 Rapport mensuel Abomey Décembre 1923, Archives Abomey.

48 The chief-priest of the land of the Dogbo-Adja. His relative Alozonhoué was probably also Dogbo-Adja.

49 This is illustrated by the case of some villages in the Fon-Adja frontier area, which were the only ones of the *Cercle* d'Abomey in 1914 which were reluctant to pay the *impôt* and to render their guns: '*Les opérations de perception de l'impôt de capitation sont très avancées. Elles ne donnent lieu à aucune observation sauf en ce qui concerne la région d'Agouna (canton de Dona) aucun des villages de cette région n'est venu aux dates fixées. (…) il reste le mauvais exemple donné par les deux villages de Koutagba et d'Aholohouéhoué qui seuls n'ont pas encore présenté les fusils de traite à l'immatriculation et dont tous les voeux tentent au rattachement à Parahoué en vue de se soustraire à la règle dahoméenne.*' (Rapport mensuel Avril 1914 Cercle d'Abomey, dossier 4, ANB Porto-Novo).

50 Rapport mensuel Juillet 1907 Cercle d'Abomey, ANB Porto-Novo.

51 Lombard (1967b:244) wrote about the *Cercle* d'Abomey: '*Ayant hérité des conceptions autoritaires des anciens monarques, les chefs, leurs descendants, continuèrent à s'imposer à leurs sujets selon les méthodes de commandement traditionnel, si bien qu'il s'instaura en fait un véritable système d'administration indirecte, la plupart des affaires intérieures aux cantons étant réglées par leurs dirigeants, en matière judiciaire notamment. (…) C'est pourquoi, jusqu'en 1945, tous les rapports administratifs étaient unanimes à constater le peu de problèmes créés à l'administration coloniale par cette circonscription.*' (After 1945, national political rivalries divided the Fon population). In 1905 thirteen of the fourteen Abomean *chefs de canton* and *-de quartier* pleased the *cercle*'s administrator (called *Résident*): '*Le Résident n'a à se plaindre que d'un seul chef: Gnimavo, du quartier de Bekan-Houegbo. Trop jeune, sans énergie, ayant déjà contracté des dettes parmi ses administrés, il n'arrive point à se faire obéir.*' (Rapport mensuel Février 1905 Cercle d'Abomey, Archives nationales du Bénin, Porto-Novo).

52 Desanti (1945), Klein (2001a:52, 58). Only if administrators believed or feared that a *chef* no longer rendered loyal services to the State they curtailed his authority. One of them was aware that princely *chefs* had enough power to abuse it: '*Les chefs indigènes faut bien leur méfier. Menés sévèrement, ils continueront à rendre des services à l'administration. Ceux qui appartiennent à la famile royale ont besoin d'être surveillé très étroitement.*' (Rapport mensuel Août 1906 Cercle d'Abomey, ANB Porto-Novo).

53 Precisely from 9 April 1904 to 7 July 1906 and from 7 Mai 1907 to 15 December 1908 (Carton Cercle d'Abomey Rapports sur la structure territoriale du cercle 1905-1922 Rapport annuel 1912 Cercle d'Abomey, ANB Porto-Novo).

54 See Appendix 3 for the list of his eleven principal informants. At least five of them were princes, seven were *chefs de canton* (the princes plus Fiogbe who was Glele's 'dignitary' and Gbɛhanzin's 'minister of Mahi and Nago affairs'; Garcia 1988:21, 247), and two were *chefs de quartier* in Abomey. Sources on the 'reigns' of chiefs: N° 34 Abomey le 13 Mars 1900 Partage du Cercle d'Abomey en cantons et villages de la ville d'Abomey en quartiers avec le nom des chefs placés à la tête de chacune de ces unités; Rapport sur la ville d'Abomey (±1909) Politique générale 1E Cercle d'Abomey et Poste de Parahoué; Fiche signalétique de chefs indigènes 30 Juin 1922 Prince Aouagbé chef de canton d'Allahé; Année 1937 Cercle d'Abomey n° 174 Notes des chefs de canton Fiches signalétiques et notes sur les chefs indigènes 1919-1932 Abomey E chefs, all in ANB Porto-Novo; Ahanhanzo Glele (1974:231-232).

55 See also Klein (2001a:57-58) on local administrators' dependency on *chefs'*, clerks' and interpreters' information.

56 Office of the administrator heading a *cercle*.

57 Manning (1982:269-270, 274, 312-313). The Fon however accepted Sagbaju and Langanfin Glele as successive *présidents* of the *conseil administratif de la famille royale d'Abomey*, fulfilling the socio-cultural roles of the former king. Justin's younger brother René Aho likewise capitalised on

his own position in intellectual and political circles. He served as a major guide and informant for scholars and film-makers for some 40 years until his death in 1977 and also produced several articles on Fon social structures himself, see section 3.3.1.

59 Adolphe Kpatoukpa, *chef de canton* of Aplahoué Sud, went to the primary school of Aplahoué in 1913, but by the time that I interviewed him on 27-11-1990 he could hardly speak French anymore. Pierre Alofa, who was raised as secretary in the expectation that he would succeed his father as *chef de canton*, wrote a letter full of errors to the administrator of Aplahoué and a similar village history to me (Lettre 11-10-1957 de Pierre Alofa à Mr. l'Adminstrateur de la F.O.M. chef de subdivision d'Aplahoué, Archives Aplahoué).

60 Aerial photographs and ground observations also show that Essou was one of the few Adja who had a *palmeraie sélectionnée* with 'improved' hybrid oil palms, but the extent of *chefs*' plantations of local oil palms is not known. In 1990 Alofa's compound was large but in bad repair, Adolphe Kpatoukpa's compound smaller but in good repair (own observations).

61 Banégas (2003:45-46). A literate Fon in Gnidjazoun told me: "During the revolutionary period we learned in school that the *chefs* levied *nujo* in the following way: when the coloniser required 1 *estagnon* oil from the *chefs de canton*, these said 2 *estagnons* to their *chefs de village*, and the *chefs de village* asked 3 from the farmers." In 1985 I heard similar propaganda on radio and TV.

62 Another, non confirmed, accusation by inhabitants of 6 Fon villages against their *chef de région* in 1914 read: '*C'est la vérité de Dieu que Bilouton prend de l'argent chez ceux qui veulent installer un fétiche, quil est malhonnête avec l'impôt, que les gens qui ne veulent pas faire le service de garde doivent lui payer 15 F, que Bilonton a pris avec force les palmiers de M. Amoussou de Azongnikpo, pour donné à l'autre personne, que Bilonton reclame chaque 4 Juillet 1 cabrit à chaque maison (…). Son cultivateur chaque année il cultive la terre pour récadeur [Bilonton] c'est la vérité de Dieu vous pouvez demander à M. Cheche*.' (Abomey justice, confidentiel, Plaintes anonymes contre des chefs, E chefs, Note N° F 18 à Monsieur le Commandant du Cercle d'Abomey, Porto-Novo 19 Juin 1914, Archives Abomey). *Chef de région* Bihouenton was already accused a few months earlier but judged innocent of most of the charges (Rapport mensuel Cercle d'Abomey Février 1914).

63 Rapport d'inspection des Affaires administratives l'affaire du Mono, Cercle du Mono, ANB Porto-Novo quoted in Lombard (1967b:151).

64 The accusation against *chef* Yeto of the Adja canton Ouétan to have kept part of the *impôt* for himself in 1911 was already mentioned (Rapport mensuel Août 1911 poste d'Athiémé, ANB Porto-Novo), a similar complaint against Adja *chefs* in 1958 will be quoted below (Chefs- Proces-verbal Plainte de Mr. FIDEGNON Ministre des Travaux Publics contre ADJOTON KOUASSI Antoine, Archives Aplahoué). Another early colonial accusation against an Adja *chef*: '*Tossou chef du village d'Adanlikpé (ou Danlopé) se présenta le 9 Août à la Résidence pour accuser son chef de canton, Oussou, d'avoir gardé par devers lui une some de 3f75 (…) de l'impôt de 1907*.' (Rapport mensuel Août 1910 poste d'Athiémé, ANB Porto-Novo).

65 In 1916 a Fon village accused their *chef de canton* of exacting too much tax and of confiscating oil palms. The *chef* was punished by the attachment of six of 'his' villages to another canton (N° 572 - 17 Avril 1916 au sujet d'une réclamation, Carton 'Cercle d'Abomey - Rapports mensuels - Rapport sur la structure territoriale du cercle 1905-1922', ANB Porto-Novo). Nevertheless in 1916 and 1919 this *chef de canton* was awarded French honorary titles for recruiting soldiers during the First World War (Fiches signalétiques et notes sur les chefs indigènes 1919-1932 Abomey E chefs, ANB Porto-Novo). The French's treatment of this dishonest Fon *chef* seems very friendly compared to their treatment of Adja *chefs*.

66 See the quotation about lack of Adja *chefs'* authority above (Correspondances cercle Grand-Popo subdivision de Parahoué 1908-10 no. 285 du 31-10-08, ANB Porto-Novo).

67 Own interviews; Lombard (1967b: 149); Holonou (1980:64).

68 In 1932 women of the *cercles* Athiémé and Grand Popo demonstrated, demanding suspension of the *impôt* (Holonou 1980:78; Manning 1982:270).

69 Upon payment people received a ticket. They had to show their ticket in 1910 to enter the (Lokossa) market (see below) and in 1985-1991 on the major roads leading to the Klouékanme and Azové markets (own observations). '*l'Administrateur s'est rendu à plusieurs reprises sur le marché de Locossa et s'est fait montrer les tickets d'impôt. (…) Au marché suivant, tout le monde avait son ticket. (…) Il*

*avait compté sans la profonde indifférence d'un certain nombre d'indigènes qui n'ont besoin ni d'aller au marché, ni de fair regler leurs affaires et c'est ainsi que l'année s'est close avec une perception incomplète*.' (Rapport mensuel Novembre 1910 poste d'Athiémé, ANB Porto-Novo).

70 The Dogbo-Adja had (and have) their own chief-priest of the land residing in the village Dogbo-Ahomè, though they also recognise the *nyigbafio* of Tado. They called him *aholu* (king, ruler). From 1905 to 1909 the administrators misspelled the name of Dogbo-Ahomè as Dogbo-Ouémé and Dogbo-Ouédemé. They described the Dogbo's tax boycott as follows:

'*La perception de l'impôt commencée en tout s'est élevée à la somme de 11475 f 00 sur les 20407 f 50 que comporte le rôle. Le paiement en a été accepté sans difficultés dans les cantons, sauf chez certains villages Dobos, qui ont pris même une attitude qu'il serait urgent de ne pas laisser durer*

| *Village* | *Population* | | | *Somme à recouvrer* |
|---|---|---|---|---|
| | *Hommes* | *Femmes* | *Enfants* | |
| *Dobo Ouémé** | *70* | *82* | *41* | *241,25* |
| *Dobo Ayomé* | *171* | *110* | *89* | *560,00* |
| *Dobo Gbanavé* | *150* | *209* | *89* | *475,00* |
| *Dobo Foncomé* | *228* | *292* | *119* | *798,75* |
| *Dobo Houediomé* | *40* | *59* | *40* | *173,75* |
| *Dobo Zafi* | *206* | *235* | *110* | *688,75* |
| *Dobo Locogohoué* | *40* | *56* | *32* | *160,00* |

* (porté à tort sur le rôle sous le nom de Ouédemé).

*plus longtemps. Ces villages sont au nombre de sept:*

*La responsabilité de cet état de choses pïse sur le grand-féticheur Aolou-Begnon, chef de Dobo-Ouémé, qui a affolé les indigènes de son village et des villages environnants, en leur faisant croire que "s'ils payaient l'impôt cette année, ils mourraient". "Depuis six ans que nous payons l'impôt au blanc, a ajouté Aolou-Begnon, il ne pleut plus, nos palmiers n'ont plus d'eau, aussi ne devons nous pas continuer à payer l'impôt".*

*Hamadah ayant fait une tournée il y a douze jours dans ses villages, sur mon ordre, afin de prévenir les populations qu'elles aient à se préparer au versement de l'impôt et qu'elles prennent leurs dispositions pour transformer des produits ou des animaux en argent monnayé, les chefs des villages précités lui repondirent que le grand-féticheur s'opposait pour les raisons données plus haut au paiement de l'impôt, et que leurs efforts restaient vains; Hamadah s'empressa de me mettre au courant, pendant que les mutins, abandonnant leurs villages, partaient pour Dobo-Ouémé se grouper, armés de fusils, autour d'Aolou-Begnon.*

*Ils se sont déjà rendus deux fois en armes, à Dobo-Tota, où réside Hamadah et lui ont déclaré que s'il persistait à vouloir faire payer l'impôt cette année, ils le tueraient. Avant de vous parler de la tournée que je viens de faire dans cette région, je dois dire quelques mots de l'histoire d'Aolou-Begnon, afin d'en bien fixer la physionomie:*

*Aoulou-Begnon (le roi de bonne vie), aujourd'hui grand-féticheur des Dobos, a été pendant longtemps le grand roi de tout le canton; il tenait son investitutee du grand suzerain du pays, le roi de Tado, Pohizoun.*

*Un résident d'Athiémé qui en parle dans un rapport à M. le Gouverneur, en février 1899, déclare que "ce personnage, maître d'un pays assez vaste et très riche en palmiers, est incontestablement le plus ancien et l'un des principaux chefs du cercle d'Athiémé et plus loin "quand Aolou-Begnon se montre en public, la foule enthousiaste lui prodIgué les mêmes démonstrations respectueuses dont sont environnés les rois du Dahomey, de Porto-Novo, d'Allada quand ils se rendent au Gouvernement le 14 Juillet."*

*En 1899, Pohizoun, roi de Tado, et Aolou-Begnon, roi des Dobos, étaient fort liés, le secont étant le coadjucteur du premier. Lors de la chûte de Pohizoun en 1900, l'émotion qu'en éprouva Aolou-Begnon fut telle qu'il n'eut plus qu'un désir: se retirer de la vie politique officielle. "Je suis trop vieux, déclara-t-il, à ses amis, la carrière active n'est plus de mon âge; je vais me consacrer uniquement au fétiche, avant de mourir*."

*C'est ainsi qu'Aolou-Begnon devint le grand-féticheur, tout en restant, au fond, le grand-conseiller du canton. Son successeur un ne Tossou de Dobo-Foncomé qui, détesté de tous, fut remplacé en Aôut 1901, avec le consentement d'Aolou-Begnon, par un étranger au pays, Hamadah, chef de Lalo.*

*Aolou-Begnon est aujourd'hui une loque humaine, dans l'incapacité de se mouvoir, mais le respect dont on l'entoure n'est que plus grand et sa parole de féticheur vénéré est crainte comme une émanation de la divinité. Devenu vieux, Aolou-Begnon s'était fait ermite et pouvait ainsi finir tranquilement ses jours. J'avais tout lieu de croire que son rôle politique était à jamais terminé; il n'en est rien …*

*Non content de troubler le pays des Dobos, Aolou-Begnon a fait appeler un de ses parents, Alozonhoué, chef du village de Zoungamé, près de Locossa, et lui a ordonné de ne pas payer l'impôt; Alozonhoué s'est fait interprête de cet ordre dans son village et se rendait chaque jour à Dobo-Ouémé; il est actuellement sous les verrous, à Athiémé, en compagnie de l'ancien chef de Dobo-Holodo (destitué par moi l'an dernier pour concussion) qui était aussi un des agents les plus zélés d'Aolou-Begnon.*

*Dès que je fus instruit de l'agitation qui avait suivi les paroles d'Hamadah concernant la préparation à l'impôt, je fis convoquer Aolou Begnon, qui se garda bien de répondre, j'ordonnai alors à Hamadah de retourner dans son canton pour informer les villages que je ne désirais pas que l'impôt fur versé immédiatement, que des délais leur seraient accordés, mais que je ne permettais pas de déclarer à priori: "nous ne paierons pas cette année!" …*

*Six gardes d'Athiémé accompagnaient Hamadah; deux jours après, les gardes revinrent et me dirent qu'il serait heureux de me voir venir sans retard à Dobo-Tota. Je partis donc le 31 Août et arrivai le lendemain matin (vers huit heures) à Dobo-Tota.*

*En passant par Dobo-Foncomé, je constatai qu ce grand village était désert; tous les hommes avaient rejoint Dobo-Ouémé, armés de leurs fusils.*

*Je fis convoquer deux fois Aolou-Begnon (Dobo-Ouémé est à une heure de Dobo-Tota), mais ce fût en vain; la seconde fois, il me fit répondre "qu'il ne pouvait pas encore dire si les Dobos paieraient ou ne paieraient pas, mais qu'il voudrait bien causer avec moi sur ce sujet, à une condition, c'est que je laisse mes six gardes à Tota et que je me rende seul à Ouémé." Il me reprochait de plus amèrement l'arrestation de "ses enfants" Pohizoun et Alozonhoué.*

*La condition qu'il me posait était inadmissible; il aurait été fort imprudent d'autre part de me rendre avec mes six gardes à Dobo-Ouémé, ou un cri, une geste mal interprêté ait suffi pour amener un conflit gros de conséquences; Hamadah et les chefs présents ne cachaient d'ailleurs leur certitude que les gens de Dobo-Ouémé prendraient l'offensive en nous voyant arriver.*

*Je reflechis qu'il était prudent de temporiser, qu'en somme les gens avaient encore plusieurs mois pour s'acquitter de leur impôt, qu'ils reviendraient sans doute sur leur décision en voyant l'exemple des autres villages qui vont payer, et que de nombreuses arrestations faites parmi les meneurs leur feraient comprendre l'intérêt qu'ils ont à rentrer dans le devoir. - Pour toutes ces raisons, je décidai de ne pas aller à Dobo Ouémé; je fis avertir Aolou-Begnon qu'il allait être puni pour ne pas avoir répondu à mes convocations et que je rendrais compte de sa conduite à mes chefs; puis je repris la route d'Athiémé par Poha-Hoton, Agamé et Fomba.*' (Rapport mensuel Août 1905 Poste aministratif d'Athiémé, ANB Porto-Novo).

'*Un village Dobo, Dobo Ouémé refuse sur les conseils pernicieux d'un grand féticheur Aolou Begnon de payer l'impôt. (…) l'an dernier ce village refusa également de payer l'impôt et ce n'est que sur des invitations reïferées qu'il consentit à le verser.*' (Rapport mensuel Août 1906 Poste d'Athiémé, ANB Porto-Novo).

'*Aolou Begnon, chef du village, aujourd'hui vieux et usé serait mêné par les nommés Djoumaghé et Koudjehoun, il n'a plus la force de réagir contre ces meneurs. Les gens de Dobo Ouémé prétendent être maître chez eux "ce n'est pas à eux disent ils à verser l'impôt, c'est les autres villages Dobos qui doivent payer pour nous*".' (Rapport mensuel Septembre 1906 Poste d'Athiémé, ANB Porto-Novo).

'*Le chef de poste s'est rendu à deux reprises dans ce village, mais chaque fois tous les habitants avaient fui, seul le vieux chef Aolou Begnon, impotent et aveugle était resté en compagnie de son fils, il s'efforca de lui faire comprendre combien mauvaise et dangereuse était la conduite du village, il leur fit une comparaison entre les autres centres qui avaient déjà acquitté leur impôt (…) Le chef Aolou Begnon promit d'user de son influence pour ramener les mutins dans l'obéissance. (…) peu après ils envoyaient à Athiémé une partie de leur impôt.*' (Rapport mensuel Octobre 1906 Poste d'Athiémé, ANB Porto-Novo).

'*La perception de l'impôt n'est pas complètement terminée, le village de Dobo-Ouédémé ayant encore une centaine de francs à verser*.' (Rapport mensuel Janvier 1909 Poste d'Athiémé, ANB Porto-Novo).

'*Grâçe à l'activité energique du chef supérieur Hammadah, le village de Dobo-Ouédemé a terminé les versements au debut du mois*.' (Rapport mensuel Février 1909 Poste d'Athiémé, ANB Porto-Novo).

71 During the first colonial years many Adja did not pay at all. By 1915 their tax payments already improved but still lagged eight months behind those of the Fon plateau: '*Cercle d'Abomey. (…) La rentrée de l'impôt a commencé le 12 Mai. Au 30 Juin il ne restait à encaisser que les sommes dues par le canton de Sahè et par la ville d'Abomey. Les opérations de perception ne peuvent, en raison de la réduction du personnel, se faire aussi rapidement que les années précédentes mais elles se poursuivent sans le moindre incident. (…) Cercle du Mono. (…) Dès le mois de Février, le secteur de Parahoué qui, fin Décembre, n'avait versé qu'une partie de l'impôt personnel, s'était acquitté intégralement*.' (Rapport politique Dahomey 1e + 2e trimestre 1915, AOM Aix-en Provence).

72 Holonou (1980:64, 77). Among the former Adja migrants whom I interviewed were Akwenon Klakla and Fantoji Tonu. In the mid-1930s Akwenon joined his cousin in Anecho, together with his fellow villagers Fantoji Tonu (born 1914) and (according to Fantoji) also Fiogbe Degli (born 1916) and two young men from Houédogli. They went to perform wage labour, according to Akwenon at first to pay the *impôt* for their family in their home village and later to earn their own pocket money. Fantoji claimed that the household of his father, who was a brother of the *chef de village*, did not need to pay *impôt*. Fantoji also suggested that Gosu participated in agricultural wage labour in Anecho. Akwenon first said about their stay in Togo:

"At the time of the earthquake I was in Togo to farm for money in order to pay the *impôt*. Men of my age already had to pay *impôt*, which was at 30 francs. I worked 3 years in Togo to earn that money. My father was already dead at the time of the earthquake, and it was very difficult to find enough money to pay the *impôt*, and if you did not pay they could arrest you if you went out of the village. Here in the village there was no money, and wage labourers received only 1 *kawo* (10 *centimes*) for 1 *abowive* (24m × 24m), but in Togo they received 2 francs." (Akwenon Klakla, 29-5-1990).

Later Akwenon corrected what he said about the wages in Togo and added: "Fantoji and I went to Togo together. Our parents had told us to go there to find money for the head tax. We had a brother in Anecho, Gosu son of Vito a descendant of Klakla, who was employed to sweep a house. He lodged us. We told his friends and acquaintances that we were available as labourers. We always found enough work in the fields.

In those days agricultural wage labour was rare here on the Adja plateau. Only Amu and his elder brother from Houédogli, and occasionally also our *chef* Togbui and the *conseiller* of the *chef de village* of Houédogli engaged wage labourers. But the people did not like to perform wage labour here in the village because those who did so were derided, they could not even find a wife because it was said that they don't farm for themselves and have nothing to eat. In those days the three richest people here were Amu and two others from Houédogli. They had many wives and children and large farms. They purchased land at low prices from those who needed money to marry or to pay the *impôt*. We stayed in Anecho during the earthquake. Then Ega Djossou, *chef de village* of Togoville, saw us and brought us into his own field to work there for a whole month. In that time they first paid 1 *kawo* (10 *centimes*) per day or per *abowive* (24m × 24m). While we were still there the price went up to 2 *kawo* per day. We [first] sent the money which we earned to our parents; Fantoji also did so. But after having earned enough money for the head tax we saw that there is money in Togo and we stayed to work for ourselves. In Anecho we mainly worked in the coco palm plantations, second in maize fields, cowpeas, cassava, tomatoes, sometimes in groundnuts. The people there also made *gari* and tapioca. It is with the money which I earned in the coco palm plantations that I purchased my sewing machine. Fantoji and I were called by Dosu son of Sodegla (a son of Atindehu) to work in Lomé at the trading company FAO. Dosu had to transport commodities in his chart to the markets, where they were weighed before they loaded into the train to the north. Towards the end of the Second World War Fantoji and I returned to the village because our parents did not accept their children to stay permanently abroad. Each time they were sending us message to come home. But now we have understood that it would have been better to stay there." (Akwenon Klakla, Atindehouhoué 26-9-1990).

On my question how many Fon there were in Anecho, and what were the Fon's economic activities Akwenon said: "There were twice as many Fon in Anecho than Adja. We learned from the Fon's example that one should not stay at home but go out in order to find money. The Fon at Anecho did the same jobs as we. But some of them had come with their wives and sold *nuwanu* on the market while their wives retailed maize and other food. In those days the Togolese did not know the *nuwanu* business, but later they entered into the business themselves." (Akwenon Klakla, Atindehouhoué 26-9-1990).

73 In the heat of the campaigns some Adja *chefs* tried to win the people's favour by exempting women from tax payments even before the official abolishment. Other *chefs* were accused by their subjects, who believed that women were already exempted, of putting women's payments into their own pockets. These accusations among the Adja seem to have been intertwined with personal ambitions and with different political affiliations, as was the case in a conflict between the *chefs de village* Pierre Alofa and Houndé Djodto in 1958 (Chefs - Proces-verbal Plainte de Mr. FIDEGNON Ministre des Travaux Publics contre ADJOTON KOUASSI Antoine, Archives Aplahoué).

74 Henyon's son Kudukui in Lagbahome (see 6.5) was one of *chef de canton* Vifen Alofa's hammock carriers, according to his son Fiogbé (born around 1927): "Alofa requested each *chef de village* to send him one hammock carrier. *Chef* Djodto chose my father Kudukui. Whenever Alofa wanted to go to Aplahoué or another place he commissioned my father to come to Houégame early in the morning. I was still a small boy when they replaced the hammocks by wheelbarrows." (Fiogbé Kudukui, Lagbahome 19-7-1990). Herskovits (1938 II plate 52) and Desanti (1945 plate VI) show Fon chiefs in their hammock. Also *chef* Djodto had a hammock (his son showed it to me).

75 Status and relationship to the former *chef de région* exempted the latter's sons, who were princes, from digging the first well in Lissazounme in 1924, a forced task in which all the other young villagers had to participate, according to one of the *chef*'s sons: "Since I am a prince I did not have to dig when the first well was constructed in the village, but I saw that the others of my age had to descend into the hole and dig." (Boniface, Lissazounme 4-10-1989). We will see below how an Adja *chef* exempted his own lineage and village from military recruitment, and how Fon and Adja bribed their *chefs* to be exempted.

76 A decree of 25 November 1912 stipulated that forced labour in the AOF should not be rendered farther than 5 km from the home village and should not exceed a certain number of days. This number was 8 to 12 days in 1926, depending on the colony, and was gradually reduced during the 1930s. (Fall 1993:202).

77 Depending on the year and the charge. Private Dioula and European traders in Bamako and Guinée paid much more to their porters (Fall 1993:74-75).

78 'Good' and 'very good' workers could obtain up to 1 franc per day (Rapport politique Mai 1900, Résidence d'Abomey, ANB Porto-Novo). In comparison: in 1900 the *impôt* in the *Cercle* d'Abomey was 1.25 francs per person per year and the export price of maize was 3 francs per ton. From 1901 to 1905 maize was exported at ca. 0.20 francs per ton (Manning 1982:376).

79 Later Célestin installed himself as independent carpenter in his home village and trained several lineage members in his craft, see section 8.1.2. According to him the wages offered by the French brought about a change in Fon mentality. Also in the informal sector the Fon would have started to demand wages: "It was the administration that started to pay people, and consequently wage labour was introduced to the peasantry. The introduction of wage labour has destroyed unpaid mutual aid." (Own interview in Lissazounme 3-10-1989).

80 As reasons for his return he advanced that his father died in 1928 and that the family wanted him to succeed dad (interview Lissazounme 4-10-1989). However, he succeeded father as *daa* of the family only in 1972. Therefore I assume that other reasons to return might have been to secure his inheritance, to found a family in his home village, and possibly also the economic crisis of the 1930s.

81 Agblonon, born around 1900-1905 in Kana-Mawuhwe, contrasts with the common stereotype of the male wage labourer migrating alone and retaining land at home. He did not inherit any land in Kana, probably partly because the lineage had (next to?) no land besides the lineage commons. (Own interview with his son Alfred in Gbegamey, 1990).

In Alfred's French words: "*Mon père avait travaillé au wharf de Cotonou depuis les années 1920 ou 1930. Le port n'existait pas encore à l'époque. Mon grand-frère est né en 1937 à Cotonou. Tous les fils de mon père ont grandi à Cotonou. J'ai passé mon enfance comme tout petit garçon chez ma*

*maman à Kana. Quand j'avais l'âge d'aller à l'école je suis venu à Cotonou. Deux de mes grand-frères travaillent au port. Ils ont obtenu des emplois dans le service de leur père parce qu'autrefois un bon travailleur avait le droit d'introduire un ou plusieurs de ses enfants dans son service, qui le remplaceront après sa retraite. Actuellement ceci ne se fait plus - c'est à dire parfois on peut encore glisser son enfant dans son service, mais ce n'est plus aussi garanti qu'avant.*" See section 8.1.2 for a similar statement by his relative Bernardin.

82 Most certainly Zogbedjigan, 1 km west of Aplahoué (*gan* means 'great').

83 Slaves in 'liberty villages' (runaway slaves and slaves from caravans seized by the French) could gain their freedom in only one month if they enlisted in the *Tirailleurs Sénégalais*, otherwise the period during which their French owners could reclaim them was 3 months (Klein 2001a:53; 2001b:10). In Dahomey, an attempt to let the Catholic Church organise liberty villages near Abomey (Villersville), Zagnanado (Saint-Lazare) and Kétou (Saint-Augustin) failed for lack of money and of slaves (Cornevin 1981:437).

84 Decalo (1976) however confounded the Adja and the Holli (the Fon's neighbours to the east, they also resisted the 1914-1919 recruitment) and speaks about the revolt of the Holli in the Mono.

85 In the beginning only voluntary *engagés* and their families received these rewards, but from January 1918 *appelés* and their families received the same rewards (D'Almeida-Topor 1973:206, 233).

86 The Adja became suspicious of every civil servant and started to flee from any labour recruitment by the administration, fearing that it could be a military recruitment in disguise (D'Almeida-Topor 1973:221).

87 When the Adja were reluctant to enlist as soldier, porters for Cameroon were demanded instead: '*Pour donner satisfaction, dans la mesure du possible, à la recente demande de porteurs pour le Cameroun, j'ai fait connaître à cet Administrateur que j'étais disposé à dispenser son cercle de fournir le contingent restant à recruter s'il lui était possible de donner 200 porteurs; (…) Les populations du Mono étant peu aptes au service militaire cette combinaison serait plus avantageuse.*' (Rapports politiques Dahomey 2eme et 4ieme trimestre 1915, AOM Aix-en Provence). But in 1915 not a single one of the 200 demanded porters embarked for Cameroon. Although the Mono *chefs* presented 95 porters, 66 of them deserted on the spot and the remaining 29 in Cotonou (D'Almeida-Topor 1973:218).

88 Tuji from the same village confirmed: "I was about 15 years old when they cached Akpa for the First World War." (Interview Atindehouhoué 30-5-1990). In those days Atindehu was *chef de village* of Atindehouhoué and some neighbouring villages.

89 Chefs de canton, Archives Abomey.

90 The Holli to the east of the Abomey plateau also rebelled against the 1914-1919 recruitment. Decalo (1976:69, 125-126) confounded the Holli and the Adja revolt and spoke about the Holli rebellion in the Mono department. Like the Adja, the Holli were as acephalous and little commoditised (Mondjannagni 1977:93, 105; Elwert 1983:280-281) and grew their palms mainly for wine. It was the rebelling Adja's fortune that their 'wine' palm plantations were not given to the Fon *chefs* too!

91 The report of the 3. trimester: '*Presque toutes les autres populations de la Colonie, mêmes les plus voisines des régions révoltées, celles des cercles d'Allada et d'Abomey par exemple, n'ont cessé de conserver, durant la période qui vient de s'écouler, le calme le plus parfait et de faire preuve à notre égard d'un loyalisme qui ne s'est pas démenti jusqu'à ce jour.*' (Rapport politique du troisième trimestre de l'année 1918 Dahomey, AOM Aix-en-Provence).

92 Herskovits (1938 II: 203). Mawu is probably God, or perhaps the *vodun* with the same name.

93 Many believe on the base of one traveller account that Da Souza had an export monopoly on all slaves at Whydah, but other contemporary sources as well as most 20th century Dahomean/Beninese scholars believe that the monopoly regarded the king's slaves only, which seems more likely. Foà (1895:23) even claims that in the 1840s Gezo sold some of his slaves to another 'Brazilian', Joaquim d'Almeida. See on the *chacha* Foà (1895:21-3, 30-31, 36-37, 42-44), Hazoumé (1937:31), Decalo (1976:51), Law (1977a:567-570), Soumonni (1979:54, 57-58).

94 Starting in Keta (1855), Peki (1858), Waya (1858) and Anyak (1859); Seige & Liedke (1990:3-5, 169-170, 178, 191).

95 Governor Desanti (1945:139): '*Le Dahoméen, surtout celui du bas Dahomey, est très avide d'instruction (…). Nos établissements scolaires sont presque partout devenus rapidement trop petits pour le nombre croissant sans cesse d'élèves désireux de s'inscrire, et dans certains centres, comme Cotonou,*

*on a vu des pères de famille (…) se cotiser pour faire les frais de classes complémentaires don't ils demandaient d'urgence l'ouverture*.'

96 According to Garcia (1971:76) and the Rapport mensuel Octobre 1905 Cercle d'Abomey (ANB Porto-Novo). The Rapport d'ensemble Dahomey 1909 (AOM Aix-en-Provence) however pretends that until 1905 Dahomey's only public school was in Porto-Novo.

97 Athiémé had a catholic mission and -boys school since 1899 (Manning 1982:212; Garcia 1971:62). In 1905 Athiémé had already 72 schooling children, in 1906 it had 60-71 and Lokossa 30; in 1910 Athiémé had 76 and Lokossa 40 (Garcia 1971:70; Rapports mensuels Février 1905 & Septembre 1906 Poste d'Athiémé, ANB Porto-Novo; Rapport mensuel Novembre 1910 poste d'Athiémé, ANB Porto-Novo).

98 '*A Parahoué, l'école compte onze élèves, fils de fonctionnaires et de traitants*.' (Rapport mensuel Avril 1911 poste d'Athiémé et Parahoué, ANB Porto-Novo). According to Garcia (1971:70) however there were 15 pupils.

99 In 1913 Adolphe Kpatoukpa, an Adja born in Djakotomé around 1905, enrolled in the Aplahoué school, but when I interviewed him on 27-11-1990 he could hardly speak French anymore. He became *chef de canton* in 1955.

100 Since at least 1915 (Rapport d'ensemble Dahomey 1915, AOM Aix-en-Provence; Rapport mensuel Décembre 1918 Cercle du Mono, ANB Porto-Novo). I assume that the Aplahoué school was still closed in 1920 because in 1920 the *Cercle* du Mono had one public school less than in 1915 (Garcia 1971:92-93).

101 Groupes scolaires Abomey - monoghaphie, Archives Abomey. The Adja informant, Tozo Kakpo from Djikpame Fikoué, would have enrolled the Abomean (primary) school in 1921, the *école d'agriculture* there in 1930, married a Fon princess in 1934, and became a *député du Dahomey à l'assemblée législative du conseiler général du Sud Est [Ouest?] de Lokossa*. (Tozo Kakpo, Djikpame Fikoué 1990).

102 In 1949-1950 the *Cercle d'Athiémé* received (or had?) three schools or classrooms, in Djakotome, Dogbo, and Honton (Inspection academique du Dahomey, année scolaire 1950, AOM Aix-en-Provence). In 1952 a catholic school was inaugurated in Azové (Calendrier historique province du Mono, INSAE 1979). In 1958 a catholic girls' school in Abomey and a primary school in Lissazounme, a few years earlier a teacher training college in Bohicon, and in the 1960s a secondary school in Abomey opened (own interviews; Cornevin 1981:445).
By the 1940s there were also some Coranic schools, namely

| Year | *Cercle* d'Abomey | | *Cercle* d'Athiémé | |
|---|---|---|---|---|
| | Coranic schools | Pupils | Coranic schools | Pupils |
| 1943 | 13 | 244 | 3 | 29 |
| 1945 | 8 | 195 | 5 | 63 |

Sources: Rapport politique Dahomey 1943, Archives Abomey; Rapport politique Dahomey 1945, Archives Abomey.

According to the colonial *Rapports Politiques Dahomey 1943* and *1947* (Archives Abomey) almost all the Muslims in South Dahomey were Nago, Yoruba, Hausa or Djerma, and almost none were Fon because Nago's 'fetishism' was not as strong and organised as the Fon's. My case studies and observations on the two plateaux confirm that there were virtually no Fon and only very few Adja Muslims. At the time of my research there were a few Coranic schools in Adja plateau villages, with a handful of Adja pupils, but there were still next to no Muslim Fon. Instruction in the Coranic schools was in Arabic.

103 This was 38% of the schools of the *Département* du Zou, while Abomey had only about 20% of the Zou's population.

104 '*Le roi a essayé d'entraver le bon fonctionnement de l'école en ordonnant à plusieurs chefs d'y en retirer leurs enfants. J'ai du m'interposer. Lui-même sans m'en rendre compte a défendu à son fils de s'y rendre afin de l'avoir près de lui et de connaître ainsi tout ce que disent les Européens. Son enfant était un bon élève parlant assez bien le Français*.' (Rapport commercial et administratif Cercle d'Abomey Août 1900, in: Rapport sur la situation agricole dans le Cercle d'Abomey Février

- Novembre 1900, ANB Porto-Novo). This incident occurred just before Agoli-Agbo's destitution in 1900, when tensions between Agoli-Agbo and the French were rising, and was a violation of his protectorate treaty with General Dodds, which aimed at stimulating French versus Portuguese and Anglophone (missionary) education by stipulating that 'French schools may be opened in all population centres. The king will promote their establishment and will use his influence to propagate the French language and to spread its instruction in the country. The school of Abomey will be attended by the children of the royal family.' (Ronen 1975:60).

105 Foà (1895:278), Manning (1982:55).

106 Chefs de canton - périodiques, Archives Abomey. One of them also edited a journal himself, see below.

107 The colonial government, initially not in favour of religious education, judged in 1945 that *la très grande majorité des évolués d'aujourd'hui sont des anciens élèves des écoles missionaires*. (Rapport politique Dahomey 1945, Archives Abomey).

108 School attendance as percentage of the total population in 1955 was 2.7% in Dahomey, 2% in Senegal, 1.6% in Ivory Coast, 0.9% in Guinea, 0.5% in Upper Volta, 0.4% in Mauritania, and 0.06% in Niger (Ronen 1975:140-141).

109 Decalo (1976:58, 82); De Jong (1986:30); Banégas (2003:32). The host countries repatriated the Dahomeans, considered as second colonists, following independence (Egg & Igué 1993:33, 122).

110 I know of only one teacher from Atindehouhoué, a man born in 1948. According to several villagers he was a refugee in France since Kérékou's times because of his activities in the forbidden Parti Communiste du Dahomey. His father claimed that he taught linguistics there; I could not verify this account. The man briefly visited Bénin in February 1990 while I was in the Netherlands, but when the PCD decided not to participate in the *conférence nationale* he returned to France. (Interviews amongst others with his father in 1985 and Apko Klakla on 21-4-1990).

111 (Allen et al 1989:37; De Jong 1986:30), after having nationalised the private (religious) schools in November 1974 (Allen et al 1989:35, 106). The new curricula, emphasising national history and -culture, practical skills and moral-ideological education, did not satisfy partly due to lack of teaching materials and of teacher training, and were abandoned again in the 1980s.

112 Applicants for fellowships had to be below a certain age, but it was easy to change one's passport age since adults and teenagers could establish a (second) birth certificate for the standard 'fee' of 5000 FCFA. Even I did so when I urgently needed my birth certificate and there was no time to mail it from Europe. This practice led to funny situations when I interviewed secondary school students on their age: "Do you want to know my real age or my school age?" In 1986, financial problems led the State to suspend the secondary school fellowships.

113 "On markets days our teacher never came to school, but rather helped his wife to retail sugar on the market to make up for his meagre salary" was one of the first statements I heard after my arrival on the Adja plateau.

114 Own interview with Dorothé Lisanon, who was one of the first pupils, and Laure Lisanon, Lissazounme 21-9-1989.

115 School attendants/population between 6 and 14 years. Source: Ronen 1975:141-142.

116 Source: Hodonou 1976:183.

117 The degree of literacy in the provinces is not a good measure for schooling in the same province, because many lettered adults migrated to the coastal- and Fon plateau towns. The difference between the provinces was largest for the age group 20-29 years (in this group, literacy in the Zou province almost doubled that of the Mono province) and smallest for the age group 10-14 years (52.1% in the Zou and 46.4% in the Mono). In all the other age groups, literacy in the Mono was about 2/3 of that of the Zou. Source: INSAE (1987:59).

118 Literacy (in official statistics such as INSAE's) is in French only. The Marxist State's literacy projects in the Fon and Adja languages were unsuccessful. Some very few Christian Adja (far less than 1%) learned to read in Ewe in the churches' literacy classes (the Bible existed in the related Ewe language, but not in Adja), and still less Adja learned to read Arabic in Coranic schools. There were next to no Muslim Fon on the Abomey plateau. Some very few Roman Catholics could read the missal in Fon; the complete New Testament in Fon was only achieved in 1995. Officials tended to ignore or overlook literacy in other languages than French.

119 Soglo was a son of king Glélé; he and his son were *chefs de région* in Ouaoué in early colonial times (Rapport politique Cercle d'Abomey 1899, ANB Porto-Novo; Partage du Cercle d'Abomey en cantons et villages, de la ville d'Abomey en quartiers, avec le nom des chefs placés à la tête de chacune de ces unités, N° 34 Abomey le 13 Mars 1900, ANB Porto-Novo).

120 Decalo (1976) names (by origin) several Fon ministers (Philippe Aho, Michel Aikpé, Janvier Codjo Assogba, and Arsene Kinde), medical doctors, lawyers, writers, high-ranking teachers, army officials etc., but not a single Adja.

121 One candidate was disqualified at the last minute, so that only 12 participated in the 1991 elections. The PCD participated for the first time in 1996 (Djaksam 1996:497; Banégas 2003:186, 203-204).

122 The facts that he sought medical treatment from French medical doctors as well as from *vodun* priests and healers, and granted State recognition to the *vodun* (for example by launching an annual festival for the *vodun* in Whydah) suggests that he, too, believed in a possible spiritual origin of his ailment. *Cakatu* is a sharp object which is magically made to enter into the victim's body, where it causes havoc. I observed Fon belief in *cakatu* in Kana in February 1991, before Soglo's disease. A piece of iron was shown around in Fon plateau churches, with the information that this *cakatu* was vomited by a victim after prayers. (Own observations and interviews; Sulikowski 1995 personal communication; Kahl 1996).

123 In the second round of 1996, when the only choice was between Soglo and Kérékou, the Adja voted for the latter, partly out of discontent with Soglo's 1991-1996 government, partly because Amoussou invited his electorate to support Kérékou in the second round (Djaksam 1996:497).

124 Le Meur (1996:310) has a similar argument for Dahomey/Bénin's oil palm policies. I will show that it applied for its' agricultural policies in general.

125 This remark was about the Avégame-Adjahonme-Djoto area, which was part of the *Cercle* d'Abomey in those days. The author compared this Adja area implicitly with the Abomey plateau.

126 Dohoun, a market village near Lokossa, was not an Adja but a Waci village. The contrast with the Adja's 'neglect' of their oil palms is clear.

127 Thinning and topping cotton plants would have encouraged the growth of lateral branches, which bear more flowers.

128 Own observations on both plateaux, which conflict with Dissou's (1970:108) claim that farmers of the Adja plateau, especially those of the *secteurs* Aplahoué and Klouékanme (including today's Djakotome and Toviklin) were by the late 1960s the most advanced in 'modern' cultivation techniques of all Mono farmers because they 'already' sowed in lines and at proper density. Dissou possibly referred to the Adja's *capability* to sow cotton at intervals of 40 cm. In 1988 however the CARDER Zou advised farmers to 'increase' their densities and to sow 40.000 plants of maize, at least 30.000 plants of cowpea, or 75.000 plants of groundnut per hectare (CARDER Zou DSEI 1988:1, 3, 8, 13), which was actually **less** than the farmers used to sow. Either the CARDER Zou was unaware of farmers' sowing densities and based its advice on the prejudices about farmers, or its report contains a miscalculation – possibly the figures refer to plant holes rather than plants per hectare.

129 As early as 1903 the Fon plateau was judged too dry and in 1919 also too poor for cocoa by an administrator and the agricultural service (Lettre de l'administrateur du Cercle d'Abomey 26-11-1903, ANB Porto-Novo; Rapport annuel Service de l'agriculture cercle d'Abomey fin de l'année 1919, Archives Abomey). Soon the climate of the rest of Dahomey appeared to be too dry for cocoa and coffee as well (Dissou 1970:19). Only a small area around Pobè-Kétou, the most humid of the country, continued to grow a little cocoa, and the Niaouli-Allada area grew some coffee. This cocoa and part of this coffee were smuggled to Nigeria and consequently underreported in export statistics, at least between 1945 and 1960 (Egg & Igué 1993:31).

130 From 1889 to 1978 palm fruit products (oil, kernels, from 1965 also kernel oil and kernel cake) were each year the country's principal export commodity both in value and in tons (Manning 1982: 365-369; 382-385; Sedjro 1980:23-24; INSAE 2002:49). From 1988 to 2001 oil palm products occupied only the fourth position among the exports (INSAE 2002:49-50). The value of palm oil exports from 1992 to 1994 was only 2% of total exports (INSAE 2002:35).

131 In 1911 Dahomey earned 4 times as much from duties on alcohol (5121 francs) than from the *impôt* (1281 francs). Other custom duties provided 2072 francs. The total value of exports, mainly palm products, was 21958 francs (Rapport d'ensemble Colonie du Dahomey 1911).

132 Yield 4-14 times higher than those of indigenous palms were expected by the colonial Rapport économique Dahomey 1943 (Archives Abomey).

133 Amongst others the *chef de village* and some big men in Atindehouhoué, Adja *chef de canton* Essoun, and several Fon *chefs* planted Tenera's. In 1991 the *chef* of Atindehouhoué still had a document showing that he was nominated 'farmer of the year 1952' for this on his wall. Colonial reports contradict each other on numbers of hybrid palms planted per *Cercle*, but the most likely figures for the years on which I found information are

Hybrid oil palms planted by farmers in the *Cercles* d'Athiémé and d'Abomey

| Year | *Subdivision* Aplahoué | *Cercle* d'Athiémé | *Subdivision* Abomey | *Cercle* d'Abomey |
|---|---|---|---|---|
| 1943[1] | – | – | – | 1990 |
| 1944[1] | – | 30350 | – | 5990 |
| 1945[1] | – | | – | 13168 |
| 1946 | – | – | 0 | 0 |
| 1947 | – | – | 0 | 0 |
| 1948[2] | – | – | 0 | 0 |
| 1951[3] | 165 | 24246 | 22660-23860 | 24340-25890 |
| 1952 until June[4] | – | – | 7050 | 11000-13550 |
| 1953 | – | 31053 | – | 29908 |
| 1954 July-Dec. | – | – | 5041 | 11167 |
| Annual averages[5] | 165 | 21412 | 6950-7190 | 12195-12708 |

1 According to one report (Rapport agricole 1947, Archives Abomey) by 1945 only the outskirts of Porto-Novo planted and the other *Cercles* followed in later years, but this is probably incorrect.

2 Farmers in the *Cercle* d'Abomey would have asked for palms but the agricultural service was incapable to provide young trees from Pobè's nurseries that year. In 1950 there was a general shortage of palms in the nurseries, which seems to have been related to the high mortality of transplanted trees, which had to be replaced (Rapport annuel Inspection générale de l'agriculture Gouvernement Général de l'AOF 1950, ANB Porto-Novo). By 1953, two nurseries existed on the edges of the Fon plateau, at Sahè and at Zado (near rivers).

3 In the *subdivision* d'Abomey, plantations were distributed fairly evenly over the different cantons with a concentration around Sinhoué-Sahè (southwest) and Allahè (northeast). Two reports give slightly deviating d'Abomey, plantations were distributed fairly evenly over the different cantons with a concentration around Sinhoué-Sahè (southwest) and Allahè (northeast). Two reports give slightly deviating figures.

4 Farmers in the *Cercle* d'Abomey would have demanded 12500 trees and received 'only' 11000 because of shortages in the nurseries, but when I sum up the numbers given for the different cantons I arrive at 13550. *Chefs* and farmers close to the palm oil factory in Bohicon were served first because 'dispersed plantations led to high % of mortality' of the palms. The cantons in the *subdivision* d'Abomey received the following numbers: Allahè 2500, Sinhoué 2500, Oumbegame 1200, Zogbodome 350, Tindji 250, and Abomey town 250.

5 Excluding 1948 because trees were not available that year. January-June 1952 and July-December 1954 are counted as half a year each.

Sources: Rapport économique Dahomey 1944 + 1945, Archives Abomey; Rapport annuel service de l'Agriculture cercle d'Abomey 1948, Archives Abomey; Rapport agricole Dahomey 1951, AOM Aix-en-Provence; Rapport économique 1er semestre Cercle d'Abomey 1952, Archives Abomey; Compte-rendu sur le fonctionnement au Dahomey des usines d'huile de palme du plan pendant l'année 1953, Archives Abomey; Rapport économique Dahomey 1953, Archives Abomey; Rapport économique 2e semestre Cercle d'Abomey 1954, Archives Abomey.

134 '*Palmiers sélectionnés. Sur le plateau d'Abomey les jeunes plantations souffrent de la pauvreté du sol, à laquelle il devrait être remedié par fumier organique et par engrais verts. (…) Pertes 1/3 des plants.*' (Rapport économique Cercle d'Abomey 1er semestre 1954, Archives Abomey).

135 With careful management the hybrids would reach up to 5 tonnes fruit per hectare according to Segalla (1999:16), who does not specify whether this is with or without food crops under the hybrids. This yield seems to be based on IRAM's (1981:54) estimation quoted in Pfeiffer (1988:52). In the indigenous styles the yields of annual crops and wine must be added to the palm fruit yield.

136 250 FCFA for a young tree from the nursery in the early 1980s. For the same price they could obtain a mature indigenous palm. They also discovered that their own seedlings of their hybrid palms yielded less than the hybrids themselves (own interviews 1985).

137 Société Nationale pour le Développement Rural, created in 1962 (Hodonou 1976:94).
138 In Agonvy in the Ouémé this even led to armed revolts (Mondjannagni 1977:483).
139 In the 1960s plantation workers received 125 FCFA daily, while the average daily income of small farmers in the private sector was 275 FCFA/day (26 FCFA/h in the Zou in 1966). In 1982 wage labour was paid 200 FCFA per day in the plantations and ca. 400-600 FCFA on private farms. Plantation labourers who had contributed their land or who worked at least 200 days in the grove were promised to be paid the difference at a later stage. (Situation agricole du département du Zou 1966, Archives Abomey; Dissou 1970:66-67; Pfeiffer 1988:50, 53).
140 Searching to explain the yield differences of Tenera palms in State plantations and in neighbouring private farms, many accused the former owners of the plantation lands to have stolen the plantations' soil fertility by means of magic.
141 CAITA's predecessor was SOCOTAB, which existed from the Second World War to 1961 (Dissou 1970:19).
142 In 1966, the State officially gave OCAD (Office de Commercialisation des produits Agricoles du Dahomey) the monopoly on purchasing groundnuts in the *département* du Zou. But OCAD's price was often lower than those of private traders, who sold the groundnuts to local- and southern urban consumers. Farmers therefore sold the largest part of their groundnuts to private traders. See also section 7.1.3.
143 Except for a handful of Abomean weavers who produced shrouds and tissues for tourists. The Fon attributed ritual and artistic value to hand-woven shrouds though only few could afford them. A little cotton was also used at home and on local markets to make wicks for kerosene lamps and to fill a few pillows and mattresses (own observations). As also for groundnut, castor and tobacco, the French cotton company CFDT terminated its activities in the early 1970s, but it was replaced by the Dahomean companies SONACO (cotton production) from 1971 and SOCAD (cotton marketing) from 1973 (Dovonou 1980:8)
144 The extensionist of the *sous-secteur* Kana-Avlame admitted that he did not often work in Kana because its people are 'disinterested in agriculture, not open to the extension themes, and disinterested in improving their farming techniques', and rather went to Avlame on the eastern slopes of the Fon plateau instead, but 'even the eastern slopes are insufficiently penetrated by extension and by improved maize- and groundnut varieties' (Gabriel Aïkpon 19-8-1989). Farmers in Lissazounme testified that extensionists ceased to come when the village's cooperative ceased to function a few years ago (interviews 28-9-1989). The extensionists of Aoundome only spoke to members of the local cooperative (Richard Dohin, Aoundome 17-8-1989). I saw extensionists meeting farmers in Lissazounme only once while I lived there.
145 IRAT was also responsible for groundnut- and food crop research (Dissou 1970:78).
146 Bureau pour le Développement de la Production Agricole.
147 82 *encadreurs*, 20 *moniteurs des services agricoles*, 6 *chefs de secteurs*, 1 *ingénieur agronome chef d'opération du CARDER*, 3 staff members specialised in cotton, marketing and social organisations, and 8 *commis de bureaux*. 17 other staff members probably had no agricultural training: drivers and wage labourers who maintained buildings and nurseries in Athiémé and Grand-Popo (Dissou 1970: 104).
148 She gives these figures as if they were Bénin's totals, but probably they applied for the *province* de l'Atlantique only. Also in other parts of her book she presents data on the Atlantique under the heading of Bénin in general. Farmers in the *province* du Zou alone received 183 pairs of oxen between 1973 and 1977 (I am not sure that all these were on credit). By 1985 the total number of ploughs in Bénin exceeded 10,000 (of which 7000 in the Borgou province), which were all introduced after 1963 because before that date Béninese farmers ignored ploughing according to Djogbede (1985: xvii). This author also believed that the main reasons why Atlantique farmers accepted only few ploughs were lack of motivation among extensionists to inform them about the 'benefits' of animal traction, and problems with the credit system. Nevertheless, among the three southernmost provinces the Atlantique had the greatest number of ploughs by 1985 (Djogbede 1985: xvii-xviii).
149 Between those years, prices were 44,505 FCFA (1976), 60,000-80,000 FCFA (1977) and 90,000 FCFA (1983) (Wartena 1987:113; CARDER Zou 1977-1978:49; 1983-1984:48).

150 Prices for an ox-cart were 65,000 FCFA in 1977, 81,900 FCFA in 1985, and 91,600 FCFA in 1987 (Wartena 1987:113; Annuaire statistique Mono 1987). Carts were indispensable, for draft oxen were only profitable if they rendered transportation services (also against payment) besides ploughing.

151 The same applies for INSAE's official re-export statistics. These list as principal re-exports second hand cars & tires, foods such as rice, and tissues, and as principal official customers, in declining order, Ghana, France, Nigeria, Italy, Ivory Coast and the Swiss Republic, but also in this case Nigeria would in reality be the main client. Since the 1970s large quantities of products whose import was formally forbidden in Nigeria, namely rice, milk, wheat flour, food oils, sugar, tissues, second hand clothes and -cars, and batteries, were smuggled from Bénin. After 1995 Bénin's rice re-exports declined a little because Nigeria liberalised the rice trade (CODO 1986; INSAE 2002:20-21, 38-39, 56). Probably Bénin re-exported also informally to Niger, Burkina Faso and Togo, who do not rank on INSAE's official list.

152 For cotton except if 1904 is taken as a baseline, that year cotton prices were exceptionally low compared to those of the other commodities. Therefore, the relatively great leap forward of cotton compared to 1904 is not representative.

153 Only if 1921 is chosen as a baseline palm oil was briefly similar to maize again during the 1940s and on the Adja plateau in 1984 and 1985.

154 Until then, farmers only preferred to sell to regional markets in years with low export prices, for example in 1921 and in 1943. In 1921: '*Les cours actuels de l'huile de palme varient entre 1050 et 1100 la tonne mais même avec ces prix avantageux il y a très peu d'apports sur le marché [d'exportation] les producteurs préférant expédier dans les cercles du nord où la consommation locale leur offre des prix plus elevées.*' (Rapport trimestriel Cercle d'Abomey 4e trimestre 1921, Archives Abomey). During the Second World War palm oil export prices were only half of the local ones. Administrators complained that much palm oil and maize were smuggled from the south to the north of the colony, where consumers started to prefer these staples over millet and shea butter, and to Nigeria in exchange for Pound Sterling, because more European imports could be acquired with pounds than with francs. Some palm oil was also used locally in lamps and as a substitute for diesel in factories in Cotonou and Porto-Novo and in maize mills, and manual production of palm (kernel) oil soap production increased (Rapport économique Dahomey 1943, Archives Abomey). Table 7.34 in Appendix 7 shows that oil exports were indeed low in 1921 and 1943.

155 Own interviews in Atindehouhoué; Rapport annuel Secteur agricole Centre 1954, p. 32, Archives Abomey; Rapport agricole Cercle d'Abomey 1956, Archives Abomey; Statistique hebdomadaire de collecte Huilerie de palme Bohicon, dossier Affaires économiques, Archives Abomey; Huilerie IRHO Statistique mensuelle de collecte (1954-1956), Archives Abomey; IRHO Palmiers - Statistique mensuelle d'achats de fruits de palme 1957, Archives Aplahoué; Rapports mensuels de 1959-60 des huileries de Bohicon/Ahozon, Archives Abomey; Huilerie de Bohicon état de collecte et de production 1960, Archives Abomey)

156 Among the home made oils, that from indigenous Dura palms was more expensive on Adja plateau markets in 1986 than the lighter-coloured oil from Tenera palms, made from stolen palm fruit from the State grove at Houin-Agame. The lower price might have been partly due to razzias by State officials who confiscated lighter-coloured oil on Adja markets in 1986 (Dandjinou 1986:88) and partly to a difference in taste.

157 Total rural production of these 21 years would be slightly more than 513,784 tons, while total (official) exports during those years were 243,838 tons according to Sedjro (1980:24) and Manning (1982:382) or 283,630 tons according to Prudencio (1976:246). Production was probably estimated on the base of kernel exports and the normal oil-kernel ratio of indigenous Dura palms. During the 1970s and early 1980s some palm oil was smuggled to Nigeria, see below.

158 Based on the assumption that the production from 1967 to 1969 was of the same order as that in the years before and after. Even if this were wrong, the difference would only be a few %.

159 Another part went to the Netherlands. Palm oil exports provided only 2% of Bénin's export income in 1994 (INSAE 2002:35).

160 The Appendix 7 shows that if Adja plateau price indices are calculated on the base of 1904 or 1921, the price index of palm oil was slightly higher between 1976 and 1985, but on the base of 1907 or 1910 the index of maize was higher.

161 With local groundnut prices I mean unofficial ones; but in some years my sources failed to make the difference between official and unofficial prices, therefore my groundnut prices and -price indices for the 1960s and 1970s are only indicators. Local groundnut-palm oil index differences depend on which year is chosen as a baseline, see Tables 7.32, 7.33 and 7.35 in Appendix 7.

162 In 1954 and 1955, Dahomean export statistics comprised an unknown volume of palm kernels imported from Nigeria that were embarked in Cotonou (Bulletin économique vue d'ensemble Dahomey 1955, Archives Abomey). From 1970 to 1980 palm kernels and cotton were the only agricultural products that Nigerian commodity boards continued to purchase, but they do not seem to have been embarked in Cotonou anymore. Palm oil, groundnuts, cocoa and cereals tended to disappear from Nigerian commodity boards (Idachaba 1980:160), cocoa because it was smuggled to Bénin and the other products because local consumers purchased them.

163 The women ground the kernels in gasoline maize mills before oil extraction (interviews and observations in these villages 1985 and July 1990). On the Fon plateau I only encountered palm kernel oil production in Lele (observation in 1985) and Gnidjazoun (in this village several women produced kernel oil since several years already according to their testimonies in 1990), both between Abomey and Bohicon.

164 The report signalled that 'irregular' traders tried to circumvent the ban on trading first season groundnuts by smuggling these at night from Azové (Adja plateau) to Abomey and Bohicon: '***Achats d'arachides avant l'ouverture de la traite***. *9 déc 1957. Ministre du commerce et de l'industrie au commandant du cercle d'Abomey. (…) un petit nombre de magasins d'Azové mais n'appartenant pas au gros Commerce ou même au petit commerce régulier peuvent être pleins d'arachides de la petite saison (…). Après mélange avec la récolte en cours, seule destinée à la traite, le tout (…) serait transporté sur Abomey-Bohicon uniquement par camions de nuit*.' (Dossier Traite de produits - Arachides, Archives Abomey). On 4 February 1958 the Governor announced new measures against trading first season groundnuts, whose *acidité augmente dans des proportions importantes pendant la saison des pluies* (ibid).

165 This in contrast with the Sierra Leoneans, who prefer palm- over other oils in rice dishes.

166 This seems especially plausible for the 1950s given the maize blight and droughts of those years, but for the 1960s local groundnut prices might have been underestimated. Whenever the source was not clear I assumed that local prices were unofficial ones rather than the – mostly lower – official ones; for some years this might have been wrong.

167 In 1924, transportation costs Abomey/Bohicon-Cotonou were 82 francs/t and Lonkly-Cotonou 666 francs/t, but this did not entirely justify the low price paid to Lonkly farmers (600 fr/t against 2,500 fr/t in Abomey in April 1924). With this local price difference, Lonkly cotton valued 2,626 fr/t and Fon plateau cotton 9,082 fr/t in Cotonou. In March 1924 the Abomean price ranged from 3,750 to 1,700 fr/t, in September the Abomean price descended to 1,250 fr/t. (Rapports mensuels Cercle d'Abomey Mars + Août 1924, ANB Porto-Novo).

168 Especially on the Abomey plateau, in Pobè (south-east of Abomey) and in Djougou in the north. Since the increase of import duties on cotton fabric in 1937 and during the War, imported cloth was scarce and of low quality. (Own interviews; Rapport économique Dahomey 1943, Archives Abomey). In the *Cercles* d'Athiémé and d'Abomey the tradition of weaving 'raffia' cloth *edidi* or *jiji* from the fibres of a palm variety was revived during the War (Rapport économique Dahomey 1939-1940, Archives Abomey; Wartena 1988a:49j, 52-53; 1988b:172-173; Manning 1982:236, 323, 386).

169 One Adja, born around 1935, told me about shortages of cloth around World War 2: "I was 7 years when we moved to the village here. In those years there were no cotton cloths. We covered ourselves with bark of *Antiaris africana* trees and with banana leaves. We also grew cotton and sold it to the weavers in Abomey. When these weavers sold us cloth we ceased to wear banana leaves." (Sadiku Aliu in Dedahoué in the centre of the Adja plateau, 24-6-1985) See 4.1.2 on the use of *Antiaris africana* bark in the 16th and early 17th century before the introduction of cotton.

170 Also in many other cotton producing countries cotton became less profitable than food production during the 1980s due to stagnant world prices for cotton according to the Common Fund for Commodities (1993). In Bénin only the – unimportant – cotton export price index could compete again with maize during the early 1990s, and only with 1904 or 1921 but not with 1907 or 1910 as a baseline.

171 Degrees of affection varied from year to year between the *cercles*. In 1951 in the *Cercles* d'Abomey and d'Athiémé 90% of the first season and 60% of the second season maize suffered from the disease, in the *Subdivision* d'Aplahoué 'only' 60% respectively 30% of the maize areas (Rapport agricole Dahomey 1951, Archives Abomey). In 1954 and the second season of 1955 the Fon plateau still suffered from the blight, but from 1956 Dahomey was almost clean from the disease. (Rapport économique cercle d'Abomey 2e semestre 1954, Archives Abomey; Rapport économique 2e semestre 1955, Archives Abomey; Rapport annuel secteur agricole centre Cercle d'Abomey 1955, Archives Abomey; Rapport agricole cercle d'Abomey 1957, Archives Abomey).

172 Palm fruit soup, which was basically an earlier stage of palm oil preparation, was often used instead.

173 Pearl millet was an important staple on the Fon plateau until the mid 20th century but disappeared by 1960; the Adja abandoned it already in the 17th or 18th century. Yam was once common on both plateaux, but became rare on that of the Fon in kingdom times and on that of the Adja in the earlier 20th century.

174 In 1943 *gari* from Savalou was in high demand in the coastal towns due to poor maize yields and wartime exports. This demand declined with better maize yields and lower exports in 1944-1945; nevertheless national cassava (and yam?) areas continued to increase (Rapport économique Dahomey 1944 + 1945, Archives Abomey), and in 1987 Savalou's *gari* was still valued as the best of Bénin (Van Lohuizen & Warner 1988:33).

175 *Hibiscus esculentus*, also called 'ladies fingers', a vegetable.

176 Flour from dried yams was called *telibo* and that from dried cassava *fenyenlibo* in Fon; the Adja hardly ate the latter. *Fenyenlibo* differed from *gari* in that it was finer and could not be eaten without cooking.

177 Société Moyen-Niger. The two societies corresponded about sales of *mil* (probably sorghum, or perhaps pearl millet) from Kandi to Abomey in 1957, 1958, and the preceding years.

178 Of a total production of 12,545 t palm oil, 9,205 t manually produced oil would have been consumed in the *cercle* and 2,615 t manually produced and 725 t industrial oil exported. (Lettre du 10 Janvier 1955 de R. Pissard chargé agricole du Cercle d'Abomey à monsieur le commandant de Cercle, Archives Abomey).

179 Rapport économique cercle d'Abomey 2e semestre 1954, Archives Abomey. In 1955 the service estimated yields of 400 kg/ha in the blight-free first and 300 kg/ha in the blight-affected second season in the *Cercle* d'Abomey (Rapport annuel secteur agricole centre Cercle d'Abomey 1955, Archives Abomey).

180 Rapport annuel secteur agricole centre 1954, Archives Abomey. According to the report, the Adja also consumed their entire cassava harvest, but this information conflicts with the next report which states that they sold *gari* to Abomey.

181 From 1956 to 1958 the agricultural service conducted fertilisation trials on maize on the north-eastern Fon plateau, and found that local farmers refused to sow a witness plot because unfertilised maize would yield nothing on their poor soils, except on termite hills (Rapport mensuel cercle d'Abomey Janvier 1958, Archives Abomey).

182 From the Aplahoué, Klouékanme and Sehoué markets, and also a little from the Lama Vertisols south of the plateau, where the State allowed farmers in 1956 to plant maize in its young teak plantations. The Lama villages Agrimey, Hlagba and Massi also sold maize to Cotonou (Disette région agricole centre Septembre 1958, Archives Abomey).

183 237 t maize and 174 t *gari* in July 1958 according to the agricultural report of 1958 in the Archives Aplahoué.

184 Early in 1960 southern plateau farmers speculated on rising prices: '*Maïs. Les marchés de la côte ne sont pas saturés et les prix qui n'avaient pas baissé dans des proportions notables ont tendance à remonter. Dans certaines régions (Adjohon et Allada) il est signalé que les paysans ne vendent que lentement, dans l'attente d'une hausse des prix. Ceux-ci sont assez stables pour chaque marché, mais varient fortement d'un centre à l'autre: Allada 7.5-10 Frs/kg; Cotonou 17-20 Fr/kg; Abomey 18-20 Fr/kg*.' (Affaires Economiques, Bulletin économique Février 1960, Archives Abomey).

185 Probably not all 'exports' were recorded and it is unclear whether missing values for Aplahoué mean 'no observed sales that month' or 'no observations'. Between 1985 and 1990, counts were

combined with taxation and 'quality control', but only commodities that left the official markets (Abomey, Bohicon, Azové, Klouékanme) by lorry, bachée (small lorry) or train through official check-points on the major trade routes were counted, and only volumes that exceeded one bag. Many small traders avoided the counts and taxes by carrying their commodities on foot or (motor) cycle beyond the checkpoints (own observations and interviews with traders and with an *agent de conditionnement* (quality-controller) in Bohicon; Van Lohuizen & Warner 1988:51). Minimum average maize 'exports' 1961-1965 were: Aplahoué 331-613 t/year, Athiémé 1666 t/year, Allada 5077 t/year, Abomey (from 1961 to 1963) 33 t/year. Minimum average *gari* 'exports' 1961-1965 were Aplahoué 506-607 t/year, Athiémé 1079 t/year, Allada 684 t/year, Bohicon 100 t/year. Source: Bulletin économique et statistique République du Dahomey, Archives Abomey.

186 In his text he erroneously states that cotton is the only export product with a value over 2 (namely 2.50), but his figures clearly show that the 2.50 index is for groundnuts.

187 Several interviews, amongst others in Lokogba 24-7-1990.

| Source | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 |
|---|---|---|---|---|---|---|---|
| MDRAC[1] | 9 | 17,930 | – | 916 | 119 | – | 2,841 |
| Igué 1985[2] | | 15,009 | 251 | 5,320 | 2,207 | 23,402 | 3,508 |

1 Based on figures of the customs services given by INSAE.
2 Imports through the port of Cotonou (Igué 1985:89).

188 *Gari* at least in 1976 (Mensah 1980:243, 245) but probably longer, the other products during the whole period. According to Honfoga (1986:110-111) the State ceased its food price intervention in 1980, but according to Mongbo (1985:65-66) and Baar (1986:98) official maize, sorghum, cassava, yam, rice and cowpea prices remained unchanged from the 'year' 1974-75 to the year 1980-81.

189 Official maize imports 1976-1982, in tonnes per year:

190 Maize- and bean prices rose indeed more rapidly in Djidja than in Abomey between 1974 and 1984; Djidja's maize price bypassed Abomey's from 1981 (Mongbo 1985:66-68, 84-86).

191 In 1954, Dahomey imported officially (recorded by its customs services) for 80 million FCFA from Nigeria and for 4 million FCFA from Togo, and informally (not registered by customs) for 160 million FCFA from Nigeria and for 36 million FCFA from Togo according to traders' estimations. Dahomey's official exports to Nigeria valued 14 million FCFA. Dahomean formal and informal imports consisted mainly in cloth, enamelware, gasoline maize mills, bicycles and spare parts for cars and bicycles. (Rapport économique Dahomey 1er semestre 1955, Archives Abomey).

192 Traders who smuggled food from Bénin to Nigeria acquired Nigerian cocoa, cars and fuel in exchange, sold the cars and fuel in Bénin for FCFA, and exported the cocoa overseas, until 1985 uniquely through the State's SONAPRA who had an export monopoly. In this way, cocoa became officially one of Bénin's three principal export commodities, in 1985 even the principal one, while this crop did not grow in the country. (Neefjes 1986:46).

193 Local measures for food crops contained between 0.8 and 4.0 kg.

194 Nigerian food deficits were aggravated by droughts in 1973-1974 (Idachaba 1985:161; Egg & Igué 1993:36) and some of the subsequent years.

195 Rice and maize imports were outlawed in 1985 according to Egg & Igué (1993:59). Prohibited 'luxuries' were amongst others rice, milk, wheat flour, food oils, sugar, tissues, second hand clothes and -cars, batteries (INSAE 2002:38).

196 Gautrand (1988) believes that the expansion of Béninese cotton areas in 1984 was a reaction to the closing of the Nigerian border, causing Béninese farmers to turn from food crops to cotton. This explanation does not seem plausible because cotton areas continued to expand after the reopening of the border in 1986.

197 Igué (1985:60) writes *'sésame'*, which was the common term that 'French'-speaking Béninese used to design *Colocynthis citrullus* or *Cucumeropsis edulis* (*gusi* in Fon and Adja, *egusi* in Yoruba) and was a common ingredient in Fon and Yoruba (but not in Adja) cooking. The real sesame (*Sesamum indicum*) was hardly cultivated in Bénin.

198 Egg & Igué (1993:59) however give considerably higher estimations of Bénin's rice exports 1980-1984, and also than its dried yam (yam chips) exports during the oil boom, than Igué (1985):

Estimations[1] of Bénin's rice, maize and dried yam exports to Nigeria 1978-1984 (tons) based on Igué (1985)

| Year | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | Average 1978-84 |
|---|---|---|---|---|---|---|---|---|
| **Rice** | **25788** | **16171** | **7143** | **44551** | **25271** | **10630** | **70000** | **24944** |
| Maize from Pobe, Ketu & Oja-Odan markets[2] | *17745* | *17745* | *17745* | *17745* | *17745* | 17745 | 17745 | 17745 |
| Maize from other places[3] | *7735* | *7735* | *7735* | *7735* | *7735* | *7735* | *7735* | *7735* |
| **Maize total** | ***25480*** | ***25480*** | ***25480*** | ***25480*** | ***25480*** | ***25480*** | ***25480*** | ***25480*** |
| Dry yam from Chicanda[4] | | 728 | 1747 | 3300 | 4429 | 4839 | 837 | 2647 |
| Dry yam from Tchaourou[5] | | *280* | *670* | 2210 | 1720 | 1079 | *320* | *1047* |
| Dry yam from Glazoué[3] | | *280* | *672* | *1269* | *1703* | *1861* | *322* | *1018* |
| **Dry yam total[6]** | | ***1288*** | ***3089*** | ***6779*** | ***7852*** | ***7779*** | ***1479*** | ***4711*** |

1 Straight figures are Igué's numerical estimations, italics my extrapolations based on diagrams in his map on p. 59.
2 Based on Igué's estimation that Pobè, Kétou and Oja-Odan used to export together 195 tons on each market day. Normally, South Béninese markets take place once in 4 days, so that there are 91 market days per year.
3 Based on extrapolations from the diagrams in Igué (1985:59).
4 Based on figures of Chicanda's market authorities.
5 Based on figures of customs services between Tchaourou and Tchachou 1981-1983, and on extrapolating from Tchaourou's market share in those years.
6 Egg & Igué (1993:91) however estimated that Bénin exported 10000-15000 t dried yam annually during Nigeria's oil boom.

Estimations of Bénin's rice re-exports to Nigeria 1980-1990 (t/year) by Egg & Igué (1993:59)

| 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|---|
| 2000 | 52000 | 51000 | 23000 | 99000 | 84000 | 167000 | 349000 | 245000 | 50000 | 12900 |

Bénin's rice re-exports seem to have been about 275,000 tons in 1992, of which roughly 250,000 tons to Nigeria, but after Nigeria liberalised the rice trade from 1995, Bénin's exports fell to about 20,000-25,000 tons per year between 1997 and 1999, according to calculations based on Bénin's rice imports and INSAE's (2002:38-39, 56) estimations of its' domestic rice consumption.

199 (Ibid:71, 91, 110; Van Tilburg 1990:28; Lutz 1994:45-50). In Bénin's eastern *départements*, competition from Nigerian food was further counterbalanced by imports of subsidised fertiliser, high-yield cassava cuttings and hybrid maize seeds from Nigeria, but these inputs hardly reached the Fon and Adja plateaux according to Egg & Igué (1993:91, 110). For the period until 1991 my research confirms the latter observation, only very few Fon and Adja plateau inhabitants knew of Nigerian fertiliser or cassava cuttings or sowed hybrid maize.

200 In 1990 the importation duty became 17% and in 1989 the exportation duty 16.15%.

201 None of the official figures of cropped areas that I found included oil palm, in spite of the fact that it was one of the Fon and Adja's major crops. In 1955 administrators made the following estimation of palm oil and kernel production (or sales?) of the *Cercle* d'Abomey and d'Athiémé:

Estimated palm oil and -kernel (surplus) production[201] per *Cercle*, 1955

| *Cercle* | Palm oil | Palm kernels | Oil + kernels |
|---|---|---|---|
| Abomey | 1,444 t (38%) | 2,356 t (62%) | 3,800 t (100%) |
| Athiémé | 180 t (20%) | 720 t (80%) | 900 t (100%) |

Source: Rapport général sur le Cercle d'Abomey année 1903, Archives Abomey.

202 Rapport général sur le Cercle d'Abomey année 1903, Archives Abomey.

203 Of my data for 90 Fon women's fields (of which 60 on red plateau soils and 30 on its south-eastern slopes), 54 were obtained by own interviews with the woman herself, 32 by interviews with her daughter, and 4 from her son.

204 Tables 7.19 to 7.25 show annual totals. My respondents gave me separate figures for the two rainy seasons. For most years this also holds for the official statistics. If desired, I can provide these seasonal figures.

205 Since my sample was stratified on the base of oil palm, the total oil palm areas declared are not necessarily representative for the whole plateaux. Furthermore it was difficult to assess the relative oil palm coverage due to variations in planting densities during history and between styles. Oil palms were never grown in monoculture except during the Adja's *dekan* stage. Only half-way my research I started to ask for palm densities, and returned to many but not all my first respondents. I recorded however relevant events such as planting and felling of oil palms. Therefore my oil palm figures do reflect the historical changes in oil palm coverage on those fields that I surveyed, but they do not necessarily reflect the percentage of plateau land under oil palm. Partly to make up for this difficulty I studied aerial photographs of the Fon and Adja plateaux in the 1950s and 1980s and tried to estimate oil palm coverage on the base of these. A preliminary analysis of oil palm areas of 40 Adja plateau men after 1950 and 27 Fon men in Lissazounme after 1930 suggests that the Adja's oil palm areas declined gradually while those of Lissazounme seem to have increased a little, with a peak in the period 1980-1985. But the Lissazounme changes (and sample) might be too small to be significant.

206 No relative groundnut areas are available before 1951.

207 In 1953 and 1957 administrators and agronomists noticed a trend of increasing sorghum cultivation in the *Cercle* d'Abomey (Rapport économique Dahomey 1953, Archives Abomey; Rapport agricole Cercle d'Abomey 1957, Archives Abomey).

208 With the exception of one woman during a brief period. The savannah district Djidja was part of the Cercle and the Sous-Prefecture d'Abomey until 1973.

209 See also Saïdou (2004:362) on agronomists' beliefs about cassava.

210 In 1933 the Mono was the only Dahomean *cercle* that continued to export maize, although not directly overseas but through Togo (Rapport agricole Dahomey 1933, AOM Aix-en-Provence; Manning 1982:91, 232; Dissou 1970:42).

211 The black seeds of this common Fon and Adja hedge plant, also called *pignon d'Inde* (French), *nyikpotin* or *gbagidi kpotin* (Fon), or *gbododui* (Adja) (De Souza 1988), were neither exported before 1917 (Anonymus 1917:25) nor between 1943 and 1946 (Annuaire statistique de l'AOF 1950-1954 et 1955-1957, AOM Aix-en-Provence). In 1947-1948 Dahomey exported 100 tons (ibid). From 1948 the agricultural service conducted field trials on *pourghère*, comparing vegetative versus genetic methods of propagation (Rapport agricole Dahomey de l'année 1950, AOM Aix-en-Provence). *Jathropha curcas* never became an important export crop. See section 7.3.4 on Adja trade in *gbododui* grains.

212 Rapport annuel secteur agricole centre 1954; Rapport agricole Cercle d'Abomey 1956, both in Archives Abomey.

213 All my own survey data about Adja men's fields 1906-1990 and Adja women's fields 1930-1990 distinguish between seasons, official statistics do so for most years between 1956 and 1986.

214 Fon men slightly more in the second, Fon women slightly more in the first seasons, but the difference was not great.

215 In the Abomey-Bohicon-Agbangnizoun-Zakpota-Zogbodome-Djidja region. Seasonal maize figures for the 1950s include Kétou and Zagnanado and are highly variable from year to year.

216 In 1917 the Adja plateau and other southern parts of the *Cercle* du Mono were forced to sow together 1 t cotton seed (Wartena 1988b:119; Rapport 2. trimestre 1917 cercle du Mono poste d'Athiémé, ANB Porto-Novo). In 1918 the *cercle* d'Abomey received 4 t and the *subdivision* Parahoué 2 t cotton seed (Rapport annuel service de l'agriculture Dahomey 1918, AOM Aix-en-Provence).

217 Rapport économique Dahomey 1er semestre 1955, Archives Abomey; Bulletin économique vue d'ensemble 1955 Dahomey 1955, Archives Abomey.

218 Mono was of the species *Gossypium barbadense*, Allen of the species *Gossypium hirsutum*. From 1953 onwards, IRCT tested various *G. hirsutum* varieties (Dovonou 1980:19), but Allen was made available to Fon and Adja farmers from 1963.

219 The Za-Kpota and Zogbodome districts produced about 25% of the Fon's cotton and the savannah the other 75%.

220 Dissou (1970:121-123). Formally, others were allowed to buy fertiliser cash at the district headquarter but in most years fertiliser was in limited supply (Mongbo 1985:58) and cotton growers, co-operatives and farmers who had relationships with extensionists were given priority to buy it. In the early 1980s most other farmers ignored that they were entitled to buy fertiliser cash.

221 The fixed prices for crude cotton (first grade), fertiliser and insecticide in FCFA per kg or litre

| | 1972 | 1973 | 1974 | 1975-77 | 1978-80 | 1981 | 1982 | 1983-84 | 1985 | 1986 |
|---|---|---|---|---|---|---|---|---|---|---|
| Cotton | 35-371 | 40 | 45 | 50 | 55 | 80 | 85 | 100 | 110 | 110 |
| Fertiliser | | | | | 25 | 25 | 25 | 60 | 90 | 90 |
| Insecticide | | | | | 300 | 300 | 560 | 600 | 850 | 1100 |
| Fertiliser subsidy | | | | | 80-85% | 74% | 70% | 50-60% | 40% | 30% |

1 The price was changed by government decree on 21 December 1972 from 34.75 to 36.75 FCFA/kg.
Souces: SATEC 1972:94; 1973:111; Mongbo 1985:70; Neefjes 1986:77.

222 In 1966 the local price of fertiliser was 30 FCFA/kg, that of cotton 26-27 FCFA/kg. The agricultural service calculated that 300 kg cotton (per hectare?) was needed to pay for its fertilisation, which suggests that 260-270 kg fertiliser was applied if the services' calculations were correct. (Situation agricole du département du Zou 1966, Archives Abomey).

223 According to the *intendante* of the CARDER Klouékanme responsible for fertiliser sales (interview 11-2-1991).

224 In the 1950s, according to the administrator Vernet of Aplahoué, not a single castor plant grew in the *Cercle* d'Abomey (Traitement ricin par S.P. 1957-58, Archives Aplahoué).

225 Manning (1980:51), Anon (1917:24), Adjanohoun (1989:263). The only other cash crops which had no local market were *Jathropha curcas* and coffee, but their production remained marginal (see about coffee the tables below and the case of Dɛngbɛnɛn's palm grove in 6.5.1).

226 Own interview. Adjanohoun (1989:263) gives in addition the Fon names *fefe*, *dagbazo* and *myon*.

227 From other parts of West Africa (Anon 1917:24-25), from Bombay (Wartena 1988b:118; Rapport 2. trimestre 1917 cercle du Mono poste d'Athiémé, ANB Porto-Novo), from Egypt (Rapport mensuel Janvier 1918 cercle du Mono, Archives Abomey) and from America (Traitement ricin par S.P. 1957-58, Archives Aplahoué).

228 After soil clearance, sowing and thinning, every year: one weeding round per month (probably only during the first 4 months) and 10 women days/ha/month during 6 months for harvesting, then drying.

229 See section 7.3.2.

230 Until the 1930s the *Cercle* de Savalou was Dahomey's main castor producer, from the 1940s onwards the *cercle* d'Athiémé (Rapport économique Dahomey 1943, Archives Abomey).

231 Organico, Archives Aplahoué.

232 Rapport annuel service du développement rural Dahomey 1963. Organico signed a contract with the *Société de Prévoyance de Parahoué* and the *Cooppérative Agricole de la Subdivision de Savè* in 1954, giving Organico the export monopoly in exchange for guaranteed producer prices and credits. Organico produced 'rilsan' plastics from castor. (Rapport économique Dahomey 1er semestre 1955, Archives Abomey).

233 Only 2 out of 152 Adja farmers that I interviewed once cultivated coffee and the plants of the second were still too young to yield.

Photo 8.1: Sale of *nuwanu* (ingredients for magic charms) on a Fon plateau market

Photo 8.2: A healer's car in Cotonou

# 8

# Adja agrarian commoditisation and Fon de-agrarianisation compared since 1900

> "We people from Lissazounme prefer to travel rather than to cultivate all our land. I sold *amansin* in Ivory Coast until I had to care for my sick brother." (Augustin, 22-6-1990).

It was on Monday 28 October 1988, only 32 hours after my arrival in Bénin for this PhD research[1]. That morning I mounted a bus from Cotonou to Porto-Novo to study in the Archives Nationales du Bénin. Most other passengers were citizens of Cotonou and travelling to their jobs in Porto-Novo, others were local traders. Topic of the day was the economic crisis of the last two years, the delays in payment of civil servants' salaries, the inability of the national bank to render its current account customers their petty savings and the resulting decline of business in the informal sector. These were the most conflictive weeks of Kérékou's military government before its final collapse (Banégas 2003).

As soon as the bus set off for its 40-minute journey a young man in a grey suit stood up front and turned towards the passengers. He bore a name badge which read 'Dr. POISON 2', picked a piece of soap from his bag, held it up, and started a long discourse in Fon, supported by gestures and a few French words. I did not yet understand much Fon but heard the words 'antiseptic', '*médicament Africain*', 'Sakpata' and '300 FCFA'. Sakpata is the *vodun*-god of the soil, of smallpox and of other skin diseases. Doctor Poison the Second mimicked a sick person scratching himself, and then walked through the bus to sell his soap. I did not expect anyone to buy it in this time of economic crisis, while ordinary local soap could be obtained for 25 FCFA and perfumed soap for about 100 FCFA, and already this was too expensive for many[2]. But to my surprise half a dozen passengers purchased a piece of Dr. Poison's soap.

In the evening I climbed another bus to return to Cotonou. Again a young man, this time in a brown suit, stood up in front when the bus set off. First he showed a gin bottle with a dark brown fluid and advertised it as an African drink to cure impotence. 500 FCFA for this bottle, or 300 for a smaller one. It did not look appetising, and who would dare to drink an unknown potion in this country where people dreaded witchcraft and poisoning[3]? Most passengers looked bashfully down, embarrassed about the theme. But three women purchased one bottle each. Next he raised a square paper package and explained that it was incense from the *Eglise Saint Michel* to support your domestic prayers. One passenger asked him how to get rid of evil spirits. He replied that his incense could also expel evil spirits from the house. At this point I became upset and, thinking that this was not yet my research area anyhow, I called from the back of the bus that one needs a clean heart not incense to chase evil spirits. The whole bus burst into laughter. Then, neglecting my advice, a dozen passengers shouted "One for me!" and "Please pass one to me!" while the medicine man passed packages to the back of the bus and the money was handed forward.

Dr. Poison and his colleagues combined the physical and the spiritual in their diagnosis and their remedies, just like healers of the traditional kind. But their business methods were modern, their customers the urban middle class. Even in this time of economic decline many Béninese eagerly purchased spiritual-herbal remedies of unknown composition for

both physical and spiritual purposes, revealing a strong faith in spiritual powers[4]. Little did I know then that I would meet many Doctors Poison in one of my Fon research villages, Lissazounme.

Chapter 7 has shown that the plateau Fon's agricultural production gradually declined during the 20th century. Yields declined, they abandoned cotton, pearl millet, bambara groundnut and cassava cultivation, their sales of agricultural products declined and became for most farmers limited to at best some groundnuts and palm oil in good years. Cereal harvests of central Fon plateau families declined far below subsistence needs, and more and more withdrew from farming their impoverished Fon plateau fields altogether. Adja plateau inhabitants in contrast continued to feed themselves from their own farms and increased their sales of agricultural products during the 20th century. This begs the question of what else did these Fon do to make a living? How were Fon livelihood portfolios composed, how did they change, and how did they compare to the Adja's?

Box 1: *Amansin*

*Amansin* ('leaf-water') is the Fon word for medicine, remedy. Indigenous *amansin*[5] consists of biological components and/or magic[6]. Chapter 8 deals only with this indigenous type of *amansin*. An *amanblótó* is someone who produces herbal medicines, magic charms and amulets. He has occult powers that he uses to heal, curse, and to pronounce incantations over herbal medicines and amulets. His knowledge is usually secret (Alapini 1985:76-78). *Nuwanu* are material ingredients for magic charms[7]. An *amansinsató* is someone who sells *amansin*, magic charms and/or *nuwanu*.

Chapter 8 will analyse changes in livelihood activities of several Fon and Adja lineages whose histories I studied through the 'three' generations approach. This methodology is discussed in section 3.2.1 and gives, I believe, greater reliability than a survey among unknown respondents. But it also implies that my sample includes clusters of people who cooperated and acquired skills, knowledge, values, preferences, material inputs, and contacts to resource persons from each other, and therefore often engaged in related activities. Therefore, the approach reveals how styles of making a living emerged historically in social networks, but does not pretend that a single network is representative for all Fon or Adja. Taken together, the case studies in this chapter frame some of the most common styles of making a living of Fon and Adja and changes in these since about 1900.

Section 8.1 gives an overview of livelihood portfolio changes during the 20th century in Fon and Adja plateau families. First a crude official perspective is presented, then an analysis of my genealogical studies in several villages, with special attention for Atindehouhoué, Kana, Lissazounme and Aoundome. All four are reasonably large villages and as such they have a better developed infrastructure than most small plateau villages have. Lissazounme had ca. 2,500 inhabitants in 1989, the other three villages about 1,000 inhabitants each, and they all had a small village market, a primary school, and several wells and maize mills, while many smaller villages (like Honsouhoué and Lagbahome with ca. 500 inhabitants each) lacked some or all of these facilities. This infrastructure encouraged the pursuit of non-agrarian livelihood activities in these larger villages as compared to smaller ones. Section 8.1 contrasts with Chapters 7 and 9 and sections 8.2 and 8.3 in that it pays only limited attention to agricultural activities on the plateau of origin, but focuses on non-agrarian and

off-plateau occupations instead. Section 8.1 also presents a crude statistical comparison between age groups and between villages, meant to show Fon-Adja differences and changes in livelihood activities and mobility over time; I do not pretend that Tables 8.2 and 8.7 to 8.10 are representative for all Fon and Adja. Section 8.2 will zoom in on four generations of one Fon lineage in Lissazounme and section 8.3 on one Adja lineage in Atindehouhoué, and describe how individual family members cooperated and made a living from both agrarian and non-agrarian activities on and beyond the two plateaux.

## 8.1 Evolution of Fon and Adja non-agrarian and off-plateau activities compared

Cultivators on the Fon and Adja plateaux have to deal with the limited availability of fertile land and face market constraints, or turn to other activities to feed themselves. This thesis investigates possible motives to engage in other activities, namely carrying capacity of the land and the cultural valuation of diverse styles of making a living, agricultural or other. The analysis in section 8.1 will therefore distinguish livelihood activities broadly into agrarian versus non-agrarian ones and those which involve out-migration from their own plateau versus those which do not. The emphasis on activities other than local farming also implies that, in section 8.1, more attention will be paid to the Fon than to the Adja simply because the former engage more in non-agrarian work.

Often it is still assumed that inhabitants of rural areas live from the products of the land only, and that activities other than local farming, hunting or gathering require migration. Such assumptions are based on the (neo)-Malthusian notion of carrying capacity, which takes only land-based sources of livelihood into account. If the (neo)-Malthusian perspective is right, demographic pressure on their plateaux should incite the Fon and Adja to escape to less densely populated areas or to town. What is more, since the demography of the two plateaux is similar (Table 9.1), Fon and Adja migration patterns should be similar too. Because of the persistent hegemony of such (neo)-Malthusian ideas it makes sense to devote a small subsection (8.1.1) to livelihood activities which are pursued by Fon and Adja beyond their plateaux of origin. I will show that the (neo)-Malthusian perspective is too simplistic in this era of globalisation and interregional (food) trade. Many Fon and some Adja continue to live in their plateau villages but feed themselves from other sources than plateau land.

Therefore, the remainder of this chapter, from 8.1.2 onwards, will consider the entire livelihood portfolios of the Fon and Adja families under study, including non-agrarian activities in their 'own' plateau villages. By 'own village' I refer to the place on the Fon or Adja plateaux where the family has land and houses which has called its own since at least the late 19th century. Hardly any new plateau villages were founded after this date, so that almost all Fon and Adja have such an 'own village' there, except for some of those who settled off the plateaux more than four generations ago, but these people do not concern my three or four generation studies. Therefore I could take plateau villages as points of departure to study individual members of four generation families claiming decent from that particular place.

My fieldwork, as explained in 3.2.1, was mainly in these plateau villages themselves. I met many migrants when they visited the village, and visited some migrants from the villages under study in their new residences (Adja migrants in Tado, Cotonou, Lomé and a seaman in the port of Antwerp, Fon migrants on the Adja plateau and in Cotonou), but I did not follow the itinerant Fon traders whose activities I present in sections 8.1 and 8.2 on their journeys.

Information on other migrants was obtained from those who stayed behind, but I did not pressure all my respondents to name all absent family members. In conversations, villagers spoke a bit more frequently about migrant relatives who were in their eyes successful than about those who engaged in less esteemed activities[8]. Some migrants probably escaped my observations, but this bias was quite systematic, and hardly affects the comparison between villages.

Observations were an important part of the methodology, because what people said about their occupations was often more revealing for the cultural values that they attributed to those activities than for what they really did. The Adja I studied spoke with more pride about their farming knowledge and activities, while the Fon did not like to speak about agriculture, trying to present their farm labour as marginal or even to conceal that they engaged in it. In contrast they spoke with more pride about their own or their family members' white-collar jobs, trade, religious and other activities. Cultural valuation was seen in the type of activities that Fon and Adja mentioned and emphasised on their own initiative, and in their joy and patience to speak in detail about particular topics. Symptomatic of the Adja's valuation of agrarian versus religious activities and of unpaid family labour is also that my Adja interpreter's father allowed his 16 year old son to become a Christian in 1984 as long as this would not keep the boy from working in father's fields on Sundays, as described in section 7.1.2. The vast majority of Fon and Adja were animists[9], but the hardworking and pragmatic Adja 'wasted' little time on religious practices and were more inclined to violate socio-religious conventions by tilling their land on the traditional day of rest as I illustrated in section 5.4.1 than the Fon, who had many animist rites and prestigious ceremonies and explained events more often in spiritual terms. Also for these reasons the quality of the data which I present below is best where I was able to observe.

### 8.1.1 Escape from the 'overpopulated' plateaux?

Geographical mobility is not easy to quantify. This section will consider any movement beyond the own plateau that takes longer than one day as migration or mobility, no matter whether the migrant later returns to the home village – as most Fon and Adja do – or not. The soil types and demography of the plateaux are clearly distinguished from those of the surrounding areas. Soil fertility decline and population pressure are regarded to be greater on the plateaux than elsewhere in Bénin. The size and infrastructure of the plateaux is such that normally at least one stay overnight is required for work beyond their borders, while activities on the other end of the plateau allow sleeping at home. Therefore it makes sense from social, ecological and demographic points of view to speak of migration or of geographical mobility (Breusers 1999:18-19) when the plateau borders are crossed.

Movement may be for short or long time spans, repeated or one time only. Mobility during certain months of the year, usually dependent on agricultural calendars, I will call seasonal migration, or cyclical if it is repeated. Interregional trade journeys between the village of origin and places beyond the two plateaux are an important form of cyclical multilocality in Fon and Adja livelihoods; seasonal agricultural wage labour is another form. Multilocality refers to the pursuit of livelihood and of identity in several places within the same short time interval; Berry (1985:42-43), Breusers (1999:19) and Anderson (2002:8, 47) show that this is a common phenomenon in many African societies. I will speak of long term migration if someone settles beyond his own plateau for at least ten years, anything less is short term migration.

Both official statistics and my own research suggest that the plateau Fon were generally more mobile than the Ehwe-Adja. Quantitative studies however mainly assess the ethnic origin of urban dwellers. Very little research has been done on rural-rural mobility and on itinerant trade; my research gives a modest contribution to fill this gap. Official statistics from 1964 and 1979 and an urban survey of 1984 (Table 8.1 in Appendix 8) indicate that a considerably larger percentage of the total Fon than of the total Adja population lived in the towns of Cotonou, Abomey, Bohicon, Parakou, Natitingou, and even in Lokossa, which was the major town and capital of the Mono province, just south of the Adja plateau, and where one would expect more Adja than Fon inhabitants.

My family studies support that more Fon than Adja migrated to large Béninese towns since the mid-19th century, but reveal also much rural-rural mobility by both groups, and much Fon long distance trade and migration to small towns. In Bénin as elsewhere in Africa it is however difficult to find criteria to demarcate between town and village; neither population size nor livelihood activities are clearly distinguishing features, and the Fon and Adja use the same word *to* for all types of agglomeration (see box 1 in section 2.1.3). Therefore I did not differentiate quantitatively between destinations where the migrants travelled too in Table 8.2, but only qualitatively and on the base of pursued livelihood activities, which will be presented in section 8.1.2 and Tables 8.7 to 8.10.

In all age groups born since 1840, a larger percentage of men from the Fon villages Lissazounme and Kana than from the Adja village Atindehouhoué migrated (Table 8.2). Only for the cohort 1906-29 the Adja rivalled the Fon lineages, because during the economic crisis of the 1930s many young Adja men escaped temporarily to Togo where the poll tax rate was lower in those years, as the Adja case study in section 8.3 will illustrate. Table 8.2, I must admit, shows some systematic underrating of the migration from all villages alike for reasons explained in the introduction to section 8.1, but this hardly affects the comparison between Fon and Adja.

Den Ouden (1986, 1989) inquired more systematically about all migrant members of the southern Adja families he studied, and consequently found slightly higher migration rates than I did among the central Adja, but still considerably lower than I found on the central Fon plateau in spite of my less systematic search, see Table 8.3 in Appendix 8.

Reasons to move from the villages that I studied and destinations were diverse as Tables 8.7 to 8.10 indicate, but shifted over the years and were often linked to the migrant's social network, especially his kinship and village network. Individuals tended to opt for a destination where they had already relatives or friends from their own village or region of origin as the case studies in sections 8.1.2, 8.2 and 8.3 will illustrate, a common phenomenon in Africa[10] which Anderson (2002:45, 65, following Heer 1996:539) calls chain migration. The choice for particular livelihood generating activities was and is often linked to linguistic group, village, or family affiliation.

One change in reasons for mobility was common to all villages I studied: The earlier cohorts relatively often moved to cultivate elsewhere, often on their own account, and all those who did were average to wealthy, which contradicts Homer-Dixon's (1999) and Blaikie & Brookfield's (1987) assumption that rural-rural migration is an affair of the poor. Later migrants from the villages I studied rarely became farmers beyond their own plateau, though young Adja from some other villages did according to Edja (2001:5, 10). Young migrants from Aoundome mostly went to perform seasonal agricultural wage labour in various villages in the savannah to the north of Abomey, not far from the place where one lineage

Table 8.2: Male mobility from some Fon and Adja villages, per cohort since 1840[1]

| Village | Adja | | Fon | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Atindehouhoué[2] | | Lissazounme[3] | | Kana-Dodome[4] | | Aoundome[5] | |
| | Numbers | % | Numbers | % | Numbers | % | Numbers | % |
| Cohort 1840-1905 | | | | | | | | |
| Seasonal & short term mobility | 1 | 3.6 | 7 | 24.1 | 4 | 30.8 | 0 | 0 |
| Long term mobility | 4 | 14.3 | 1 | 3.5 | 1 | 7.7 | 0 | 0 |
| All migrants | 5 | 17.9 | 8 | 27.6 | 5 | 38.5 | 0 | 0 |
| Sample size | 28 | | 29 | | 13 | | 5 | |
| Cohort 1906-1929 | | | | | | | | |
| Seasonal & short term mobility | 5 | 13.9 | 4 | 18.2 | 0 | 0 | 2 | 10.3 |
| Long term mobility | 5 | 13.9 | 2 | 9.1 | 2 | 14.3 | 1 | 5.1 |
| All migrants | 10 | 27.8 | 6 | 27.3 | 2 | 14.3 | 3 | 15.4 |
| Sample size | 36 | | 22 | | 14 | | 19 | |
| Cohort 1930-1956 | | | | | | | | |
| Seasonal & short term mobility | 6 | 10.5 | 20 | 39.2 | 3 | 15.0 | 3 | 13.6 |
| Long term mobility | 11 | 19.3 | 15 | 29.4 | 15 | 75.0 | 1 | 4.6 |
| All migrants | 17 | 29.8 | 35 | 68.6 | 18 | 90.0 | 4 | 18.2 |
| Sample size | 57 | | 51 | | 20 | | 22 | |
| Cohort 1957-1973 | | | | | | | | |
| Seasonal & short term mobility | 5 | 10.3 | 31 | 54.4 | 2 | 8.3 | 12 | 14.6 |
| Long term mobility | 11 | 22.9 | 8 | 14.0 | 15 | 62.5 | 7 | 25.0 |
| All migrants | 16 | 33.3 | 39 | 68.4 | 17 | 70.8 | 19 | 39.6 |
| Sample size | 48 | | 57 | | 24 | | 48 | |

1 Counted are men who were born or spent at least part of their childhood in their paternal village. I did not go at length to trace all migrant relatives. Long term migrants in particular were hard to find and probably systematically underestimated in all villages alike. Long term migration in my terminology is one or more decades, short term migration up to a few years.
2 Lineages Sala and Klakla.
3 Lineages Lisanon, Kpleli, Segbeji, Tobada and Azatasu.
4 Lineages Sesinu and Mawuhwe.
5 Lineages Adibe, Ahungbe, Ahosa, Aïnu, Dehun, Denyihunglo, Dohwe, Gbesi, Hlanhosu, Hukpon, Zodi, Zungbagbe, and one lineage from the neighbouring village Atchia.
Source: Own genealogical interviews and observations.

head from their village had obtained land to farm on his own account. The younger cohorts of all other villages migrated increasingly to perform non-agricultural work, some in rural areas and some in large towns. In the next section I will analyse how types and places of livelihood activities changed over the years and were often linked to social networks.

### 8.1.2 Livelihood diversification of Fon and Adja families: four villages compared

The 'three' generation studies in the remainder of this chapter will show how occupational specialisation and styles of making a living are linked to social networks. I will first present some general studies on South Bénin and then my own research. All these findings reveal group specialisation and differences in livelihood portfolios between cultural groups. For

example, the commodity chains of many locally processed foods, from producers in the four southernmost Béninese provinces to consumers in Cotonou, are each dominated by a specific linguistic group according to research by Nago (1989) and Thuillier-Cerdan & Bricas (1996:34-37) between 1988 and 1994 (Table 8.4), my own observations in Cotonou agree with them. The foods were often processed in rural producer areas and retailed in town by women from that area, and Béninese women tended to specialise in those products of which their group had processing skills and which the farmers of their region used to sell at inter-regionally competitive prices.

Table 8.4: Ethnic specialisation in manual processing and trade of local foods in South Bénin[1]

| Product | Specialising group | % of the trade in Cotonou in the hands of the specialising group |
|---|---|---|
| Groundnut oil | Fon | 100% |
| *Kulikuli* (fried groundnut oil cake) | Fon | 80% |
| Tapioca | Fon | 75% |
| *Sodabi* (palm wine distillate) | Adja | |
| Palm oil | Mina | 50% |
| *Akasa* fermented maize snack | Gun | 46% |
| *Wagashi* cheese | Fulani | (probably 100%) |

1 Based on a survey in 1988 by Nago (1989) in the provinces Zou, Mono, Atlantique and Ouémé, and by research from 1991 to 1994 by Thuillier-Cerdan & Bricas (1996:34-37) in Cotonou.

Official statistics also indicate that the importance of the agricultural and trade sectors, and to a lesser extent of industry, differed between gendered categories and between the Zou and Mono provinces, of which the plateau Fon and Adja formed about half of the population. These figures, and even more so those of Mensah (1980:62-63), support the common view that Zou women trade much more and farm less than Mono men and women and Zou men. Taken into consideration that the northern half of the Zou population mainly lives on agriculture, they are also in line with my findings that in each gender category, inhabitants of the Adja plateau farm more than those of the Fon plateau. Combined with the finding that much more Fon than Adja migrate to town, the greater involvement of Adja women in farming as compared to Fon women contradicts the thesis of Meillassoux (1977) and Rogers (1980) that (male) urban migration forces women into subsistence cultivation (see also section 7.4 and Wartena 1997, 2001). A weakness of the official statistics presented in Tables 8.5 and 8.6 is that they consider only one livelihood activity per person, while many Fon and Adja engage in more than one.

My own research on livelihood portfolios is based on genealogical studies in several villages. Tables 8.7 to 8.10 give a quantitative assessment of the livelihood activities of all men from the studied families on whom I have information, sorted by age group, so that changes in livelihood portfolios over time can be discerned. The tables take up to four principal activities per man into account, weighed according to their approximate importance, and are intended as guide through section 8.1.2. Section 8.1.2 focus mainly on males, but this gender bias will be redressed in section 8.2 and 8.3.

Data collection methods were participant observation and various types of interviews, varying in depth between individuals. Information about illicit or less prestigious activities,

Table 8.5: Percentages of the working population active in each major economic sector in 1979, per province

| Province | Mono | | | Zou | | |
|---|---|---|---|---|---|---|
| | Males | Females | Total | Males | Females[1] | Total |
| Agriculture | 87.3 | 79.7 | 83.3 | 80.8 | 48.5 | 70.2 |
| Trade | 1.2 | 14.3 | 8.1 | 1.9 | 42.0 | 15.1 |
| Industry | 4.6 | 3.5 | 4.0 | 7.7 | 6.8 | 7.4 |
| Total | 93.1 | 97.5 | 95.4 | 90.4 | 97.3 | |

1 According to Mensah (1980:62-63), Zou women's participation in agriculture is only 24%, in trade it would be 60%. Mensah (1980:212) was also convinced that trade contributes more to raising women's living standard than agriculture, but this was probably based on stereotype images rather than on research.

Source: INSAE (1987:75)

Table 8.6: Occupation of household heads in 1979, in percentages per province

| | Mono | Zou |
|---|---|---|
| Agriculture, fisheries, hunting | 78.8 | 60.2 |
| Trade, restaurant11, hotel | 4.4 | 8.1 |
| Industry | 3.5 | 5.5 |
| Public infrastructure | 0.6 | 1.3 |
| Transport, construction | 0.8 | 1.1 |
| Financial sector and other services | 3.7 | 4.1 |
| Unknown | 8.2 | 19.7 |
| Total | 100.0 | 100.0 |

Source: INSAE (1987:135)

for example agricultural wage labour, was more easily obtained from people whom I studied closely; therefore such activities are probably systematically underestimated a little across all villages, but this does not affect my comparisons between villages and ethnic groups. Since the sample includes clusters of people who learned from and created jobs for each other and have roots in the same specific locality, these villages and their characteristics deserve a short introduction.

Kana at the centre of the Fon plateau possesses many distinguishing features of Fon styles of making a living and livelihood portfolios – distinguishing especially with regard to Adja styles – to the extreme. This village represents in many regards ideal typical Fon styles and end points on Fon-Adja continua. As the former Fon kingdom's second capital, Kana was also an idealised prototype and its lifestyles were role models in Fon eyes. I will therefore start with a discussion of Kana-Dodome to bring out general differences between Fon and Adja livelihood portfolios. Next I will describe Lissazounme as a more average Fon plateau village as far as soils, centrality and livelihood activities are concerned. I conclude my discussion of Fon villages with Aoundome, situated on the south-eastern fringe of the Fon plateau and at the other extreme end of the range of Fon plateau styles of making a living. This is followed by a discussion of Adja livelihood portfolios as found in Atindehouhoué, with some references to other Adja villages to show the range of Adja diversity. Sections 8.2 and 8.3 zoom in on the history and livelihoods of one family in Lissazounme and one family in Atindehouhoué respectively.

Kana had a tradition of itinerant trade because it is situated on the crossroads of the principal commercial routes between the Fon plateau, the South, the North, and Yorubaland since pre-Columbian times, and it is a major political, religious and forging centre of Danhomɛ, as discussed in Chapters 5 and 6. Several of its lineages[12] had members in Whydah or in Allada since king Agaja (1708-1732) conquered these palace towns, and maintained contact with them until the time of my research. The only colonial railway line, built in 1905, had a station in Kana. Like Abihunjɛ whose story I narrated in section 7.1.1, many men from his and other lineages in Kana-Dodome became railway employees. His son explained in 1990 that

> "in those days every worker had the right to introduce one relative to succeed him. So I joined my father in the railway service since about 1950. Also my own son is looking for work now and I would like to take him into the railway service too, especially now that my retirement is approaching. But the times are changing. We don't have the right to introduce people anymore."

Tossa's (1982:108) study about the Béninese railway (OCBN) confirms that: '*La plupart des ouvriers qu'on retrouve à l'OCBN sont, soit des fils d'anciens cheminots, soit des gens ayant été recommandés par des cheminots retraités parce qu'étant d'une même région*.' He (ibid: 107, 111) brings this into connection with other people's fear to approach the fire-spitting wagons. And in spite of the 'changing times', in 1996 Abihunjɛ's grandson wrote me from Cotonou:

> "You remember my search for work. At this moment I am doing jobs at the railway service. But I am occasional, which is my anxiety."[13]

Several of them, especially the elder cohorts, acquired land on the Allada plateau at long the rails, farmed it when off duty, and also helped some kin to obtain farmland there. After retiring from the railway service, some returned to farm in Kana, leaving their Allada land to their sons. Other sons became railway employees themselves or, especially the younger cohorts, craftsmen and petty traders (barber, tailor, charcoal producer, luggage carrier etc.) on the Allada plateau. Some early migrants from Kana, while working at the rail or at the wharf like Abihunjɛ's younger 'brother' Agblonon, purchased land as early as the 1920s near the railway terminus at Gbegamey, which is one of the oldest wards of Cotonou. When I visited these migrants at Gbegamey I found that it was mainly inhabited by Fon from Kana and other Fon plateau villages, while settlers from other origins lived in Cotonou's younger quarters. "We Fon were the first to come to Cotonou, wanted to live near the rail and near our brothers, and so purchased all the land here until Gbegamey was full. Newcomers now have to settle in Cotonou's outer quarters" several of them told me[14]. Most of the later migrants from Kana went to places near to their older kin, hence to Cotonou or the Allada plateau. Though many still secured employment at the railway or the port through their relatives, like Abihunjɛ's and Agblonon's sons (see section 7.1.1), an increasing number also worked as craftsmen, (petty) traders, soldiers, teachers, or in other (Para)state organisations, for example the palm oil factory, the extension service, the water- and electricity service, etc. Some of these migrants moved with all their wives and children, others alone or with one wife. A common strategy of town dwellers from Kana but also Lissazounme, adopted amongst others by Agblonon, Abihunjɛ's son Bernardin and other railway employees, and Barnabé Lisanon whom I will present in section 8.2, was to leave one or more wives with the younger children behind in the village and to take the elder children along to school in town. This allowed the children to acquire school- as well as some farming knowledge

and to build their own social networks in both places. Many Fon but also Adja school leavers started their careers as farmers, sometimes combined with part-time agricultural wage labour in their home villages, but switched to non-agricultural occupations as soon as they found these. This phenomenon explains the relatively high rates of farmers and low rates of migrants among the youngest cohorts of Kana and Lissazounme in Tables 8.2, 8.7 and 8.8. Throughout the generations, a good number of Kana migrants returned to their father's village at old age and became hobby farmers, without much own experience and mostly obtaining low yields, even though several of them asked extensionists' advice. It did not bother them very much because their main goal was to enjoy country life and historical memories in their paternal village.

Kana-Dodome also stood out by its relatively high rates of non-agricultural livelihood activities in the village itself since pre-colonial times, especially forging, trading and priestly activities. These occupations remained important among men in the village until today; though no young men in my sample happened to be blacksmith. Also palm oil production remained an important activity of women and of *vodunsi* cult initiates during their times of seclusion, and poor Kana men harvested and pounded palm fruit for a wage. Gradually, crafts like tailoring, carpentry and (motor) bike mechanics also gained popularity in Kana as in the other villages I studied, as Table 8.7 shows. Fon forging however remained almost exclusively localised in the ancient smithies of Kana and of Abomey. Also young men from traditionally non-forging Kana families entered this craft, but few Fon and even less Adja from other localities did. The priesthood of public *vodun* remained largely attached to lineages with ancient public shrines, though occasionally new public shrines were established, for example in Atindehouhoué in the late 1980s. The fact that no men of the youngest Kana cohort in my sample were priests of public *vodun* is explained by the fact that this hereditary position is mostly held by the oldest man of the family which holds the shrine.

Most women in Kana-Dodome, wives of resident or migrant husbands alike, engaged in petty trade- and sometimes (food) processing activities. Some but not all of them combined this with subsistence farming; very few of them had an agricultural surplus to sell during the last 20-30 years, due to the declining soil fertility and the generally small sizes of their fields compared to those of women in the other Fon villages I studied. Over the years, also Kana women shifted more and more to trade and processing activities (mainly palm oil and local foods) at the expense of farming.

Inhabitants of Lissazounme and other villages on the south-western Fon plateau stood out between the mid-19$^{th}$ and mid-20$^{th}$ century for moving to the north-western Adja plateau as section 6.3 describes. From 1840 onwards, when Danhomɛ started to export palm oil to Europe, many big men from Fon villages like Sahè, Lissazounme, Gboli, Sinhoué and Agbangnizoun confiscated fertile Adja land and settled there to farm, to trade, to raid agricultural products from the Adja, and to install their families and slaves. Genealogical studies in Sahè, Lissazounme, and Adja plateau villages confirm this.

During the 20$^{th}$ century the interest of Sahèans and Lissazounmeans to cultivate beyond the Fon plateau borders gradually declined, to the extent that several of them abandoned the fields which they had there, and only one or two set up a new farm outside the Fon plateau, in the northern savannah. In early colonial times, some Fon from Lissazounme who did not benefit from family land on the Adja plateau still purchased plots there or on the Allada plateau, for example the mother of Ahovi's son Pierre and Ahehemɛ, see Wartena (2001: 247) and section 6.2. Settlers on the Adja plateau of free Sahè and Lissazounme origin

usually retained houses and fields in their native villages and visited these from time to time, in particular during dry seasons and for family rituals, and returned definitively to their village of origin in their older age, leaving their Adja plateau fields to younger family members. In post-colonial times however, many of them (Pierre, Ahehemɛ's sons, Norbert from Lissazounme, Lante from Sahè) lost interest in farming on the Adja and Allada plateaux, none of their kin wanted to take over, and they sold or abandoned their fields to local farmers. Some of Ahehemɛ's grandsons became carpenters and magic charm traders on the Allada plateau not far from his former field, Pierre and Lante tried their luck with home gardening and Pierre also with trading magic charms and second hand clothes in their native villages though with very little success, and Norbert and one of Pierre's wives went to cultivate at Dassa and Agouna in the North (sections 6.2, 6.3 and Wartena 2001). Several other Fon settlers, discouraged by the drudgery of farming, gave all or most of their Adja plateau land in sharecropping to Adja farmers and concentrated on petty trade or petty crafts themselves (own interviews in the mixed Fon-Adja villages Kplakatagon and Akwevɛadja; Luning 1986:35). Edja (2001:2, 5, 10, 20) signals that also further South, near Lake Aheme and Whydah, many elderly landowners from noble Fon families fail to find young relatives willing to cultivate their land (which was formerly cultivated by slaves) and therefore give it in sharecropping to mainly Adja sharecroppers, who leave the Adja plateau in the search for farmland and appear to be more willing to work in agriculture than most other Southern Béninese.

In general, Lissazounme men engaged less and less in farming during the 20th century, be it in- or outside the village, and the same applies for Lissazounme women. The apparent prevalence of farming among the younger Lissazounme cohorts in Table 8.8 is due to the fact that many young men start their career as farmers, and does not represent an increase over time. Until the 1960s, many Lissazounme cultivators still sold part of all their crops with the exception of pearl millet, since then few of them can sell anything but some groundnuts and a little palm oil, due to declining yields.

Non-agricultural activities increased among Lissazounme residents and even more so among its migrants, especially crafts, sale of (semi) spiritual services, teaching, and to a lesser extent other types of trade and (Para) State employment. Lissazounme, like Kana, had a number of regionally important public *vodun* shrines where people came for paid services like divination, healing, and initiation to the cult. More and more Lissazounme diviners who were not *vodunon* (priests) themselves also provided divination and healing services on a commercial base both in- and outside the village, and this business soon became the villages' speciality. Itinerant *amansinsató* typically travel to sell magic charms and remedies as soon as they finish ridging their fields, leaving crop maintenance to their wives, children, mother or brothers, as the case study in section 8.2 will illustrate.

Also the importance of crafts increased, and more and more Lissazounme men combined crafts with migration. In the early 20th century, Lissazounme artisans were weavers, tailors and carpenters, including one, Célestin, who was employed and trained at the French colonial *Residence* in Abomey. After some years he set himself up as carpenter and farmer in Lissazounme, of which carpentry was his primary activity in terms of time spent on and income derived from it[15]. He trained many young men of his lineage and village in the craft, most of whom initially combined carpentry with farming in the village, but in the 1970s and 1980s several set themselves up as part- or full time carpenters in various towns and villages of South Bénin and Nigeria. In all the Fon families I studied, weaving went out of use after

World War two, tailoring survives as a craft, the youngest cohorts value apprenticeships in soldering and mechanics, and more and more poor elderly men make mats and baskets in their home villages from palm branches which they gather in other people's palm groves. Like in Kana, many poor Lissazounme men of all ages harvest and pound palm fruit for wages for oil palm growers and palm oil producers in the village; the employment of paid at the expense of unpaid family labour in this sector seems to increase.

Almost all Lissazounme women engage increasingly in petty trade and/or the processing of foods such as palm oil, *afintin* spices and the like. Many but not all of them combine this with cultivating their own and their absentee husband's or sons' land. In Lissazounme the importance of women farming on their own account, as compared to female assistance on family fields, increased until roughly independence, but now tends to decline again, as shown in Wartena (2001). There are very few differences between livelihood portfolios of the Lissazounme lineages I studied, except that Célestin's lineage has slightly more carpenters, and the lineage which I will discuss in section 8.2 has a few more teachers.

Aoundome is situated on the borderline between the Fon plateau and the Zado area on its south-eastern slopes, and is not really representative for the Fon plateau but more for the Zado slopes. I present it here to illustrate that some Fon families from non-plateau areas have less disdain for agriculture than plateau families and farm more than these. But in contrast with the Ehwe-Adja, the inhabitants of Aoundome did not till their land on the traditional day of rest, *Hundjrogbe*, as I explained in section 5.4.1; in that regard they were similar to the plateau Fon. Aoundome represents another extreme end of the spectrum of Fon styles of making a living, and is in many regards the antipole of Kana. The reader who prefers to compare plateau villages only may jump straight to the Adja and Atindehouhoué.

Aoundome livelihood portfolios mainly consist in farming on the Zado slopes, whose soils differ from plateau soils. Therefore, Aoundome farming styles require some explanation. Zado soils are of different types than Fon plateau soils and usually still more fertile and more suitable for annual crops than these. They have a lower water retention capacity and are less suitable for palm fruit production than red plateau soils, but are good for palm wine yields. The slopes are also less densely populated and have still more bush fallow than the plateau.

Agriculture also declined over the years in the livelihood portfolios of Aoundome families, but far less than in those of the studied families from Fon plateau villages. At present as in he past, the majority of Aoundome men spend most of their time farming on their own account in and around Aoundome. Unmarried men help on their father's fields. They grow the same crops as Fon plateau farmers but larger areas than these, and sell most of their groundnuts and part of their other crops depending on yields and cash needs. Some Aoundome men, but especially Aoundome women, grow large areas of okra for sale.

In contrast to many Fon from the plateau villages, no Aoundome men I know of abandoned farming altogether. Aoundome men too diversified their livelihood portfolios over the years, but for them this meant to adopt a secondary activity while remaining an own account farmer. A good number of them, used as they were to hard agricultural work and to ridging, which requires strength and skill, chose as secondary occupation seasonal ridging for wages in the savannah to the north of Abomey. Many also engaged in (semi) illicit hunting and gathering or farm-related crafts in their home village. At the time of my research, several Aoundome men trapped animals in the dry season in traps forged by Kana blacksmiths and sold the game. Others made charcoal for sale from dry wood which they gathered in their

neighbours' fallows, preferably when these neighbours did not watch. Some tapped palm wine and distilled *sodabi*, an enterprise which the Fon considered more permissible on slope soils than on the plateau itself. Several worked as wage labourers in their neighbours' *sodabi* and charcoal industries. Some men of the younger cohorts became tailors in Aoundome or elsewhere, and a few did apprenticeships in soldering or mechanics. Aoundome's literacy rates throughout the generations were lower than those of Kana and Lissazounme, but higher than those of the Adja villages I studied. Most Aoundome school leavers became craftsmen, which many combined at least initially with cultivating and seasonal wage labour in the north, and a few became teachers. Like in the other Fon villages, no Aoundome school leaver wanted to remain farmer. When I proposed to them to acquire farm land in the north for themselves they replied "No, we don't want to become farmers, and besides we are too young and don't have the right social relationships there to obtain land."

Also Aoundome women's livelihood activities differ from those of women in the other Fon families I studied, in that Aoundome women farmed more and continued to farm until the end of my research; there was no sign of them abandoning agriculture. They always assisted on their parents' and husbands' fields, and increasingly farm also their own plots, on which they grow the same annual crops as the men, though a bit more okra and cowpeas and less groundnuts. They too sell their okra and groundnuts and sometimes part of their other crops depending on food and cash needs. Like their men, also Aoundome women more and more diversified into secondary activities alongside farming, and chose mainly gathering and transformation of agricultural products. In the early 20th century, many Aoundome women gathered wild leaves and herbs for sale as vegetable, medicine or wrapping leaf, and some still do so. Their transformation and petty trade remained less important than those of women in the Fon plateau villages.

The image of immobile Adja traditionally glued to their plateau lands, which may rise when one considers the small numbers of Adja in Béninese towns (Table 8.1), needs demystification. The Adja too have a long history of rural-rural mobility to and from their plateau and back again, pulled by hunting grounds and fertile farmland and pushed by Fon invasions, quarrels and diseases, as sections 5.3 and 6.5.1 point out. This movement continued in the 20th century as I will show below, but with farming as a much stronger motive than among the Fon migrants from the villages discussed above. Especially from the later 19th century onwards, many inhabitants of the Ehwe-Adja plateau settled around Dodohoé between Tado and the river Klikou, which is a tributary of the Mono in the savannah to the north-west of the plateau. So also Tchigosu, whose son Dɛngbɛnɛn returned later on (see 5.3.2 and 6.5.1), and Séboka's brother in law from Houédogli with Séboka's son Tola (see 8.3). Other Ehwe-Adja still move to farm in the savannah around Dodohoé, Tado and Tohoun until today (Abotchi 1995:253, 259-262).

Atindehouhoué may serve as example of an Ehwe-Adja village in the upper middle group as far as Adja livelihood diversification and socio-economic differentiation are concerned. It has slightly higher rates of non-agrarian activities and slightly larger numbers of big farmers than some of its neighbouring villages like Honsouhoué, Lagbahome, Dédahoué and Zaffi. Each Adja village, as also Dèdèhouanou (2003:69, 74, 117) has shown, tended to specialise in certain crops, processing activities, and cultivation techniques. The analysis which follows concentrates on Atindehouhoué; Figure 10 in Appendix 2 may be helpful in reading. The discussion starts with agricultural activities beyond the Adja plateau borders and then shifts to non-agrarian occupations.

Between roughly 1910 and 1980 several men from Atindehouhoué moved to set up their own farms in the savannah around Tado and Tohoun or on the edges of the Adja plateau, at a time when many Fon from Sahè and Lissazounme rather abandoned the farms which they had beyond Fon plateau borders. Atindehu, lineage head and *chef de région* under the colonial regime until his death in 1919, obtained land at Lanta[16] and Afomaï on the north-eastern and eastern fringes of the plateau, where the French attempted to construct new export routes from the Adja- to the Fon plateau. Atindehu had two brothers; the youngest settled to farm in Afomaï. The middle one moved together with the second-youngest of Atindehu's fifteen own sons to install themselves as farmers at Doko-Name on the south-east of the Adja plateau. Another younger son of Atindehu went to farm at Tokanme on the plateau's north, the village of Atindehu's father. These younger sons did not inherit land in Atindehouhoué (in spite of the Adja's ideal that brothers should share equally) and consequently did not return. When some of their own sons returned to Atindehouhoué in the 1980s, they had to borrow farmland there from descendants of Atindehu's elder sons. Also Togbui, who succeeded Atindehu as *chef de région*, did not leave much land to the younger ones among his thirty sons when he died in 1943 (Wartena 2001:240). His second youngest son Ganhunja settled to farm at Tchikpè in the east. The third youngest and one middle son went to farm at Afomaï. Another middle son, Hundé who succeeded his father as colonial *chef*, acquired around 1970 a large field near Ounkémé, where the Adja plateau borders the river Mono in the west. Since then he plants it with maize and cotton with the help of his debtors (who have to pay off the bridewealth which Hundé advanced for them) and of some of his wives, while his other wives and sons cultivate his land in Atindehouhoué. Monlu, *delegué* of Atindehouhoué under Kérékou's 'Marxist' regime, acquired land near Tohoun in the late 1970s, and farms it part-time with his wives' and children's assistance while cultivating his fields in Atindehouhoué during the rest of the year. His FFBSS Nuji obtained a plot near Monlu's around 1980. Nuji's elder brother Ada settled at Tado around the same time, taking his wives and children along to cultivate maize, yams, cotton and cowpeas on his own account. With the exception of the big men Hundé and Monlu who maintained farms in two places and some sons of early landless migrants mentioned above, the other Atindehouhoué men in my sample who established farms off the plateau did not return to their native village until the end of my research. However, all Atindehouhoué men I know of who moved to farm fulltime elsewhere were born before 1950. The younger cohorts were less inclined to migrate with farming as their primary ambition. But if their craft or teaching job brought them to a rural area they grew their own staples there.

Agricultural wage labour beyond the Adja plateau was not popular among Atindehouhoué men except during the 1930s, when several young Adja men migrated to rural areas in South Togo to farm for a wage, partly because the poll tax was lower in Togo in those years. During the same years, some Atindehouhouéans migrated to Lomé to work as carrier, cleaner and the like. Most of them returned after a few years, married and became farmers in Atindehouhoué.

Through *chef* Togbui's and Hundé's contacts with French traders, some Atindehouhoué big men became supra-local traders in agricultural products as early as the 1940s, at a time when only few Adja did so and such trade was mainly dominated by Fon, as sections 6.4, 7.3 and 8.2 point out. Several of them cooperated with close kin, who thus acquired trading skills and tended to specialise in the same commodities, as the cases studies in section 8.3 illustrate for male bicycle trade and in Wartena (2001:243-245) for female trade in empty

bags, maize, soap, lamps and buckets. Atindehouhoué became known in the region as a village with, for Ehwe-Adja standards, many male and female traders. In the late 1980s and early 1990s it became common knowledge that "all the carriers of empty bags on the way to Adja plateau markets are women from Atindehouhoué" (personal communication Simplice Vodouhè 24-7-1992; Wartena 2001). In colonial times they mainly traded on the Adja and Fon plateaux and in southern Togo, since then also in Cotonou and occasionally Nigeria. But even the largest Atindehouhoué traders continue to farm in the first place. *Chef* Togbui also made some of his sons serve some years in the French army. They all returned to cultivate in Atindehouhoué with a renewed sense to experiment on their farms.

Crafts and white collar employment remained relatively less important in Atindehouhoué and most other Adja villages than in the Fon villages discussed above, *sodabi* production exempted (Tables 8.7 to 8.10). Since a Dahomean ex-soldier introduced distilling techniques around 1920, several Atindehouhoué men produce *sodabi* in the village during at least a few days a year. The paralyzed Kofi became a basket maker as I described elsewhere (Wartena 2001). Gradually, a few Atindehouhoué men also learned crafts which do not relate to farm products, like bricklaying, tailoring, carpentry, mechanics and taxi driving. The elder cohorts exercised their craft in their home village and as a secondary activity while farming remained the first; some, like Isaka (Wartena 2001), even gave up their craft in favour of agriculture because the latter yielded more. Later, some younger Atindehouhoué craftsmen worked in Cotonou and Lomé. Atindehouhoué children started to go to school relatively late in history compared to Fon children as I have shown in section 7.1.2. Consequently, teaching and (Para) State employment remained marginal in Atindehouhoué livelihoods.

Farming in their home village on their own account was at all times the principal activity of Atindehouhoué men and women. Section 8.3 will illustrate how one lineage branch from Atindehouhoué made a living mainly from subsistence cultivation and from the sale of maize, cotton and other crops. As indicated in 7.3.1, Atindehouhoué farmers, men and women alike, grew slightly more cotton and less groundnuts and tomatoes than farmers on the red soils of the eastern and western Adja plateau[17].

Animal husbandry is a diversification strategy that almost all Fon and Adja villagers engage in, also those with little land. This activity does not differ much between Fon and Adja, except that in Lissazounme and other central Fon plateau villages, goats and pigs are more strictly secluded than in most Adja- and many Fon plateau border villages. There, animals receive only little food from their owners since they are allowed to roam freely during most of the year. Many had a few chicken, some also goats or pigs like the poor paralyzed Kofi (Wartena 2001), and some very few own oxen like the *délégué* of Atindehouhoué (section 7.1.3). Also landless adolescent boys and girls keep animals, and many poor have animals in guardianship instead of acquiring them themselves (De Wit 1988). Goats were and are more popular among women, pigs among men. Owners sell them in case of urgent cash needs or when the animals' offspring exceeds the numbers of animals they wish to keep, but hardly ever eat the meat themselves except when they sacrificed an animal to one of their gods, which the Fon did more regularly than the Adja.

### 8.1.3 Introducing two families for closer observation

The two following sections, 8.2 and 8.3, will give a close-up of livelihoods of members of one Fon family in Lissazounme and one Adja family in Atindehouhoué during the 20th

century. This closer observation will bring individual actors, their practices and interactions into the picture, and will give more insight into social relations and socio-cultural motivations than the distant analysis in section 8.1. The villages of both families are situated near the centres of the plateaux and were residences of colonial *chefs*. Both families had some specialisations (bicycles, empty bags and itinerant 'medicine' trade) but were, besides these reservations, quite typical for plateau Fon and Adja.

Elsewhere I showed, on the basis of three other cases and a survey in several Fon and Adja villages, that Fon women worked more in processing and trade and had to help their husbands more with soil tillage than Adja women did. Until the early 20th century Fon women farmed also more on their own account than Adja women, but from World War 1 the percentage of Adja women with own fields gradually increased and by World War 2 it had bypassed that of Fon women (Wartena 1997; 2001). The same gender differences emerge in the cases presented below.

As the majority of the Ehwe-Adja, most members of Salaga, the Adja family presented in section 8.3, devoted the largest part of their labour time to their fields, made an effort to develop agricultural skills and knowledge, experimented and innovated, and were willing to invest in inputs such as land, fertiliser and insecticide. Most of them derived the largest part of their material livelihood, both in cash and in kind, from farm produce. In contrast with the Fon lineage Lisanon, the Salaga's non-agricultural livelihood activities remained secondary to agriculture.

The family studies in sections 8.2 and 8.3 illustrate typical differences between Fon and Adja social relations in production. Adja children perform until today more unpaid farm labour on senior family members' farms than Fon children, especially schoolchildren and teenagers; they hence confirm the observations made on filial respect in section 7.1.2. For younger children the Fon-Adja difference is smaller. The case studies suggest that teenage and elder Fon demand more often a wage, even from close relatives, than their Adja age-mates, both in agriculture and in palm oil production. They also show that Adja women farm more than Fon women, that agriculture is most Adja women's principal activity, and that many Adja women sell fairly large proportions of their harvest. But in contrast with Fon women, the Adja women hardly till their husbands' fields, they mainly till on their own account. Sowing and harvesting however are done free of charge for close family members by Fon and Adja wives and daughters alike, or at best in some cases for a small reward in kind.

The case studies also show different attitudes towards agriculture by school leavers which seem to be typical for each culture group. Salaga school leavers who failed to find profitable white collar-, craft or trade employment (and they were many due to the Adja's limited social ties with employment-providers) preferred to set up their own farms rather than to remain un- or underemployed. But no Lisanon or other Fon school leaver whom I know became a self-employed farmer as his or her principal occupation in the long run, even if he failed to generate a profitable alternative source of livelihood. Some young educated Fon exploited temporarily a plot of family land until finding other work (see 8.1.2 and Tables 8.7 to 8.9 in Appendix 8), or – and this was more common among the Lisanon – helped a farming family member on the land once in a while. Especially in the age group between 20 and 60 years, male Fon farmed very little as compared with the Adja.

The concept 'liberation' is used by the Fon and Adja and in the case studies below for the liberation of a junior person from labour duties for a superior. It is specifically used when apprentices reach the end of their training period and cease to work for their master

and for farmer's sons when they receive a plot of land from their father and are allowed to farm it full time on their own account. The latter occurs usually shortly after the son's first marriage, and must be distinguished from the gift of land to the unmarried son, wife or daughter, which they may farm after finishing their daily labour duties for their father or husband. The latter is called *gbadagle* (evening field) among the Fon, who have such plots since at least the 19th century. Among the Adja, 'leisure' plots only became popular around the middle of the 20th century, and there is no short term in Adja for them yet.

Finally, the close-ups in sections 8.2 and 8.3 illustrate typical Fon and Adja relationships to food. On the one hand, fairly abundant staple food production by the Salaga, resulting in self-sufficiency for most family members in most years, and in some cases surplus production which they sold. Atindehouhoué fed in general on its own maize harvest about the year round. Though some of its poorer households like that of Tola (described below) and of Kofi (Wartena 2001) more or less frequently had to buy maize, others could often sell. In the Fon lineage Lisanon on the other hand, not even the largest farmers were self sufficient in cereals anymore, neither for food nor for seed. They had to purchase basic staples during several months of every year since the 1960s or 1970s. These different degrees of subsistence and commodity food production, and dependence on markets for basic food needs were also found in the other Fon and Adja plateau villages that I studied (Aoundome on the plateau borderline exempted).

The family studies also illustrate that, while labour was more a commodity among the Fon than among the Adja, with farmland it was the other way round. Adja farmers frequently bought, rented or sharecropped land for fairly large amounts or shares of the harvest, also from close relatives. The Fon in contrast usually lent out their Fon plateau land for free to anyone, only occasionally purchased land, and never rented it for money or sharecropped it for a fixed share of the harvest. This difference was due to the poverty of Fon plateau soils and the Fon disinterest in farming, as also illustrated in section 8.1 by numerous cases of Fon landowners abandoning their land to Adja farmers, both on the eastern Adja plateau and on the coast. See also section 6.5.2 on Fon and Adja land tenure.

### 8.2 Lisanon, a Fon lineage in Lissazounme

Lissazounme[18] was selected as research village for three main reasons: it was on red plateau soil, it was one of the few Fon plateau villages that still had a sacred forest, and it was the only Fon plateau community for which INSAE could provide me a historical calendar[19]. Wanting to take soil samples in the sacred forest we needed the permission of its priest, hence he was the first person we looked for when we reached the village. In this way I came in contact with the priest's lineage Lisanon.

Lissazounme was a fairly average village in the middle of the Fon plateau. Situated 6 km from Abomey and 10 km from Bohicon it was for plateau standards neither very near nor very far from the centre. For the sake of comparison I also did some research in the red-soil villages Gnidjazoun in the centre-north (4 km from both towns), Sahè-Abigo in the southwest (13 km from Abomey, 17 km from Bohicon), and in the grey & pebble soil villages Kana-Dodome and Aoundome in the southeast[20]. With about 2,500 inhabitants in 1989, Lissazounme was a quite large agglomeration. Each Fon and Adja village stood out in certain economic activities; in Lissazounme these were mainly *afintin* production by women and healing business by men. The fact that Lisanon lineage had a priest of a regionally important *vodun* was not exceptional, for this was the case of many Fon lineages (see 5.2.4).

In 5.2.2, 6.2.1 and 6.5.2 I have dealt with settlement history, oil palm farming and priestly livelihood activities in Lissazounme[21]. Here I will analyse how members of Lisanon made a living in the 20th century, in particular those of the branches Hunayiji, Kahun and Hunyon. The analysis starts mainly from some successful men and women. Many young or unsuccessful lineage members will appear on the stage in their roles as dependants of the former. Some other poor or young men will be presented separately. Figure 9 in Appendix 2 shows the genealogy and the principal occupations of members of these and other Lisanon branches.

Lisanon belonged to the larger landowners of the village. Its members attribute this to the fact that it was one of the first Fon lineages there, but I guess that Lisanon's access to labour, wives and income through its *vodunkpamε* also helped to bring and keep much land under cultivation. Access to land, and also to other assets, became however very unevenly distributed within the lineage. The case study will reveal some processes of socio-economic differentiation.

In all Fon lineages, the office of lineage head (*daa*) included rights to the palm fruit from the lineage commons and the duty to judge family affairs. In Lisanon as in many other Fon lineages it also included the priesthood of the lineage *vodun* and hence access to labour- and other contributions for the shrine. In the case of the *vodun* Lisa these contributions seem to have been considerable. Lisanon's lineage head Degenon died at the end of the 19th century and his successor Gomayahanto around 1910 (Figures 8 and 9 in Appendix 2).

***Hunayiji (1870): farmer, priest-lineage head and healer***

Degenon's son Hunayiji was *daa* from about 1910 until his death around 1953. He had seven wives, including at least three *vodunsi* (cult initiates, see 5.2.4) of the *vodunkpamε* for which he was responsible. The initiation as *Lisasi* took a minimum of one year. Some candidates stayed for many years until their parents or their bridegroom had saved enough money for their liberation rituals. In several cases the priest ended up paying for the rites himself and in this way became the bridegroom. Hunayiji also gave one *vodunsi* as first wife to his son Ajidé. His own wives came amongst others from the villages Sahè, Zounzonme (where the lineage founder Bovi came from), Segbeji lineage in Lissazounme, and the Kahun branch of his own lineage Lisanon.

Hunayiji was a great commercial farmer. With the help of his wives, children and also his married sons he grew large areas of oil palms, maize, pearl millet and, especially after the Second World War, groundnut. He sold most of his palm oil and groundnuts, but also so much of his cereals that, in spite of his large land holdings for Lissazounme standards, in many years during the 1930s and 1940s according to one of his wives:

> "Our husband's granaries were already empty in the second season of those years that he had to sell because of family problems. Therefore he had given *gbadagle* (personal plots) to all his wives. We ate the harvest of our own fields when he did not give us enough maize, and we also sold of it to buy our own clothes." Though the wife excused his cereal sales by saying that he had to spend money on the funerals of his many parents-in-law and on other family responsibilities, but I assume that personal gain was another motive.

Between the mid-1920s and the mid-1940s Hunayiji grew each rainy season about 3.7 ha maize, 0.25 ha groundnuts, and 0.2 ha cowpeas, and each first season 2.3 ha pearl millet. After that he increased his groundnut areas to 'up to' 0.7 ha per season, according to two of his wives. Already in the 1950s, according to his youngest wife, export companies refused

to buy first season groundnuts (see 7.1.3), but Hunayiji stored these in two big baskets inside each other until the end of the second season, sold both harvests together, and the traders would not have noticed the difference. Besides the oil from his personal palm groves he also received the oil from the lineage groves, and could sell a large proportion of it. The Lisanon women and children and probably also the *vodunsi* in the Lisakpame had to manufacture the oil for him[22].

Hunayiji maintained close relations with priests and other members of *vodunkpamε* in Zounzonme, amongst others with the healer Awinon, and became a member of Awinon's healers' association. He learned a lot about divination, magic and healing and their commercial exploitation from these other priests and healers. The sale of magic charms, divination and remedies against various diseases provided him an additional income. His elder sons Ajidé (born around 1905) and Kamille (around 1930)[23], FBSS Hunyon, and neighbour Germain learned the healing business amongst others from him. Hunayiji's younger sons Barnabé (around 1942) and Gaspard (around 1950) went to school in Abomey. To prevent disputes he allocated his land to his sons already during his life, large shares to the elder sons and small ones to the schoolboys.

Hunayiji's wives cultivated their *gbadagle* with the help of their own children, and worked for each other in turns. His wife Ayonu, born around 1905 in Sahè-Abigo (see 6.3.4) and mother of Barnabé, also exchanged labour with her husband's brothers; the men cleared her field and she made the second side of the ridge for them. After 1960 she sometimes engaged wage labour, and was assisted on the land and in her petty retail trade by her daughter's daughter and her sister's granddaughter Elimε, who lived with her. In old age Ayonu still cultivated a little, was supported by Barnabé, and helped Elimε free of charge to crack palm kernels. Hunayiji's wife Gboju farmed a little, but was economically less enterprising and less successful. She was a *vodunsi* of Lisa and frequently fell in trance, not only during rituals (as most Fon *vodunsi* do) but also at 'inappropriate' moments in daily life, which yielded her the label of being a little crazy. Her second husband Kamille accused her of having inherited a bad character to the sons whom he had with her (see Kamille's account in 7.1 under '*chefs*'). These sons did not support her. At the time of my research she survived by cracking palm nuts for a tiny wage[24] for her former co-wife Elise and by using her right to beg for coins from neighbours when in trance. At Hunayiji's death around 1953 his younger brother (FS) Alakpato (1875-1955) inherited the office of *daa* and *vodunon*, succeeded consecutively by Gomayahanto's sons Akpamaso (1880-1960), Besso (1885-1965) and Kanfon (1890-1970), and Hunayiji's son Ajidé (1905-1981).

***Gomayahanto's daughter Agenonon (1888): spirit medium***

As a young girl, while undergoing initiation to the cult of Lisa, the *vodun* appeared to be very strong in Agenonon. He told her to marry inside the village, and to introduce her first son to the cult to become a priest of Lisa. She married Ahosuhwe (section 6.5). She fell so often in trance that everybody considered her not just an ordinary *vodunsi* but rather a *vodunon* of Lisa.

***Hunon (1908): vodunon and farmer***

Agenonon's first son Hunon, born in 1908, inherited his mother's spirit of clairvoyance. His own son Simeon said: "Father was born as a demon. At the age of one he divined already and spoke like an adult; all the old men of the village testify to this." Hunon accompanied his mother during rituals from childhood, for example when the *vodunsi* of Lisa had to sacrifice

the first fruits of pearl millet to their *vodun*. During the 1920s Hunon himself underwent an initiation period as *vodunsi* of Lisa, which prevented him from helping his brothers to plant oil palms for their father (6.2.1). He frequently had dreams and visions which announced what would happen soon. His son Simeon said:

> "My father Hunon received everything by inspiration, and he predicted the future by divination. Nobody taught him incantations, or how to make magic; he was a super-*bokonon*. Before Tafotan Lisanon was conceived he told the boy's parents that they would have a son who would be a *vodunsi* of Lɛgba and guard the *vodunkpamɛ* of Lisa, and it happened like this. Father also predicted correctly that my health would improve before his death."

Hunon himself said:

> "One time I saw in my visions that three related fellow villagers would die unless they would sacrifice a goat and give me 4000 FCFA and a bottle of gin. I warned them, but they gave me only 1000 FCFA and did not bring the sacrifice. Some days later two of them died.
>
> Another time I saw that a neighbour would attract misfortune if he continued to expose himself to the sun. I warned him, but he did not believe. Three days later he sat near the water tank and died. Since then the villagers always listen to me.
>
> Though my mediation, my sterile neighbour Hogbonuto conceived a son whom she dedicated to the *vodun*. Once in a while I have dreams or visions about the boy; then his mother always comes to sacrifice palm oil."

Hunon had fields with oil palms, but he did not manage to cultivate all his land because he concentrated on his healing and divination business and on his priestly tasks. Successes like the above provided Hunon a good reputation as healer. Shortly after World War II he started to divine, heal and sell *amansin* in distant Béninese towns, especially in Parakou. During the earlier 1970s his eldest son Simeon travelled with him, and Simeon learned from his father. But when in 1975-76 the 'Marxist' government started to hunt witches, his friends advised him to be prudent with his divination and his magic arts to avoid being imprisoned. Hence he ceased to travel abroad and started to concentrate on his priestly tasks at home. He assisted the priest of the *Lisakpamɛ* in his ritual tasks, and during the interregna of the Lisanon priest-lineage heads, Hunon assumed the priestly duties alone. This was accepted, because Hunon's occult powers were evident. At the time of my fieldwork, while Tafotan Lisanon was waiting for his enstoolment, Hunon acted as interim priest.

His sons only helped him on his land when they were young. After that they went to school until the BEPC exams, and around the age of 20 they all became *amansin* traders abroad and diminished their work for Hunon. At the time of my fieldwork his wife lived in Cotonou to trade and to nurse her mentally disturbed son Simeon. Lacking labour to slash the savannah grasses in his palm groves, Hunon lent his land out to protect his precious oil palms. He said:

> "I know no other way to avoid bush fires in my palm groves than to lend them out. I could slash a circle of at least 5 m diameter around each palm, but I regard it a loss to clear without planting anything. And unless you slash the whole field, people may still light fire in your plantation, which constitutes a loss of soil nutrients and might cause your palms to burn. Hence I lend my land out free of charge, I don't care whether my tenants give me maize or not. I gave land to members of my own and my mother's lineages, and also to Hogbonuto. I am not like some other people who sack borrowers from their land if these do not give agricultural products." (Hunon, Lissazounme 26-6-1990)

Hogbonuto confirmed that she did not give Hunon field products, but only brought oil as a sacrifice on behalf of her son, conceived through the priest's mediation, once in a while. Hunon died as a poor man in November 1990.

***Hunon's 'son' Wolu (1935): bankruptcy of a healer in Ghana***

Wolu was raised by Hunon because his own father, Hunon's brother, died when he was young. Wolu learned the healing business from Hunon. In the 1960s he started to work as a healer in Ghana, and had at least four children from two Ghanean wives. Between 1972 and 1990 he broke all contact with Lissazounme, and even refused to receive visitors from his village. In the later 1970s he sent the two daughters of his first wife to Lissazounme because their mother divorced. During three years the second wife and her two sons also moved to Lissazounme, hoping that Wolu would follow them, but he failed to do so.

On 12 April 1990 Wolu suddenly turned up in Lissazounme, sick and alone, saying that his second wife had run away with all his belongings. He arrived in Lissazounme with nothing but the clothes he wore. He suffered from severe diarrhoea, goitre and swollen feet. He wanted to sell the 3.7 hectares which he had inherited from his father to finance his medical treatment, but did not dare to tell this to Hunon because the old man expected money from his migrant son. His neighbour Laure, to whom he offered the land, refused to buy it, saying that the members of his father's lineage should have the first chance to buy the land. But none of them was prepared to raise the required amount.

***Hunon's son Simeon (1953): a vodunon turns mad***

Simeon was introduced by his father Hunon into magic arts and the *vodun* cult when he was still a child in the primary school. He said:

> "My father started to initiate me into the domain of *chimiques* (magic) as soon as I reached the age of understanding. He allowed only me, his eldest son, to enter the *vodunkpamε*. As a young boy I could do many things just like my father. In secondary school I resolved all the problems of my teachers and of my fellow pupils by the means of magic. I hypnotised girls so that you could do with her anything you want, and I even rendered people invincible. Everybody came to me, and I earned a lot of money without the knowledge of my father."

Simeon also earned money with ridging and pounding palm fruit for wages in the village. He successfully passed the BEPC exams after the fourth year of the secondary school in Abomey.

At the age of 17 he abandoned school and started to accompany his father Hunon on his healing journeys to Parakou and to other towns. Around that time he also underwent initiation as *vodunsi* of Sakpata. Not much later he became a *vodunon*, in spite of his young age. He said:

> "Everybody came to me because I asked lower prices for magic remedies and for divination than my father and than other practitioners in the area. Because my father was a diviner, he knew that I did these things without his permission, but he did not say anything. The other practitioners went to him and complained that nobody came to them anymore because I asked less money for the same mystical work."

Simeon used his earnings to enjoy life, buy clothes, and a bridewealth for his first wife. But in 1985, while he underwent initiation into the *kúvító* men's secret society which he wanted to join, he turned mad. Simeon's wife and children were entrusted to the care of his younger brothers, who later also accompanied him to Cotonou for psychiatric treatment. Simeon himself said:

> "But one day I felt that something contracted my heart, I felt exhausted. I had lost my mind. My brothers Augustin and Didier received the responsibility to care for me, for my family and for my parents."

All the villagers believed that the occult powers with whom Simeon was dealing had turned against him and rendered him mad. Gossip in the village held that Simeon played imprudently with spiritual powers in his attempt to become strong in the occult. Laure Lisanon said:

> "Since five years Simeon suffers from a mental strain. At his young age he was already *vodunon* and an *àzetó* (wizard) He experimented with occult powers, he used evil powers against animals, and if it worked well he used the same powers against humans. But then the powers with whom he played turned against him and he became mad. He was very imprudent; he was too young to understand the danger. Since a few months he undergoes psychiatric treatment in Cotonou. His younger brother Augustin is with him in Cotonou to nurse him." (Laure Lisanon, Lissazounme 13-4-1990)

Augustin basically agreed with this reading, and explained in more detail what happened to his brother. Simeon had been imprudent by trespassing rules of the spiritual world. He said:

> "My brother Simeon became ill as a result of a dispute with another branch of our lineage about the plot on which we built our house. The others contest our right to the plot. One day the other planted a piece of wood [i.e. magic] near the water tank in our compound without informing us, and when we asked him he said that it was because of the tank. A few days later, Simeon saw a second piece of wood next to the door. He said 'what is this?' and uprooted the wood without any precautions. He should have warned the old men who know rituals to neutralise the power of such objects.
>
> Then the people said to Simeon that at his age he should know the secrets of *kúvító*, and hence be initiated. I believe that the man who disputes our land was behind this, because his sister's husband is the *gbalɛ* (chief) of the *kúvító* society in the neighbouring village Mignonhito. But Simeon was already *vodunsi* of Sakpata, and during his initiation there they forbade him to bind things around his head. During the initiation rituals to *kúvító* however, they wanted to bind his head, but Simeon said that he could not allow this, and stopped with the initiation in the middle of the process. Then he fell ill.
>
> We went to consult a *bokonon* – not our father, though he is also a *bokonon*, for one does not see clearly if one divines on behalf one's own child – and the *bokonon* said that Simeon started something which he did not finish. You cannot be halfway initiated into the *kúvító* society. So Simeon completed the initiation rituals in the *kúvító* society of Kinta, where he did not need to bind his head. But he did not recover; the *àzetó* had already been able to attack him because he made a mistake.
>
> We wanted to take Simeon to church, but he refused, saying that he does not believe that his disease is spiritual. Therefore he also did not want us to perform *vodun* rituals on his behalf. He believed that Kérékou tried to harm him with a machine, and demanded to see the government in Cotonou. So we cheated him, took him to Cotonou, and started to treat him with medicine. Then he also accepted that we perform rituals on him.
>
> Hence Simeon became ill because he was not careful with the occult powers and because the *àzetó* sent him something when we disputed the land. The people in the village say that Simeon became ill when he became too deeply involved with occult powers." (Augustin, Lissazounme 19-7-1990)

During his trade journeys, and later during his disease, Simeon's land was cultivated by his wife and by his younger brothers. Early in 1991 Simeon felt a bit better, returned to Lissazounme, and started to help them a little on his own land.

### *Hunon's sons Augustin (1962) and Didier (1965): itinerant amansinsató*

Augustin and Didier performed wage labour in and around the village on off-school days to feed Simeon's wife and children, besides working his land. Didier ridged for wages, carried commodities to the Kinta train station on Augustin's bike, and cut hair for a small reward.

He used part of his income to buy clothes for himself and to raise pigs and poultry. Both boys successfully passed the BEPC exams after the fourth year of the secondary school.

But from the late 1980s onwards, Hunon could not afford his sons' school fees anymore, and Didier and Augustin became magic charm- and *amansin* traders in Togo, a business which they had learned from their father. In between their journeys they continued to till Simeon's land with the help of his wife.

Augustin was initially quite successful in the *amansin* business. But at the end of 1989, when Simeon was sent for psychiatric treatment to Cotonou because his health deteriorated, Augustin had to join his brother to nurse him. Didier stayed in Lissazounme to ridge Simeon's land. In April 1990 Simeon felt a bit better, and after the initial land clearance, Didier and Augustin left for another trade journey to Togo. Augustin returned after two months with 119,000 FCFA and said:

> "We people from Lissazounme prefer to travel rather than to cultivate all our land. The villages Lissazounme and Zounzonme are the capitals of a regional association, named Awinon, for traditional pharmacopoeia. My brother and I use to travel to Togo, and recently also to Ivory Coast, to sell medicine. I sell medicine on the base of natural ingredients – which I buy, I don't gather them myself – and I also sell medicine based on spiritual powers, depending on what the customers want. But if the disease of a patient is of spiritual nature, he cannot be healed with leaves alone. In such cases we propose a spiritual treatment. But some customers, for example Muslims, are reluctant to take medicine which has been consecrated to the powers of the *vodun* or on which incantations have been pronounced. Therefore we can heal better in the regions of the *vodun* [i.e. animist] cult, like Togo, Ivory Coast, Burkina Faso and Cameroon. Didier and I want to attempt trading in Cameroon now.
>
> We just return from a journey to Togo. I travelled for 58 days and earned 140,000 FCFA in that time. On my journey home I stopped in Lomé, where the association of traditional healers celebrated the anniversary of its official recognition by the Togolese government, more than 40 years ago. But it was already active in Togo before it was recognised. Though I was not obliged to do this, I contributed 10,000 FCFA to the celebrations. But the senior healers in Lomé are happy when they see the young ones. They themselves cannot travel far anymore and cannot earn much anymore, as the young ones can. Therefore, when we give them something they feel that they have not been forgotten. The seniors are also of some use for us to learn the profession, but not very much. My travel expenditures amounted to 11,000 FCFA, therefore I came home with 119,000 FCFA." (Augustin, Lissazounme 18-7-1990)

His brother Didier added:

> "Augustin and I now prepare a journey to Cameroon, where there are not yet many healers-herbalists from among us. We don't know yet if we will sell much, it is a risk we take. I became herbalist because there are no jobs in Bénin anymore". (Didier, Lissazounme 18-7-1990)

Box 2: Fon magic charm business seen from Accra and Lomé

Victor Olympio lived in Accra during the 1950s, used to spend his summer holidays with his (upper class) relatives in Lomé during the 1960s, and told me:

"Many Dahomeans came to Ghana during the 1950s when I was a kid. They did dirty jobs in town and hoed weeds in the cocoa plantations, and in their free time they sold hair dye and magic charms. We Ghanaians said that the Dahomeans had magic charms that gave them the strength to do jobs like emptying latrines without letting the buckets fall down. One day I saw a Dahomean and a Hausa shit-carrier competing whose charms were stronger by chanting incantations towards each other.

From 1962 to 1970 I spent my summer holidays in Lomé. Almost all the Fon there sold magic charms and ingredients for charms: skulls and the like. Some were also *bokonon*. I only saw Fon from the Abomey region, and no people from other ethnic groups, engage in this trade.

> Those who sold ingredients for charms sat in the marketplace. The others went from house to house with wooden boxes in which they had their charms, asked whether people had certain diseases, and told them that they had the proper stuff to cure it. They also came to our house. Sometimes they had to go back to Abomey to get the necessary ingredients for their cures and to see their leaders. I was told that before 1960 they carried their charms in calabashes. I have the impression that in the 1980s the Loméans also entered this trade because they see it is doing well." (Victor Olympio, Kana-Dodome 7 October 1989)

***Farming lineage heads 1953-1970***

From 1953 onwards the lineage had many successive lineage heads who all combined their priestly tasks with farming in Lissazounme. None of them remained *daa* long enough to accumulate through this position. The lineage continued to manage the *kpawugle* and the palms on them as lineage property and give the oil to the *daa* throughout the 20th century in the same way as described in 6.2.1, 6.2.2 and 6.5.2[25]. But after 1960 the oil yield of the *hɛnudeju* started to decline because the palms became old, some palms died, and some very old ones were 'killed' because they risked falling on the houses. The lineage planted only few new palms, the main reason which several members advanced for this was that they then built many new houses on the *kpawugle*. The lineage spent a good proportion of its declining communal oil yield on the expensive consecration ceremonies for new *daa*, which were frequent during those years.

***Ajidé (1905): farmer and briefly priest-lineage head***

I will expand a little on lineage head Ajidé. His principal activity was agriculture. Until about 1970 he mainly grew maize, pearl millet and cowpeas, of which he also sold substantial amounts: according to his son Hwèto around two thirds of his harvest in the 1940s, and still half of it in the 1960s when the number of mouths in his household had increased, but this was probably a slightly exaggerated description of 'good old times'. After his consecration as *daa* around 1970 he expanded his groundnut areas in the intention to sell them[26]. Like Hunayiji he stored his first season groundnuts for some months and sold them as if they were second season ones. The yield of the lineage oil palm grove did not suffice for lineage rituals anymore during Ajidé's reign; therefore he used the revenues of his groundnut sales to purchase the goats and other things which he needed for the annual sacrifices to the ancestors.

Ajidé's three sons continued to till his land almost daily until their father's death in 1981, also after the marriages of the younger sons in the 1960s. Also Ajidé's two sons in law helped him on his fields. This was quite exceptional, only few married Fon on the plateau still worked for their father or father-in-law on a regular base by the 1960s. Ajidé only gave each of his three sons a fairly large[27] 'afternoon field' (*gbadagle*) where they could work after finishing the day's task for father, from around the time the two youngest married. The sons were about 30-35 years then, which was very late; most Fon boys received *gbadagle* by the age of 17-20. Ajidé never employed wage labourers, but occasionally someone ridged his land in exchange for the head tax; this would have been in the 'time of the earthquake' (probably the 1950s) according to his son Hwèto[28].

Under Ajidé's priesthood the Lisa cult was hindered by government restrictions. The 'Marxist' regime tried to fell the sacred forest of Lisa and forbade initiations longer than 3 months. This was not enough to initiate a *Lisasi*. The number of new initiates declined, and likewise did Ajidé's revenues as priest.

Ajidé died around 1981. The position of *daa* remained vacant for six years because the Lisanon first had to accumulate money for the enstoolment ceremonies; the oil yields on the lineage commons, destined for such ceremonies, had become very low. In the dry season 1987-88 they consecrated Lohotogbe, who died exactly one year later. Some Lisanon members openly started to question the principle, still adhered by their and many other Fon lineages, to appoint the eldest lineage member as *daa*, and argued that other lineages, especially the princely ones, already abandoned this custom[29]. At the end of my fieldwork (March 1991), they were still saving money to enstool their eldest man, Tafotan.

***Hwèto (1933) and Gilles (1937): poor farmers and wage labourers***

Ajidé's sons Hwèto (1933) and Gilles (1937) were socio-economically unsuccessful, though Hwèto had a reasonable amount of land. They were poor farmers and performed at the time of my research some wage labour in Lissazounme. Hwèto had neither wife nor children[30], and also made mats, brooms and baskets, which is a poor man's craft. Gilles was known as a drunkard who was fed by his wife. The middle son Luc (1934) became a farmer in the hamlet Oungbeoundo 1 km from Lissazounme, and had very little contact with his lineage in Lissazounme.

In the dry seasons Hwèto engaged in palm oil production and basketry since he was about 14 (1947), and since the 1960s also in agricultural wage labour. Basketry was and is considered a poor man's job. The raw material, oil palm leaves and branches, could be gathered freely in other people's oil palm plantations. According to Hwèto basketry was never as profitable as agriculture, even though mats and baskets have become relatively more expensive over the years. (Lissazounme December 1989).

Around the age of 30 Hwèto received a *gbadagle* of slightly more than 1 ha (9-12 *glegban*) from his father, were he grew mainly maize and pearl millet (3 *glegban* each) and also some sorghum, cowpeas, groundnuts and sometimes bambara groundnuts[31]. Until the death of his mother in 1970 he gave her the harvest from his field and she cooked for him. He also gave his revenues from baskets and palm oil processing to his father to buy sauce ingredients. This was quite exceptional, most adolescent Fon boys kept the largest part of their incomes from *gbadagle*, crafts, trade and wage labour for themselves and gave only occasionally a little to their mother[32].

When his father died in 1981 Hwèto inherited about 3.25 ha. Hwèto's primary goal remained self-sufficiency in staples, as also his father's had been. Few other plateau Fon placed so much priority on staple crops. He said about his farm:

> "I grow every year maize and cowpeas on my *kpawugle*. Ridges with maize and with cowpeas alternate each other. To have food I cultivate the same things every year. I only grow crops of first necessity, and only rarely groundnuts on my *kpawugle*". (Lissazounme 30-5-1989).

He almost managed to reach his target of self-sufficiency in cereals, due to his, for a single man, fairly large landholdings. Hwèto's own maize harvest lasted for a longer time than that of most other Lissazounme farmers whom I know. Only since the 1980s, and only in years when his yields were low, he had to buy some cereals. He was also one of the few lineage members who reserved part of his harvest for sowing. He found chemical fertiliser too expensive and never used it.

After the death of his mother in 1970, his brother Gilles' wife Seko and her daughters started to perform female chores for him. Seko cooked for him, and Hwèto said that he gave her market money. In 1990 one of Gilles and Seko's daughters, the 13 year old Josine,

regularly washed Hwèto's clothes. Seko and her daughters also helped Hwèto a little on the land and in palm oil preparation, especially with the female tasks of sowing, boiling palm nuts and skimming oil from the mixture of pounded nuts with water, and occasionally also with ridging. His brother Gilles ridged Hwèto's land 3 times in 1990. Hwèto's uterine sister Adoton, who was married in the village to a Segbeji, and her sons Alex (1965) and Thierry (1975) assisted with several other tasks on Hwèto's land, and Thierry also helped him in basketry. (Our time allocation survey).

At the time of my research Hwèto's hut, furniture and clothing were poor compared to those of most other Lisanon, only his landholdings were reasonable. In 1989 he still owned the 3.25 ha, all planted with oil palms and within 1 km from the village. Of these 3.25 ha he lent in total 1 ha to a 'cousin' and to another person. "The two tenants give me as a free gift 8-10 measures (20-25 kg) of their harvest" he said. He cultivated the remaining 2.25 ha himself with a little help from his sister Adoton, brother Gilles, brother's wife Seko, their children, his *sò* (labour exchange group) whose other members were Lisanon women. During the 1980s he engaged wage labour for about three labour days per year to ridge his fields, while Hwèto himself spent more time in basketry and pounding palm fruit for wages than on his own fields.

In 1990 he gathered almost daily palm leaves and branches or made mats, brooms, ropes and baskets. His second activity was wage labour in the fields and the palm oil industries of others. Since the early 1980s he regularly pounded palm fruit for wages for Lisanon women and sometimes men when they wanted to prepare palm oil, mainly for his father's brother's son Barnabé's wife Elise, occasionally for his father's brother, Kamille, and for other Lisanon women. In 1990 he spent 35 mornings trampling palm fruit in the *deto*[33], each time about one *gbali* (barrel containing ca. 200 l), for which he was paid about 200 FCFA per *gbali*. Since the 1970s he cleared and ridged occasionally for wages for Lisanon men and women and for farmers in neighbouring villages, amongst others for Barnabé Lisanon's wife Elise[34]. Together with his FBSS Fernand and some male Lisasi (*vodunsi* of Lisa) from other lineages, Hwèto played the drums and bells *gongong* during the lineage's *teđuđu* sacrifice of yam first fruits to their *vodun* Lisa (own observations in 1990).

Ajidé's youngest son Gilles (1937) was known as a poor drunkard. He also pounded palm fruit for wages for Elise and other Lisanon women and worked a little on his fields around the village, but he did not care much about his land. Most of the work on his fields was done by his wife Sekofole and by their children. Before continuing with Gilles's son Henry I will first present some other men of the older generations.

***Kamille (1930): rich weaver, farmer, amansinsató and sodabi producer***

Hunayiji's son Kamille was one of the more successful men in the village and a central figure in several people's social networks. This is a good reason to present him early in this case study. Kamille's mother was a 'daughter' of Kahun and a cross cousin (FFZSSD) of her husband (Figures 8 and 9 in Appendix 2)[35]. She died when Kamille was still young. He grew up with his father's wife Gboju. As a teenager in the 1940s he cultivated for his 'parents' in the village. Besides farming he learned a little French from a former secretary of the colonial administration; from his father Hunayiji he learned how to produce and trade magic charms, *nuwanu* and *amansin*, and around the age of 20 Kamille learned the craft of weaver. This was during or just after the Second World War, when imported cloths were scarce and of low quality, see 7.1.4. But after the war imports of cheap fabric resumed and the demand for manual weaving declined. Kamille did not weave often anymore.

Towards 1950, Kamille was not yet married; he started to trade *amansin* and *nuwanu* in Lomé, Cotonou and Accra. He used to go on journeys of 1-2 months each, interrupted by a few days at home, probably often together with his FFBSSS Tafotan who also sold *nuwanu* in Accra and Lomé around that time (see below under Tafotan). Hunayiji and Hunyon introduced him into Awinon healers' association, were he learned more about the healing business. He also exchanged knowledge on magic charms with non-members such as his fellow villager Pierre Ahovi, whose life history I presented elsewhere (Wartena 2001:251).

When his father Hunayiji died, around 1953, the lineage elders decided that Kamille should marry the widow Gboju. Kamille did not want this because he considered her to be his mother, but he could not oppose the elders. He inherited at least 5-6 ha from his father and 1 ha from his mother[36]. In the rainy seasons he cultivated his fields with his *so* (labour exchange group) and helped by his wives and children, and in the dry seasons he traded *nuwanu* and *amansin*. He married additional wives in 1958, 1970 and 1983.

Around 1960 Kamille started to produce *sodabi* with the help of his wives, and to work a little as a bricklayer. To distil *sodabi* he purchased oil palms towards the edges of the plateau, where Fon farmers hesitated less to 'kill' palms than in the traditionalist centre, and he felled some of the many palms that he inherited. He also harvested much palm fruit from his own palms, and sometimes from those that he purchased for felling. He engaged his elder brother Hwèto to pound the palm fruit for him for wages, and let his wives prepare palm oil in exchange for a few bottles of it.

During the 1960s Kamille combined bricklaying, *sodabi*- and oil production with agriculture and his *amansin*- and *nuwanu* trade. According to himself his off-farm activities were always more profitable than farming and since 1960 he spent more time in *sodabi* production and bricklaying than in the field. The reverse to this medal was that since the 1960s Kamille's cereal harvest did not suffice to feed his wives and children anymore, in spite of his fairly large landholdings. Each year they purchased sorghum in addition, which was cheaper than maize but stigmatised as poor man's food. In the late 1980s his average maize harvest fed the household for only two months a year. From about 1975 he also ceased to reserve part of his maize-, cowpea and groundnut harvest for seed.

In the early 1970s Kamille abandoned his *amansin*- and *nuwanu* trade to concentrate on *sodabi* and agriculture alone, because his increasing responsibilities at home were difficult to combine with long journeys abroad. According to his wife Elimɛ:

> "My husband now stays at home because of his responsibilities for the village and the family, and also because he prospers with producing *sodabi*. However, selling *nuwanu* would be at least as rewarding as *sodabi* production. *Nuwanu* pays well and therefore more and more people give themselves to this trade. Its profitability is increasing because its traders create new outlets by going to Lagos, Lomé, Kara in northern Togo, Ivory Coast, Burkina Faso etc." (Lissazounme 10-10-1989)

Since the early 1970s Kamille's number of children grew, and his two eldest sons started to cause him trouble. The first son went to Nigeria, left his son Marcel with Kamille, and never came home anymore. The second became a criminal (see Kamille's account on his eldest sons in 7.1 under '*chefs*'). In 1974, when Kérékou's government replaced the *chefs de village* by *délégué*'s, Kamille was elected *délégué* of Lissazounme, an influential position which required him to stay in the village.

In the same year 1974 Kamille did not feel well. He consulted a *bokonon* (diviner), who advised him not to eat sorghum and not to ridge himself anymore. His wives started to cook

two separate dishes, one from maize for Kamille and one from sorghum for the children and themselves. From then onwards Kamille only cleared, sowed, weeded and maintained his oil palms himself. The ridging was done by his children, his three youngest wives, his son's son Marcel, and occasionally by his brother Hwèto and by wage labourers. During the 1980s he engaged more wage labour, for about 20-30 days per year. His first wife Gboju had her own plot of 4 *kantin* and ceased to ridge for Kamille in 1970. In 1984 he also gave a *gbadagle* of 5 *kantin* to his second wife Mɛwi and liberated her from tillage duties. Later Kamille also gave a *gbadagle* to his third son Fernand. In 1990 Fernand, Marcel, his two youngest wives, and his daughter Irma (born 1975) were his principal farm helpers.

The third wife Elimɛ had a *gbadagle* of 5 *kantin* from her grandmother, and in order to avoid jealousy of her co-wives she never asked her husband for land. The co-wives already envied her because she had the greatest number of children and for this reason received more maize and sorghum from Kamille to feed them all. The three other wives did not dare to voice their grievance to Kamille, instead they withdrew from helping on his land, pretending to feel sick when he asked them to sow, weed or harvest his fields. Elimɛ also carried more often firewood and prepared more palm oil for him than her co-wives. After 20 years of marriage Elimɛ still worked more for him than the three others together, more even than her younger co-wife who should according to Fon custom take over part of the senior wives' labour duties. She did so to quench the jealousy of her co-wives and because she liked agriculture more than they did.

The youngest wife Hoonon helped her husband most of all wives to distil *sodabi*, a relatively easy task where she could keep his company, and sold it for him. Kamille himself, at the time of my fieldwork, extracted almost daily palm wine with the help of his grandson Marcel and distilled it with Hoonon. It is not uncommon to see youngest wives working in company of their husband most of the time. All in all, the total number of days that each of Kamille's wives worked for their husband, was related to their seniority, as customary among the Fon[37].

Kamille sent all his children to school, and when his adolescent sons abandoned class he let them do apprenticeships, because he believed that his land was insufficient and too poor to provide a living to all his sons. In 1989 his son Fernand failed for the second time for the CEFEB (final exams of the primary school), and Kamille paid him a place as apprentice in mechanics in Abomey. With him Kamille lost his principal farm labourer, but he commented:

> "We try to put all our children in school. But some children do not progress well in school and give up. We do not fear that we will lack children to help us on the field; instead we send our children to do apprenticeships because we see that the land is poor and will not be sufficient for all our children. When my son Fernand becomes an apprentice I will have to engage wage labourers, but I prefer that he learns a craft."[38]

His wives' *gbadagle* were situated near the houses, his own fields about 1 km form there. Therefore the wives manured their fields with household waste and grew mainly maize for own consumption; the second wife (Mɛwi) also some cowpeas for sale on her own account. The third wife Elimɛ earned pocket money with palm oil production and petty trade in the village. She sold snacks and retailed maize, cowpeas, beer, sauce ingredients and vegetables; the latter as well as some early maize from the Couffo floodplains at her grandmother's village Sahè. Hwèto and his brother Gilles pounded the palm fruit for her for wages. Her own and Kamille's brother Gaspard's children assisted her in all other tasks.

***Barnabé (1942): teacher***

Barnabé went to school in Abomey. When his father Hunayiji died around 1953 the about 11 year old Barnabé inherited father's wife Elise and a portion of his land, but was able to pursue his education in secondary school and in teacher training college. In the 1960s he was a schoolteacher in Kandi (northern Dahomey) while his wife Elise stayed in Lissazounme, farmed his land, and received financial support from him. Elise became an influential woman in Lissazounme, I will devote a separate section to her. From 1958 to 1965 Barnabé cared for his orphaned father's brother's son Dorothé, born around 1952, entrusted him to Elise, and let him go to the new primary school of Lissazounme.

During the first half of the 1970s Barnabé would have been the first director of the secondary school in Abomey in Ahouaga quarter[39], while he lived in Lissazounme. From the nationalisation of all private schools in November 1974 (Allen et al 1989:35, 106) Barnabé became a teacher and later director of the renowned 'Collège du Père Aupiais' in Cotonou, and took his second wife Louise and all his children with him to school there. From Cotonou he sent money to support his mother Ayonu (see 6.3.4) and to build a brick house in Lissazounme, where he lodged his mother and intended to spend his old age himself. But during the first 9 months that the children were with him he did not send money anymore to Elise, until his elder brother Kamille and other Lisanon men rebuked him:

> "If you don't support your inherited wife you will attract misfortune. And when you ask the *bokonon* for the reason he will say that it is because you neglected the inherited wife. You may neglect the wife whom you chose yourself and for whom you paid the bridewealth yourself, but you have to support the wife you inherited because you did not pay bridewealth for her". (Laure Lisanon, Lissazounme 12-12-90).

His first son Jules became a University student in Germany, his first daughter Laure a trader in Cotonou and later in Lissazounme, and his second daughter Gisele a hairdresser in Cotonou. Dorothé became a teacher and farmer in Ouinhi (northern Ouémé province), and took care of several Lisanon children besides his own who went to school with him there.

***Tafotan (1923): tailor, farmer, nuwanu trader***

When Tafotan's mother was pregnant of him, his FZS Hunon predicted that she would have a boy who would become a *vodunsi* of Lɛgba and guard the *Lisakpamɛ*. So Tafotan was initiated as *vodunsi* and started to assist the consecutive *vodunon* of Lisa in their tasks. He also became a member of Awinon healers' association, like his father Hunyon and Hunayiji. Through the *Lisakpamɛ* and the association he learned to fabricate magic charms and to trade them abroad.

Tafotan finished his tailoring apprenticeship in 1946 and married his first wife. As a young man he worked as a tailor on the market of Agbangnizoun, 6 km from Lissazounme, where he spent the nights. He also farmed a little in the village, and his wife helped with all farm tasks.

But in the 1950s or 1960s second hand clothes from Europe started to flood Dahomean markets. He abandoned tailoring and started to travel regularly to Lomé and Accra to sell *nuwanu*, probably often together with Kamille (see above), and farmed his land in Lissazounme in between his commercial journeys. His first wife died around 1960 and he married Dansi, who also helped him with all farm tasks, but received no *gbadagle* from him. His five sons and three daughters also helped on the land, the four schoolboys at least on off-school days. Since the 1960s he engaged every year about 20-30 wage labour days for ridging.

According to Tafotan the *nuwanu* trade was more profitable than agriculture. Around 1977 he ceased to travel long distances because of his age and his family responsibilities, but he continued to sell *nuwanu* in the neighbourhood. According to himself his *nuwanu* business remained more important than his farming in terms of labour time and income derive from it throughout the 1980s.

Tafotan inherited at least 2½-3 ha around the village from his father, which he all planted with oil palms. On the one hand he considered his land too much to farm with his wife; on the other hand he hardly ever harvested enough cereals to feed his family the year round, not even in the 1950s. Since about 1960 he also ceased to store his own maize, cowpeas and groundnuts for seed. Besides these he grew sorghum and until 1960 pearl millet in those palm groves that the family managed to till. According to other Lisanon men Tafotan was not a skilled farmer because he had travelled a lot. According to himself agriculture was never his principal activity.

In 1983 Tafotan gave 10 *kantin* (0.6 ha) as a *gbadagle* to his fourth son Pascal (1962). His other four sons were working in town. In 1990 the second was a policeman in Cotonou, the third a schoolteacher in Glazoué, the fifth was still an apprentice in Agbangnizoun, and the first and only one who did not go to school was a *sodabi* producer and/or farmer in Nigeria. Pascal also continued to cultivate his father's fields, who assigned him each season about 5 *kantin* to ridge for father before he was allowed to cultivate his *gbadagle*. Later Tafotan gave another plot to Nagbevo, the wife of his eldest son. But he still had too much to keep his oil palm plantations free from weeds. Since he feared that the palms would catch fire he lent out some plots to strangers. The problem of bush fires in Fon oil palm groves and the Fon's permanent-cropping strategies to cope with it were already discussed in 6.5.2.

> "I don't have money to engage wage labourers to cultivate all my land and I cannot sell it. The family will beat you if you sell the land that you inherited; at most you can sell land which you purchased yourself.
>
> Therefore I lend out parts of my inherited land to people who cultivate it to protect my oil palms, for there are oil palms on all my fields. If someone clears and cultivates and maintains and protects our palm plantation we consider this as our salary. But if he destroys young palms you have to chase him from the land. One does not actively search people who want to borrow land; those who don't have inherited land come by themselves."[40]

Since the 1970s Tafotan lent about 1 ha to Norbert from the neighbouring lineage Segbeji, who gave half of it in 1983 as a *gbadagle* to his sons Nazer and Clautaire. The *gbadagle* of the sons was poor and infested by *Striga hermonthica*. Custom demanded that the sons give a few kg of their harvest as a 'free' gift to the owner of the land, but they knew there was no need to give much for such a poor plot. Clautaire said:

> "In the first and the second year I gave Tafotan 4 kg of the maize I harvested. Because I was good for Tafotan he added to me one *kantin*, so that I have 9 *kantin* now (about 0.5 ha). But since then I did not give him anything anymore. In 1989 I harvested 3 bags of groundnuts but gave nothing to Tafotan. But if the harvest is good this year I will give something to him. In our village you don't need to give part of your harvest to the owner of the land. But if he is good to you, you will give to him. If you give to him he will not quickly chase you from the land."[41]

When Lohotogbe died in the dry season 1988-89 Tafotan, who was now the lineage eldest, was designed to succeed him as *daa* and priest. But the money for the consecration ceremony was again lacking. At the end of my fieldwork Tafotan was still waiting to be installed. In the mean time he himself and Hunon, who was a *vodunsi* of Lisa and had predicted Tafotan's birth, acted as interim priests.

***Victor (1931): farmer***

Victor, the eldest of five sons of Akpamaso's son Koko, was the only living fulltime farmer of Lisanon lineage, except that he occasionally distilled sodabi. Many praised him as the most knowledgeable farmer of the lineage. From the age of 18 he cultivated a *gbadagle* of 0.6 ha, given by his father, where he grew groundnuts and cowpeas after finishing his day's task on his father's fields. Soon his younger brothers also received *gbadagle*, each of them gave part of his harvest to father. Victor sold the rest to buy his own clothes and to make gifts to his bride, Vivo from Sakla lineage in Lissazounme. His second and third brother later at Lanta and Adjahakpa on the left and right bank of the river Couffo to farm there, the fourth brother became a carpenter elsewhere and never returned to the village anymore, and the youngest brother became a well-to-do trader in and around Lissazounme.

At Victor and Vivo's marriage in 1962 he received more land and first tilled it together with her and with his labour exchange group. In 1970 he purchased 1.7 ha in addition from an *aïnon* (chief of the land) in a neighbouring village, and in 1971 he inherited 1.4 ha from his father. When he married a second wife in 1979, Lihan from Ahanyan lineage in Lissazounme, he liberated the first wife from tillage duties and let only her two eldest children (the boy Basile on off-school days) and the second wife till for him, until 1989 he never engaged wage labour. He gave 0.3 ha as gbadagle to each of his wives. From then onwards the wives first had to cook their own maize before Victor gave to them, but they were allowed to sell their groundnut and cowpea harvest on their own account.

Since 1980 Victor farmed another 1.4 ha near his house, a plot on the lineage commons that was previously cultivated by his father's deceased youngest brother Hwetugbe. Normally, Hwetugbe's sons had the first right to ask the daa for usufruct of the field, but his sons Eric (1964) and Roger (1969) cultivated near Glazoué in the north of the province. His son Hunsi (1966), even though he cleared and ridged Elise's land for a wage in April 1990, did not seem interested in the plot. In 1986 Victor allowed the CARDER to conduct fertilisation trials on maize on 0.4 ha of this lineage plot. He constituted a 'co-operative' of 22 members to cultivate the plot for this purpose. That year Victor and Kamille, who were with their wives the only other co-operative members from Lisanon lineage, also tried fertiliser at the recommended dosage on their own fields, Victor 200 kg and Kamille 300 kg. Other Lisanon members, for example Tafotan and Elise, had only been experimenting with small amounts of fertiliser on 'weak' spots of their fields. The 1986 trials failed for lack of rain, the co-operative was dissolved, and neither Victor nor any other Lisanon presented here applied fertiliser again, in spite of the fact that extensionists continued to offer it on credit to Victor 'because he had been the chairman of the co-operative'. Officially, only cotton growers and co-operatives were entitled to fertiliser on credit.

All Victor's fields contained oil palms, which he actively maintained at 200-300 mature palms per ha, depending on the soil type. He replaced unproductive or ill-spaced palms by young ones at regular densities, and kept his palm groves free of weeds by cultivating them almost permanently, or if he left them fallow he slashed the grasses in the dry season. In 1989 he obtained another palm grove of 1 ha from his mother's lineage, and lent one third of it to a member of Tobada lineage who asked for it. He preferred to lend out this plot rather than one which contained less palms, because the palms assured his own claims on the land and the tenant would help to keep bush fires out. Whenever Victor 'killed' one of

his own palms he extracted wine, distilled sodabi and sold it, but agriculture remained his principal activity. In 1990 he still tilled his land himself, assisted by his youngest wife and his labour exchange group.

In spite of his large land holdings for Lissazounme standards, Victor's household was never self-sufficient in maize. Until 1975 they filled the gap by growing pearl millet and purchasing additional maize if needed, since then they buy maize and sorghum during 6-10 months every year. Since 1978 Victor also purchased maize, groundnuts and cowpeas for seed. Sodabi production would be more profitable than farming if own palms could be used, but not from purchased palms or wine according to Victor. He saw no future in agriculture for his sons, whom he all sent to school. The eldest, Basile (1968), became an apprentice in mechanics after abandoning classes; the other boys were still too young. "None of my children wants to become a farmer, and I don't have enough land for all my sons." (Victor Lisanon, Lissazounme 28-9-1989).

***Teto's sons Prosper, Gildas and Donné (1935-45): mixed business and mixed success***

Prosper (1935), Gildas (1940) and Donné (1945) were sons of Teto, a descendant of Kahun, who married a Lisanon woman around 1800 (Figure 9a in Appendix 2). Their children were adopted into Lisanon lineage. The three brothers inherited some land in Lissazounme, but less than their age-mates from Lisanon's main branches. Prosper never farmed much but preferred to trade, first beer in Bohicon and from the 1980s *amansin* in Nigeria. Gildas and Donné farmed and worked as carpenters in Lissazounme; they learned the craft from other carpenters in the village. In 1978 Gildas and a few years later also Donné started to sell *amansin* in Lagos and other towns. They tilled their fields in between their trade journeys, and their wives and the children under their care weeded and maintained them when the men were away. (Gildas' second wife did not have children of her own, but took care of her three orphaned younger siblings). Gildas' two wives did not have *gbadagle*; they and Kamille's wife Elimɛ also retailed some of Prosper's beer in Lissazounme and received a share of the profit.

In February 1989 Gildas had a stroke, became paralysed on his right side and could not work anymore. His first wife abandoned him. From then onwards the household lived from the petty trade and farm work of his youngest wife and her orphaned siblings alone.

The cases so far show the central role of women in Lisanon's making a living. Before I continue with some young Lisanon men, I will first present some key women who were born or married in the lineage.

***Elise (1930): a successful female farmer and palm oil producer***

Elise, as we have seen, was given as a young widow around 1953 in levirate marriage to a man who did not care to live with her and did not always support her. Nevertheless she became one of the more successful women in Lissazounme and a central person in the social networks of many men and women in the village. Elise was born around 1930 as a carpenter's daughter in Segbeji lineage in Lissazounme. With her first husband Hunayiji she had two children, Gaspard and Yvette, and a *gbadagle* of almost 0.25 ha, where she grew pearl millet, maize and cowpeas for own consumption and some groundnuts for sale on her own account. Her second husband, Hunayiji's son Barnabé, let her stay in Lissazounme while he worked as a teacher in Kandi (1960s), in Abomey (1970-1974), and from 1975 in Cotonou. After being rebuked by the Lisanon men (see above) he resumed his financial

support to her again. The amount depended on the number of his children at her care and on his salary, but seems to have been quite high compared to the remittances of many other Lisanon migrants[42].

Elise cultivated Barnabé's as well as her son Gaspard's share of their father Hunayiji's land, and disposed of the harvest as she liked. Four of her five children as well as Hunayiji's brother's son Dorothé, for whom she cared, went to local schools and helped her on the land on off-school days. She also cleared and ridged herself and participated in labour exchange with her mother in law and with other Lisanon women. Her daughter Laure described their farm activities in the 1970s in the following way:

> "Mother used to go to the field at sunrise; we children followed an hour later and brought food. The boys Gaspard and Jules made the first side of the ridge and my sister Gisele and I the second side. When we had ridged a while we girls and mom started to sow while the boys continued to ridge. Sometimes Hwèto and other villagers ridged for wages. When we children went home in the afternoon mother and father's mother usually still stayed to collect firewood. Only if mom wanted to prepare palm oil in the afternoon she went home early."[43]

Elise continued to grow maize, groundnuts, cowpeas, until 1975 also pearl millet (almost all other Fon farmers abandoned pearl millet by 1960, but Elise cultivated it a little longer because of a clan-specific ritual with it), and managed the oil palms on Barnabé's and Gaspard's land on her own account. From the 1950s she replaced part of the other crops by sorghum because the fertility of her soils declined, and after 1960 she also reduced her groundnut areas in favour of food crops because she found that groundnuts became relatively cheaper than these. In 1975, when her three youngest children joined their father to school in Cotonou, she abandoned pearl millet because all the birds came into her field. Dorothé was in teacher training since the late 1960s; her daughter Yvette married outside the village in 1970, and her son Gaspard traded *amansin* in Lomé, Burkina Faso and Nigeria since 1973 and only helped her on the land in between his trade journeys. But when Gaspard married Vera (from Agonli on the eastern slopes of the Fon plateau) in 1972 and Anne (from Sakla lineage in Lissazounme) in 1982, his wives came to help Elise with all tasks on the land, in palm oil preparation and in the kitchen. From the birth of their second children, each of Gaspard's wives started their own trades (retailing *gari*, donuts, yam dishes and roasted groundnuts in the village) and prepared some palm oil on their own account, but they never bothered to ask for *gbadagle*, mainly because they did not like farming. This in spite of the fact that they were accustomed to ridge and weed their parents' fields in childhood. They continued to cook, eat and farm together with Elise until the end of my research, which was much longer than most other Fon plateau daughters in law did. Also Gaspard's children cultivated for Elise on off-school days. Occasionally she engaged wage labour to help with clearing and ridging, during the 1970s mostly Hwèto and at the time of my research mainly some members of the Akpamaso branch of Lisanon lineage: Hwetugbe's son Hunsi (1966) and Honoré's widow Tohosi. Tohosi was remarried to his son Benoit, who was a student in Cotonou and could hardly support her (Figure 9 in Appendix 2). Also three teenage sons from the marriage between Elise's brother and Hwèto's sister Adoton occasionally farmed for Elise, sometimes for wages, at other times for groundnuts or a meal, and they could call on Elise's help in times of need. During the 1970s Elise had so much farm labour at her disposal that she borrowed additional plots from strangers. In spite of this since the 1970s her cereal harvest did not suffice for home consumption anymore, mainly because her land became too poor to grow maize except on the manured *kpawugle*[44]. She purchased maize

and sorghum in addition. In the later 1980s Gaspard's youngest wife Anne fell ill. In 1990 she recovered but his first wife Vera was pregnant and could not till much, Elise's own strength started to decline, and soil depletion made farming with wage labourers less and less profitable. Elise could not cultivate all her land anymore, but because she feared that the oil palms would catch fire if fallow grasses were allowed to grow she lent some plots to women in a neighbouring village. These women gave Elise a few kg of their groundnut harvest as a 'free' gift and sold the rest to her daughter Laure, who roasted them and retailed them in the village, alongside other goods.

Throughout her life Elise prepared palm oil for sale. As a girl she did so for her mother, as Hunayiji's wife mainly for him, and as Barnabé's wife on her own account. She harvested the fruit of the many palms on Barnabé's and Gaspard's land with the help of her own, Gaspard's and Adoton's sons, and of wage labourers, and purchased palm fruit in addition. Fon palm fruit was mainly harvested and processed in the dry season from December to March. Cracking kernels could be done at slack moments, for example in the evenings while chatting with household members and visitors. Therefore, Fon palm fruit processing hardly interfered with cultivating annual crops. Sometimes Elise pooled her fruit with that of Kamille's wife Elimɛ to fill a *gbali* (barrel of 200 l), which was the standard boiling vessel and -unit for one preparation. One time the whole produce would be for Elise, the next time for Elimɛ. From March 1990 to March 1991 Elise prepared one barrel of palm fruit almost every four days. Until 1980 she used to pound the fruit herself; then she started to pay poor men from the lineage to do this, mainly Hwèto and in 1990-1991 also his brother Gilles, Akpamaso's descendants Hunsi and Jisosi, and Kamille's son Fernand. She did the rest of the work herself with the free help of her daughter and son's wives and daughters; and all the small children in her household cracked nuts. Vera and Anne preferred to fulfil their labour duties towards their mother in law by processing palm fruit rather by farming, and Laure was capable and willing to prepare oil for her mother but not to till the soil. Occasionally poor Lisanon women worked for Elise for a small reward in kind or cash, depending on the customary Fon payment for each task: oil cake for extracting nuts from the *deto*, oil for skimming off oil, coins for cracking nuts, and shells for sifting shells and kernels after cracking. In 1990 the work on Elise's kernels was mainly done by Kamille's first wife Gboju and by the widows of Awí and Honoré Lisanon (descendants of Alakpato and Akpamaso), who were not so well cared for by the men who inherited them. According to Elise until the 1970s palm oil production and -trade was more profitable than agriculture on the Fon plateau, after that it was the other way round because the yields of local oil palms declined.

From 1983 to 1988 Elise manufactured *afintin*, a spice from *Parkia biglobosa* seeds, instead of palm oil. Some Lissazounme women discovered that the boiling water of these seeds, a by-product of *afintin*, was a good organic fertiliser and eradicated striga (*Striga hermonthica*, a weed that parasites on maize and sorghum, especially on poor soils) from infested fields. *Afintin* also fetched a good price on local markets. Hence more and more Lissazounme women produced the spice. Elise's daughter Laure, who lived with her father Barnabé in Cotonou, sold the product in town and shared the profits with her mother. In 1988 however Elise ceased to produce *afintin* because the work became too hard for her and because Laure moved back to Lissazounme and could no longer sell in Cotonou. From then Elise took up palm oil production again to have a regular monetary income, something to do in slack hours, and because it was easier to mobilise unpaid or cheap labour for her palm oil industry than for her field.

***Laure (1966): trader***

Laure abandoned classes halfway the secondary school and became a trader in Cotonou, while still living with her father Barnabé. In 1988 she became pregnant, and Barnabé decided that she should stay in Lissazounme until the father of her child would pay the bridewealth. Most other Fon girls in the 1980s were allowed to live with their boyfriend after a first instalment of the bridewealth and his promise to pay the rest. But Barnabé was strict partly because he would have to share Laure's bridewealth not only with her mother, as customary among the Fon, but also with his brothers Kamille and Gaspard because he did not pay bridewealth for Elise but inherited her.

In Lissazounme, Laure opened a small shop in Elise's hut where she retailed all the common foods (maize, sorghum, gari, palm oil and other sauce ingredients), soap, kerosene, industrial medicine and sometimes *amansin*. Children of Gaspard, of Kamille, of Tafotan's son, of Alakpato's son Awí, and of Ajidé's daughter Adoton, especially the girls, a few women married in the lineage, and her brother Gaspard helped her in trade. They carried commodities from the Abomey and Bohicon markets to the village, staffed the shop when Laure was on the market or prepared palm oil for her mother, and the girls also vended Laure's merchandise from door to door. They received very small rewards for this. Only once in 1990 Laure had to engage a wage labourer to transport goods from the market. When she sat in her shop herself, Laure cracked palm kernels for her mother free of charge.

Laure was not an experienced farmer anymore. Her mother once offered her to take as much of her land as she wanted to farm on her own account, but Laure believed that it would not pay to engage wage labourers on the poor soils around the village. From May 1989 to March 1991 I engaged her as a cook and research assistant.

***Gaspard (1950): tailor and amansinsató***

Gaspard, Elise's son, went to school during some years and then became a tailor apprentice in Lomé. He worked as a tailor until his first wife Vera gave birth to her first child in 1973. Then he looked for a more rewarding occupation. He left his land and family under the experienced management of his mother, and went to sell magic charms and *amansin*, first in Nigeria and later in Burkina Faso and in Lomé. Gaspard told me that he searched most of the plant ingredients for his *amansin* himself, put his *médicaments* in a box, and went around giving explanations and selling them (Gaspard Lisanon, Lissazounme 19-10-1989). But according to his son he usually purchased the ingredients on the market of Abomey, like also most other *amansinsató* did.

Gaspard's trade journeys usually took 30-45 days, interrupted by 10-15 days in Lissazounme. If trade had been successful he gave some money to his wives and his mother. When at home he helped his mother a little on the land, and carried palm bunches for her and commodities for his sister Laure on his motorbike. He was not an experienced farmer and his two wives did not like agriculture. Therefore he was glad that his mother managed the farm. Mother Elise let her daughters in law cook in turns from the harvest for the whole household.

***Pascal (1962) and Henry (1965): farmers and amansinsató***

Pascal was the only of Tafotan's five sons who stayed part-time in the village. At the age of 10, while still going to the village school, Pascal started to raise poultry. In 1981 or 1983 his father gave him a *gbadagle* of 10 *kantin*, where he worked after finishing his task on father's fields. In 1988 Pascal started to sell *amansin* abroad in the dry seasons. But he still

farmed his *gbadagle* and his father's fields in the rainy seasons. He gave part of his trade revenues to his parents and used another part to pay the bridewealth for his first wife.

Henry (1965), the eldest son of Ajidé's son Gilles, went to school for 8 years. After school he cultivated for his father and occasionally ridged for wages to buy his own clothes. In the early 1980s he considered himself old enough to have a *gbadagle*, but his drunken father did not care to give him one. Henry decided to take himself a large piece of father's land. Neither his father nor his mother prevented him from doing so. He now ceased to ridge for his father, but he gave part of his own harvest to his parents:

> "I took 30 *kantin* (1.8 ha) from father because I need land to cultivate, he did not give it to me as *gbadagle*, I just took it. I ridge myself and I pay people to ridge for me. I use the harvest for three purposes: one part for my parents, one part for seed and one part for my own needs." (Henry Lisanon, Lissazounme 1990).

In 1985 Henry too entered the business of itinerant *amansinsató*, trading herbal- and magic medicine in town. He sent part of the money he earned as herbalist to his parents, and in between his journeys he farmed his *gbadagle* in Lissazounme.

***Fernand (1971): apprentice mechanic, amansinsató and unwilling bridegroom***

Soon after Fernand started his apprenticeship in 1989, his father planned to marry him to a cross cousin, a daughter of Victor's sister, who was promised in marriage to Kamille's family from birth. Kamille met her parents at a funeral in April 1990 and was reminded of the promise. A few days later he sent Elimɛ to buy the things for the *agban kpevi* (the first part of the bridewealth). He and Elimɛ brought the gifts to the bride Regina and her father and asked for her hand: '*n na da hwɛ*', which means literally 'I want to marry you' but customarily means 'I want you as a wife for someone in my family'. Regina agreed. Kamille went himself to buy the things for the *agban đaxó* (principal bridewealth), and Hoonon, Elise and his friend Jokotan brought the gifts to the bride and her family.

Fernand knew that his father planned to marry him but did not know when; he thought it would be after finishing his apprenticeship so that he could feed his wife. He also feared that she would not respect him if he would not feed her. His fears seemed to be well founded, for from her arrival in Lissazounme on 14 October 1990 Regina continued to complain that the food in Kamille's house was poor. The first night that Fernand wanted to sleep with her, she gave him a severe beating and injured his knee, saying: "I don't want to marry you, I want your father. It was he who came and said 'I want to marry you'." The next day Fernand came to my house limping and lamented "If things are like this, there are enough other girls in Abomey". But the old Kamille did not want another wife for himself, besides this Fon custom did not allow him to marry a wife who slept with his son before.

Two weeks after the wedding Fernand started to pound palm fruit for Elise for wages to be able to feed his wife himself. Then he decided to seek more profitable occupations, even if for this he had to abandon his apprenticeship, which would disappoint his father. Early in January 1991 Fernand left his master and went abroad to sell *amansin*. He planned to return in the rainy season to ridge his 'own' field and those of others for wages. Afterwards he would go again to sell *amansin*. Though Fernand said that he preferred to be a mechanic, he knew that agriculture and *amansin*-trade would give him more immediate returns.

Regina did not want to be the farming wife of an itinerant *amansinsató*. She ran away a few weeks after her marriage. Laure said: "Today Regina returned home. This morning I still saw her and she did not tell me anything. She tried to take her wedding gift and to

leave quietly on foot. The people in the house refused her to take the wedding gift but did not stop her from walking out of the village. Theophile Segbeji saw her on the road and brought her to her village on his moped. When Regina arrived home, she told her parents that the Lisanon don't give her anything to eat, that she wants to celebrate the New Year with her boyfriend, and that she does not want to go back to Lissazounme" (Lissazounme 19-12-90).

## Changes in Lisanon men's principal livelihood activities during the 20th century

A comparison between Lisanon and the other families discussed in section 8.1 shows that Lisanon's livelihood portfolios and changes in these were fairly representative for Lissazounme, at least for the families that I studied in their village, except that Lisanon had slightly more school teachers and Segbeji many carpenters. Lisanon and Ahovi were initially the villages' trendsetters in peddling 'medicine' and magic charms, but soon the men from other lineages engaged as much in this trade as they did.

Like other Lissazounmeans, Lisanon men abandoned farming little by little during the 20th century, especially farming on the Fon plateau. Initially, crafts such as weaving and

Table 8.11: Principal occupations of Lisanon men[1]

| | Born 1850-1929 | Born 1930-1956 | Born 1957-1971 |
|---|---|---|---|
| Farmer in Lissazounme | 29 (71%) | 9 (19%) | 7 (20%) |
| Farmer elsewhere | – | 8 (17%) | 4 (11%) |
| Agric. wage labour in Lissazounme | – | | 1 (3%) |
| Palm oil wage labour in Lissazounme | – | 3 (5%) | 1 (3%) |
| Teacher elsewhere | – | 5 (11%) | – |
| Soldier elsewhere | – | – | – |
| (Para)State employee elsewhere | 1 (2%) | 2 (4%) | – |
| Other wage labour elsewhere | – | 2 (4%) | 2 (6%) |
| Craftsman in Lissazounme | – | 4 (8%) | 2 (6%) |
| Craftsman elsewhere | – | 2 (4%) | 3 (9%) |
| *Sodabi* producer in Lissazounme | – | 2 (4%) | – |
| Apprentice, elsewhere | – | – | 5 (14%) |
| Merchant in & around Lissazounme[2] | – | – | – |
| Merchant elsewhere[2] | – | 3 (6%) | – |
| *Vodun* priest in Lissazounme[3] | 6 (21%) | – | – |
| Healer & diviner in Lissazounme | | – | – |
| Healer & diviner elsewhere[4] | 3 (8%) | 5 (11%) | 4 (11%) |
| Schooling in Lissazounme | – | – | 1 (3%) |
| Schooling elsewhere | – | – | 5 (14%) |
| Seasonal & short term mobility | 4 (20%) | 6 (41%) | 7 (41%) |
| Long term mobility | – | 10 (28%) | 4 (24%) |
| Total number of men | 20 | 21 | 17 |

1 Counted are activities responsible for more than 30% of a man's labour time and (roughly) income; if an activity contributed for more than 70% it is double-counted. In other words, for each man a maximum of three principal activities are counted here and weighed according to their importance.
2 Except traders in magic charms and in herbal-spiritual medicine.
3 The high number of *vodunon* in the oldest cohorts stems from the fact that Lisanon lineage usually gave this position to the eldest lineage member. Many of them held the position only briefly before they died. Men in the younger cohorts were not yet eligible as *vodunon*.
4 Including traders in magic charms and in herbal-spiritual medicine.

tailoring in and around Lissazounme were popular, and the oldest men of the lineage had income from their work as priests and lineage heads, but these remained secondary activities carried out alongside farming; most men of the eldest cohorts spent less than 25% of their labour time on their crafts, so that their crafts do not show in Table 8.11. Later, some Lisanon men made crafts such as carpentry their principal occupation, others migrated to farm elsewhere, some started to work as diviners and traders of magic charms and 'medicine' in various towns, and still others found more or less profitable jobs in one particular town, for example as teachers. Most Lisanon men who stayed in the village combined agriculture with one or more important non-agricultural occupations, only few engaged in one or the other almost fulltime. Some men of the youngest generation migrated for similar reasons as their elder brothers, others valued apprenticeships in mechanics over old-fashioned crafts like weaving and tailoring, and more and more young Lisanon combined part-time farming in Lissazounme with itinerant trade in 'medicine' and magic charms; they typically only did the land preparation of their fields and left crop maintenance to their wives, mothers, children and other family members. Only few young Lisanon farmed temporarily full time in the village, while searching actively for non-agricultural occupations. I witnessed several young men take up off-farm occupations, leaving their field to the care of others, especially to women. Most women and children stayed behind and combined cultivation of their household's land with petty trade and the processing of foods such as palm oil, *afintin* spices and the like.

## 8.3 Salaga, an Ehwe-Adja family in Atindehouhoué

Atindehouhoué is situated in the centre of the Adja plateau, in the middle between the Adja's three principal markets Azové (10 km), Klouékanme (10 km) and Dogbo (20 km). The village itself has greyish soils, but from 3 km east and west soils are red of the same type as in Lissazounme. Many inhabitants of Atindehouhoué had fields on both soil types. Atindehouhoué is a fairly representative Ehwe-Adja village, though with an above average number of big farmers. I narrated its myth of origin in section 5.3.3.

***Atindehu (ca. 1835): chef and farmer***

Atindehu, the eldest of Nana's three sons, became the head of the family after the death of her husband Sala. In this position he also controlled the family's land. Though he was not Sala's biological son, the family was called Sala and the village that they founded Salahoué or Atindehouhoué. Around 1900 Atindehu had already four wives and 20 children and seems to have been a 'big man' in the region.

In 1900 the French appointed Atindehu as *chef de village* over Atindehouhoué and eleven neighbouring villages. He was the only man who dared to become *chef* for the colonials according to his son's son Hundé. He scores a point because the fairly egalitarian Adja did not easily accept the authority of French-appointed *chefs* (see 7.1). Atindehu's number of children rose to 26, from four mothers. He was *chef* until his death around 1919[45]. Besides inheriting fairly large amounts of land, he also obtained land on the north-eastern slopes of the Adja plateau, and his youngest brother and some younger ones of his own sons settled there as farmers, as I narrated in section 8.1.2.

Atindehu's appointment as *chef* was a loss of power and prestige for the slave-master Asu from Houédogli, and to Asu's sons and slaves. These were hiding in small hamlets in the

south-east (see 5.3.3 and 6.3.2). Asu's family narratives emphasise that Atindehu's chiefly and 'leisurely' style of making a living conflicted with the Adja ideal of being a hard working farmer who provides well for his family, in a story that they told me:

> "Asu's daughter married Atindehu. But she came each time to us for food. We had to farm a lot in order to feed her. So we understood that her husband Atindehu did not cultivate. And since he did not farm we thought that it would be good if he rules over us. So we gave him the stool."[46]

Farming remained an important activity in Atindehouhoué, though slightly less than in most neighbouring villages. Asu's and Hundé's account about Atindehu's courage characterises the Atindehouhouéans as farming less and being slightly less timid than many other Ehwe-Adja and in any case than Asu's 'descendants'. Elsewhere (Wartena 1997) I described the history of a family in Asu's group, that of Agbédo in Honsouhoué, who cultivated more than Sala. Nevertheless, also Sala engaged much more in agrarian livelihood activities than the Fon lineage Lisanon, and will argue that this difference was typical for the plateau Fon and Adja. If I had chosen an Adja lineage from a smaller village the difference would even come out clearer.

At Atindehu's death his eldest son Togbui (born around 1860) succeeded him as *chef de village*. Elsewhere (Wartena 2001) I discussed the family histories of two of Togbui's sons, Kofi and Isaka, and in section 6.5.3 of this book the histories of Atindehu's sons Soton and Tonu's fields, crops and fallow vegetation between 1910 and 1942. The case study below will concentrate on the descendants of Atindehu's third son, Salaga. Most members of Salaga branch were primarily farmers, some poor, others fairly wealthy but in an inconspicuous way. They lived in simple clay houses without compound walls, only Kokuhu had a cement-plastered house. All this was typically Ehwe-Adja.

Atindehouhoué had good soils for cotton. In the early 1980s cotton prices started to increase again. From about 1983 more and more men of the village (re)adopted the crop. About a year later their women followed. Most cotton growers also started to use chemical fertiliser, the first year a bit hesitantly because this product was quite new on the Adja plateau and an important financial investment, but within a few years almost all cotton and also several other Adja crops were fertilised. Since the introduction of the variety Allen in 1963, cotton was always sown in relais-cropping with a first season maize (or occasionally tomato) crop. See sections 7.3.3 and 9.2 on the technicalities and social organisation of cotton cultivation.

In describing Sala lineage's making a living I will frequently mention fields by name. The Ehwe-Adja name fields after their distance from home, soil type[47], vegetation type, or a village near the field. *Ahwegboboji* (house-near field) are plots in the former circle of bush that protected Adja villages in pre-colonial times; this circle was cleared little by little between World War One and the time of my research. *Bovime* (small field) are fields just beyond the former circle of bush, about 200-700 m from the village. Other fields[48] are often called after their soil- or 'original' vegetation type, for example *zohuji* ('on fire', fields whose vegetation when cleared for the first time would mainly have consisted in fire-prone grasses). Amongst others on the base of this indigenous classification I argued in Chapter 4 that the Adja plateau, contrary to what many believe, was not entirely forested but covered by a semi-deciduous forest-savannah mosaic at the arrival of the Adja settlers between roughly 1200 and 1800.

***Salaga (1868): chef Atindehu's son, farmer***

Salaga, Atindehu's third son, was born around 1868 in Atindehouhoué. He married two wives before his father became *chef*, and obtained fields at Lokogba, at Dohoji, at Edahoué, and at a place near Lagbahome classified as *zohuji*, all situated 1-3 km from the village. Salaga farmed during his whole life, assisted by his sons, and does not seem to have engaged in other economic activities. His wives helped him with the 'traditional' female tasks of burning, sowing and harvesting. His first wife Ehi, a girl from the village, had two sons: Seboka, born around 1895, and Sodeka, born around 1906. His second wife had one son, Lihonu, around 1900.

***Ehi (1875): Salaga's early farming wife***

Before World War One it was not yet customary for Adja women to farm their own plots or for Adja husbands to give land to their wives. But Ehi received a 'Bovime' field of 35 *abowo* (1.4 ha) near the village from her own father in the early 20th century, not later than the 1930s. She grew mainly maize, assisted by her children, until she became too old to farm. Then her son Sodeka obtained her field and started to support her.

***Seboka (1895): farmer***

Seboka inherited fields at Zohuji, Dohoji, and Edahoué, together at least 6 ha. His first wife was from Houédogli and had four sons, Lofi (1916-20), Hwehwe (1925), Tola (1928), and Kokuhu (1935), and two daughters who died. His second wife did not yet have children when she divorced him. His sons helped him on the land. Sometimes they cleared some bush fallow and planted yams there in the first year, followed by maize and occasionally cowpeas. With this strategy they were self-sufficient in maize and yams, but often purchased cowpeas[49], also because this crop is difficult to conserve due to storage pests.

According to his eldest son Lofi, father Seboka died before Lofi married his first wife, which was about 1941-44. After Seboka's death Lofi first controlled all the land and the four brothers worked it together under his leadership. According to the two middle sons Hwehwe and Tola however, father granted them individual plots when they were adolescents, hence in the 1940s, and allowed them to farm these after finishing their task for him and to sell the produce on their own account. But they continued to work with their father during the first two years after their marriage (1949-1957 for Hwehwe and 1962 for Tola) and where then 'liberated' by him with a larger amount of land. Probably they either used the word 'father' for 'elder brother' or I mistook Lofi's statement about Seboka's early death[50].

Be this as it may, after some years the four brothers divided the land so that each of them could decide alone, but they and their household members continued to help each other a little on their farms. The brothers also co-operated in trading and repairing bicycles, sometimes together with their FFFBS Isaka, whose life history I discussed elsewhere (Wartena 2001). Kokuhu and Isaka purchased cheap Nigerian bicycles in Adjarra in south-east Bénin, and they and the others repaired and sold them on the Adja plateau.

***Lofi (1916-20): farmer, palm kernel, castor- and bicycle trader***

He married two wives, Vunahin in 1941 and Kedome around 1955. Vunahin's sons were Sefa (1942) and Edgar (1945). Kedome never had children. After sharing father's land with his three brothers, Lofi retained a little less than 2 ha for himself. He planted oil palms on all his land and grew maize, cassava, cowpeas, pigeon peas, groundnuts and cotton between the palms, assisted by his sons and wives. Besides farming Lofi traded palm kernels, castor-

and *Jathropha curcas* seeds in the 1940s and 1950s, and bicycles thereafter. In section 7.3.4 I quote Lofi on his trade in colonial times.

According to a document from 1954-55 in the colonial Archives of Aplahoué, Togbui's son Hundé stood surety for one other castor trader of Atindehouhoué, his brother's son. From the beginning to the end that France demanded Dahomean castor, from 1916 to 1963, the Adja and the Dassa-Savalou-Savè areas were the only producers as explained in sections 6.4.7 and 7.3.4. The Fon woman Ayonu's eyewitness description in 6.4.7 and Lofi's, other Adja- and archival testimonies indicate that castor was collected on the Adja plateau by small Adja traders who worked for larger Fon- and European traders[51].

After abandoning his castor- and palm kernel trade, Lofi started to purchase bicycles on the Klouékanme and Azové markets and from his brother Kokuhu who acquired them near the Nigerian border, repaired them if needed, and tried to sell them at a higher price. Around 1975 Lofi abandoned also this trade, and started to concentrate on agriculture and animal husbandry alone. He usually raised about 2 goats, 4 pigs and 7-20 chickens himself. When his sons married around 1965 and 1973 he gave some land to each of them. By 1985 he did not farm much anymore, but was supported by his wives and sons.

***Vunahin (1920) and Kedome (1935): Lofi's maize and cotton growing wives***

Soon after their marriage his wives asked for land, and Lofi gave 3 *abowo* (0.12 ha) to each of them. From 1978 onwards Vunahin borrowed another 4 *abowo* (0.16 ha) from one of Lofi's FB's or FFBS's. Kedome rented another 8 *abowo* (0.3 ha) on her own account from 1983 to 1985. Both women grew mainly maize for own consumption, Lofi only gave them maize after they cooked some of their own. But from 1984 onwards Vunahin also started to grow cotton, as one of the first women in the village. Both in 1984 and 1985 she grew 0.2 ha cotton in the second season. Besides farming they raised some domestic animals (in 1985 Vunahin had 3 pigs and 6 chicken and Kedome 2 goats) and occasionally retailed chilli peppers, tomatoes and other sauce ingredients in the village.

***Sefa (1942): young commercial farmer***

As a boy Sefa cultivated for his father, but after his first marriage he started to farm on his own account. He married three wives, Emma around 1965, Martha around 1970, and a third in 1990, and became an enterprising farmer. In 1983 some of his fellow villagers started again to grow cotton because cotton prices were on the rise. Sefa observed his neighbours' results during two years, but in 1985 he planted the fourth-largest cotton field of the village, 1.5 ha[52].

He tilled his land himself, assisted by his elder children. His wives, his daughters, and other children of the patrilineage helped with sowing and harvesting[53]. In 1985 I observed that he also participated in tilling the communal village school field. In 1990 Sefa borrowed a plot *ahwegboboji* of 14 *abowo* (0.6 ha) from his FFFBSS Raymond in addition to the land he owned already. Though this was a free loan, Sefa's son Raoul (1980) weeded in the same year Raymond's groundnuts for the normal wage of 10000 FCFA/ha.

***Emma (1946) and Martha (1948): Sefa's wives farming for subsistence and sale***

Sefa's wives obtained fields a few years after their marriage, farmed them on their own account, and did not till his land anymore. The women mostly grew maize in the first season which they largely used for own consumption and sometimes sold in part. They mostly grew cowpeas, sometimes groundnuts, and after 1985 sometimes cotton in the second season

which they largely sold on their own account. In 1990 Emma also grew groundnuts in the first season on her '*zohuji*' field. She herself and her two eldest daughters (born 1974 and 1977) weeded them.

As a girl Martha was used to till both her father's and her mother's fields in Houédogli, and retailed cowpeas in the Azové and Klouékanme markets on her own account to buy herself some clothes and kitchen utensils. Five years after her marriage to Sefa, in 1975, he gave her 8 *abowo* (0.3 ha) 'Bovime' because most other Adja women already had land. In 1990 she acquired 10 *abowo* (0.4 ha) in addition and grew maize and cotton at Bovime. She weeded the cotton herself with the help of her eldest son (1978).

***Edgar (1945): mechanic, trader and farmer***

In his youth he farmed for his father Lofi, and was one of the first boys of the village to do an apprenticeship in mechanics. But after his liberation he first devoted himself to agriculture during six years before working briefly in his new craft. When he married his first wife Nagè around 1972, his father allowed him to farm on his own account. He grew maize and in 1977 he once tried cotton. From 1978 to 1979 he worked as a mechanic in Cotonou, and from 1980 to 1984 he traded various commodities between Bénin, Nigeria and sometimes Togo. His FB Kokuhu, his FFBS Kwesi (1927) who was a wealthy trader and a good friend of Edgar, and other friends in Cotonou introduced him to the cross border trade. During those years Nagè cultivated his land, and he also sent her money to engage wage labourers. But when Nigeria closed its borders in December 1984 he was one of those smaller smugglers who could not afford the bribes (see 7.1.4) and returned to Atindehouhoué to farm. In 1984 he married a second wife, Chérie from Kpatohoué (6 km to the west).

***Nagè (1952) and Chérie (1960): Edgar's farming wives***

Edgar's wives grew maize which they largely ate with their children and groundnuts and cotton which they largely sold. Nagè took care of her husband Edgar's fields while he was in Cotonou from 1978 to 1984, but also obtained land to cultivate on her own account, and sold fairly large parts of her crops. In 1990 for example, she grew groundnuts for sale rather than maize for own consumption in the first season on her field just beyond the former circle of bush around the village. She used a combination of (female) wage labourer, reciprocal aid and unpaid family labour to weed them[54].

In 1985 Chérie, recently married, received me in a remarkably urbanised and 'feminine' room, with pink colours, plastic flowers and a mirror, while most Adja women had huts with bare clay walls. She told me that she did not (yet) ask for land on her own because she did not like farming. Instead she traded goats and sheep on the Azové and Klouékanme markets. Apparently she hoped to adopt an urban lifestyle and to become a trader like her husband, and he did not yet give her land because she was a young wife.

In 1990 however Chérie was an enterprising farmer. She had at least two fields, one of 9 *abowo* (0.4 ha) 1 km from the village, where she grew maize and cotton in 1990, and another one nearer by where she grew groundnuts. She tilled the land with the help of women from her labour exchange group. Her husband made the plant holes for her cotton. Her co-wife's children and other women married into Salaga family (wives of her husband's B, FB, FFFB etc.) helped her with sowing, fertiliser application and harvesting, and received as customary part of what they harvested as a reward.

***Hwehwe (1925): farmer***

As an adolescent he farmed for 'father', and also cultivated a plot of 1/4 ha with maize and cassava and traded pigs on the Azové market on his own account. With the revenues he purchased clothes and shoes for himself and saved a little money. After his marriage with his first wife Kohwefa, a daughter of his father's half-brother Lihonu, around 1949-1957, he continued to farm with his 'father' for 2 years. Even though Kohwefa was his parallel cousin[55] Hwehwe's 'father' gave her parents the fairly normal bridewealth of 25000 francs and three sheep for the customary sacrifice[56]. Kohwefa died in the 1970s. Hwehwe married his second wife Irene around 1972 and his third wife Elsa in 1980.

Two years after Hwehwe's first marriage his 'father' liberated him with about 1.5 ha *zohuji* 3 km to the northeast. From then onwards Hwehwe concentrated on farming, and traded only occasionally some bicycles on local markets together with his brothers. During some years in the 1970s Marsaye, son of Kiki in Lagbahome (see 6.5.3) sharecropped part of Hwehwe's *zohuji* field 'because the Lagbahomeans are hard working farmers but lack land' according to Hwehwe, and my observations in Lagbahome support his judgment. Marsaye had to give Hwehwe only 25% of his harvest; in the 1980s the customary share ranged from 33% to 50%. 'Out of gratitude' Marsaye worked on Hwehwe's field about one day per year, which was neither required nor commonplace. Besides that Marsaye offered Hwehwe's family shelter in his house whenever they were surprised by rain while working on their Lagbahome field, also after Marsaye ceased to sharecrop Hwehwe's land. If this happened early in the mornings of *gbotanhwegbe* (market days of Klouékanme) they sometimes found Marsaye's daughter cooking bambara groundnuts for sale on the market. She then offered a meal to Hwehwe's family, who gladly accepted, as customary when arriving at an Ehwe-Adja's place during a meal (see section 1.3).

On several of his fields Hwehwe rotated *bogbudi* (young palms with annual crops) and *dekan* (palms with secondary bush). Each time when felling a *dekan*, he cleared the land without burning and planted new palms, as customary for Adja 'wine palm' style (see section 6.5). Under this management the land which he received as *zohuji*, hence covered with savannah grasses, gradually started to bear shrubs like *Holarrhena floribunda* and *Mezoneuron benthamiamum*[57]. Also in 1980 Hwehwe planted 0,4 ha of his *zohuji* field with young palms at the fairly average Adja 'wine palm' density of 1125 palms per hectare, cultivated annual crops between them until 1985, and then let the palms 'occupy the land'. In 1991 the plot was still under *dekan* with as principal fallow species three shrubs (*Byrsocarpus coccineus, Holarrhena floribunda,* and *'fleficu'*), two grasses (*Panicum maximum* and *Pennisetum violaceum* or *Andropogon gayanus*), and two herbs (*Tridax procumbens* and *Urena lobata* or *Triumfetta rhomboidea*)[58].

When the price of cotton started to rise again in the early 1980s, Hwehwe and his wives soon started to grow it. In 1984 he planted 0.7 ha, in 1985 0.5 ha, and he continued to plant cotton in the following years. In 1990 planted in addition to maize and cotton he sometimes also planted cassava or other crops.

All the work on his farm was done by unpaid labour from kin, affines, sharecroppers and friends, he never engaged wage labourers. Hwehwe and his unmarried sons cleared the land and weeded it whenever they were not in school or in apprenticeship. His wives and children sowed, as well as his son in law during the first 10 years of marriage. His wives, daughters, FBD, two daughters of his former sharecropper Marsaye, and the daughter of a friend also helped with harvesting and received part of the harvest as reward. In 1990 his

wife Irene also weeded a small part of his maize in spite of the fact that they were already married for 18 years; Adja wives (in contrast to Fon wives) rarely weed for their husbands after more than 5-6 years of marriage.

Hwehwe's household was almost self sufficient in maize. He hardly ever purchased maize, only after some years of drought. But, as already his father Salaga had done, he often purchased cowpeas in the period before sowing, probably because he did not grow this crop every year and cowpeas were difficult to conserve due to storage pests. Also if he wanted to sow groundnuts he usually purchased the seed[59].

***Irene (1950) and Elsa (1955): Hwehwe's farming wives***

Soon after their marriage, Irene and Elsa started to farm on their own account. In the first seasons they grew mainly maize which they largely ate, in the second seasons mainly other crops which they largely sold. From 1985 onwards, they also planted each year about 0.2-0.4 ha cotton. The women tilled their land with the help of their labour exchange group, which comprised about a dozen of women from the village. Elsa's eldest daughter also assisted with all tasks including fertiliser application to her mother's cotton; Irene did not yet have children old enough to help.

***Hwehwe's schoolboys***

Hwehwe sent all his sons to school for some years. The first, Yao (1963), became a trader of bicycle spare parts on the Azové market, where he had a permanent stall. He rented a room in Azové and settled there with his wife and baby daughter. The second, Kwesivi (1966), abandoned secondary school in 1985 after failing several times for the BEPC exams (like most Adja pupils did, see 7.1.2), and did an apprenticeship in carpentry in Cotonou paid by his father. After his liberation in 1989 he returned to the village and started to assist his father and brothers with clearing father's land. He was proud that after a few days he got used to this physical work again:

> "At the beginning of the season it took me 2½ hours to clear 1 *abowo* for my father since I was no longer used to the work. But now after ten days I have already improved, and I can finish it in 2¼ hours. I bought a watch to observe my progress. I feel satisfied if I have worked well, but I am very dissatisfied if I haven't done anything the whole day. It is good to work hard on the land and not to give up after initial failures, in the end you will gain."

From April 1990 to March 1991 he was my research assistant. Then he returned to work some months for his former master, and finally set up his own carpentry shop in Cotonou. The pictures and letters which he continued to send me, showed that his shop gradually expanded through his own and his apprentices' hard work. Hwehwe's third son, **Mevu** (1969) was still an apprentice in 1990, but helped on family's fields when he visited the village.

***Fifa (1956): Hwehwe's farming daughter***

Hwehwe's first daughter Fifa (1958) married in 1976 a young farmer from a fairly poor family of another lineage in the village, and remained his only wife. Her children were born in 1977, 1979, 1982 and 1989. Until 1983 she farmed together with her husband on the 0.5 ha that he received from his father and the 1.2 ha that he sharecropped. She also weeded occasionally for her mother in law, harvested for her father in law, and received as a reward half of the pigeon peas that she harvested.

In 1984 she started to sharecrop 9 *abowo* (0.3 ha) on her own 3 km to the east[60], while her husband sharecropped 0.6 ha from Isaka for half of the harvest. Her husband did not

give her land, but liberated her from tillage duties. He even occasionally weeded for her, and helped to harvest her maize and cassava. Fifa used to grow maize in the first seasons and cassava or cowpeas in the second, transformed her cassava into *gari* and sold part of it in the village, and sold the cowpeas on the Klouékanme market. Her brother helped her to carry the cowpeas to the market on his bicycle. She invested the revenues in *kakɛ* seeds (*Prosopis africana*, see Chapter 1, sections 6.3 and 7.1.3) to sell later at a higher price, and in 25 l kerosene and 1 kg sugar to retail in the village. Later in the year her husband often helped her to carry kerosene and sugar from the market, and also to retail it when she was not at home. Her husband provided most of the maize that the couple and their children consumed, but Fifa also contributed maize. On Isaka's land they grew, on his request, maize and cotton in relais cropping, instead of two maize crops as they might have wished themselves, with the result that the next year they bought maize for consumption during two weeks before the new harvest.

In 1989 the marriage did not go well and Fifa returned to her father Hwehwe, leaving her elder children behind. While trying to reconcile his daughter with her husband, Hwehwe gave her 10 *abowo* (0.4 ha) of his *zohuji* field, and she sharecropped another 0.2 ha from her FFB's wife Hwini for one third of the harvest. On both fields she grew maize and cotton in 1990. At cotton sowing time Fifa's relationship with her husband was slightly better, and he and her younger brothers Mevu (1969) and David (1978) opened plant holes for her cotton. Fifa, her FBSD Rachel (1977), her sister Marie and her own son Kohovi (1981) sowed the cotton into the holes. David and Marie joined her in applying fertiliser to her maize and cotton, and Marie and Rachel helped her to harvest the maize. Fifa weeded and harvested her cotton herself with the free assistance of Vidé (1971), a daughter of her father's former sharecropper Marsaye. Hwehwe also allowed Fifa to clear a plot of *dekan* (oil palm secondary bush), a job rarely done by women. She managed to clear 1.5 *abowo,* sowed cowpeas there, and applied cotton insecticide to them herself.

***Tola (1928): moderately successful farmer***

In his youth he farmed for his 'father' or elder brother, who granted him a small plot to farm on his own account. There he grew maize and cassava and sold it to save money for his marriage. 'Father' would complement his savings and pay the bridewealth. From 1953 to 1958 he went to farm with his mother's brother who had obtained a field in the savannah northwest of the Adja plateau, in Togo, from a local chief of the land in exchange for some libations to the ancestors. Since the later 19th century, many Ehwe-Adja settled there to farm (see 5.3.2, 6.5.1, 8.1.2, and Abotchi 1995). Tola returned to Atindehouhoué to marry his first wife, Yovoke, in 1959. The first two years of their marriage he and his wife farmed for his 'father; then he was liberated with two fields, together about 1.5 ha. Yovoke remained his only wife. They had seven sons and two daughters.

Shortly after his liberation his wife asked him for land and he granted her some. According to Yovoke this was 4 *abowo* after two years marriage, according to Tola it was 9 *abowo* (0.35 ha) after the birth of her second child (1963) "because it was customary to give your wife land after one or two children. Since then we first eat the wife's maize, then the husband's, then if necessary the husband buys maize." In most years however Tola and Yovoke were self-sufficient in maize. Several times his harvest was even so abundant that he could sell, but according to both Tola and Yovoke "in years of famine one has to buy maize", and also from December 1984, after Tola started again to grow cotton again (which he had not done

since many years), his maize harvest was already finished and he purchased maize to eat until the first harvest of 1985. In 1985 he refrained from growing cotton, but later he planted it again. In some years Tola or Yovoke also sowed cowpeas or groundnuts, but not every year, and therefore they rarely stored seeds for these crops but usually purchased them.

Since Yovoke received land, Tola tilled his field with the help of his children alone, the girls daily and the boys whenever they were not in school. Yovoke only sowed and harvested. Until the end of my research he never engaged wage labourers.

During the 1970s or early 1980s Tola briefly tried his luck in trading bicycles with his brothers. He used the profits to rent more land because his inherited field did not suffice him. But he was less successful in the bike trade than his brothers and than on his fields, and quit trading because he wanted to cultivate 'in the right way'.

One of Tola's two inherited fields was 3 km to the northeast, near Lagbahome, on red soils classified as *zohuji*. Until the early 1980s he alternated *bogbudi* (field with young oil palms and annual crops) and *dekan* (mature oil palms with secondary bush) on his to fields. Lacking space to plant maize to feed his growing family, Tola rented another 8 *abowo* for the price of 28000 FCFA under the 'planting oil palms' regime from 1980 to 1987 from his FFFBS Doto, who was in urgent need of cash. 'Planting oil palms' is a tenancy contract particular to some Adja villages. It implies that the tenant plants oil palms and annual crops between them until the palms start to bear fruit, abandons the grove to *dekan*, and returns the land to the owner[61]. Tola planted maize and pigeon peas in the first seasons and groundnuts, cowpeas, sweet potatoes, soybeans, cotton, okra, tomatoes and chilli peppers in the second.

During the first half of the 1980s or longer he also borrowed 1 ha from his brother Kokuhu, and from 1987, after returning Doto's field, Tola rented 0.7 ha for 80000 FCFA for 12 years from a farmer on the northern fringe of the Adja plateau. This still did not suffice him to grow maize. Therefore he started to prune his oil palms, which he had planted in 1975 at the fairly average 'wine palm' density of 1000 trees per ha on 0.5 ha at Lagbahome, leaving only 10 branches per palm at the beginning of every first rainy season. In this way he continued to grow maize, cassava and other annual crops between the palms until the end of my research. In 1986 he felled one third of the palms and replaced them by the same number of young palms to obtain what Quenum (1988) calls a multi-stratified wine palm grove. Under this management the field, though permanently cropped since at least 1975, still contained shrubs like *Mallotus oppositiLofius, Byrsocarpus coccineus, 'fleficu',* the woody herb *Urena lobata* or *Triumfetta rhomboidea,* and the grasses *Imperata cylindrica* and Pennisetum violaceum or *Andropogon gayanus*[62]. In 1991 the plot contained maize, cassava, and 1000 palms per ha of which 675 aged 15 years and the other 325 aged 4 years.

***Yovoke (1940): Tola's farming and petty trading wife***

As a girl in Avégodo, 1½ km northwest of Aplahoué, Yovoke and her eleven sisters used to weed for her father. She helped her mother to manufacture palm oil and cotton wicks for kerosene lamps and to sell these on the Azové market; mother used her revenues to buy sauce ingredients, cotton fabric and water jars. Yovoke herself occasionally made maize cakes *egblen*, sold them at Azové and purchased clothes and kitchen utensils with her profits. Mother only started to farm on her own account after Yovoke's marriage in 1959.

A few years after her marriage, she asked and received land from her husband as explained above. Later she acquired additional land, so that by 1990 she had 10 *abowo* (0.4 ha) about

1 km south of the village. Until the later 1980s she mostly grew maize and groundnuts in the first season and tomatoes in the second. She ate some of the maize and sold the rest of the harvest on her own account. Towards the end of the 1980s she also started to plant cotton. She tilled her field herself; her children assisted her after finishing their task for father, and her husband's FFFBSS Lansu also helped occasionally. Until the end of my research she never engaged wage labourers.

Until the earlier 1980s she sometimes transformed *kakɛ* seeds (*Prosopis africana*) into the local spice *flefi* (see Fifa, Chapter 1 and sections 6.3 and 7.1.3), and sold it on her own account on the Azové market. But in 1984 she decided to give up this trade, to rent more land herself in addition, and to concentrate on agriculture alone. Also in 1984 her 6 goats and 20 chickens were stolen, but she acquired new ones and used their droppings to manure her field.

***Tola's sons***

Tola sent his sons to school for some years. The first, Pepin (1960), abandoned secondary school in grade four after failing for the BEPC exams in 1984 (like most Adja pupils did, see 7.1.2). He went to look for work in Cotonou while living in the house of his FFFSS Kwesi (1927), who was *chef de village* from 1958 to 1960, but was not successful. In 1990 he was trying his luck in Azové. The second son, Samson (1967), though not yet married, received in the later 1980s a plot of at least 8 *abowo* (0.3 ha) *ahwegboboji* from his father. In 1990 he grew maize and cotton there on his own account. Samson himself, his four youngest siblings, and occasionally his FBS Leon (1982), and his FFFBSS Mathieu (1982) tilled, sowed, fertilised and harvested his crops, and his mother also helped with sowing.

***Kokuhu (1935): farmer and bicycle trader***

When the four brothers divided their land, Kokuhu received the smallest part of it, only 1 ha. Nevertheless he became more successful than his elder brothers both in agriculture and in off-farm activities. He accumulated more land, trade capital, wives, children, houses, granaries, and had the largest agricultural surplus to sell. He married four wives, Dosi around 1957, Afokui around 1959, Ajowa around 1970, and Anette in 1981. Dosi died in the 1970s.

Initially he cultivated his 1 ha together with his wives, but then he purchased additional land, gave 0.4 ha to each of his wives, and liberated them from tillage duties. The wives now only helped him with sowing, harvesting and fertiliser application. Since the wives had land he let them cook some of their own maize first before he gave them from his harvest. But he mostly harvested enough for the household to be self sufficient in maize both for consumption and for seed. Only if the wives wanted to sow cowpeas or groundnuts they usually purchased them, because they did not grow these crops each year and did not store them.

By 1982 Kokuhu owned about 5.5 ha, including 4 ha that he purchased. From then until at least 1985 he lent 1 ha of inherited land 200 m south of the village to his brother Tola (and in 1985 also 1 *abowo* to me), and farmed himself 59 *abowo* (2,4 ha) *zohuji* that he had purchased 3 km south of the village. After the acquisition, he gradually planted the field with oil palms, every year a few *abowo* until at least 1990. In the early 1980s he grew mainly maize in the first and cowpeas in the second seasons. But from 1983 he was one of the first and largest cotton cultivators of the village, with 1 ha cotton in 1983, 1.7 ha in 1984, and 2.4 ha in 1985, and he continued to plant cotton until the end of my research. Nevertheless

he still harvested so much maize that in July 1985, a few weeks before the new harvest, he still had a large volume in his granaries from the previous year. Therefore he sold his old maize on the Azové and Klouékanme markets before harvesting the new.

In the 1980s Kokuhu himself and his nine children cleared and weeded his fields – two of his sons only when not in school. Occasionally he engaged wage labourers or worked together with some men from his mother's family in Houédogli, for example in 1985. His wives, children, son's daughter Dagbo (1981), and his wife's foster daughter Azonshi (1982) assisted him with sowing, fertilising and harvesting. He himself planted and harvested his oil palms, assisted by his eldest sons. His wives carried the palm bunches home and were allowed to use some for own consumption. Kokuhu sold the rest of the fruit to them and to other women. His wives helped each other a little with palm oil preparation.

Kokuhu sent his second and third son Kojo (1965) and Kojovi (1967) to school for some years. They abandoned school in the earlier 1980s, Kojo in grade 3 of the secondary school and Kojovi in grade 6 of the primary. Kojovi then started to farm for his father. Kojo did the same until March 1985, then he began an apprenticeship in mechanics in Azové, paid by his father, but in 1990 he helped again on his father's and his foster mother Ajowa's fields. When his eldest son Komi (1958) married around 1980, Kokuhu purchased 0.4 ha for him at the price of 50000 FCFA, gave him a plot of *ahwegboboji* in addition, and liberated him from tillage duties for father.

Besides farming Kokuhu raised pigs (he had eight pigs in 1985) and traded and repaired bicycles together with his brothers and with his FFFBS Isaka (1934), whose life history I discussed elsewhere (Wartena 2001). In the dry seasons Kokuhu and Isaka travelled about weekly to Adjarra close to the Nigerian border and purchased each time 2-3 bicycles. In the rainy seasons Kokuhu prioritised farming and only bought bicycles on Adja plateau markets, where also his brothers acquired them, but Isaka continued to travel bi-monthly to Adjarra. The brothers and Isaka repaired and decorated the bikes and sold them again on Adja markets, on average 31% more expensive than purchased at Adjarra. Kokuhu, Isaka and occasionally Hwehwe continued the bike trade throughout the 1980s, but Lofi and Tola, as already mentioned, abandoned the trade before 1985. In the 1980s Kokuhu was also the owner of one of the two still working gasoline maize mills in the village, a profitable business. Women of Atindehouhoué and of neighbouring smaller villages without own mill paid him to have their maize ground there.

Though Kokuhu devoted part of his labour time to trade, he was a knowledgeable and innovating farmer, and willing to invest in agriculture. Instead of investing all his profits in trade, houses, maize mills or his son's education, he also purchased additional land, agricultural wage labour, and fertiliser. He went out of his way to acquire chemical fertiliser, also for his maize. In 1981 or 1982, when fertiliser was officially only sold to cotton growers, and hardly used by others, he managed to purchase not less than 250 kg (at the subsidised price of 1000 FCFA per 50 kg) and applied it to his maize. He considered this was a big but worthwhile investment. When fertiliser was made available for other crops than cotton from 1986 onwards, many Adja followed his example and fertilised their maize and tomatoes, even though the price multiplied by five because no longer subsidised. On the other hand, extensionists had managed to convince his FFBSS Monlu to acquire a plough because according to them this would save labour and improve yields. Monlu offered ploughing other farmers' fields for payment. But Kokuhu refrained from renting the plough, arguing that this would impoverish the soil, and continued to work with the hoe. In section 7.1.3 and 9.2 I discuss why Kokuhu was probably right.

***Afokui (1940): Kokuhu's farming wife***

As a girl in Dodohoé, Afokui and her two sisters weeded for her father, and helped her mother to prepare and sell cowpea donuts. Occasionally she prepared maize cakes *egblen*, sold them in the village and purchased cotton fabric and kitchen utensils for herself. Mother did not cultivate on her own account.

One year after her marriage she asked her husband for land, and he granted her 6 *abowo*. She tilled the land herself, assisted by her five children, but never engaged wage labourers, and did not exchange labour with her co-wives because of animosity between them. She grew mainly maize, cassava, cowpeas, chilli peppers and tomatoes, the maize for own consumption and the cowpeas, peppers and tomatoes for sale. She used her profits for sauce ingredients. Her husband also contributed sauce ingredients and maize. Later she acquired more land from her husband and from her daughter's mother in law. By 1990 she had a fairly large area, in total 22,5 *abowo* (0,9 ha) of which 16,5 *abowo* between 200 m and 2 km from the village received from her husband, and 6 *abowo* from her son in law's mother.

***Ajowa (1950): a rich farming woman***

Kokuhu's third wife Ajowa became a wealthy woman who was mainly active in agriculture and a little in trade. She farmed fairly large areas, was able to sell a large part of her maize and her entire groundnut and cotton harvest in most years of the 1980s, and was also one of the few Adja women I know of who engaged some agricultural wage labour. She and her husband's FB's wife Hwini were the first two women of the village starting to grow cotton in 1983. In spite of this she still had maize surpluses to sell at the approach of the new harvest, for example in May 1985.

She gradually increased her landholdings. In 1985 she had at least 18 *abowo* (0.7 ha) 200-600 m from the village, in 1990 at least 31 *abowo* (1.2 ha) including a new plot 2 km to the south. Since 1983 she planted each year between 0.3 and 0.5 ha cotton. Besides that she grew maize, cowpeas, groundnuts, and some leaf vegetables.

Ajowa took care of Dosi's three sons Komi (1958), Kojo (1965) and Kofi (1970) and of a girl, Azonshi (1981), but did not have own children. Besides these four, several other children descending from Salaga and a few women and children from the neighbourhood worked free of charge on her land, for example her husband's son Koku (1972), FBS Mawuna (1968), BS Michel (1975), FBSS Jacob (1977), FBDS Kaci (1977), FFFBSS Frederic Dosu (1975), BSD Rachel (1977), and a woman neighbour (1945) with her two daughters (1977, 1980). Occasionally she engaged wage labourers, for example for weeding 18 *abowo* in May 1985, but she did most of the soil clearance and weeding herself, assisted by the children. She too did not cooperate with her co-wives in agriculture, but only a little in making palm oil.

She engaged a little in petty trade, palm oil and -kernel oil production, animal husbandry and speculating in tree products. After selling her 1984 cotton in the dry season, she purchased palm oil on the Dogbo- and *kak*ɛ seeds on the Klouékanme markets to sell them in their lean season at a higher price. Afokui's daughter Abla (1970) and another girl of the same age helped her to transport 200 l oil on their heads the 20 km to the village. During the rainy season Ajowa retailed tomatoes in the village. In 1985 she raised 5 pigs, 1 goat and 4 chickens.

In the dry season she prepared occasionally a little palm oil or palm kernel oil for sale, sometimes together with her co-wife Anette, but less frequently and much less at the time

than the Fon women Elise and Elimɛ (see the Fon case study). In March 1985 Ajowa and Anette helped each other to process about 25-30 kg palm fruit, and obtained 2 l oil and half of the nuts each. They pounded the palm fruit in a mortar like all Adja women do, having too little palm fruit to fill a *deto* (see 6.3.3 on the Fon and Adja's differing palm oil production techniques). Since they rarely made palm oil they did not even possess a mortar themselves. They borrowed one and gave the owner a little oil as a reward. During later slack hours each woman cracked her nuts and sold the kernels.

***Anette (1963): Kokuhu's farming wife***

In 1984, three years after her marriage, her husband gave her a field of 10 *abowo* (0.4 ha) on red soils 4 km east of the village. The first year she grew only maize and harvested so much that in June-July 1985, at the approach of the new maize harvest, she was able to sell 600 kg of it. The second year she planted maize and cotton. Besides cultivating her own land, she assisted her husband, her father, and her husband's daughter in law Pia with sowing and planting cassava. Her husband treated her cotton with insecticide. She did not exchange farm labour with her co-wives because of animosity between them, but occasionally prepared some palm oil for sale together with Ajowa, as described above. During her first years of marriage Anette did not engage in any other trade.

***Komi (1958): farmer***

Kokuhu's eldest son Komi married his first wife Pia around 1978-82 and was liberated by his father with two fields. Soon he married a second wife, Lucy (born 1961). In 1984 he was among the first farmers of the village who started to grow cotton, and continued to plant each year about 0,5 ha of this crop in relais-cropping with maize. In addition he sowed crops like cowpeas, which he treated with cotton insecticide. Labour on his farm came from himself, his wives, his younger brother Kojo (1965), his daughter Nyovi (1979), and some unrelated children from the village. Besides farming on his own account he also participated in tilling the village's school field in 1985.

***Pia (1959) and Lucy (1961): Komi's farming wives***

Pia and Lucy started to till their own plots soon after marriage, assisted by their children as soon as these were old enough. Pia was among the first women in the village to plant cotton, with 0.2 ha cotton in 1985. Besides maize which she mainly ate she also grew fairly large areas of groundnuts for sale (0.3 ha in 1990) in her field 2 km south of the village. Lucy had at least one home garden *ahwegboboji* of 3 *abowo* (0.12 ha) where she grew maize.

***Lihonu (1900): farmer***

Now we move back in time and up in the genealogy again, to Salaga's second son, Lihonu. He too lived from farming in Atindehouhoué, cultivating amongst others a Bovime field. He married four wives. His sons Kwesi (1953-54) and Ganto (1955) helped him full time on his farm until two years after their marriages, even though several other adolescent Adja already received small plots to farm on their own account in their leisure time. Lihonu rewarded his sons for their labour by paying the bridewealth for their first wives, as customary among the Adja. Contrary to his sons, his wife Sedemɛ did obtain land from him soon after her marriage around 1935.

***Sedemɛ (1915) and her mother (<1895): early farming Adja women***

Sedemɛ's mother, born before 1895, farmed a plot on her own account already in the 1920s, when cultivating Adja women were still a minority. She lived in Maïbui in the centre of the Adja plateau with her husband, eight co-wives, and his 78 children. She farmed 10 *abowo* (0.4 ha), where she used to grow maize, cowpeas, cassava and groundnuts for sale. As a girl Sedemɛ helped her mother on the land and to prepare and sell fermented maize cakes *ɛgblen* in the village.

Being used to farm with her mother, Sedemɛ asked her husband Lihonu for a field soon after her marriage around 1935, and received 10 *abowo* where she grew maize in the first, and cowpeas and groundnuts in the second seasons. Besides selling her own groundnuts she occasionally purchased additional ones from other growers to retail in the Azové market. She spent the revenues on pottery, cloths and jewels.

***Kwesi (1953-54) and Ganto (1955): Lihonu's farming sons***

As a teenager Lihonu's son Ganto, besides farming for his father, made baskets for sale 'on his own account' until he became ashamed to engage in such a poor man's craft. He gave the revenues from his basket sales to his mother, who bought clothes for him.

Lihonu's son Kwesi married his first wife Josephine around 1975. Ganto took his first wife[63] around 1976, his second (Bella) around 1985, and his third (Afi) around 1988. Both sons were 'liberated' by their father with land two years after their first marriage. Kwesi received, in addition to a medium-sized field at a larger distance, one of the last remaining parts of the circle of bush around the village. Ganto inherited at least 8 *abowo* (0.3 ha) Bovime.

Kwesi cleared the bush in 1987, and built a house on it from clay which he extracted from the deeper layers of his village plot. Then he encouraged his wife to throw the household's maize husks and other waste into the hole behind the house, as customary among Adja who have such a pit (Chapter 9 and Wartena 1994). In 1990 Kwesi sowed maize on the open space behind his house, fencing it to keep domestic animals out. Josephine and he saw that the maize on the waste deposit grew much better than elsewhere. For the next years they planned to spread out their household waste in the whole plot; I ignore the results of this experiment.

Ganto grew maize, cotton and other crops on his Bovime field. He himself performed all field tasks, his three wives and his small sons helped with sowing, fertiliser application and harvesting. Ganto's youngest son (1982) also helped his FFBSS Samson to apply fertiliser on his cotton field.

***Sodeka (1906): farmer***

Salaga's third son Sodeka also became a fulltime farmer in Atindehouhoué. He inherited 30 *abowo* (1.2 ha) at Lokogba from his father. Later, around 1960 when his mother Ehi became too old to farm, Sodeka as her only surviving son started to support her and also received the 1,4 ha that she had cultivated, even though she had borrowed this field from her own father rather than her husband. At that time her father was dead and her brothers did not (yet) claim the plot.

Sodeka married 6 wives from various Adja plateau villages, Navi around 1938, Lolo around 1944, Hwini around 1955-1960, Zodi around 1962, Enyon around 1967, and around 1969 a woman passed away in 1980.

The first two wives helped him with soil tillage during the first ten years of their marriage, in the 1940s and early 1950s; then they asked him for land. He granted them 4 *abowo* (0.16 ha) each and expected them henceforth to eat their own maize first before he gave them any. His other wives also received 4 *abowo* each. From now the wives only sowed and harvested Sodeka's fields, but his children continued to assist with all tasks. Two of his seven sons and four of his eighteen daughters went to school for some years, but helped on off-school days.

In 1984 his eldest son Komlan (1957) went to school in Cotonou, and his second and third sons Marc (1967) and Mawuna (1968) received 4 *abowo* each to farm on their own account after finishing their task for father; Marc grew cotton there in the first year. In 1990, Marc and Mawuna still tilled their own plots as well as those of father. By then, also Komlan was back from Cotonou and assisted his father on his land.

Sodeka was a hard working and knowledgeable farmer. In 1985, almost eighty years old, he himself still cleared and even started the work earlier than most other villagers, when the soils were still very hard and difficult to clear, because he knew the importance of early sowing for good yields. (Many other Adja wait with their superficial soil tillage for a first little rain to moisten the soil, and the Fon even wait for a substantial amount of rain before starting their deeper ridge tillage. Consequently the Fon sow much later in the year and lose more soil nutrients by leaching than most Adja. When Sodeka became older and lost part of his elder sons' labour, in some years he had difficulties to finish soil clearance before the onset of the first rains with the help of his children alone. In such cases he employed some wage labourers in addition to be able to sow early.

Sodeka planted oil palms on most of his fields. Between young palms in the *bogbudi* stage he grew, in their order of importance, maize, cassava, cowpeas, pigeon peas, groundnuts, chilli peppers, sweet potatoes, and sometimes yams, tobacco, cotton and soybeans. Yams mainly in his youth after clearing fallow, but in 1985 he also planted some yams near the village. He was one of the first farmers of the village who started (again) to grow cotton when its price rose in the early 1980s, and he grew fairly large areas. In 1983 he had with 1.8 ha the largest of the 16 cotton fields of Atindehouhoué. In 1984 he sowed 0.9 ha and in 1985 1.3 ha cotton. In 1984 he tried soybeans. When his oil palms matured he let them 'occupy the land' (*dekan*) and grew his annual crops elsewhere. Little by little, he stretched the *bogbudi* stages by pruning young mature palms and planting annuals for some more years.

Sodeka refrained from selling maize, but sold part of all his other crops. The cassava mostly to his own wives, who made *gari* for sale. During some time the wives also bought his groundnuts, transformed them into oil and *gangodi* (a snack from groundnut cake) and sold these, but by 1985 they abandoned this industry and Sodeka sold the nuts to other traders.

His household was usually self sufficient in maize, but if not he sold some oil palms to *sodabi* producers. In January 1985 he still had three quarters of his 1984 maize harvest even after giving some maize to his son Komlan in Cotonou. Nevertheless he sold some palms to *sodabi* producers to create space for annual crops. Besides farming Sodeka raised some domestic animals. In 1984-1985 he had 2 goats, 2 pigs, 30 pigeons and between 2 and 30 chickens.

***Sodeka's farming and petty trading wives***

As girls Sodeka's first two wives Navi (1915) and Lolo (1920), who did not grow up with their own parents, used to purchase salt in the Azové market and retailed it also there to buy clothing and pottery for themselves. Their mothers did not farm on their own account; Lolo's mother partly because she was often sick.

Navi and Lolo asked their husband for land about ten years after their marriage, because in those days many Adja women started to farm on their own. Sodeka granted 4 *abowo* to each of his wives. Lolo, Hwini and Zodi acquired additional land by themselves: Lolo 6, Hwini at least 7 and Zodi at least 4 *abowo* (0.16-0.3 ha). They grew mainly maize, especially in the first seasons. Navi and Lolo used to grow cowpeas every second season, and Navi also some pigeon peas. Hwini was, with Kokuhu's wife Ajowa, the first woman in the village who grew cotton in 1983. From 1984 Zodi and other women in the village followed their example. Hwini sowed every year about 0.35-0.4 ha and Zodi 0.2-0.3 ha cotton.

In 1990 Hwini gave 0.2 ha at Dohoji in sharecropping to Hwehwe's daughter Fifa in exchange for one third of the harvest. On another 9 *abowo* (0.35 ha) Hwini planted cotton. The women worked the land themselves, assisted by their own and their co-wives' children and occasionally other children from the village. All the wives as mentioned prepared *gari* and in the 1970s also groundnut oil for sale.

Navi farmed less than her co-wives because of her age, and made in addition flefi, the typical Adja spice from kake seeds for sale on local markets (see Fifa, Afokui, Chapter 1, 6.3 and 7.1.3). She purchased unshelled *kakɛ* seeds, her own and her co-wives' children helped her to shell them for a small fee, and she herself fermented them, ground them and sold them on her own account[64.]

## Notes

1 It was my second stay in Bénin, after an absence of 3 years.

2 25 FCFA for ca. 100g hand-made palm oil soap, 50-60 FCFA for industrial palm oil soap from the national soap factory, and from 100 FCFA for 100g imported perfumed soap, as I knew from my research in 1985.

3 See 1.3 and 3.3.4 on Fon reluctance to accept food from kin and neighbours for fear of poisoning. Also witchcraft, according to South Béninese, is passed on through bewitched food. In spite of these fears, there is hardly any official regulation in Bénin's healthcare sector; *tradi-practiciens* and doctor's apprentices can exercise their professions freely without State control (Mongbo 2001:7).

4 O'Connor & Falola (1998:123) think that the economic decline since the mid-1980s was an incentive for Nigerians to turn more often to diviners and to 'traditional' medicine because these were cheaper than medical doctors and hospitals. This might have been a factor in some Béninese disease cases, but not for all because 'traditional' medicine was not always cheaper.

5 Today the word *amansin* is also used for medicine from the pharmaceutical industry, and even chemical fertiliser is *amansin* for the soil. I will not speak about this industrial scientific *amansin* here.

6 See also the testimony of the *amansinsató* Augustin in section 8.8.

7 *Nuwanu* are mainly animal remains (bones, horns, feathers etc.), leaves of plants, and sometimes live animals. Today also inorganic items such as empty batteries, plastic slippers, glass etc. are used in magic charms, but these are rarely purchased from *nuwanu* traders (own observations). Herskovits (1938 I plate 13b) and Chesi (1980:168) show the sale of *nuwanu* on the markets of Abomey and of Bè in Lomé.

8 In Aoundome on the south eastern fringe of the Fon plateau for example, I only discovered that many men migrated seasonally to farm for wages in the northern savannah because of their sudden absence for some weeks in May during my fieldwork. It is likely that also in earlier years more men from this village performed agricultural wage labour in the north than I found out through interviews.

9 More than 99% of the inhabitants of Lissazounme and roughly 95-97% of the inhabitants of Atindehouhoué. I know of only 1½ non-adherents of the *vodun* in Lissazounme: a catholic boy in the village and a migrant from Lisanon lineage who joined the syncretistic Celestial Church of Christ (in secret because the lineage elders did not like their dependents to abandon the *vodun*). There were about 10 Muslims and 10 Christians older than twelve in Atindehouhoué in 1985; by 1990 the number of Christians had more than tripled.

10 Wouterse (2006:22, 29) observed chain migration from four villages in Burkina Faso to various (West) African destinations and, for two of the villages, also to Italy, and attributes this to the role of a (social) network as information provider and a source for reducing entry and installation costs in the place of destination.

11 'Restaurant' is the common term in Bénin for the sale of meals, snacks and processed food on the street.

12 For example Houngan, see section 3.3.1 and Chapter 5.

13 Bernardin Abihunjɛ, interview Kana 16-11-1990, and his son Lambert, letter from Cotonou March 1996.

14 Interviews with migrants from the lineages Mawuhwe and Sesinu from Kana and Lègonu from Dokon.

15 Own interview in Lissazounme 3-10-1989. See also section 7.1.1.

16 Probably he appropriated it in his position as *chef*. According to his SSSS Léon he did not obtain this land from his father Sala (Léon Djodto, Atindehouhoué 29-6-1990).

17 About half of my sample for Tables 7.24-7.25 is from the Atindehouhoué area, the other half from the east and west.

18 *Chef de village* of Lissazounme in 1966-67: Sogbossi AZATASSOU SOHOUNME (Remises aux chefs de villages sur le produit de la taxe civique 1967, Archives Abomey).

19 INSAE (Institut National de la Statistique et de l'Analyse Economique) established '*calendriers historiques*' for each *commune* to assess respondents' ages during its census of 1979. These calendars contained dates of local events such as reigns of *chefs*, construction of infrastructures etc. I hoped to use these calendars to date events during my historical interviews (see Wartena 1988b:12-19). Unfortunately, the local calendars that INSAE gave me for Lissazounme and Bozinkpe on the Adja plateau appeared to be so full of errors that they were of little value. The quality of INSAE's calendar for the whole *province* du Mono was better.

20 I will refer to this research where I see fit. Each village and lineage has something special, and none really is an 'average' village or family. Therefore, a presentation of one family history in isolation gives a biased image of Fon society. For the sake of space however I will concentrate on one, and add only some elements from the other histories. Quantitative information from family histories is found in section 8.1 and Tables 8.7 to 8.10.

21 And that since the 1910s Ahehemɛ, *daa* of a Segbeji lineage-branch (*hwedo*) in Lissazounme, farmed a second field at Attogon on the Allada plateau, and some members of his lineage worked as carpenters in Cotonou, Abomey, and later also around Attogon. The Lisanon's public shrine (*vodunkpamɛ*) remained instrumental for the lineage's history, but such *vodunkpamɛ* were quite common among the Fon. The lineages that I studied more closely in Aoundome and in Kana also had one (5.2.2, 5.2.3).

22 Most *vodunsi* were (young) women. According to Laure Lisanon (born 1966) the *vodunsi* of Lisa mainly worked in the *vodunkpamɛ* and did not farm the priests' fields. *Vodunsi* of Mawu in Kana engaged in petty industries like preparing cowpea oil-dumplings for sale (Bernardin Abihunjɛ 17-9-1989). But given the facts that *vodunshi* in training among the Adja did and do farm for their priest and that those among the Fon were in the past not (always) secluded but could visit the market freely (Herskovits 1938 II:182), I assume that the image of non-farming *vodunsi* was rather an anachronism or a modern ideal than historical reality.

23 Kamille learned to speak and write a little French from a person whom he first called 'my father, secretary for the colonial government in Allada'. Kamille spoke indeed some French, but his teacher was probably not his biological father. I asked some other lineage members about this secretary but they never heard about his existence.

24 Elise paid 5 FCFA per *atasa kpɛvi*, a local measure. Elwert (1983) confirmed my observation that cracking palm nuts was a poorly paid job done mainly by poor old women.

25 The oil was given to the *daa*, who used part of it to finance lineage ceremonies and rituals, gave some to the women who prepared the oil, and sold the rest on his own account.
26 Around the same time he ceased to cultivate cassava because the number of pigs in the village grew (pigs destroy cassava).
27 The *gbadagle* of the eldest, Hwèto, was 9-12 *glegban* (slightly more than 1 ha) according to himself.
28 According to some informants there would also have been an earthquake in 1937, and though it is unlikely that Hwèto remembered much of it given his age, it is possible that Mawunon occasionally paid taxes for those who where unable to pay them during the economic crisis of the 1930s.
29 Fon customs were rarely static.
30 Hwèto once said that he received without bridewealth a wife in exchange for a bride which Lisanon *hɛnu* had given some time before. But his 'wife' stayed in her own lineage, never lived with Hwèto, and divorced him after a short while. Hwèto gave contradictory information on the date of this 'marriage'; he first said that she divorced before the eclipse (1947) and then that they married after 1970 (interviews Lissazounme 13-10-1989 and December 1989).
31 Hwèto Lisanon, Lissazounme 11-9-1990.
32 Nevertheless, he said "I don't know how my mother obtained sauce ingredients; I just sat down to eat. Sometimes she sold a little of the maize which I gave her." (Lissazounme 13-10-1989).
33 'Palm fruit hole', a pit of ca. 1 m by 2 m wide and 50 cm deep for pounding boiled palm fruit.
34 In the 1970s mainly for Elise, and in 1990 eight times for male Lisanon and three times for others.
35 But also a distant parallel cousin because of the way how the descendants of Kahun and his Lisanon wife were adopted into Lisanon lineage, see under Prosper, Gildas and Donné Kahun.
36 Most likely she had no brothers, the only customary valid reason for Fon girls to inherit. Having no brothers would have been an additional reason to marry a cousin, so that the land would stay in the same family line.
37 Between 1 April 1990 and 31 March 1991 the first wife worked for him 7 times, the second 52 times, the third 165 times and the fourth 344 times, each time about 4 hours (own survey). Only the fact that the third wife did the hardest work was rather unconventional.
38 K. Lisanon, Lissazounme 9-10-1989.
39 According to Cornevin (1981:445) there was a secondary school in Abomey since 1960 (see section 7.1.2), probably the Barnabé's daughters' claim about her father pertained to Ahouaga quarter only.
40 T. Lisanon, Lissazounme 4-10-1989.
41 C. Segbeji, Lissazounme 10-4-90.
42 In 1989 Elise spoke of "at most 5000 FCFA per month".
43 L. Lisanon, Lissazounme 21-12-1990.
44 'Fence-near fields', fields near the houses.
45 Atindehu died between 1918 and 1924, probably around 1919. In any case he died before the *chef de canton* Assou Gamèfio of Houégame (1924 according to the Archives) and after the *chef de canton* Hwinu of Essouhoué, who was still alive in 1918. Hwinu was replaced by his son Essou, and Assou Gamèfio by his son Vifin (Vifɛn), who changed his name to Alofa. (See also 7.1 on *chefs*; interview Kpadonou Tabo, born 1895-1905, Tchankada 18-5-1990).
46 Asu received a stool from Glele to reign over the surrounding villages according to Sonyonu Dɛngbɛnɛn and Lofa Sokposu. The latter added: "Asu remained on the stool until his death, and also his son Agbényon after him. But Agbényon's son Ado said that he cannot rule because he is a farmer, and gave the stool to the people of Atindehouhoué." (Lofa son of Sokposu son of Ado, Dekime 21-5-1990). Atindehu and his successors had indeed a small rectangular wooden stool carved from one piece of wood – very few Ehwe-Adja had such a symbol of chieftaincy. But they claim that they received it from Atindehu's mother's ancestor Dégbe, the assistant of Ahwanmakponi, who had received the stool and the chieftaincy over the land around Houédogli from *nyigbafio* Kpoyizun (Hundé, Atindehouhoué 3-1-1991). Asu's descendants might have used the word 'stool' symbolically for 'authority' and not in the literal sense. Atindehu's stool was similar in shape but much lower than those of the *nyigbafio* and of the Abomean kings.
47 For example *keji* (on pebbles), *nyigbanyun* (red soil), *nyigbanfunfun* ('ash' or grey soil), etc.

48 Irrespective of their size these fields could also be called *bogan* (big field), but they were usually specified by location. *Bogan*, between brackets, was also the name of the Adja's long-cycle and high-yielding maize variety.
49 Hwehwe and Tola agreed that "since the time of our father we often purchase cowpeas in the period before sowing".
50 One family member said that Seboka died between 1965 and 1980.
51 Other Adja testimonies are found in section 7.3.4. The Archives in Aplahoué contain the names of several (castor) traders, many of them Fon, and of the local Adja intermediaries.
52 Only his FB Kokuhu, the *délégué* and a former *chef de village* had slightly larger fields than he.
53 In 1990 I observed that Sefa, his second eldest daughter Rachel (1977), and his FFFBSSS (1978) made plant holes for his cowpeas and his wives Emma and Martha and his two eldest daughters sowed.
54 Ajowa Bohunge (1964) weeded for 300 FCFA/*abowo*, Philomène Basile (1967) weeded in exchange for Nagè's help another time, and Edgar's FBD Fifa (1956) weeded free of charge.
55 Roughly 6% of the 200 Adja marriages that I surveyed were parallel cousin marriages. Among Fon commoners this figure was about the same, but in the princely Fon lineage that I studied it was 15% (Wartena 2001). The Fon preferred cross cousin marriages (the groom marries MBD) over parallel cousin marriages, and called the latter *hweblodo* ('repairing the house'). Also Atindehu's son's son Fantoji, whose palm grove I described in 6.5.3, married his father's brother's daughter.
56 Three other Adja parallel cousin marriages that I encountered, all in the 1930s, were without bridewealth payments to her parents except for sacrificial sheep. For marriages to Adja women outside one's own lineage after World War One the groom's family always had to pay money or to give another woman in exchange. (Own survey of 200 Adja marriages between 1924 and 1990)
57 Local names *sesewu* and *kpofun*, these would be common shrubs on *zohuji* soil types according to Hwehwe.
58 See Table 6.10 for the local names and section 3.2.10 for the methodology used to identify the scientific names. *Fleficu* might be *Prosopis africana*.
59 Only occasionally (in earlier colonial years?) the agricultural service would have distributed (new varieties of?) groundnut seeds to some farmers free of charge, but 'not everyone' would have received them.
60 A field 3 km to the east near Honsouhoué or Kpokeme.
61 The advantage for the owner is the assurance that the tenant will be squeezed out from the plot when the palms become too dense; see also Fanou (1992:136-137).
62 See Table 6.10 for the local names and section 3.2.10 for the methodology used to identify the scientific names. *Fleficu* might be *Prosopis africana*.
63 According to my assistant's survey her name was also Josephine. This might have been an error.
64 In the third week of February 1985 she purchased 17 *Kahungolo* (12-15 kg) seeds for 500 FCFA, paid the children 10 FCFA per *Kahungolo* for shelling, and sold the *flefi* for 1500 FCFA.

# 9

# Styles of farming and ecological change on the Fon and Adja plateaux ca. 1600-1990

> "The herb is the son of the house (*ahwevi*) and the crop is the stranger (*amejro*). The son never wants to be dominated by the stranger. Therefore, when we sow we have to weed; otherwise the crop will not produce well." (An Adja farmer quoted in Dangbégnon & Brouwers 1991:11).

This chapter will examine anthropogenetic ecological changes on the Fon- and Adja plateaux and how they related to Fon and Adja farming practices from about 1600 until 1990. The turn of the 16th century marked the beginning of new technological and commercial opportunities due to the arrival of European traders on the coast a few years earlier. An additional reason to start my analysis there was that from that date some written traveller accounts exist about the Slave Coast, and from the 18th century also about the Fon plateau.

Today, ecological degradation is one of the main problems of the Fon and the Adja, but in particular of the Fon. A short visit reveals that the fallow vegetation of the Fon plateau is of a completely different type and much poorer than that of the Adja plateau. This rises the question when, how and why the plateaux became ecologically different. I will defend in this chapter that the main driving forces were not demographic or ecological but socio-cultural.

In Chapter 4 I argue that the Fon and Adja plateaux were ecologically similar before 1600. Plateau soil types, climate and spontaneous vegetation were the same. I also described technologies that the plateau inhabitants used before ca. 1625 to make a living. In Chapter 6 I discussed how some production technologies changed and came to differ between the ethnic groups when oil palms started to be exploited commercially by the Fon from 1840 onwards and by the Adja from ca. 1920 onwards.

Here I will analyse agro-technological and ecological changes on the two plateaux between 1600 and 1990 and how they related to different styles of making a living in a more comprehensive way. How did Fon and Adja land uses change since 1600, what was the impact on ecology, and how did Fon and Adja respond again to these environmental transformations? Of particular interest are changes and differences in soil tillage practices, manuring, and crop choices, besides the already mentioned different oil palm management styles. I will show that innovations in Fon tillage techniques enhanced land and labour productivity in the short run but impoverished fallow and soil qualities, that the Fon responded with organic manure and less fertility demanding crops, and that the Adja chose more chemical fertiliser and demanding crops. All this was interlinked with different value orientations, different property regimes, and different gender role models. I will show that these agro-technological innovations were largely endogenous developments. Some were facilitated by wider informal socio-economic networks, but the impact of extension services and government policies on them was marginal.

The chapter starts with an analysis of demographic developments on the Fon and Adja plateaux between 1600 and 1990. I will argue that population size cannot sufficiently explain the observed agro-ecological changes (9.1). Section 9.2 picks up two other Boserupian

themes, namely labour requirements per unit of land and agro-technological innovation, focussing in particular on tillage styles. It shows that agricultural labour inputs continue to differ greatly between Fon and Adja styles in spite of similar population densities. It also reveals Fon ingenuity in inventing new tools and tillage techniques. Finally it argues that the greater drudgery of the Adja's technologies was no reason for them to adopt the Fon styles. The next two sections zoom in on different Fon and Adja manuring styles and on innovations in these. Manuring will appear to be more related to cultural values and to socio-technical networks than to population pressure. Section 9.4 will discuss organic manure and chemical fertiliser use. Links will be established between these and other Fon and Adja practices which I discussed earlier in Chapters 6 and 7, in particular their oil palm management styles, crop choices especially cotton, property regimes, and external knowledge networks.

## 9.1 Similar population density, different ecological change

Agro-ecological change is often assumed to be primarily caused by and the inevitable result of population growth, either in the direction of degradation as in (neo)-Malthusian views, or in the direction of increased productivity as according to Boserup, who also believes that population growth triggers increased drudgery of labour and technological innovation. In spite of their differences, all these views attribute an essential role to demography. In section 2.2 I discussed the major versions of these perspectives.

The 'carrying capacity' and 'degradation caused by overpopulation' axioms are deeply entrenched in popular thinking, also in South Bénin. Confronted with the poorer soils and vegetation during the 20th century of the Fon- as compared to the Adja plateau, numerous Béninese and international intellectuals and Fon farmers say or write that the Fon plateau is since kingdom times more populated than the Adja plateau. They argue that 'If the Fon plateau's ecology is poorer its population density must be higher'. However, a brief look on recent maps does not give me the impression that the plateaux differ demographically. To know and compare demographic development on the Fon and Adja plateaux I had to move beyond assumptions and crude impressions.

To assess demographic developments on the two plateaux I studied colonial and post-colonial local census data as well as qualitative sources in the colonial archives, the literature, in addition to my interviews. The results are presented in Table 9.1. These data show that the population density of the Fon and Adja plateaux is quite similar today. That of the Adja plateau is even slightly higher than the Fon's if the urban population[1] is excluded rather than the other way round as intellectuals and Fon farmers assume!

Before 1600, demography was low on both the Fon and the Adja plateaux. During the 17th, 18th and 19th century the population of the Fon plateau increased a little faster than that of the Adja plateau because the Fon added war captives to their numbers and had, through raiding neighbouring groups and external trade contacts, access to more sources of livelihood than the Adja, in particular booty, iron and firearms. However, in exchange for overseas imports Danhomɛ exported slaves, which held local population increase in check until at least the 1860s (Manning 1982:31). From the 1860s until 1894 the Fon plateau population probably grew at a faster rate because slave exports slowed down while Danhomɛ continued to make war captives and to settle them on their own plateau but also around it, for example on the eastern Adja plateau, see 6.3. When the French conquered the kingdom of Danhomɛ in 1894 they abolished slavery and allowed domestic slaves to return home. This seems to have led to the departure of about 8-12% of the Fon plateau population between

1894 and 1905; many (former) slaves however preferred to stay[2]. Therefore I estimate that the population difference between the Fon and Adja plateaux reached its climax in 1894. Colonial censuses indicate that in the beginning of the 20th century the population density of the Fon plateau was about 1.2 to 1.4 times that of the Adja plateau. I estimate that the difference was between 1.3 and 1.5 at its apogee in 1894, and smaller than that before 1894. Hence, the population gap was never very great. (Table 9.1 and note #).

Since 1910 the population on the Adja plateau increases at a faster rate than that of the Fon plateau. Out-migration from the Fon plateau was more important than out-migration from the Ehwe-Adja plateau throughout the 20th century, except perhaps from 1930 to 1935. In the early 20th century Adja plateau population density still 'lagged' 10-20 years behind that of the Fon plateau, in other words it took the Adja population 10-20 years to reach Fon levels. But around 1950 the rural population density of both plateaux was almost equal. It became higher among the Adja than among the Fon after that date[3] (Table 9.1). Therefore, if farming systems and ecological change would only be a function of population density we would expect Adja technology and ecology to lag at most 20 years behind those of the Fon. However we will see that the fundamental technological and ecological differences between the Fon and Adja plateaux were sustained over many centuries.

In conclusion, do not want to deny a possible influence of population pressure on the depletion of natural resources. But this research, covering three centuries, proves (neo)-Malthusian views to be mistaken. Population density has differed only periodically between the plateaux, and when it differed it never took more than 10-20 years to catch up. These temporary differences cannot account for the sustained differences in farming techniques and in fallow vegetation over a prolonged period.

## 9.2 Socio-technical knowledge networks, tillage techniques and ecological change

One of the most obvious distinguishing features of Fon and Adja styles of farming are their different soil preparation techniques, ridge tillage by the Fon and flat minimal tillage by the Adja. These have great impact, first on almost all the other cultivation techniques that follow after. Land preparation is also, for various reasons, crucial for ecological change as I will show. Therefore I will start with a discussion of Fon and Adja land clearing and soil tillage styles before I discuss their farming styles as wholes.

In this section I will first reconstruct the social, cultural and technological origins of Fon and Adja flat minimal versus ridge tillage techniques through an analysis of the socio-technical networks around farm tools. Furthermore I will discuss how these techniques interacted with the ecological environment, labour needs and socio-cultural attitudes to work. To do so I describe the socio-cultural organisation and valuation of field labour, labour requirements and labour films of the different techniques, and their effect on soils and vegetation.

Farming systems approaches commonly assume ecological change triggers agro-technological innovation. But my analysis will make clear that socio-cultural labour organisation, technology and ecology influenced each other mutually. Some remarkable innovations resulted indeed from Fon and Adja indigenous ingenuity in response to vegetation change and to soil degradation, but many other Fon and Adja farming techniques were impacted more by their socio-cultural attitudes to farm work and by their different socio-technical trade- and knowledge networks than by ecology. This applied in particular for their arable tools and tillage techniques and some of their crop choices. In my discussion I proceed

Table 9.1: Population density of the Fon- and Adja plateaux 1910-2002

| Year | Ehwe-Adja official figure | Ehwe-Adja corrected# figure | Fon total | Fon rural+ | Rural Fon/ Ehwe-Adja |
|---|---|---|---|---|---|
| 1894 | | | | | 1.0-1.6 (ca. 1.3) |
| 1907 | 30 | 38-45 | | | |
| 1908 | 32 | 38-46 | | | |
| 1909 | 34 | 39-48 | | | |
| 1910 | 34 | 39-48 | 66 | 57 | 0.9-1.5 |
| 1911 | | | 64 | 55 | (ca. 1.2) |
| 1912 | | | 55 | 47 | |
| 1913 | | | 55 | 47 | |
| 1922 | | | 65 | 56 | 1.0-1.3 |
| 1923 | 44 | 44-55 | | | |
| 1932 | 51* | | | | |
| 1933 | 45* | | | | |
| 1934 | 48* | | | | |
| 1935 | 57* | | | | |
| 1936 | | | 87 | 72 | 1.0-1.1 |
| 1938 | 73 | | 97 | 79 | |
| 1942 | 76 | | | | |
| 1949 | 84 | | 107 | 85 | 1.0 |
| 1950 | 84 | | 108 | 85 | |
| 1951 | 87 | | 108 | 85 | |
| 1960 | | | 108 | 88 | |
| 1961 | 110 | | | | 0.8-1.0 |
| 1964 | | | 140 | 115 | |
| 1965 | 121 | | | | |
| 1968 | 133 | | 166 | 130 | 1.0 |
| 1969 | | | 172 | 134 | |
| 1979 | 202 | | 215 | 168 | 0.8 |
| 1983 | 231 | | | | |
| 1985 | 240 | | 238 | 177 | 0.7 |
| 1992 | 308 | | 290 | 188 | 0.6 |
| 2002 | 409 | | 377 | 238 | 0.6 |

# In 1956 and 1960, colonial demographic figures were evaluated, found wanting, and redressed on the base of ex post censuses by +10.5% for the *Département du Sud-Ouest* (Mono) and +15.6% for the *Département du Centre* (Zou) as a whole (Hodonou 1976:178; Mondjannagni 1977:93-94, 570). It is well known that colonial censuses, which were related to taxation, underestimated the Adja more seriously than the Fon, in any case until 1950, because many *chefs*, in particular among the Adja, concealed part of the population (Rapport Cercle d'Abomey 1908). Adja *chefs* continued to do so until the 1950s ('Recensements' Archives Aplahoué). The administrators knew that they underestimated the number of Adja, but did not know how much. I modestly corrected the Adja figures before 1923 on the base of extrapolations by adding 25-50% in 1907, 20-45% in 1908, 15-40% in 1909-1910 and 5-25% in 1923.

* During the economic crisis of the 1930s a good number of Adja migrated to Togo. Most returned later on.

\+ Excluding the towns of Abomey and Bohicon. The population of these towns engages less in agriculture than the rural Fon.

Sources: see endnote 4.

to some extent chronologically, from tool trade networks, tillage styles and field labour organisation several centuries ago to those of the 20th century, and from land preparation to crop maintenance techniques, for in all these cases later techniques are modelled on earlier ones. It is however impossible and undesirable to discuss the different stages in the labour process within one cropping cycle in isolation; labour films and techniques will also be analysed as wholes. Though labour organisation, technology and ecology influence each other mutually and are therefore difficult to analyse in separation, I will first focus more on socio-technological aspects of farming and then more on ecological changes.

The Fon's ridge tillage is generally believed, by policymakers, agronomists and common Béninese people alike, to be more time consuming per unit of land but also more productive, more sustainable, and technologically more 'advanced', than the Adja's flat minimal tillage. These images are usually held to apply for the Fon and Adja's whole farming styles and the whole farm labour process, including crop maintenance. The colonial administrators quoted in Chapters 1 and 7 clearly expressed this common view that laziness, cultural conservatism, backwardness and economic and ecological insouciance keep the Adja from adopting the Fon style. The image of ridge tillage as labour intensive is fed by the fact that in Fon the word for ridging, *lɛ huèn*, has the figurative meaning of 'hard work' and 'drudgery' (section 5.4.1). The idea that ridge tillage is also agro-technologicaly more advanced is probably fed by Boserupian evolutionary ideas. Whatever their source, these images portray Adja farming on a lower plane of agricultural civilisation than Fon styles.

According to Boserup (1965:28-34), Ruthenberg (1980) and Pingali, Bigot & Binswager (1984: 28-33), more frequent cropping holding tools constant usually requires higher labour inputs per unit of land for activities such as weeding, manuring, terracing and irrigation if the land is to be managed in an ecologically sustainable way. This often leads to declining labour productivity in the short run, but triggers technological innovations. If these are fundamental, for example ploughing, labour productivity might increase again. Fon and Adja agriculture relies entirely on human labour power and hardly uses chemical inputs; therefore they should fit into Boserup's (1965) model if it is correct.

The Fon's ridging is generally considered akin to ploughing because it works the soil to similar depth. Scholars and literate people of Bénin use the same French word *labour* (ploughing) for both. Ridge tillage appears civilised with its straight and relatively weed-free rows as compared to minimal tillage. Also the general images that the Adja are more backward than the Fon, and that primitive, non-commoditised people are lazy and idle because insensitive to market opportunities, contribute to ranking Adja farming techniques and labour inputs lower on the Boserupian ladder than the Fon's. According to evolutionary models of farming system development, the transition from hand hoe to plough is high in labour costs, especially in bush fallow systems because of the labour requirements for destumping and eliminating roots (Pingali, Bigot & Binswager 1984:33). If this is already true for animal ploughing, conducting the same operation by manpower with a hand hoe must certainly be extremely hard work so the argument runs. Also many Adja think that Fon tillage styles require more work than their own, at least before sowing (Wartena 1987: 119-120). Labour time estimations of 12 Fon and 19 Adja farmers, surveyed by Pijnenburg (1987:23), support the view that Fon soil preparation takes more time than the Adja's, but suggests that this difference in effort is more or less made up for during the sowing and weeding stages. On the other hand, Fon and other South Béninese farmers label the Adja, and especially the Ehwe-Adja, as 'hard workers in agriculture who are not afraid of the sun' and who 'work in their fields also in the afternoon' (own research; Den Ouden 1989:3). The estimations of Pijnenburg's respondents were imprecise as he admits himself, and did not include harvesting. Are Fon cultivation techniques indeed more labour intensive than Adja techniques? Do Boserup's and other evolutionary approaches to agricultural intensification apply to them?

This issue will be addressed in section 9.2, together with the social division of labour, the amount and timing of labour required for each task, and changes in these during the 20$^{th}$ century. Because precise comparative studies of Fon and Adja agricultural work and its requirements in hours of labour did not yet exist I ventured to conduct them myself.

### 9.2.1 Tools, socio-technical networks and the ridging regime

Chapter 4 demonstrated that before the introduction of European iron the Adja used to mine, smelt and forge their own iron in Tado. Their socio-technical blacksmithing knowledge network extended to the West and Northwest, to the areas of the Akpafu and Bassar in today's Togo. The Fon plateau inhabitants in contrast acquired iron and iron tools from their eastern and north-eastern neighbours; they do not seem to have mined themselves before 1600. In this section I will discuss Fon and Adja hoe types, their technological qualities, the origins of each model, and the socio-technical networks into which each model was embedded. Hoes and their designs are carriers of technological knowledge, predestining to particular cultivation practices. According to all available evidence, the Adja hoe model originated long before 1600 and did not change until today. Also the Fon hoe remained unchanged between 1600 and 1930. In the 1930s the Fon developed a new hoe model and also a scythe, which supplanted the old hoe and replaced most uses of the machete.

At present as in the past, the hoes that the Adja forge are similar to those found among all Adja- and Ewe-related groups except for the Fon and Gun and also to those used in various other communities in the West and Northwest, reaching from Atakpame to Djenné, and by Bassar women[5]. Adja blacksmiths also used the same forging instruments as the Bassar still use in modern times (Pazzi 1979:150), seem to have purchased some hoes from Bassar, and imported in the 17th and 18th century Bassar iron which was of a better quality than their own (Martinelli 1984:485, 498; de Barros 1986:164-166; Goucher 1988).

At present as in the past, the Adja hoe (Figure 2 in Appendix 2) has a straight wooden handle. The iron blade is only supported by a peg which is pierced into the wood when the iron is still hot; the angle between handle and blade is about 40-45º. Its cutting edge is almost straight and is slightly wider than the opposite end of the blade, the end with the peg. This hoe is suitable for superficial weeding and for making conical mounds, but not for ridging. It allows cutting, scraping, pulling or lifting in a straight direction only, usually from before to under the cultivator. The attachment is not apt for turning soil sideward. The Adja and Ewe used these hoes for superficial weeding and for making plant holes and yam mounds[6]. The Adja cultivated yams only in the first year after clearance. They, and also the Yoruba, pruned small spontaneous trees and left them in the field for the yams to climb on. Adja and Yoruba women took the woody clippings home for firewood or piled them up in the field and burnt them. Their men made yam mounds, incorporating non-woody herbs with the ashes at the end of the second rainy season to give them time to decompose during the dry season, planted a seed yam in each mound, and covered it with some mulch to conserve soil moisture[7]. If Fon farmers planted yams they also did so at the beginning of the dry season already, explaining this timing as 'tradition'[8]. The next years after clearance Adja cultivators cut back trees and shrubs that had stooled out again, but from then onwards the soil was not mounded anymore and fresh branches, leaves and herbaceous weeds were left on the soil to decompose, protecting it against runoff and climatic influences. Only woody clippings were piled up and burnt. The men then made plant holes with a digging stick or with the hoe and the women sowed grains into them. Only after prolonged cultivation it became necessary to weed superficially with the hoe. This meant that the Adja practiced an almost minimal tillage; only the first year mounds were made on some spots, and this was done in such a way that trees were spared. They used these same techniques in the savannah around Tado and on the Adja plateau.

The Fon today claim that their ancestors obtained their first iron tools from Oyo and from the Bariba of Nikki. These hoes were of the 'hooked wooden handle' type which was only found in the area of what is now northern Togo, north-east and south-east Bénin, Nigeria and south Cameroon. In this belt however it was and is used by many ethnic groups, amongst others the Oyo, Edo, Ibo, Nupe, Hausa of Kano and Zaria, Bariba, Pila-Pila and Kabye[9]. The iron blade of this hoe has a peg which is stabbed into a hole in the hooked wooden handle and is supported by the handle's shorter end. The angle between the blade and the longer end of the handle is about 30º. The cutting edge is usually rounded off but is as wide as the opposite end of the blade (Figure 3 in Appendix 2). When the edge of a new hoe wears out the farmer rounds it off again, but when the blade becomes too old and too short he lets it straighten out and uses the hoe for superficial weeding only; the blade then has a rectangular shape. This hoe is forged in four hours from wrought iron, and is called *alin* (hoe), *avunđε* (dog's tongue) or *gbođε* (goat's tongue) in Fon (own interviews, Ederveen 1990:48-51). It is likely that it developed from an entirely wooden hoe or hooked stick (*kpò* in Fon, Figure 3) to which some iron was attached by those who were able to afford it. With this hoe the cultivator is able to lift and turn the soil into several directions, especially if the cutting edge is rounded off, as he needs to do when ridging the soil. To make ridges the cultivator walks backward in the direction of the ridge, lifts the earth before him and turns it upside down to one side. The rounded blade-end makes these hoes less suitable for flat cultivation.

In the early decades of the 20th century Fon blacksmiths shifted from wrought iron to sheet steel as raw material for hoes. Their principal sources of sheet steel were initially palm oil barrels and later scrap iron from the railway and from factories. At the same time the mode of attachment changed: instead of forging a peg and burning a hole into the handle, blacksmiths now rivet a steel case to the blade into which they insert the shorter end of the hooked handle. This new hoe type is called *kpεli* (from *pelle*, the French word for shovel or spade, because of the mode of attachment) and can be forged in only 1½ hours. Blacksmiths produce it in two standard sizes; the 'male' size, when new, tends to be a tiny bit larger than the *gbođε*. Farmers gradually replaced their *gbođε* by *kpεli* when the former wore out, on the understanding that most men gave their worn out *gbođε* to a woman or child in their house, who used it up before they too acquired a *kpεli*. The last replacements seem to have taken place during the 1940s. Around the same time the Fon's land preparation technique changed from incorporating grass to slashing and burning it, but this was more related to the invention of the scythe, which I will discuss below, than to the *kpεli*, which farmers use for the same tasks as the *gbođε*. Its main advantage for cultivators, besides its cheaper price, is the more sustainable connection. Its handle does not let loose or break as easily as that of the *gbođε*, and if it breaks it can be replaced without the use of fire.[10]

Ridging and mounding are widespread technologies in West African savannah areas. They are good technologies for dealing with tall grasses with rhizomes. With minimal tillage these grasses would stool out again very quickly and demand too much weeding or would quench the crop (Shen & Harrison 1965). In very dry areas, ridging and mounding is often the only means to assemble enough organic material around the plant roots to provide nutrients for the crop. It also enhances the moisture holding capacity of the soil (Kowal & Stockinger 1973:136), and may prevent water erosion if ridges are made at long the contour lines. In forest areas, ridging or mounding is only common for crops from which underground parts are harvested, to facilitate the growth and the harvesting of these parts. In very moist areas mounding is necessary to prevent waterlogging in the root zone (Maduakor et al. 1984: 127; Tarawali & Mohamed-Saleem 1987:32; Isom & Worker 1995:204). Ridging uproots

'weeds' more effectively than shallow flat tillage, resulting in less weed regrowth and in a relatively bare soil which is more exposed to the impact of sun and rainfall. The latter two cause crust formation and compaction of Nitisols. Besides the Fon, all other cultural groups which used the 'Oyo' hooked handle hoe lived either in the Sudanese savannah ecological zone or in the humid zone; those in the humid zone subsisted on root and tuber crops[11].

The Fon and Adja plateaux are neither in the humid zone nor in the Sudanese savannah. They were more forested than the savannah and had two rainy seasons, which the Sudanese savannah had not, but their total annual rainfall was too low to classify them as humid. On the plateaux, ridging was neither necessary to make crops grow nor to prevent waterlogging. Nor did the ancient Fon and Adja grow large amounts of underground products that were difficult to harvest with minimal tillage; cultivation of cassava, groundnut and bambara groundnut was marginal and the yams in the first year were grown on mounds never on ridges. This begs the question why the Fon plateau inhabitants, called 'Gedevi' before the reign of the Fon kingdom, purchased ridging hoes from distant Oyo and Nikki in stead of flat-tillage-and-mounding hoes from the nearer Tado? After all, most 'Gedevi' were socio-linguistically more related to the Adja and to Tado than to Oyo and Nikki. On what was to become the Fon plateau, in the 16th century the relatively few 'Gedevi' of Yoruba descent, in particular the real Gedevi in Kana, were socio-politically dominant over the larger group of Adja-related inhabitants of the plateau, as I argued in Chapter 4. The real Gedevi's livelihood portfolio then consisted to a larger extend in agriculture than that of the Adja-related groups on this plateau and on its eastern slopes, but the arrival of Gede spearheaded a migratory movement towards the plateau and towards agriculture by these Adja too. By 1600 the whole plateau-and-slope population between the rivers Couffo and Zou accepted the head of the Gedevi in Kana as their principal chief of the land and adopted the name 'Gedevi' for themselves. The Gedevi's relationship with Oyo seems to have been the major reason for their dominance and for their farm-oriented styles of making a living, for Oyo was in the 16th century more centrally organised, more urbanised, and had more craft industries (weaving, brass casting, and well developed blacksmithing) than the Adja and Ayizo groups of South Bénin. Oyo had flourishing trade relations with Djougou, Nikki, Salaga and Kano, with whom it exchanged cloth, horses, cola, gold, precious stones, antimony, as well as iron tools. The Gedevi founded their own market in Kana, which remained until the 19th century the most important market on the Fon plateau and maintained strong trade contacts with the Oyo-Djougou-Nikki-Salaga-Kano network (own interviews with Fon blacksmiths and traders; Pazzi 1979:133-136, 153). This makes it plausible that Oyo or Nikki tools, including hooked-handle ridging hoes, were sold on a regular base on the Kana market.

Before the establishment of the Fon kingdom, new Yoruba immigrants like Gede in Kana probably preferred the hooked-handled hoes to which they were accustomed over Tado's straight-handled ones, and ridged their fields at Kana as they used to do at home. In the South Béninese cultural context, new immigrants had to work some time for the local chief of the land. In most cases they probably received tools from him. Yoruba *aïnon* such as Agidi and Kpahè might even have instructed their dependents to ridge their fields. All this encouraged tool imports from Oyo but not from Tado to the Kana market. Newcomers who wished to acquire tools on their own must have found it easier to buy an Oyo hoe in Kana than to obtain one from Tado.

Some agronomical properties of ridge cultivation probably encouraged the 'Gedevi' to continue with this technique. During the first years after clearance most crops usually grow

a little better on ridges than on the flat, even on plateau soils, because the fertile topsoil is assembled in the ridge. Only after prolonged ridging of plateau soils the disadvantages appear: the woody fallow vegetation, soil fertility and yields decline more rapidly than with minimal tillage. But the newcomers were perhaps not aware or did not mind this because land was still abundant. An experiment in 1909 supports farmer's knowledge that ridge tillage gives higher yields in the short run than flat tillage on still fertile Nitisols. The trial compared the effect of ridge- versus flat tillage on four local maize varieties on the Allada plateau. The ridged fields produced 350 to 600 kg more per hectare than the flat ones; average yields of the four treatments were 3 tons per hectare which was considered very high and indicates that the soils were fertile (Rapport d'ensemble Service de l'agriculture Dahomey 1909, AOM Aix-en-Provence). If a soil has once been ridged it is difficult to return to flat cultivation according to Fon farmers, first because the remains of last season's ridges make the field uneven, second because the crusted and compacted soil of the old ridges needs deep tillage to loosen it again, and third because ridging becomes necessary to realise a harvest from impoverished soils. Therefore, the Fon continue ridge tillage until today.

### 9.2.2 Socio-technological organisation of land preparation

In the 16th, 17th, 18th and (early) 19th centuries, both Fon and Adja cleared their fields in communal labour by fairly large groups, probably mostly *hɛnu* (lineages). Land preparation was coordinated by the heads of these communities. Dapper (1676 II: 118) described ceremonial communal clearing and sowing on the Bight of Benin south of Allada. The Ehwe-Adja still used to clear and sow in communal labour groups in the early 20th century and called this *habobo* (grouping of people). In the Adja families I studied, around 1900 these groups mostly consisted of descendants of a single father or grandfather, and the subsequent field tasks were performed in smaller groups. Similar practices existed in the Ghanean forest, where before 1600 land was after the communal clearance given in usufruct to smaller units (Amanor 1994:41). In early times most iron tools were probably guarded by the heads of clearing-groups. An Adja farmer explained how his father's dependents used to clear and sow in common with those of his brothers in the 1930s:

> "In the later 1930s I helped my father on his three fields. We constituted a group *habobo* with the houses of his brothers and helped each other in turns with clearing and sowing. On sowing day, all the men and women of the brothers participated, the men made plant holes with the hoe and the women sowed. The inviting brother provided food, usually a big pot of cooked cowpeas with palm oil mixed with a few grains of maize, not with *gari*; there was no *gari* in those days. If the host recently felled some oil palms he served palm wine in addition, but this was not obligatory." (Dosu Asu, Atindehouhoué 19-5-1990).

The Adja cleared the plots they wanted to cultivate with axes and cutlasses; this was men's work. They never burned standing vegetation except for some very large trees which were neither sacred nor had useful products. Sacred trees spared by both Fon and Adja were and are *Chlorophora exelsa*, *Bombax costatum*, *Ceiba pentandra* and *Antiaris africana* (worshipped as *vodun*), and *Adansonia digitata*[12] is regarded as meeting place of witches. To get rid of the other large trees, for example large *Daniella oliveri*, both Fon and Adja made annular incisions in the bark and burned fires under the tree until it died (Manning 1982:67; Savariau 1906). Adja men left smaller trees in the field for yams to climb on.

Savannah spots on the plateau, called *zohuji* in Adja ('on the fire', Adja name for what they believe to be natural grassland with too few trees to prevent bush fires), were also cleared

with the cutlass and never by burning the standing grass according to Adja accounts, in spite of the fact that burning would have been less work[13]. Only after clearance, woody clippings – and only these – were burnt on heaps. Where spontaneous trees were lacking, Adja men planted stakes for yams, then tilled the soil as described above in the section about tools.

The Adja practices to burn early in the dry season and to weed before the burn encourages the regeneration of woody vegetation and suppresses grasses, because it results in relatively cool fires which consume herbs but cannot destroy trees and shrubs[14]. Late fires in standing dry grass however develop much heat and kill many trees and shrubs. Perhaps some Adja yam stakes also took root. According to villagers in Guinean savannah areas, repeated garden-like mounding and the burying of organic matter over the years improves the structure, water retention capacity and fertility of savannah soils in an enduring way, so that woody vegetation rapidly establishes itself when the plot is abandoned, while this new vegetation and the greater soil moisture also protect against hot fires (Fairhead & Leach 1996b:110). Whatever the process on the Adja plateau, the fallow vegetation of its *zohuji* land now also contains trees and shrubs, in particular *Holarrhena floribunda*.

The 'Gedevi' possibly used more fire in clearance than the Adja until the 17th century because they had less iron tools. Burning tracts of land would also have helped them to drive game into a corner and hence served their hunting livelihoods. Whatever the motive, clearing land by fire typically requires less work than clearing with iron tools, especially in bush fallow systems (Pigali, Bigot & Binswager 1984:31, 33). The full name of their king Agaja (1708-1732) indicates that the Fon around 1700 were familiar with bush fires and with large trees that survived them: *naki ja agaja ma nyon zo do* (wet standing wood cannot be set on fire) (Le Herissé 1911:16; Akinjogbin 1967:61). Whatever the hunting techniques of the ancient 'Gedevi', since at least the later 19th century the Fon stand out among the Adja-related groups in the Dahomey gap for starting game by fire. Towards 1900, hunters on the Abomey plateau and around Atakpame and Bedjrovi, two Fon enclaves in South Togo founded in 1850, distinguished themselves from their Adja and Ewe neighbours by their use of fire (see 5.2.4, 5.3.2, 6.5.2), which suggests that this was already common Fon practice before 1850. Fon and Ana farmers around Atakpame, and some immigrants from the North, also used to ridge their fields while their Ewe neighbours planted on the flat, at least during the 1970s[15]. Throughout the 20th century the plateau Fon widely hunted by fire and sometimes burned standing grassland, while the Adja did not.

When the ancient 'Gedevi' cultivated a plot for more than 3-5 years they started to ridge the ground, according to present day accounts from Sahè, Lissazounme, Gnidjazoun and Aoundome. Only during the first 2-4 years after clearing bush they planted on the flat because the presence of woody roots in the soil made ridging difficult. Within four years of cultivation most of the woody roots died, started to decompose and could easily be uprooted in the process of ridging. Four years seems rather fast for tree roots to die under minimal tillage, unless the plot was frequently burnt (Amanor 1993:37-39); also this supports that the 'Gedevi' used fire widely. *Andropogon gayanus* however, a savannah grass which does not belong to the South Béninese plateau ecology according to Adjanohoun (1989:34), survives ridging better than woody species and consequently replaced the dying trees and shrubs in Fon fields. An elderly Fon farmer in Lissazounme explained:

> "*Fan (Andropogon gayanus*) appears only when you ridge every rainy season for about 7-8 years. Here around Lissazounme it replaced the shrubs and trees *Daniella oliveri, Vernonia cinerea, Dichapetalium guineense, Mallotus oppositifolius* and *Securinega virosa*. Later, *Andropogon* gave way to *Imperata cylindrica*." (Victor Lisanon, Lissazounme 8 May 1990)

Ridging means that the soil to a depth of 15-20 cm is loosened, lifted, turned, and assembled into a ridge. If the soil has been ridged before the old ridge is split and the new ridge is made on the furrow of the previous year. Hence within two growing seasons the whole field is worked to a dept of 15-20 cm. Until the 1940s, most herbs and grasses that grew in the field were incorporated into the ridge[16]. Later, they were slashed and burned instead.

The main advantages of ridging and mounding compared to flat tillage are the looser topsoil, concentration of organic matter in the crops' rooting zone, and the more effective elimination of 'weeds'. Uprooting is the best way to combat grasses with rhizomes such as *Imperata cylindrica* and *Andropogon gayanus* if out-shading is not an option according to Fon and Adja farmers. Incorporation inhibits their stooling out again[17]. Covering organic matter with soil also reduces volatisation of its organic nitrogen. The importance of these advantages was greatest in savannahs, where soil organic matter content is more critical than in forest zones and where tall grasses compete with crops. The Adja's yam mounds were less damaging for woody fallow species than the Fon's ridges because each plot was only mounded once after bush fallow and small trees were purposely spared as yam stakes.

Most Fon farmers today believe that the 'Gedevi' plateau inhabitants already ridged before 1625. Neither Fon collective memory nor unintended messages in Fon narratives point to a sudden introduction of ridge tillage after that date. Only in a Wemenu lineage whose ancestors moved around 1625 from the south-eastern slopes of the plateau to Gnidjazoun on its centre, I heard a narrative about 'ancient times when agriculture was marginal and no ridges were made'; this was probably before 1625 on the slopes (see 4.1.2). Therefore I accept the common Fon account that the 16th century 'Gedevi' ridged whenever they had iron hoes and the cultivation period was more than two to four years.

From the reigns of Hwegbaja (ca. 1650-1685) and Agaja more iron became available to the Fon (see 5.2.3) and ridge tillage probably spread rapidly. All soil subtypes on the plateau and on its eastern slopes were ridged according to Fon farmers; in any case they ridge all soils today. In the 17th and 18th centuries, ridged fields might well have been the mark that distinguished wealthy Fon or 'Gedevi' farmers with access to iron hoes from poorer or politically marginalised ones. If my hypothesis concerning ridging as a status symbol is correct, this must also have encouraged its spread.

In 1772, Dalzel's informant Norris seems to have observed ridges in the Fon kingdom, for he described 'beautiful' fields with rows. Linear planting distinguished ridge culture from the Ayizo's flat half-circular planting with the digging stick on the Allada plateau (Elwert 1983:322) and from yam culture, which was usually on irregular mounds:

> 'the Dahomeans (..) reap four, or rather two double crops; for soon after the maize comes above ground, they plant callavances[18] in the interstices between the rows; which gives the fields a very beautiful appearance' (Dalzel 1793/1967:v).

The regular rows and effective suppression of weeds in ridged fields made these more beautiful and tidy in most European eyes than minimally tilled ones. This was and is another reason for many Europeans and agronomists, besides the belief in its technical superiority, to prefer ridge- over flat tillage until today.

Soil tillage among the ancient 'Gedevi' was a female task, if we may believe Gbese's story recorded in Chapter 4. The account seems to refer to pre-1600 times when iron was scarce, most hoes probably entirely from wood, and soil tillage only superficial. Work with iron arable instruments however seems to have been male among both the Adja and the Fon when such tools were first used. With the spread of iron, women were initially relegated to

those field tasks which could be done without metal (Skertchly 1874:162). Engels (1884/1990) has argued that the means of production were appropriated by males only with the introduction of the plough, but among the Fon the replacement of wooden hoes by iron ones seems to have had a similar effect. This changed again in the Fon kingdom with the spread of slavery in the 18th and among the Adja in the late 19th or early 20th century, when some girls and women received tillage duties with iron hoes. Until then only men farmed with iron.

Clearing and mounding for yams, as described above, was usually done at the end of the second rainy season or the beginning of the dry season. For other crops, Adja men in the subsequent years cut back trees that had stooled out again during the dry season and cleared herbs superficially with the hoe just before or after the onset of the rains. Fon men slashed tall grasses around oil palms at the beginning of the dry season to prevent fire damage to the palms, leaving the clippings to cover the soil (see 6.5.2). They also cut trees during the dry season, but left the rest of the grass standing until the beginning of the rains or until it was lit by hunters.

After the first good shower the Adja sowed and Fon men started to ridge. Ridging dry soil would have been very difficult and was never done. The hardest was the first side of the ridge, the second slightly easier. In the 17th century ridging was probably reserved for men, but from the 18th century the Fon's female slaves also had to help with it. It is common Fon knowledge that from Agaja (1708-1732) onwards slaves around the royal palaces in Abomey and Kana cultivated cereals for the king and that all the slaves who lived in the palaces were female[19]. Travellers observed that women in the slave trading Whydah[20] after the 1690s, the king's 'wives' in Kana and Abomey in 1772, and Fon plateau women in 1849-1851 did almost all the work in agriculture and performed all field tasks including soil tillage with iron tools[21]. In the 20th and probably also in the later 19th century, Fon wives and daughters customarily had to help with ridging and weeding their household's fields (Table 9.4) – young girls often only the easier second side of the ridge while men made the first. Many elderly Fon women told me: "I ridged very well. My father or brother opened the ridge and I followed him and closed it".

In pre-colonial times Fon men incorporated most herbs and grasses into the ridges. Around oil palms they slashed tall grass at the onset of the dry season and incorporated the clippings when ridging in the rainy season (6.5.2); the areas treated in that way expanded with oil palm cultivation. Where there were no palms Fon farmers made those herbs which had survived bush fires lie down at the onset of the rains and covered them with the soil of the ridge. If the grass was tall, like *Andropogon gayanus*, it was pushed to the ground by walking over it with a stick, held horizontally under one foot by means of two strings suspended from the worker's hands (see descriptions and illustrations in Appendix 2, Meuleman 1990:15-16 and Ederveen 1990:61, 68c).

Incorporating tall herbs into the ridge is hard work. In the cases that I observed it took adult men 116 hours per hectare, including 10 hours for pushing the grass to the ground, as compared to 87-101 hours[22] for clearing and ridging without incorporation (Table 9.2). Another disadvantage is that herbs with a high C/N quotient, like savannah grasses, decompose only slowly. Soil micro-organisms need water and nitrogen for their decomposing work; hence they take more time in dry and/or organically poor soils. In the process they fix soil nitrogen so that it is not available for the crop until N is released from the decomposed herbs. Therefore it is impossible to grow crops with high N demands, for example cereals, on poor soils with incorporated, non-decomposed herbs. If much tall grass was incorporated, the Fon

preferred not to sow anything in the first season but to wait between two and four months for the grass to decompose partly. Then they weeded the ridge superficially and either sowed bambara groundnuts in May or June, or groundnuts in August or September, or cowpeas; the latter according to some elderly farmers in Atchia and Aoundome only after remaking the ridges completely 'because cowpeas don't grow on old ridges' (Meuleman 1990:17). Cereals were only planted on new ridges that contained but little savannah grass.

With soil depletion and the expansion of *Andropogon gayanus* in the early 20th century more and more Fon farmers started to slash and burn the grass instead of incorporating it also if there were no palms. In such cases they waited with slashing until the end of the dry or the beginning of the rainy season, piled up the herbs, and burned them before ridging. Reasons for this technological innovation were not only ecological changes but also Fon farmers' increased desire to produce rapidly a marketable surplus[23]. The new technique is less work than the old, allows immediate sowing, and gives good yields in the short run. Fon plateau farmers throughout the 20th century were aware that burning grass constituted a loss of organic material and hence of soil fertility in the long run. Nevertheless, by about 1950 they all did it (Meuleman 1990:18-19; Ederveen 1990:61).

The effective suppression of weeds in ridged fields resulted in relatively bare soils, directly exposed to sun and rain, during large parts of the growing season. This exposure contributed to the destruction of the soil structure, because Nitisols are very vulnerable to crust formation and compaction under hot conditions and water runoff (Sombroek & Siderius 1982 in Kerkdijk 1991). Water runoff was further encouraged by the fact that the Fon made their ridges perpendicular to the contour lines, because they found it difficult to work with their feet standing at unequal height. Tillage loosens compacted Nitisols again, but also destroys the clay particles of the topsoil, breaking them apart and allowing them to wash out, especially when soil organic matter is low, as is more and more the case since most herbs are burnt. As a result, Fon farmers observed that their soils became sandier after years of ridging, and that the lost clay never returned. Qualitative observation of the plateau soils in general and laboratory analysis of the texture of some Fon and Adja fields (Tables 9.22-9.32 in Appendix 9) support that the cultivated layer of the Fon plateau contains less clay than that of the Fon plateau.

### *The scythe: indigenous Fon tool- and tillage innovations around 1940*

The Fon's switch from incorporating herbs to slashing and burning them was facilitated by the invention of a completely new farm tool by Fon blacksmiths around 1940: a two-edged scythe, called *ada* in Fon (Figure 5 in Appendix 2) (Ederveen 1990:60). The scythe is a very remarkable and entirely indigenous innovation. To my knowledge, no scythes exist in any other West- or Central African culture[24]. In contrast with the *kpɛli* hoe which Fon smiths invented because it was easier to forge, the *ada* and the new tillage techniques were developed in response to ecological changes and to commoditisation among farmers. The new techniques however further stimulated savannisation, loss of soil organic matter and soil erosion.

Until the 1930s the Fon slashed herbs with the cutlass, bending over to the ground (Meuleman 1990:18; Ederveen 1990:61, 68c). This drudgery was usually men's work, which was another reason why many preferred to incorporate the herbs instead. With the scythe in contrast, farmers can slash tall grass faster than with the cutlass and in a more comfortable, upright body position. Farmers swing it like a pendulum, cutting grass at each forward and

backward move. In plots with many trees one can not sway far enough to gain sufficient momentum, but such fields had become rare on the Fon plateau by the 1940s. Since the invention of the *ada*, also more women clear grasses with this new tool. One 48 year old woman in my sample continued to use the cutlass because scything hurt her in the lower back. Her husband (asked separately) explained that the scythe causes more back-ache than the cutlass because it obliges to spin the back contra-naturally at the level of the reins or buttocks. This woman slashed almost as fast with the cutlass, namely 52 h/ha, as other adults worked with the scythe, namely 32-46 h/ha according to my labour time observations (Table 9.3)[25]. Ederveen's (1990:60-61) informants however claimed that working with the *ada* was 'three to five times faster than the old techniques', but she does not state which old field tasks where included in the farmers' (over)statement.

The scythe and with it the practice to cut tall grasses spread very rapidly on the Fon plateau. Within a few years after 1940 almost all Fon used it to clear *Andropogon* both in their palm groves at the beginning of the dry season and in their other fields at the onset of the rains. In the latter case they now always piled up the grass and burned it before ridging; piling up and burning are mostly done by women. Incorporation of herbs into ridges was completely abandoned. Since then, also more and more women make both sides of the ridge themselves.

Slashing can be done before the start of the rains, but if sufficient rain and ridging do not follow quickly the grass stools out again in the mean time. Since the start of the rainy season is unpredictable, many Fon farmers wait with slashing until the first rain. This causes delays in ridging and sowing.

Only after finishing the ridges the Fon start to sow. This implies that the Fon can not sow at the first good shower like the Adja except if they have enough labour at their disposal to finish ridging in one day. If no herbs are incorporated Fon farmers however strive to sow as soon as possible to make maximum use of the rain, but before the 1940s if much tall grass was incorporated many waited up to four months for the grass to decompose as explained above.

Several plateau Fon credit themselves with having invented the double-edged scythe. When Ederveen (1990:61) interviewed them in 1988, some blacksmiths in Sinhoué and Hounto and some farmers in Kinta – which are three villages on the southern Fon plateau – all claimed to have derived the idea from a sickle on a long stick which was used by Fon farmers around Djidja and Détohou, but which was inconvenient for slashing grass and was hardly used for this purpose. Farmers in Détohou on the plateau-savannah border adopted the double-edged scythe after seeing it on the Abomey market around 1950, farmers in Djidja in the northern savannah followed during the 1950s, and farmers still further north around Savalou and Dassa still incorporate their herbs today, but Dassa does not have much *Andropogon gayanus* according Aoundome men who performed wage labour there (ibid and own interviews in Aoundome).

The Fon blacksmiths' claim that one of them designed the two-edged scythe is probably true because no other West African tools could have stood model for it; though it remains unclear which smith was the first. It is also obvious that knowledge about the new utensil spread rapidly to all Fon blacksmiths and farmers on the plateau and on its eastern slopes through local tool trade networks. The markets of Abomey and Kana, which almost all Fon visited once in a while, as well as the smithies in those two former palace towns, played central roles in this process of technological standardisation. Soon almost all Fon plateau

smithies forged the *ada*, as my own and Ederveen's (1990) research shows. An elderly blacksmith in Kana-Dodome said about the 1940s and 1950s:

> "In those days the people came from far and near to buy hoes, cutlasses and scythes here in Kana. They came from Atogon, Zado and Atchia. We sold our products at home and on the markets of Kana, Abomey and Bohicon. The people from Zado and Tindji[26] purchased more scythes than the others." (Victor Azaïnon, Kana-Dodome, 19 June 1989).

The rapidity with which the scythe and the new slashing technique spread in the 1940s to all Fon, but not to neighbouring cultural groups, through existing trade networks, also strengthens my belief that the Fon and Adja's different hoe types and their corresponding tillage techniques spread in the same way in pre-Columbian times.

### *Labour needs of ridge versus flat land preparation compared*

In this and the following sections I will compare the labour times needed for the Fon and Adja's cultivation techniques, in terms of minutes per hectare and timing over the year. Again I distinguish between land preparation before sowing on the one hand, and crop maintenance including sowing and harvesting on the other.

As far as land preparation is concerned, labour time measurements do not contradict the popular opinion that the Fon preparation techniques require more work (Tables 9.2. and 9.3). Kersten (1988) measured labour times in 1987 in typical farmers' fields in the Ehwe-Adja village Zouzouvou, and I did the same in 1990 in Atindehouhoué, Lagbahome and the Fon villages Lissazounme, Sahè and Aoundome. Of these, Atindehouhoué and Aoundome have grey and the other villages red soils. Kersten (1988) and I found more or less the same Adja labour times for all tasks except weeding, which was roughly 30-35% faster in Zouzouvou than in the cases I observed, and might be due to the relative dry year 1990 and/or to the grey soils of Atindehouhoué and the prevalence of spear grass (*Imperata cylindrica*) in Lagbahome.

Kersten and I found also more or less the same relative differences in speed between gender and age groups (i.e. age- and gender specific labour time indices based on her and my own observations are quite similar): Adult men are fastest in most tasks, followed by women and boys between 9 and 15 years, next come girls of 9-15 years, then seniors and small boys, and finally small girls. Differences are greatest for tasks which require much physical strength, especially land clearance, ridging and opening plant holes, and smallest for tasks which require precision like sowing. When it comes to weeding Adja maize however, boys of 9-15 are fastest according to both Kersten (1988) and my own observations. The girls of 9-15 years whom I observed were on average fastest in weeding Adja groundnuts, faster than adults and boys, but this is not confirmed by Kersten's observations. Taken together I trust that Kersten (1988) and my observations were careful and numerous enough and the observed cases sufficiently representative for plateau farms[27] to draw conclusions about Fon-Adja differences, also regarding weeding.

According to my own and Kersten's (1988:26) measurements, adult Adja men need roughly 90 hours to prepare one hectare for sowing. Adult Fon men need 87-101 hours (depending on the mode of calculation, see notes to Table 9.2) for their 'new style' land preparation, consisting in slashing *Andropogon gayanus* mixed with some shrubs with the scythe and ridging counted together, or 116 hours for the 'old style' pushing *Andropogon gayanus* to the ground and incorporating it into the ridge. All these observations were on

typical farmer's fields that had been cultivated the year before or in some cases between 1 and 4 years before, and were covered with herbs and some shrubs, in Fon fields mainly *Andropogon gayanus, Digitaria spp*. and *Daniella oliveri*, in Adja fields mainly *Commelina spp., Boerhavia spp, Portulaca meridiana, Talium triangulare* and other broad-leaved herbs, grasses like *Digitaria spp., Brachiaria deflexa* and *Imperata cylindrica*, and shrubs like *Mallotus oppositifolius, Combretum hispidum, Securinega virosa* etc.

Estimations by Pijnenburg's (1987:23) Adja respondents are slightly more optimistic and those of his Fon respondents more pessimistic then my measurements, but they too indicate that Fon land preparation takes a little more time than Adja land preparation. A plausible explanation for the Adja respondents' apparent understatements and the Fon respondents' overstatements is that the Adja, but not the plateau Fon, derived status from working hard and fast on the land. Adja farmers usually set targets for themselves in terms of daily area to achieve and time to spend on it, and bring a measuring stick and if they can also a watch to the field for this purpose. In section 8.3 I described how my Adja interpreter bought a watch when he started to farm again and prided himself in improving his speed from day to day. When several Adja work in the same field as is often the case, they turn it into a sporting-like contest by assigning individual plots, adapted to the worker's age, and competing who finishes first[28]. Even children of 7-8 years receive a plot which is small enough for them to finish around the same time as the adults, which gives them a desire to imitate, a sense of achievement and the pride of contributing to the group's work through their own effort in the field. Adja children of 5-6 years sometimes stand between an elder person's legs, hold the hoe together with him, and acquire agricultural skills and values in that way. Fon farmers in contrast work either alone in the field or in small groups on the same plot without measuring or plan, complain about the drudgery, and tend to go home when they are fed up with it. At best they count in hindsight how many ridges they made, or how many bowls of seed were required for a certain field, but they don't know the length of these ridges. Biaou (1994:23, 1995:12) confirms that also in the neighbouring provinces Atlantique and Ouémé, Fon, Ayizo and Gun farmers used to measure only imprecisely in terms of ridges or bowls of seed, and regard precise measuring with stick a recent introduction by Adja and Holli farmers, adopted with the aim to combat laziness. The standard surface measure which the Fon do have (but rarely use) is also larger (576 $m^2$) then the most common Adja standard for a day's work (400 $m^2$), which seems to support my findings that most Adja field tasks take more hours per hectare than the Fon's. According to my observations, Fon plateau children also more often work alone in the field without adults farming with them than Adja children, a situation which makes the Fon kids feel that they perform unpleasant labour duties rather than giving pride in imitating adults, and convinces them that growing up in age and status goes with being freed from agricultural work. When asked about their labour time, Adja farmers probably sketch the ideal situation. Reality is sometimes different; my observations included a few workers who were sick, pregnant, fasting during the month of Ramadan which coincided in 1990 with land preparation time, had a baby on their back, tilled dry soil for lack of rain, were tired because they had worked several hours already before we came to observe them, or were slow for a less obvious reason.

I had too few labour time measurements of piling up and burning the clippings to include them in my calculations, but those I have and the labour time surveys by myself and by researchers of the FSA indicate that this task takes between 0.3 and 3.5% of the total time

Table 9.2: Land preparation labour time per hectare by adult males, 16-54 years

| | Adja | Fon old technique | Fon new technique after ca. 1940 | | |
|---|---|---|---|---|---|
| | Superficial tillage with the hoe | Pushing grass to the ground & incorporating it in the ridge | Slashing with the scythe | Ridging | Slashing + ridging |
| Individual[1] h/ha averaged | **90** | **116** | 46 | 55 | **101** |
| Range (h/ha) | 50-182 | 94-128 | 19-108 | 28-93 | |
| N | 26 | 4 | 13 | 29 | |
| Aggregate times/areas[2] | **91** | **116** | 32 | 55 | **87** |
| N | 10 | 4 | 13 | 29 | |
| Farmers' estimations[3] | **80** | | 50 | 65 | **115** |
| N | 19 | | 12 | 12 | 12 |

1 Obtained by first calculating individual speeds per hectare and then averaging them. If differences in speed are great, this gives excessive weight to slow individuals. Sources: Own observations, supplemented for the Adja by observations by Kersten (1988).

2 Obtained by summing up all the worked minutes and the total area achieved by all the workers that we observed. This gives more weight to individuals who worked long and/or large areas. (We had no standard time of observation, but stopped when either we of the worker wanted to go home). Source: Own observations.

3 Estimations by 19 Ehwe-Adja farmers in Kpatohoué and 12 Fon farmers in Sahè. Source: Pijnenburg (1987:23).

spent in the field depending on crop, gender and tillage style (Tables 9.19 and 9.20). Groundnuts require the most thorough elimination of the clippings to allow sowing, while cotton is mostly planted between the rows of maturing maize without burning. After the harvest of the maize its stalks are laid on the ground to decompose between the rows of cotton but are still not burned. Women spend more time in piling up and burning because this is supposedly a female task, but our observations show that men also participate. My only observation of clearing secondary bush of 3 m high with the cutlass required 194 hours per hectare.

The figures show that slashing and ridging take only a little more time than the Adja' superficial clearing if one has sufficient physical strength. Ridging in particular requires a concentrated effort, but also training. Other field tasks, including the Adja's preparatory tillage, demand less energy per minute but are usually hold out during a greater number of hours per day. It is significant that most adult women and boys between 9 and 15 years need considerably more time to ridge one hectare than adult men, see Tables 9.3 to 9.4, while for most other field tasks the age- and gender effect is smaller. Consequently, if women and children prepare the land, the time gap between Fon and Adja is greater than if men do it. This might be one reason why many Fon men do prepare at least their own land, even if they absent themselves from their fields during the rest of the growing season, as many Fon men described in the case study in section 8.2 and in my earlier publications do (Wartena 1994a; 1994b; 2001). Fon women with own fields either train themselves in soil preparation and perform all the tasks alone, or engage wage labourers for the ridging and sometimes also for slashing. Fon children, especially boys who don't go to school, help both their parents with these tasks.

Among the Adja, most adults, male and female, prepare their own fields with the help of their sons and to a lesser degree their daughters. Wage labour for land preparation is less important on the Adja than on the Fon plateau. Large farmers in the savannah to the north of the Fon plateau however engage much wage labour for ridging, which gives rise to seasonal labour migration by mainly Fon men who are used to this type of work as the

case of Aoundome in section 8.1 illustrates. Adja farmers in the savannah around Tado and Lonkly neither ridge their land nor engage large amounts of wage labour from the plateau, but mainly use family labour.

Table 9.3: Land preparation labour time per hectare by adult females, 16-54 years

| | Adja | Fon new technique after ca. 1940 | | |
|---|---|---|---|---|
| | Superficial tillage with the hoe | Slashing with the scythe | Ridging | Slashing + ridging |
| Individual h/ha averaged[1] | 100 | 46 | 158 | 204 |
| Range (h/ha) | 65-156 | 46 | 108-284 | |
| N | 14 | 1 | 11 | |
| Aggregate times/areas[2] | 100 | 46 | 155 | 201 |
| N | 14 | 1 | 11 | |

Notes: as Table 9.2
Sources: Own observations, supplemented for the Adja by observations by Kersten (1988).

Table 9.4: Land preparation labour time per hectare by boys 9-15 years

| | Adja | Fon new technique after ca. 1940 | | |
|---|---|---|---|---|
| | Superficial tillage with the hoe | Slashing with the scythe | Ridging | Slashing + ridging |
| Individual h/ha averaged | 178 | 66 | 106 | 172 |
| Range (h/ha) | 100-330 | 26-193 | 81-135 | |
| N | 9 | 9 | 7 | |

1 Observations include some relatively small, slow boys. The 3 Adja girls whom we observed cleared faster (116 h/ha). For most other tasks however girls are slower than boys.
Sources: Own observations, supplemented for the Adja by observations by Kersten (1988).

Table 9.5: Land preparation labour time per hectare by girls 9-15 years

| | Adja | Fon new technique after ca. 1940 | | |
|---|---|---|---|---|
| | Superficial tillage with the hoe | Slashing with the scythe | Ridging | Slashing + ridging |
| Individual h/ha averaged[1] | 116 | 71 | ? | ? |
| Range (h/ha) | 94-143 | 28-91 | | |
| N | 3 | 4 | 0 | |

Note: as Table 9.2
Sources: Own observations, supplemented for the Adja by observations by Kersten (1988).

An important consequence of the Fon's more time consuming land preparation is that most Fon sow later than the Adja. This is aggravated by the fact that industrious Adja, like Sodeka in the case study in section 8.3, start clearing at the end of the dry season already, while most Fon wait with slashing until the onset of the rains to prevent the grass from stooling out again before they can start ridging, which requires moist soil. Another reason why the Fon usually sow later than the Adja is that ridge-tops dry out faster than flat-tilled soil,

especially just after tillage and as long as the soil is bare (own observations and interviews; Maduakor et al. 1984:123; Bowers 1962:84; Botswana Annual Report 1983-84:150). To avoid loosing their whole crop, farmers wait to sow ridges until the rains are well installed. However, disadvantages of late sowing are that substantial amounts of nutrients leach out with the first rains, especially if the soil is bare as is the case with ridged land, and that less time is left for the crop to mature. If rains start late the season might even become too short to ridge and sow at all, while flat cultivation is still possible. During my research in both 1989 and 1990 the first season rains were too late for many Fon to sow their short cycle maize or even to sow pulses, but not for the Adja to plant their long cycle maize.

### 9.2.3 Labour processes of Fon and Adja crop and weed management compared

Are Fon farming styles indeed more labour intensive than Adja styles, as popular opinion asserts? Do they fit into a Boserupian evolutionary model of agricultural growth conditioned by increased drudgery of labour? Or is Pijnenburg (1987) correct that Fon and Adja farming styles require about the same amount of work? In the following section I will discuss field labour processes after the initial preparation of the land, in other words crop management from sowing to harvesting. I will analyse Fon and Adja social division of labour, amounts and timing of work required for each field task, total labour needs per unit of land and per crop, and changes in these during the 20$^{th}$ century. Weed management is an essential part of this labour process, will appear to be one of the principal differences between Fon and Adja styles, and has important ecological consequences. Therefore, emphasis in the following section will be on weeding.

The analysis will allow to judge whether it is laziness and insouciance or something else that keeps the Adja from ridging. It will be shown that the Fon more than make up for their initial loss of time during crop maintenance later in the year. All in all, the image of Adja laziness and Fon diligence will clearly be reversed.

Much to my own surprise, analysis of my labour time measurements reversed the popular image that Fon styles of farming are more work than the Adja's. It also shows Pijnenburg's estimations for the Adja to be quite imprecise. Instead, the measurements show that Adja farming styles require significantly *more* labour per unit of land than Fon styles. According to my measurements, for a maize crop male Adja need about twice as much labour as Fon men, and female Adja need almost twice as much time as Fon ladies (Tables 9.6 to 9.9). For a groundnut crop, Adja men need two to three times and Adja women about two times as much labour as their Fon counterparts (Tables 9.10 to 9.13). Figures for Fon and Adja children exhibit similar differences. Also cotton, tomatoes and until 1960 castor, grown in large quantities by the Adja but not by the Fon, are very labour intensive. The Fon's sorghum in contrast is very little work. Since the 1960s, cotton belongs to the Adja's and sorghum to the Fon's principal second season crops, and both are grown in relais-cropping with first season crops. A comparison between the two shows that Adja men need five to six times as much labour for growing cotton than Fon men need for a sorghum crop according to my measurements (Tables 9.14 and 9.16). If the work as done by women, the Fon are at least four to five times faster than their Adja sisters (Tables 9.15 and 9.17). Even if I allow for a measuring error margin of 20%[29], or would use Kersten's (1988) weeding figures instead of mine, huge differences between Fon and Adja labour expenditures remain.

### *Sowing, weeding and harvesting on ridged and on flat land*

These huge differences reside for all crops first in the extra time that the Adja need for sowing and especially for weeding. Second, crops like cotton, groundnuts, tomatoes and chilly peppers also require much harvesting labour. Groundnuts are extremely more difficult to harvest from minimally tilled land than from ridges. To understand why this is so I need to describe Fon and Adja sowing, weeding and harvesting techniques.

The Adja's sowing consists in two steps and is therefore more labour intensive than the Fon's one step technique. Sowing labour time also increases with planting density. The Adja make plant holes with the hoe or – especially in olden days – sometimes with the digging stick. This was and is a task of men and teenage children, but women often do it themselves on their own fields. Adja women and children of all ages then sow grains into the holes and cover them with soil with one foot. Among the Fon, women, girls, less often boys, and occasionally men, make plant holes into the ridge-tops with their heel, sow grains into the hole, and close it with their toes.

Weeding with the hoe was initially men's work, but not later than 1772 the Fon's female slaves, wives and daughters started to help with it, first on their husbands' and fathers' fields and later also on their own plots. Since the early 20th century also more and more Ehwe-Adja daughters and then wives help with weeding the household's crops, and acquire their own fields which they weed themselves with the help of their daughters and to a lesser extent their sons (Wartena 1997; 2001). Until the 1940s the weeding requirements of Fon and Adja fields did not differ much. The Fon's straight ridges were always relatively easy to weed, and each Fon crop seems to have been weeded once since early kingdom times. Weed infestation on Adja fields was low until roughly between the two World Wars. Before the 1920s some Adja crops were even hardly weeded at all and for others one weeding round[30] was sufficient.

Gradually cultivation periods increased, which encouraged (initially) the growth of herbs and grasses. On Adja fields in particular, also fast growing shrubs emerged. All these are quite effectively uprooted and eliminated by ridging, but with minimal tillage they survive and quickly stool out again. Therefore since the 1930s more and more Adja weed each maize crop twice, and since the Second World War many weed trice. Only unforeseen shortages of rain or labour make some Adja farmers cease weeding after the first round, but such neglect severely depresses their maize yields as experience has shown. If the farmer wants to sow cotton in July between the maturing maize or maturing tomatoes, which is the customary way to grow cotton since the introduction of the variety Allen in 1963, the third weeding round is next to compulsory and constitutes the soil preparation for cotton. Cowpeas and groundnuts, which have a shorter growing cycle and cover the soil more effectively, can mostly do with one or occasionally two weeding rounds.

If however the principal weed in Adja fields is spear grass (*Imperata cylindrica*), a grass with rhizomes which thrives on open land of good to average fertility, even three weeding rounds may be insufficient. This grass is a problem in many Adja fields where tree cover has decreased. The Adja developed several strategies to deal with this herb. One is to quench it by planting cassava (see 7.3.6), pigeon peas or *Mucuna pruriens* or by leaving the field under oil palm 'fallow' (*dekan*, see 6.5). *Mucuna pruriens* was introduced in 1986 by agronomists to raise soil fertility, but Adja farmers discovered within one year its effectiveness to combat spear grass and spread it rapidly among themselves for the latter purpose (Koudokpon 1992:77; 1994:173). A disadvantage of *Mucuna* is that its seeds are unsuitable for human

consumption except after special treatment. Also oil palm fallow is very effective against spear grass but benefits only landowners[31]. Others uproot spear grass by planting tomatoes or capsicum peppers on mounds, which is very labour intensive. *Dekan, Mucuna* and tomatoes are mainly male strategies, pigeon peas, cassava and capsicum peppers are also planted by women. If the soil fertility further declines, spear grass gives way to smaller herbs. On the Fon's ridged fields one weeding round remained sufficient, and there are no indications that this will increase, because most Fon soils have become too poor to produce much weeds. Spear grass is rare on the Fon plateau because of ridging and because most Fon soils are too poor for this weed.

Weeding time measurements by myself and by Kersten (1988:29) between 1986 and 1990 show that Adja weeding, no matter whether it is in maize or groundnuts, takes considerably more time than Fon weeding and also than Pijnenburg (1987) estimated[32]. According to our measurements, weeding a maize crop is about 3 to 5 times more work in flat Adja fields than in ridged Fon fields, depending on the number of weeding rounds that the Adja farmer performs. We measured 3 to 7 times higher weeding requirements for Adja- as compared to Fon groundnuts, again depending on Adja weeding rounds. Weeding times of each gender and age group separately exhibit the same difference between Fon and Adja; see Tables 9.6 to 9.13 and 9.18. Adja weeding times in cotton which I observed held the middle between groundnuts and maize (Tables 9.16 and 9.17).

Several studies indicate that the Adja devote larger proportions of their total agricultural labour time on weeding than the Fon, except perhaps for groundnuts which are more difficult to harvest from flat than from ridged land. For the Fon, weeding takes 18-25% of their total farm labour time both according to my measurements in groundnuts and maize and according to my time allocation survey among Fon women from March 1990 to March 1991, see Table 9.19. Extensionists on the Fon plateau recommend 22% for cotton, 25% for cowpea, and about 27-28% for maize and groundnuts (Table 9.21). The Adja in contrast devote 38-60% of their time in maize, 20-48% of their time in cotton, and 16-45% of their field labour in groundnuts (depending on whether plucking pods from the uprooted plants is included or not) on weeding, according to my measurements and to time allocation surveys by my self in 1985 and by the UNB-FSA in 1986-1987 (Tables 9.6 to 9.13, 9.16, 9.17, 9.19, 9.20). Relative weeding requirements of Adja cotton and groundnuts are lower than of Adja maize because of the labour intensive harvest of these two crops.

Harvesting was and is Fon and Adja women's and children's work, except if it concerns underground parts or palm fruit, then it is mainly male. This implies that women and children harvest maize, cowpeas, sorghum, vegetables and cotton with their bare hands and in the past pearl millet with small knives. They are, however, remunerated with the gift of part of what they harvested unless it concerns a food crop of a 'senior' member of their house for whom they are obliged to work, as the case of Veduna (Wartena 2001:243) illustrates. In the case of cotton they receive a gift in cash after the crop is sold or a new dress at the occasion of the New Year. The Adja typically harvest in large groups of women and children from the neighbourhood. Women and children are also responsible for carrying the harvest home on their head.

Occasionally, men assist with these tasks, especially picking their own cotton and tomatoes and transporting by bike, after finishing their own work. If hoes or cutlasses are needed for harvesting then the work is always male except if a woman owns the crop. Men dig up yams, cassava, and most of the groundnuts.

Fon groundnuts grown on ridges are usually simply uprooted by hand, and women and girls participate in it. The Adja however have to dig up their groundnuts with the hoe or cutlass, except in sandy soils if they are very moist. My labour time measurements indicate that the Adja's groundnut harvest is between 2 and 6 times as much work as the Fon's for uprooting the plants alone[33]. Extremely long hours are reached in some dry Adja soils, especially in the greyish soils of the central plateau as compared to the red soils in the East and West. For this reason the central Adja grow systematically less groundnuts than their neighbours. Combined with the fact that groundnuts can still thrive on poor Fon plateau soils, labour processes also explain why the Fon plant much more of this crop than the Adja on all soil types. In the mixed Fon-Adja region of the eastern Adja plateau, most groundnut fields belong to Fon farmers and to a few Adja who experiment with ridging for this crop. But even there, most Adja farmers refrain from ridging their land.

My data also suggest that the Adja need more time for harvesting and transporting their maize, which surprises because their maize harvesting techniques are the same as the Fon's, but can be explained by transportation times and Adja tiredness. The observed Adja maize fields were fairly large and on average 2 km from the village (range 0.5 – 3.5 km), as typical for Adja maize, so that harvesting and transporting constitutes an Adja labour peak. Most Adja women and girls harvest and transport maize about 10 hours every day during this period and are obviously tired in the end; so also in almost all the Adja cases I observed. Central Fon plateau maize is mainly grown in small home gardens because the more distant fields are too poor, can be harvested in a few hours, and does not require much transport. All my Fon maize harvesting time observations were in such small plots. We assessed also the maize yields obtained; these were of the same order[34] on both plateaux in those fields whose harvesting times we measured, and can therefore not explain the differences in speed. Maize yields in more distant Fon plateau fields tended to be lower.

High labour costs for cotton stem from the fact that each cotton crop is plucked three times by hand. This careful plucking is one of the reasons why Bénin's cotton is known as the best of francophone Africa (INSAE 2002:50). The plucking times I measured in cotton seem high but my sample is large (82 plucking observations all ages taken together) and the observed age-specific patterns normal enough to be conclusive[35]. Plucking times probably increased since the introduction of the cotton variety Allen in 1963 because it yields much more than older varieties. The Adja custom to remunerate cotton harvesters with a cash gift stems from shortly after this date. The high labour requirements of cotton is one of the explanations given by local people and local extensionists for the fact that in mixed Fon-Adja villages, on both plateaux, it is mainly the Adja who grow cotton[36]. Fon in the savannah north of the plateau however do plant cotton and employ wage labour for harvesting; some few women from Lissazounme engaged in this job.

Additional operations which some farmers perform are thinning unwanted seedlings, application of chemical or organic fertiliser, and sprinkling insecticide. As mentioned in section 7.1.3 and shown in Table 9.21, extensionists recommend thinning to two plants in those holes where more than two have germinated, but Fon and Adja farmers only thin some weak plants in pockets of four that fall automatically into their hands during weeding. Women in central Fon plateau villages apply most organic manure, followed by Adja women in red soil villages. Adja and Fon men in grey soil villages manure least, with other categories somewhere in between as I will show in section 9.4.1.

Since the mid-1980s, more and more Adja but hardly any Fon use chemical fertiliser, especially on cotton, maize, tomatoes, chilly peppers, and occasionally on groundnuts as

section 9.4.2 and Tables 9.7, 9.9, 9.15, 9.16 and 9.20 indicate. Since then, Adja farmers also widely apply cotton insecticide to cowpeas and of course to cotton. The insecticide is made available, with pulverisers, to cotton planters. Many cowpea cultivators, most of whom are women, manage to lay their hands on some insecticide, but rarely on the pulverisers[37]. Until the early 1990s, the extension service kept the pulverisers and lent them to cotton planters in turns, but only during the cotton spraying season, and primarily to male planters. Cowpea growers therefore sprinkle the insecticide on their crop by means of a palm leaf, which takes adult women about 20 hours per hectare (7 observations), while adult men need only 1,5 hours to spray insecticide with the pulveriser on cotton (15 observations). Most of the numerous female cotton growers in Atindehouhoué had their cotton sprayed by a male relative. Sprinkling with a palm leaf is also less precise and constitutes a greater health risk.

Table 9.6: Labour time needed for a maize crop by adult Fon men (16-54 years)[1]

| | Hours per hectare | Range | N |
|---|---|---|---|
| Slashing | 32-46 | 19-108 | 13 |
| Ridging | 55 | 28-93 | 29 |
| Sowing[2] | 20 | 17-24 | 2 |
| Weeding[3] | 53 | 47-59 | 4 |
| Harvest | 49 | 37-67 | 4 |
| **Total** | **208-222** | | |

1 All figures, except for the lower slashing time, are obtained by first calculating individual speeds per hectare and then averaging them. The lower slashing time is obtained by summing up all the worked minutes and the total area achieved by all the workers that we observed. For the other tasks the differences between the two modes of calculation are negligible.
2 Pijnenburg's (1987:23) 12 Fon respondents estimated that they need 22,5 h for sowing maize.
3 Observations for maize, cowpeas, groundnut and sorghum taken together. Time differences between weeding these crops on ridges were negligible. Pijnenburg's (1987:23) Fon respondents estimated that they need 50 h for weeding maize.
Sources: Own observations.

Table 9.7: Labour time needed for a maize crop by adult Adja men (16-54 years)[1]

| | Hours per hectare | Range | N |
|---|---|---|---|
| Land preparation | 90 | 50-182 | 26 |
| Opening plant holes | 16 | 5-46 | 17 |
| Sowing | 17 | 14-20 | 2 |
| 2-3 weedings[2] | 172-259 | 50-143 per round | 13 |
| Harvest & transport[3] | 93 | 61-136 | |
| **Total** | **389-475** | | |
| Optional fertilising[4] | 11 | 4-22 | 12 |

1 All figures are obtained by first calculating individual speeds per hectare and then averaging them. (Calculation by summing up all the worked minutes and dividing this by the total area achieved by all the workers that we observed gives a slightly higher total of 408-500 h/ha without fertilising: 91 h/ha for land preparation, 21 for opening plant holes, 18 for sowing, 184-277 for weeding, and 93 for harvesting).
2 The lower figure is for 2 and the higher for 3 weeding rounds (82,2 h per round).
3 Harvest including transport, mostly by head, of maize cobs over ca. 2 km (range 0,5 – 3,5 km) from field to village. Extrapolation from 7 mixed groups of 35 harvesters of different genders and ages, working together on the same plot. Their average speed was 117 h/ha; I estimated the adult male speed using labour time indexes derived from observations by Kersten (1988:39) and myself on the other field tasks.
4 Superficial fertilising besides each plant, which was the most common method. Only a minority of Adja fertilised their maize, therefore I do not include it into the total labour times. By 1990, a still smaller minority of Adja farmers experimented with incorporating fertiliser by opening 'plant' holes for the fertiliser with the hoe or digging stick, throwing fertiliser into the holes, and closing the holes with the toes. Adult men needed ca. 30 h/ha for incorporating fertiliser.
Sources: Own observations, supplemented by observations by Kersten (1988).

Table 9.8: Labour time needed for a maize crop by adult Fon women (16-54 years)

| | Individual times averaged[1] | | Aggregate time[2] | N |
|---|---|---|---|---|
| | Hours/hectare | Range | Hours/hectare | |
| Slashing | 46 | 46 | 46 | 1 |
| Ridging | 158 | 108-284 | 155 | 11 |
| Sowing | 36 | 30-54 | 32 | 4 |
| Weeding[3] | 71 | 30-170 | 76 | 5 |
| Harvest[4] | 51 | 18-117 | 35 | 8 |
| **Total** | **362** | | **344** | |

1-3: As Tables 9.2 and 9.6.
4 Much time was needed by two sick women. The average speed of the healthy individuals was 32 h/ha.
Source: Own observations.

Table 9.9: Labour time needed for a maize crop by adult Adja women (16-54 years)[1]

| | Individual times averaged[1] | | Aggregate time[2] | N |
|---|---|---|---|---|
| | Hours/hectare | Range | Hours/hectare | |
| Land preparation | 100 | 65-156 | 100 | 14 |
| Plant holes | 18 | 13-30 | 20 | 11 |
| Sowing | 11 | 10-19 | 16 | 9 |
| 2-3 weedings[3] | 225-338 | 62-191 per round | 242-363 | 23 |
| Harvest & transport[4] | 105 | 68-153 | 105 | |
| **Total** | **459-572** | | **484-605** | |
| Optional fertilising[5] | 16 | 8-30 | 17 | 19 |

Notes: 1-5: As Tables 9.3 and 9.7.

### *Changes in fallow vegetation*

Vegetation maps and descriptions of the Aplahoué area in 1889 and of the Kana area in 1892-1893 indicate that the principal fallow vegetation on the (central-eastern) Fon plateau then consisted of tall grasses, and the principal semi-spontaneous vegetation on the (western) Adja plateau was a thicket that contained many trees and shrubs (see Maps 5 and 6 in Appendix 1). Elderly plateau inhabitants confirm this, specify that the principal Fon plateau grass was *Andropogon gayanus*, and that it was initially inter-grown by small trees and shrubs. During the 20th century, woody species on the Fon plateau gave way first to *Andropogon,* which incited Fon blacksmiths to invent the scythe *ada*, and then more and more to small herbs that thrive on poor soils like *Cyperaceae* and *Digitaria spp*., *Ipomoea involuncrata* and *Striga spp*. The changes in fallow vegetation from the 1910s to 1990 on Tobada's and Ahovi's fields in Lissazounme, which I described in section 6.5.2, are some of the many examples I could provide. Fallow periods hardly contributed to reverse the process of vegetation change in ridged land that contained but few roots of woody species, also because Fon farmers used to slash fallow vegetation between oil palms every year to prevent fire damage to the palms. Consequently, in 1990 the principal dry season plants in the Fon fields where we measured labour times were *Andropogon gayanus, Digitaria spp*., and the savannah tree *Daniella oliveri*.

Also elderly Adja describe how the number of wild trees and shrubs declined in their fields with prolonged cultivation, but these gave way to a greater variety of broad-leaved

Table 9.10: Labour time needed for a groundnut crop by adult Fon men (16-54 years)[1]

| | Hours per hectare | Range | N |
|---|---|---|---|
| Slashing | 32-46 | 19-108 | 13 |
| Ridging | 55 | 28-93 | 29 |
| Sowing[2] | 33 | 23-44 | 2 |
| Weeding[1 3] | 53 | 46-59 | 4 |
| Harvest[4] | 67 | 30-138 | 14 |
| Total | **240-255** | | |

1 As Table 9.6.
2 Pijnenburg's (1987:23) 12 Fon respondents estimated that they need 42,5 h/ha for sowing groundnut.
3 Pijnenburg's (1987:23) Fon respondents estimated that they need 55 h/ha for weeding groundnut.
4 Uprooting the plants only.
Sources: Own observations.

Table 9.11: Labour time needed for a groundnut crop by adult Adja men (16-54 years)

| | Individual times averaged | | Aggregate time | N |
|---|---|---|---|---|
| | Hours/hectare | Range | Hours/hectare | |
| Land preparation | 90 | 50-182 | 91 | 26 |
| Opening plant holes | 60 | 58-68 | 60 | 5 |
| Sowing[1] | 65 | 60-72 | 65 | 5 |
| 1-2 weedings | 188-377 | 77-567 per round | 173-346 | 18 |
| Harvest[2] | 201 | 57-490 | 121 | 10 |
| **Total** | **604-792** | | **510-683** | |

1 Estimated on the base of female sowing times, using labour time indexes derived from observations by Kersten (1988: 39) and myself on the other field tasks.
2 Uprooting the plants only. Some harvests from tiny areas of very dry red soil and wet grey soil required much time. Therefore, the harvest time calculation based on aggregates is considerably lower.
Sources: Own observations, supplemented by observations by Kersten (1988).

Table 9.12: Labour time needed for a groundnut crop by adult Fon women (16-54 years)[1]

| | Hours per hectare | Range | N |
|---|---|---|---|
| Slashing | 46 | 46 | 1 |
| Ridging | 158 | 108-284 | 11 |
| Sowing[2] | 69 | 32-158 | 11 |
| Weeding[3] | 71 | 30-170 | 5 |
| Harvest[4] | 45 | 45 | 1 |
| Total | **389** | | |

1 Individual times averaged. Calculations on the base of aggregate times gave the same results.
2 Including one woman of 63 years.
3 As Table 9.6.
4 Uprooting plants only.
Sources: Own observations.

herbs and grasses and not at all to *Andropogon gayanus* nor to *Striga spp*.[38] These two were virtually unknown among the Adja fields until the end of my research. What is more, when Adja farmers left their land fallow for about 7 years or more, trees and shrubs always reinstalled themselves and quenched grasses and small herbs. Adja fallows of this duration were almost always under the *ede xo nyigban* (oil palm fallow) regime; under the high palm densities no grasses could survive. The cyclically changing vegetation in the oil palm

groves of Sonyonu Dɛngbɛnɛn between 1906 and 1970 that I described in section 6.5.3, in the groves of Soton, Tonu and Henyon (6.5.3 and Tables 6.6 to 6.9 in Appendix 6), and in the groves of Hwehwe (8.3) are examples of this. Experiences of other Adja farmers have shown that fields with *Imperata cylindrica, Brachiaria deflexa, Cyperaceae* and *Digitaria spp*. became free of grass again after a few years under oil palm fallow. But even if Adja farmers cultivated permanently during 20 to 40 years without leaving their land fallow, as also Sonyonu Dɛngbɛnɛn did between 1970 and 1990, herbs remained more abundant and more diverse than in central Fon plateau fields, and continued to consist in a mixture of small and medium grasses, broad leaved herbs, and some shrubs. Indicative is the vegetation in the Adja fields where I measured labour times in 1990. It consisted mainly in *Commelina*

Table 9.13: Labour time needed for a groundnut crop by adult Adja women (16-54 years)

| | Individual times averaged | | Aggregate time | N |
|---|---|---|---|---|
| | Hours/hectare | Range | Hours/hectare | |
| Land preparation | 100 | 65-156 | 100 | 14 |
| Plant holes | 63 | 63 | 63 | 3 |
| Sowing | 74 | 69-83 | 92 | 5 |
| 1-2 weedings[1] | 198-396 | 83-511 per round | 187-374 | 30 |
| Harvest[2] | 288 | 105-755 | 202 | 5 |
| **Total** | **723-921** | | **643-830** | |

1 The lower figures are for 1 and the higher for 2 weeding rounds. Most Adja weed their groundnuts once.
2 Uprooting plants only. One woman needed 755 h/ha to uproot plants from a tiny plot of dry red soil. Therefore, the harvest time calculation based on aggregates is considerably lower.
Sources: Own observations, supplemented by observations by Kersten (1988).

Table 9.14: Labour time needed for a sorghum crop by Fon men[1]

| | Hours per hectare | Range | N |
|---|---|---|---|
| Sowing | 23 | 9-39 | 3 |
| Weeding[2] | 53 | 46-59 | 4 |
| Harvest | 57 | 60-82 | 7 |
| Total | **133** | | |

1 No slashing and ridging are required for sorghum, which is usually grown in relais-cropping with cowpeas, groundnuts or maize. Sowing and harvest include one respectively two observations on males of 13 and 58 years old, all the other observed men were 16-54 years old. Sowing and harvesting times hardly varied with age.
2 As Table 9.6.
Sources: Own observations.

Table 9.15: Labour time needed for a sorghum crop by Fon women[1]

| | Hours per hectare | Range | N |
|---|---|---|---|
| Sowing | 32 | 26-39 | 5 |
| Weeding | 71 | 30-170 | 5 |
| Harvest | 88 | 36-174 | 7 |
| Total | **191** | | |

Notes: As Table 9.14. Sowing includes two observations on females of 12-13 years old, all the other observed men were 16-54 years old. The girls sowed as fast as the adult women.
Sources: Own observations.

*spp., Boerhavia spp, Portulaca meridiana, Talium triangulare* and other broad-leaved herbs, grasses like *Digitaria spp., Brachiaria deflexa* and *Imperata cylindrica*, and shrubs like *Mallotus oppositifolius, Combretum hispidum, Securinega virosa, Uvaria chamae, Zanthoxylos zanthxyloides*, and also some *Dialium guineense* and *Dichrostachys glomerata*, thus a greater variety than in the Fon fields.

*Striga hermonthica*, and (less frequent) *Striga gesnerioides* were, with *Andopogon gayanus,* the only weeds I know off that grew only on Fon- but not on Adja fields. *Striga hermonthica* occurred in fields between roughly 20 m and 300 m from the houses which were intensively cultivated with primarily maize. On nearer fields, Fon women combat it with crop residues, organic household waste, and by-products of transformation activities (see section 9.4.1). The fact that the semi-parasitic witchweed (*Striga spp.*) only strives on organically poor soils which are quite permanently cropped with their host plant (cereals for *Striga hermonthica* and *S. asiatica,* cowpea for *Striga gesnerioides*) is well known[39]. Recent research has also shown that soil tillage of at least 10-15 cm deep stimulates the emergence of *Striga hermonthica* shoots as compared to zero- or minimum tillage of 0-2 cm

Table 9.16: Labour time needed for a cotton crop by adult Adja men (16-54 years)[1]

| | Individual times averaged | | Aggregate time | N |
|---|---|---|---|---|
| | Hours/hectare | Range | Hours/hectare | |
| Opening plant holes | 16 | 8-29 | 16 | 14 |
| Sowing | 13 | 13 | 13 | 1 |
| 1-2 weedings | 123-257 | 77-203 per round | 101-202 | 3 |
| Insecticide treatment[2] | 2 | 0.4-5.2 | 2 | 15 |
| Harvest[3] | 528 | 69-353 per round | 547 | 8 |
| Optional fertilising[4] | 11 | 4-22 | 11 | 12 |
| **Total** | **694-818** | | **690-791** | |

1 Land preparation for cotton coincides with the last weeding round in the first season crop (mostly maize) between whose rows the cotton is sown in July.
2 With pulveriser.
3 Three harvesting rounds taken together.
4 Fertilising is optional but since the later 1980s most Adja cotton planters do it. The figures are for superficial fertilising besides each plant, which was the most common method.
Sources: Own observations.

Table 9.17: Labour time needed for a cotton crop by adult Adja women (16-54 years)[1]

| | Individual times averaged | | Aggregate time | N |
|---|---|---|---|---|
| | Hours/hectare | Range | Hours/hectare | |
| Opening plant holes[2] | 19 | 11-34 | 19 | |
| Sowing | 33 | 13-69 | 27 | 8 |
| 1-2 weedings | 165-331 | 160-247 per round | 160-320 | 6 |
| Insecticide treatment[2] | 2 | 0.5-6 | 2 | |
| Harvest[1] | 600 | 61-400 per round | 506 | 27 |
| Optional fertilising[1] | 16 | 8-30 | 17 | 19 |
| **Total** | **835-1001** | | **731-892** | |

1 As Table 9.16.
2 Extrapolation from male times, because it was difficult to find women who opened cotton plant holes and treated cotton with insecticide, index 0,87 based on other tasks. Treatment was with pulveriser.
Sources: Own observations.

(Van Delft et al. 2000; Van Ast 2006:91-106). This is explained by the fact that soil tillage greatly contributes to spreading witchweed seeds through the cultivated layer. Consequently, plant roots are relatively safe from exposure to the seeds of the parasite in the deeper, untilled layers. The Adja's shallow tillage might therefore be another reason, besides the higher organic matter content of most Adja soils, why witchweed did not invade Adja fields until the end of my research in spite of the proximity of infested Fon fields.

The Fon and Adja plateau vegetation types changed during the 20th century but remained systematically different from each other, and there was no indication of convergence. What is more, the 'spontaneous' vegetation remained much more abundant in Adja than in Fon fields even after several decades of permanent cultivation. Why then did Fon and Adja vegetation remain systematically different, instead of becoming more similar to each other?

Table 9.18: Weeding times of Fon and Adja boys, girls, and senior men and women (hours per crop and per hectare)

| | Boys 9-15 | Boys <9 | Men >54 | Girls 9-15 | Girls <9 | Women >54 |
|---|---|---|---|---|---|---|
| Adja | | | | | | |
| Maize[1] | 135-203 | 289-433 | 222-333 | 283-424 | 284-427 | 231-347 |
| N | 11 | 5 | 6 | 14 | 7 | 7 |
| Groundnut[2] | 226-452 | 251-503 | 384-769 | 168-335 | 403-805 | 208-416 |
| N | 9 | 6 | 2 | 6 | 3 | 3 |
| Fon | | | | | | |
| Both crops[3] | 85 | 262 | | 74 | | 79 |
| N | 6 | 1 | | 2 | | 2 |

1 The lower figure is for 2 and the higher for 3 weeding rounds.
2 The lower figure is for 1 and the higher for 2 weeding rounds.
3 Observations for maize, cowpeas, groundnut and sorghum taken together. Time differences between weeding these crops on ridges were negligible.
Sources: Own measurements, supplemented for the Adja by some measurements by Kersten (1988)

Table 9.19: Time spent per principal field task in % of total field labour

| | Ehwe-Adja, surveys February to August[1], 1985 and 1987 | | | Fon women, days per activity, March 1990 - March 1991 |
|---|---|---|---|---|
| | Households, hours per activity, 1987 | Women, working days per activity | Men, working days per activity, 1985 | |
| Land preparation[2] | 29% | *28%* | *39%* | 29% |
| Burning clippings | 2% | 1% | 2% | 3% |
| Sowing | 14% | 9% | 9% | 19% |
| Weeding[2] | 42% | *41%* | *50%* | 20% |
| Harvesting | 13% | 20% | 1% | 28% |
| Total | 100% | 100% | 100% | 100% |
| *Tillage total* | 71% | 69% | 89% | |
| N | 10 households | 23 adult women | 13 adult men | 12 married women |
| Sources | Kersten (1988:24) | Wartena (1987:67) | Wartena (1987:66) | My survey 1990-91 |

1 The observation periods include almost the entire first agricultural seasons and the sowing of cotton for the second season. The maize harvest continued a few days longer than my survey in 1985, and also the labour intensive weeding and harvesting of cotton is excluded.
2 My Adja respondents and assistants did not distinguish between preparatory soil tillage and weeding, but called all superficial tillage with the hoe *gblen* and translated it as *sarclage*. Women devoted 69% of the days in the field on *gblen* and men 89%. Figures in italics are extrapolations from my observations, using conversion factors derived from Kersten (1988:24) and from Table 9.20.

Table 9.20: Time spent on each field task in maize, in cotton and in groundnuts, in proportion of Adja's total labour time in these fields in 1986 and 1987

| | Maize | | | Groundnuts | | | Cotton | | |
|---|---|---|---|---|---|---|---|---|---|
| | Males 8-60 yrs | Female 8-60 yrs | Total <60 yrs[1] | Males 8-60 yrs | Female 8-60 yrs | Total <60 yrs[1] | Males 8-60 yrs | Female 8-60 yrs | Total <60 yrs[1] |
| Land preparation | 37.4 | 19.0 | 29.5 | 26.7 | 12.0 | 18.3 | 10.0 | 2.3 | 6.4 |
| Burning clippings | 0.8 | 1.6 | 1.1 | 3.7 | 3.6 | 3.5 | 0.8 | 0.5 | 0.3 |
| Sowing[2] | 12.9 | 23.4 | 17.5 | 20.4 | 18.4 | 17.8 | 12.6 | 14.9 | 13.5 |
| Fertiliser application[3] | 0.2 | 0.1 | 0.1 | 0.3 | 0.1 | 0.2 | 2.0 | 0.2 | 1.3 |
| Weeding | 43.8 | 29.4 | 37.8 | 21.0 | 12.6 | 16.1 | 56.2 | 34.8 | 47.9 |
| Harvesting[4] | 5.0 | 26.8 | 13.8 | 29.0 | 52.5 | 42.8 | 19.1 | 49.3 | 30.7 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| *Tillage total*[5] | *81.2* | *48.4* | *67.4* | *40.1* | *27.9* | *32.0* | *66.2* | *37.0* | *54.3* |
| Monitored hrs of work in each crop | 56727 | 44146 | 108660 | 10244 | 12514 | 25806 | 12340 | 8720 | 22644 |

1 Including children under 8 years or of unknown age. These children contributed substantially to harvesting groundnuts.
2 Opening plant holes and sowing grains into them taken together.
3 In 1986-1987, Adja cotton planters in the surveyed households did not yet apply as much fertiliser as cotton planters in Atindehouhoué and Honsouhoué, and also much less than average Adja cotton planters did around 1990.
4 Probably including plucking groundnut pods from the uprooted plants, because much labour of children under 8 years is included in the figures.
5 Land preparation (with the hoe) and weeding taken together.
Source: 'Heures de travail effectué par chaque catégorie de membre de ménage par culture et par activité'. Data from a survey by a research team of the UNB-FSA in which daily labour times were monitored throughout 1986 and 1987 in 97 households in the villages Toulehoudji, Zouzouvou (Ehwe-Adja) and Gbanave (Dogbo-Adja).

Table 9.21: Relative labour time per field task of Fon and Adja compared[1] (recommended Fon times and actual Adja times in maize, cotton and groundnuts)

| | Maize | | Groundnuts | | Cotton | |
|---|---|---|---|---|---|---|
| | Fon | Adja | Fon | Adja | Fon | Adja |
| Land preparation | 32.9 | 30.6 | 31.9 | 21.8 | 22.3 | 6.7 |
| Sowing[2] | 7.1 | 17.5 | 15.3 | 17.8 | 6.8 | 13.5 |
| Thinning | 5.7 | | | | 7.8 | |
| Fertiliser application[2] | 1.4 | 0.1 | | 0.2 | 4.9 | 1.3 |
| Weeding | 27.1 | 37.8 | 27.8 | 16.1 | 22.3 | 47.9 |
| Insecticide treatment | | | | | 2.9 | ? |
| Harvest[2] | 25.7 | 13.8 | 25.0 | 42.8 | 33.0 | 30.7 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

1 For the Adja, labour times in 97 households as according to a survey in 3 villages in 1986 and 1987. For the Fon, labour recommendations of the extension service of Zogbodome district in 1989 (in reality, hardly any Fon farmers spend as much time on thinning and fertilising).
2 For the Adja as in Table 9.20
Sources: For the Fon, a handwritten document 'Normes' by the CARDER Zogbodome 1989. For the Adja, Table 9.20.

### *Sustainable weed management: accommodating rather than expelling the field's host*

Weeding is obviously one of the principal differences between Fon and Adja styles of farming. This is a direct consequence of their land preparation techniques, since ridging eliminates shrubs and herbs more permanently than the Adja's minimal tillage. The extra time which the Adja devote to weeding, as compared to the Fon, greatly exceeds the extra time which the Fon spend on land preparation, so that the net time gain is for the Fon. This begs the question why the Adja are willing to devote so much time to weeding, knowing that the herbs will reappear within a few weeks, while they could simply eliminate them by ridging at the beginning of the year?

Weeds compete with crops in the short run but have great ecological advantages in the longer run. They protect the soil against the sun, against erosion, and against loss of soil organic matter and of soil fauna. This organic matter enhances the soil's water retention capacity, and live roots and stubbles are a condition for abundant spontaneous fallow vegetation. The Adja's superficial curtailing of herbs creates space for the crops for a short period so that they can grow, but does not deprive the fallow vegetation of the capacity to reproduce it self. They are well aware that their repeated superficial weeding helps to maintain the ecological balance. Some told me: "We don't like ridges, because ridging kills the soil by destroying the roots." Others express this is in the parable quoted at the beginning of this chapter, whose analogy implies that the Adja consider themselves and their crops to be guests, and accept the position of the weed as 'host' who maintains the ecological house. The host may be dammed in and curtailed a little, but it would not be wise to expel him from his house, because this would jeopardise its management. This awareness that man depends on his ecological environment corresponds to that of the Sahu in Indonesia, who consider themselves both guardians and products of the land they live on (Visser 1984:9, 32). The Fon style in contrast tends to kill the host, namely the shrub, the herb and soil, and the Fon word *nukanmɛ* signifies not only bush but also rural backwardness (section 5.4.2). May I stretch the analogy to the socio-political domain and suggest that also the Fon kingdom's socio-political style implied aggression to the host? Both local and dynastic versions of Fon mythology (see 4.1.2 and 5.2) admit that the Fon State expanded by killing, expelling or subjecting one local chief of the land after the other. The kingdom's name *Danhomɛ* (in the belly of Dan) itself refers to the murder of chief of the land Dan and the establishment of Fon dominion at the same place[40]. Since these anecdotes entail confessions of having violated the in Africa commonly accepted norm that newcomers should respect the land rights and political leadership of the first human settlers, I grant a fair degree of credibility to them (Vansina 1985:105-108).

Farmers around Fon enclaves on the north-eastern Adja plateau and Atakpame in Togo had the opportunity to observe prolonged flat and ridge tillage in adjacent fields. They all came to the conclusion that ridging is in the long run more degrading for the soil structure, soil fertility, and fallow vegetation. Augustin Daa Alikoton, a young Fon farmer[41] who cultivated on the flat in some of his fields in Ahogbeya on the easternmost fringe of the Adja plateau (with the motive was to spread his labour film more evenly over the year), noticed that his ridged land degraded more rapidly:

> "I ridge some but not all my fields, because this allows me to sow earlier in the rainy season, and because I do not want to ridge on *Hunjrogbe* [the day of rest][42] but have no objections to flat-tillage on these days. My fields have been cultivated without fallow since the time of my

> grandfather because we lack land. I experienced that after 10 years of permanent ridge tillage the land is more impoverished than after 10 years of permanent flat tillage. Nevertheless I continue to ridge some of my fields because this requires less weeding afterwards; I enjoy to rest after sowing and to engage in odd jobs. All in all, ridging is more expensive in labour time than flat tillage." (Augustin Daa Alikokoton, Sahè 15 June 1990)

Lante (see quotation in 6.3.4) and Daa Aladasi, two old Fon from Sahè who farmed in Akwevɛadja on the eastern Adja plateau agreed with him:

> "If you ridge one plot every season during 10 years and you cultivate another plot with the same initial fertility permanently on the flat during 10 years, in the eleventh year the ridged plot will be poorer." (Daa Aladasi, Sahè-Abigo 15 August 1990)

Two elderly Fon who farmed on the north-eastern Adja plateau agreed:

> "Since our ancestors from Sinhoué [on the Fon plateau] arrived here on the Adja plateau, our cultivated layer has become sandier. Clay disappears more rapidly if you ridge your land than if you cultivate on the flat. And the soil fertility disappears with the clay. Therefore we can recommend to farmers who have only little land to cultivate on the flat. But flat tillage it is more work than ridges, especially because you have to weed three times instead of only once." (Jèsusi Agbanyon and Nicolas Gbadu, Akweweadja 8-1-1991)

And a Ewe who had lived near the Fon enclave Atakpame told me timidly:

> "We Ewe don't like ridges. Ridging kills the soil because it destroys the roots and stimulates water erosion. We observed that, when our Fon neighbours and immigrants from the North practise ridge tillage, after several years the land yields nothing anymore. But when we warn them not to ridge they rarely listen to us. We ourselves cultivate on the flat to protect the woody roots; our red plateau soils do not need ridges." (Georges Adjata, personal communication 1994)

#### *The image of Adja laziness and Fon diligence reversed*

The analysis of Fon and Adja labour investments per unit of land and per crop has shown that the popular image about Adja laziness and Fon farming diligence needs to be reversed. Only flat land preparation was slightly less labour intensive per hectare than ridge tillage, but the Fon more than make up for their initial loss of time during crop maintenance later in the year. It was also shown that the Adja's labour-expensive styles of farming are ecologically more sustainable than the Fon's, and in that regard not 'insouciant' or 'bad cultivation' as popular opinion holds. Whether the workaholic Adja also seized their economic interests depends on yields and prices of their crops. So far, these were mostly good enough for the Adja to justify their efforts.

### 9.2.4 Indicators for soil degradation

To describe the fertility of Fon and Adja plateau soils in the 20th century and differences and changes in these I had to use a number of indicators. Due to local variations both in soil types (see 4.2.1) and in land use history also within each plateau, soil quality parameters vary greatly between plots. Settlement history, the distance between plot and houses, fallow histories, occurrence of bush fires, crops grown, cultivation techniques all played a role. More importantly, soil fertility is also a process and not only a value, and can therefore not be expressed on a simple scale. The different aspects of soil quality should be seen in their interaction with the ecological, technological and social environment.

A few soil samples were taken on each plateau[43], as described in section 3.2.8. Crop yields, types and abundance of the fallow vegetation, and texture, colour, odour and buoyancy of the soil were considered as indicators for the actual and potential performance of the soil. These indicators were partly assessed by own observations, and partly based on farmers' descriptions and opinions about what was indicative for the quality of their land.

Soil analysis in several fields and fallows in the Fon village Lissazounme, of a field near Abomey, in the Ehwe-Adja villages Zaffi, Lokogba and Kokohoué, and in some Dogbo-Adja villages suggest that cultivated fields on the Abomey plateau, except for manured home gardens, are indeed poorer in C, N and organic matter and have a lower CEC than cultivated Adja fields (Tables 9.22 - 9.32 in Appendix 9). The lowest C value for cultivated Adja fields found was 0,56% (fields cultivated for more than 30 years; these fields would have an organic matter content of about 1%). Cultivated Fon fields had values of only 0,39% C and 0,63% organic matter (Adja field no 6 and Fon fields no 1 and no 2 in Tables 9.22 and 9.24 in Appendix 9). The cation exchange capacity (CEC meq/100 gr) of the sampled Fon fields appears to be about three times lower than that of the Adja fields (around value 2 in Fon fields and value 6 in Adja fields).

The short fallow (1-5 years) with *Andropogon gayanus* which many Fon practice does not seem to be able to restore soil fertility very much. At the end of a Fon fallow period of 4 years and in the first year after this fallow, C and N levels in the Fon field were similar to those of Adja fields which had been cultivated permanently during 12-15 years (Adja field no 5, Fon field no 3 and Fon fallow no 5 in Tables 9.22, 9.24 and 9.25).

The soil chemical properties under woody fallow and under oil palm 'fallow' should be compared with great care. Under fallow, a large part of the nutrients is immobilised in the woody biomass, therefore the soil figures do not reflect the capacity of the soil to produce a crop; they are too low. After felling the trees and their decomposition, more nutrients become available for the crop. The Adja oil palm 'fallows' perform better than the soil samples indicate; among the Fon, fallows of more than 5 years, even planted ones, are very rare.

## 9.3 Horticultural strategies to maximise returns to land

Vegetable production for urban markets is an indigenous strategy to maximise agricultural revenues with much labour and little land. For the Adja it was at the same time a strategy to combat spear grass, an obstinate weed on some flat tilled land (section 9.2.3). In this section I will show how through different socio-technical knowledge networks and attitudes to agricultural labour in general and to gendered field tasks in particular, commercial horticulture became an almost exclusively Adja strategy, a few Fon women on the edges of the plateau exempted. Adja men became known as the principal tomato providers of South Bénin and were able to compete on the vegetable markets of Nigerian and Béninese coastal towns with horticulturalists of the outskirts of Cotonou and Porto-Novo and of the Couffo valley (Fanou 1994:51, 131-133; Sikirou et al. 2001:3; Edja 2001). Adja farmers stand out in South Bénin for the size of their tomato fields. Most individual Adja horticulturalists (90%) plant 0,1 - 0,25 hectare tomatoes, and 5% have more than this, while 87% of Cotonou's commercial horticulturalists have less than 0,05 hectare tomatoes (Djomamou 2002:5). Adja women and young men plant chilly peppers, and a few Fon women grow okra and leaf vegetables for sale on plateau edges.

### 9.3.1 Ehwe-Adja tomato production for urban markets

Shortly after the Second World War the Adja started to specialise in yet another agricultural commodity: tomato (*Solanum lycopersicum*). They soon became the main tomato providers of the whole of South Dahomey (later Bénin) including the Fon plateau, and in some years of South Togo and south-western Nigeria as well. No other Dahomean or Beninese group ever cultivated tomatoes to the extent that the Adja did. From 1954 the agricultural service started to report on the Adja's tomato export cultivation, first in qualitative and then also in quantitative terms.

> '*Les tomates sur les marchés proviennent en grande partie du pays Adja.*' (Rapport de tournées Secteur Centre Cercle d'Abomey décembre 1954, Archives Abomey).
>
> '***Tomates** - Fort tonnage produit dans la région de Koulikanmé où des camions viennent spécialement de Cotonou et Lomé pour acheter ce produit.*' (Rapport annuel service de l'agriculture cercle du Mono 1956).
>
> '***Tomates**. Culture peu importante dans le cercle d'Abomey. (…) Parahoué ravitaille les gros marchés d'Abomey et de Bohicon.*' (Rapport agricole Cercle d'Abomey 1956, Archives Abomey).

According to the service's estimations (Table 9.33 in Appendix 9) the Adja's tomato production was roughly ten times the Fon's tomato production between the late 1960s and the end of the 1970s. Later, between 1980 and 2000 the difference would even have been larger according to local informants and to Dèdèhouanou (2003). Fanou (1994:133) shows that between April and June 1988, 50% (in tons) of the Adja plateaux exports' beyond the plateau borders consisted in tomatoes (against 11% in maize, 15% in gari, 5% in other vegetables and citrus fruits, 5% in palm oil, 5% in groundnut products, 2% in sodabi, and 1% in beans). Around 1990 it was common knowledge, and easy to observe on the roads, that the majority of the tomatoes consumed in Cotonou and on the Fon plateau came from the Adja plateau and only a small part from local home gardens.

As in the case of cotton, the Adja's greater interest in tomato cultivation was not only due to soil quality. In the mixed Fon-Adja region on the eastern Adja plateau, at least in the villages Akweveadja and Tchikpè, the Adja grew more tomatoes (and more maize) in the 1980s than their Fon neighbours according to the local extensionist (own interview 13-2-1991). Regional statistics indicate that most Adja tomatoes were planted in Klouékanme and Lalo districts, which are on the eastern Adja plateau. My own observations confirm this. Fon tomatoes grew mainly around Djidja in the savannah north of the plateau, not on the plateau itself (Tables 9.34 and 9.35 in Appendix 9).

Adja tomato cultivation was an entirely indigenous development. Horticulture was neither stimulated, nor supported with technological advice, nor closely monitored by external organisations. Only from 1986 onwards the extension service officially sold mineral fertiliser to tomato growers who paid cash, at least as long as horticulturalists' purchases did not encroach upon the stocks that were reserved for fertilising cotton in the second season. The later was often the case, so that Adja horticulturalists could not buy as much fertiliser for their tomatoes and chilly peppers as they wanted according to some planters as well as to the *intendante* of the CARDER Klouékanme responsible for fertiliser sales (see section 9.4.2). The *intendante* in Klouékanme ignored why planters preferred NPK fertiliser for first season and Ureum for second season tomatoes[44]. Therefore, to understand Adja horticulture we must consider inside information. Fon and Adja farmers' declarations of the tomato areas that they grew year by year in their own fields, in my research villages, agree well with the official estimations (Tables 7.22 to 7.25 in Appendix 7).

Before the 1940s only small 'wild' tomatoes grew on the Adja plateau according to my elderly Adja informants[45]. Many of them mentioned the 'spontaneous' occurrence of such tomatoes in the bush and in their family's fields. Around 1906, when Dɛngbɛnɛn and his son Sonyonu cleared a bush fallow on the central Adja plateau and planted maize and beans on it (see 6.5.1)

> "there grew spontaneous tomatoes called *yovogbo wluiwlui* between the yams. We did not plant them, but protected them, ate them, and also sold them for a lot of money. There grew also (spontaneous) capsicum peppers called *yebesi wluiwlui* (*Capsicum spp.)* which we sold as well." (Sonyonu Dɛngbɛnɛn, Edahoué 1990)

Around 1925 Fantoji and his father Tonu cleared a plot in the circle of bush around their village Atindehouhoué and found wild tomatoes and capsicum peppers there, which they protected but did not plant. According to Fantoji it was permissible to gather wild peppers and tomatoes in other people's fields[46]. Henyon's son Kiki in the Adja village Lagbahome domesticated wild tomatoes. Then, not later than the 1920s, he started to plant and to sell the modern variety according to his son Marsaye (born around 1927):

> "My father Kiki cultivated some small wild tomatoes that grew in the bush around his field, but only for our sauce. When the big tomatoes arrived he planted them and sold them on the village market Houédogli, already before my birth. I learned the tomato work from him. I started to grow tomatoes myself before *chef de canton* Alofa died (1955). My father sowed his tomatoes only in the rainy season, and in the beginning I did the same. But after some time I started to grow them already in the dry season.
>
> In the 1950s my friends and I used to carry our tomatoes to Abomey and Bohicon on our bicycles, were we fetched better prices than here because the tomato traders from Cotonou did not yet come to the Adja plateau. In the 1960s prices were best in Lokossa, hence we carried there as much as we could. Sometimes our harvest was so abundant in those years that we had to sell some in Azové and Klouékanme for lack of time. Now that we are old and tired and the tomato traders come with their trucks to the Adja plateau, my three wives carry my tomatoes to the Azové and Klouékanme markets." (Marsaye Kiki, Lagbahome 23, 24 and 25 April 1990)

Inhabitants of the north-eastern Adja plateau testified that the Adja's tomato culture there was well established around 1950. Elderly Adja in the villages Akweveadja and Zouvou told me that they and their fathers had tomato fields around that date[47]. And a Fon settler from Lissazounme, in whose home garden grew the first 6 tomato plants which I saw on the Fon plateau since my arrival 21 months earlier:

> "In 1949 I started to cultivate in Lanta on the Adja plateau, after having served in the army from 1938 to 1945. At that time the Adja's tomato cultivation was well developed. Initially I grew cotton, maize and groundnuts in my Lanta field, but in 1979 I also started to cultivate tomatoes. Now that I am old I returned to Lissazounme. In an attempt to grow tomatoes here this year I applied compost in my home garden and planted a few tomatoes, but I don't know whether they will produce since our soil is less fertile than the Adja's." (Own interview in Lissazounme 24-10-1990)

At the time of my fieldwork on could still see small groups of Adja farmers, their bicycles heavy loaded with tomatoes, on the road to Abomey on market days. Adja tomato growers were motivated by the high income that could be obtained per hectare, and by the fact that Adja tomato cultivation techniques were effective to fight *Imperata cylindrica* in fields that were infested with this weed (see section 9.2.3)[48]. Adja farmers made by hoe new mounds of 15-20 cm high for each tomato crop and eliminated spear grass in the process.[49]

Tomatoes were sown into nurseries and watered daily during several weeks. In the mean time a field was cleared superficially, then mounded, and palm branches were cut. Then the seedlings were transplanted and each seedling was protected against the sun by a palm branch. During the first days after transplanting the seedlings were watered with bowls and watering cans unless rains were abundant. The water was carried from wells and water tanks, sometimes over several hundred or even thousands of meters, since no canal irrigation existed and exists on the Adja plateau. The plants were neither staked nor pruned, but allowed to roam freely in the field. Tomatoes were harvested every 2-4 days during several weeks; first season tomatoes give about 10 pickings (Edja 2001:10). Carrying the bulky product to the market was another heavy task. Most tomatoes were sold on the Klouékanme market to businesswomen (sometimes men) from Cotonou or Abomey.

Table 9.36: Labour time needed for a tomato crop by Adja families[1], hours per hectare

| | Individual times averaged | | Aggregate time | N |
|---|---|---|---|---|
| | Hours/hectare | Range | Hours/hectare | |
| Land preparation | 90 | 50-182 | 91 | 26 |
| Mounding | 355 | 99-690 | 349 | 13 |
| Transplanting | 251 | 179-364 | 247 | 10 |
| Placing shade | 125 | n.a. | 125 | 1 |
| Irrigating[2] | 96-1338 | 45-125 per round | 89-1239 | 15 |
| Weeding, 1 round | 266 | 139-343 | 199 | 13 |
| Harvest, 10 times[3] | 742 | 9-154 per round | 804 | 31 |
| **Total** | **1925-3136** | | **1873-3023** | |

1 Excluding the time needed for the tomato nursery (land preparation, sowing, shading, irrigation). Observations were in accordance with the task division of labour in the observed families in Lagbahome. Land preparation: men 16-54 years. Mounding: 6 men of 16-54 years, 6 men of 55-63 years, 1 woman of 30 years (all male age groups had the same speed, the woman was faster than they). Transplanting: 5 men of 16-54 years, 5 men of 55-63 years (the old men were slightly faster than the young ones). Placing shade: 1 man of 63 years (he needed another 97 hours per hectare for cutting palm branches as shading material). Irrigating in the field, including fetching water at the village well at 100-200 m distance: 4 women of 19-54 years, 7 children of 5-9 years, 4 men of 55-63 years; their speeds were similar. Weeding: 13 men of 16-54 years. Harvesting (excluding transportation): 66 persons of all ages and genders compounded, who mostly worked together in the same plot without delimiting; 31 plots were observed.

2 Each crop is irrigated at least once after transplantation. Water gifts continue (almost) daily as long as it does not rain; I estimated a maximum of 14 water gifts but this may be even more if rains are late.

3 Based on the assumption that each crop is picked 10 times. Observations were on 31 pickings at the beginning and the middle of the season, averaged and multiplied by 10. However, the last few pickings yield little and probably take less time, therefore the harvesting figure is probably slightly overestimated.

Source: Own observations.

Early tomatoes usually fetched high prices. Therefore more and more Adja established their nurseries already during the dry season. This meant that seedlings were often transplanted before the onset of the rains and in some cases the transplanted crop had to be watered during many weeks, for the beginning of the rainy season was unpredictable. All Adja tomatoes were consumed fresh. Until the end of my research, plans to install a canning factory in Klouékanme or elsewhere in Bénin never materialised, presumably because early planters (and speculators?) did not want prices to level out. Likewise, plans to teach Adja farmers a technique to dry tomatoes were aborted.

The red soils of the eastern and western Adja plateau were preferred over the grey soils of the centre for tomato cultivation, because the red soils had a better water retention capacity. On grey soils farmers rather planted cotton. More tomatoes were however grown

in the East than in the West, and the reasons for this seem to be historical socio-technical and trade networks. In the mid 20th century Abomey seems to have been the principal market for Adja tomatoes, which stimulated tomato cultivation in the East[50]. The eastern half of the Adja plateau developed more experience and later a commodity chain to Cotonou. In consequence, farmers there continued to grow more tomatoes than the westerners until at least 1990 in spite of the fact that the eastern markets were only accessible by mud roads while the West had an asphalt road since 1978.

Some tomato growers, especially on the eastern Adja plateau, applied mineral fertiliser to the crop. Until 1986 they either saved some of the fertiliser that was sold for cotton or procured it in other 'illegal' ways, since then the lucky ones obtain it cash from the CARDER. Planters in Lagbahome and Atindehouhoué on the central plateau however usually grew tomatoes without fertiliser. Several of them believed that tomato plants with Ureum, much NPK or much organic manure grow tall and green, loose their resistance to drought and hot sunshine, and produce only little fruits. "Manure is too hot for tomatoes. We often choose fields of moderate fertility, for example those with *ebe (Imperata cylindrica)*. If the field is very poor we apply a little bit of NPK, not too much, and certainly no Ureum." (Marsaye Kiki, Lagbahome 24-4-1990).

The majority of Adja tomato fields belonged to men, especially the larger fields and the early fields that needed prolonged irrigation[51]. This was related to the labour requirements. Adja tomatoes were largely grown with the help of unpaid family labour. Only for mounding a few growers engaged wage labourers (in 1990 wages for this were 1000-1500 Franc CFA per *abowo* of 400 $m^2$, depending on the amount of *Imperata* left in the field after the initial clearance, this wage is in line with my labour time observations), but the vast majority of them also did this themselves. Tomato nurseries were usually established and maintained by the tomato farmer himself. His women and children often helped him with transplanting, weeding, and head-loading water to the field and the harvest to the market. They were especially bound to help with the irrigating the transplanted crop and with harvesting. Some male planters transported irrigation water and/or the harvest themselves on their bicycle or their motorcycle or dug tanks to collect runoff water in their field. It was not profitable to irrigate with the help of wage labour according to tomato growers.

Only few Adja women grew tomatoes for sale, and if they did it was usually on a smaller scale than the men. It was difficult for women to mobilise much unpaid labour. Tables 7.24 and 7.25 confirm my own observations that Adja women in the research villages devoted smaller proportions of their land to tomatoes than Adja men. The figures of the extension service, which do not distinguish the genders, keep the middle between men's and women's own declarations. All figures agree that Adja tomato areas expanded from the 1950s onwards.

The fact that tomatoes were labour- but not land- or capital intensive and could be grown on soils of average fertility made the crop suitable for farmers with little land. Also many sharecroppers planted tomatoes even though they had to give one third or half of the harvest, depending on the agreement, to the owner of the field[52]. The size of fields depended mainly on the amount of labour that the farmer could mobilise and on the risk that he was willing to take. Tomatoes were a risky business because of unpredictable price fluctuations and -rainfall patterns and their fragility.

Among the Adja families that I studied more closely, those in Lagbahome stood out for their tomatoes. What distinguished the Lagbahomeans was their solidarity and non-

commoditised co-operation. While most other Fon and Adja wells were the private property of one villager who paid for its construction and its maintenance and sold the water to his neighbours, the Lagbahomeans pooled money into a common fund to dig and maintain a well, managed it as common property, and used water free of charge.

Fon farmers on the plateaux refrained from growing tomatoes because of the labour needs, their soils would be too poor, and because of their lack of experience with this delicate crop. One Fon family that I studied more closely drowned the tomatoes in their home garden in Lissazounme by watering them daily until the flowering stage, which leads to flower abortion, and consequently did not harvest anything (see the case of Pierre and Jeanine in Wartena 2001). On the Abomey plateau tomatoes were rare even in home gardens.

Some Fon on the eastern Adja plateau grew tomatoes, but often employed wage labour for watering the crop according to the *intendante* of the CARDER Klouékanme, which was not very profitable (interview 11-2-1991). Some Fon in Akweveadja on the eastern Adja plateau gave as reasons for growing no or only few tomatoes that most of their own fields and the fields offered for sharecropping would be too poor for tomatoes (Nestor Abeni and his grandmother, 8-1-1991) or that it was too much work:

> "We never planted tomatoes because one needs a big family to do so, we prefer to grow less labour intensive crops." (Jèsusi Agbanyon and Nicolas Gbadu, 8-1-1991)

> "Many Adja here plant tomatoes after felling a palm grove. In this way the Adja oil palm system pays, the tomatoes largely compensate for the lack of palm fruit. But we cannot fell our palms for tomatoes; besides tomato culture is drudgery and not all soils are apt for it." (6 Fon men of the families Degan, Agbanyonde and Agbanlin, born 1920-50, interview 10-1-1991).

On the Fon plateau proper grew virtually no tomatoes. Only in valley bottoms and flood-plains of rivers on and around the plateau some Fon women planted tomatoes and other vegetables, see section 9.3.3. None of my male Fon respondents grew tomatoes, except for two in Lissazounme who experimented unsuccessfully with five or six plants in their home garden. Other Fon men could not oblige their women and children to do the necessary watering and harvesting, and also did not do the work themselves.

Also much further South, Fon landowners from formerly slave-owning families near Lake Aheme and Whydah refrain from tomato cultivation because they lack family labour. Some even lack labour to plant anything at all, offer their land in sharecropping, and find that mainly farmers from the distant Adja plateau respond to this opportunity. These Adja often plant tomatoes after having acquired experience with this crop on their own plateau (Edja 2001:10, 22), and thereby clearly demonstrate Adja agricultural skills and willingness to work hard in (tomato) horticulture.

### 9.3.2 Chilly pepper commodity production by Adja women

Chilly or capsicum peppers (*Capsicum frutescens* and *Capsicum annuum)* were another crop that the Adja grew more than the Fon. The official figures, my survey and my own observations agree in this regard. In contrast with tomatoes, chilly peppers were mainly grown by Ehwe-Adja women, and to a minor extent by adolescent Adja boys and young men who did not (yet) have much access to family labour. Chilly peppers demand less care than tomatoes. They too are first sown into nurseries, sometimes already in the dry season, and than transplanted, but are rarely grown on mounds, and are irrigated during a much shorter period than tomatoes after transplanting. Also the pepper harvest stretches out over a long

period, but with greater intervals between the pickings, and without the need to sell them as fast as tomatoes. Adja women did all this alone with the help of their children, young men with the help of their younger siblings.

Especially in some red soil villages of Djakotome district, and to a minor extent in grey soil villages around Atindehouhoué, many women and some young men specialised in commercial pepper cultivation (own observations, Verhagen & Wipfler 1992:41-42, 45). Women in Kokohoué in Djakotome district devoted many of their richer fields to chilly pepper cultivation, established their pepper nurseries at the beginning of the first season and planted the seedlings in relais-cropping between maize after the flowering of the latter. After the maize harvest the peppers remained alone in the field. (Verhagen & Wipfler 1992). Capsicum areas, especially those of Adja women, are probably slightly underestimated in my survey (Tables 7.22-7.25) because I rarely asked specifically for this minor crop and some respondents forgot to mention it; I saw much more peppers in Adja fields than in the survey. I did, however, not see any capsicum peppers in Fon fields except for a few plants in home gardens, and this is in line with what Fon farmers declared in the survey.

### 9.3.3 Okra and leaf vegetable production by women on the Fon plateau slopes

Okra was a speciality of Fon women in Aoundome and some other villages of the Zado area on the eastern slopes of the Fon plateau, where soils are more fertile than those of the Fon plateau (see section 8.1.2). The Zado women whom I surveyed, most of them in Aoundome, declared to have devoted in the 1980s 13-15% of their land to okra. During the 50 years between 1930 and 1980 their okra areas fluctuated around 5-8%. Since at least the 1910s some Sahè women grew leaf vegetables, and later also some tomatoes, in the floodplains of the Couffo in the dry season after the retreat of the water, avoiding irrigation labour in that way and fetching high prices for their off season greens (sections 6.3.1 and 6.3.4).

Fon women on the red plateau soils grew little vegetables: 1% between 1960 and the 1980s and less before, according to my survey[53]. Men and Adja women in my sample all grew less okra and leaf vegetables than 1%. Okra was not difficult to grow, but the harvest was labour intensive. Women cultivators picked every few days the ripe fruits with the help of their children. Fresh pods had to be sold within 3 days. Most Aoundome women sold their harvest to traders from Cotonou who came to their village with trucks.

## 9.4 Styles of organic and artificial manuring

This section will discuss how and to which extent Fon and Adja farmers countered processes of soil degradation by applying organic and/or an-organic manure. I will describe different manuring styles and elucidate how these styles relate to cultural group, gender, property regimes, spatial land use pattern, physical and chemical soil qualities, cultural notions about the cleanliness of semi-spontaneous vegetation, of crop residues and of household refuse, and socio-technical and trade networks with extensionists and cotton commodity chains. I will show that Fon women on degraded red soils had more experience with organic manuring, but that the Adja applied far more chemical fertiliser not only on their cotton but also on maize and other food crops, which is quite exceptional for Africa.

### 9.4.1 Bush, cleanliness and gendered manuring practices in home 'gardens'

In sections 2.2.3, 4.1.1, 5.3.2, 5.4, 6.2 and 6.5, I argued that the Fon and Adja's use of the strip of land that immediately surrounded their villages, diverged since the 17th century. Here I will show how this led to different gendered access to this strip, different ecological processes and notions of cleanliness, and different manuring practices. All Fon regarded semi-spontaneous vegetation around their villages as unclean and those on the plateau edges also tended to label household residues in this zone as dirty, but Fon on degraded plateau soils had no objections against organic manure. The Adja valued dense vegetation, but tended to be concerned about the 'heat' of fresh organic material.

The ancient Adja and the 'Gedevi' inhabitants of the Fon plateau before the establishment of the kingdom Danhomɛ encouraged the growth of a strip of bush around their villages to protect the village against bush fires and invasions, as a source of forest products, as a site for rituals, as burial ground and toilet, etc. For the slave raiding and urbanising Fon these hedges lost much of their importance and became associated with rural backwardness, while the raided Adja increasingly camouflaged their villages behind protective bush (5.4.2 and 5.4.3). From the mid-19th century onwards, the plateau Fon encouraged the growth of oil palms on the land nearest to their houses, later also on the land further away, in order to raise a cash income on the booming palm oil export market. Semi-spontaneous vegetation in these palm groves became, besides being 'backward', also dangerous for the palms because most Fon plateau herbs easily caught fire. Combined with the beneficial effect of soil tillage on palm fruit yields, the Fon came to pride themselves in keeping the *kpawugle* (fence-near fields) clean weeded through permanent cultivation. On the Fon plateau, the *kpawugle* and the oil palms on them were and are managed as lineage commons (Adjinacou 1987:31-32). Fon plateau villages typically consist of several *hwedo* (ward inhabited by a lineage branch, see box 1 in Chapter 2), each surrounded by its own communal *kpawugle* and oil palms; Fon villages are therefore labelled as *habitat dispersé* (Adjahi Baï 1976). The *kpawugle* were and are strongly embedded in notions regarding, amongst others, the right and duty of the lineage head to entrust sections of this land to individual lineage members to maintain its cleanliness through permanent cultivation (section 6.2). Any lineage member who fails to keep his plot weed-free is reprimanded by the head, who argues that the weeds attract snakes and bush fires and look backward, and might allocate the weedy plot to someone else (own observations). This implies that most Fon *kpawugle* have indeed been cultivated almost permanently since the mid-19th century, and this almost exclusively with maize. Fields at a greater distance are called *gleta* (head-field) in Fon (Adjahi Baï 1976).

Hedges of bush increased in importance for the Adja during the 17th, 18th and 19th centuries. They grew around most Adja villages until at least 1956, and the houses within this circle formed one dense agglomeration, called *habitat groupé* or *mixte* (Adjahi Bai 1976). Villages on the edges of the plateau still have these hedges today, and most villages in the centre still conserve some patches, as can be seen from aerial photographs and from present day observations[54]. The Adja call this bush land *ave* (forest). Behind the woody strip come first the *ahwegboboji* (house-near fields), and beyond these are found the *boji* (field)[55]. The distant *boji* were usually more fertile than the *ahwegboboji*, and cultivated less frequently in a given time period (Kerkdijk 1991:30-32; Brouwers 1993:89; Koudokpon et al. 1994). Therefore, the *boji* were the fields from which adult Adja men derived their status, but many men also had a small plot in the *ahwegboboji* zone[56]. If Adja women and adolescent sons

received a plot in usufruct, which happens increasingly since the 1920s, these were slightly more often in the *ahwegboboji* than in the *boji* zone.

In Adja memory all their land was always allocated to individual adult men and their relatively small domestic groups, in most villages even the land in the woody hedge around the village. Not all men and domestic groups received land in this strip, but those who did had the right to cultivate or build houses there (like Kwesi did in section 8.3), to give them to their sons, and in Atindehouhoué some even sold from this strip to strangers who lived in the village as civil servants, without reproach from the other lineage members.

The woody strips around central Adja plateau villages were increasingly transformed into fields, inhabited space, oil-wine palm groves, timber[57] and fruit tree plantations during the 20th century, especially since the 1950s. The new fields in this strip are called 'nearby *ahwegboboji*' or '*kpamɛboji*' (enclosured field) if fenced to keep domestic animals out, which is increasingly done because most Adja animals are allowed to roam freely even during the growing season in spite of penalties to their owners for doing so[58]. The *ahwegboboji* are, especially the parts on former garbage heaps in the forest, much more fertile than what was now called 'remote *ahwegboboji*'. The male owners of nearby *ahwegboboji* usually cultivate them themselves, mostly with maize, sometimes with cotton, cowpeas, tobacco, oil palms, fruit trees or timber.

On the Fon plateau in contrast, the *kpawugle* are often though not exclusively cultivated by women (Adjahi Baï 1976). In the plateau villages that I studied, land in these commons was not 'scarce'. Any ward member who wanted received a plot to cultivate there. The 'nearby *kpawugle*', between zero and 20-30 m from the houses, were usually more fertile than the *gleta* according to farmers' declarations and my own observations, the 'remote *kpawugle*' between 30-300 m from the houses were poorer than all other fields in spite of permanent cultivation with maize on all *kpawugle*. Indicative was that the remote *kpawu* were infested with *Striga hermonthica* (section 9.2.3), especially in the centre of the plateau, while this cereal-parasite of poor soils did not occur on the nearby *kpawugle*. How could this difference in fertility level be? The answer lies in Fon women's use of household waste and crop residues on their plots in the nearby *kpawugle*.

The Fon word *zunkó* means at the same time dirt, garbage, manure, humus and forest soil (Ségurola 1988:643). The Adja have separate words for household waste (*kòlú* or *nukpló*) and for humus-rich soil (*nyigban zozu*) (own interviews, Brouwers 1993:149; Direction de l'Alphabétisation 1994), but they too, like the Fon, are well aware that organic refuse turns into fertile soil in a gradual process of decomposition. In all Fon and Adja villages, sweeping the inhabited areas and throwing the sweepings is women's and girl's work. Almost all household waste on the two plateaux is organic, at the time of my research more than 95%. The sweepings which I observed contained mainly soil from the courtyard, goat and chicken droppings, ash, residues from fruits and vegetables, teak- and banana leaves (used as packing materials on local markets), and crop residues: among the Adja mainly maize husks and cassava peels, in Fon villages with poor soils mainly cowpea and groundnut pods, and in Fon villages with relatively rich soils residues from all these four crops. Women throw most of their sweepings on garbage heaps near their houses (called *zunkóta* in Fon and *kòlújí* in Adja) and in holes from which clay was taken for construction purposes; each Fon and Adja village has many holes like these and women try to fill them up (see Kwesi in section 8.3). But in some villages, some sweepings are used as manure. I studied why, since when, by whom, in which fields, which types of waste, and by which manuring techniques.

Fon women in Whydah manured their fields with kitchen residues as early as the 1860s (Burton 1893/1966:330), those of the Abomey plateau since at least 1906. Savariau (1906: 35) noticed the absence of cattle manure in the colony of Dahomey, but that 'in the *Cercle* d'Abomey in particular, certain *indigènes* spread organic debris, ash and poultry droppings in their crops' (my translation). Inhabitants of Gnidjazoun, 4 km from Abomey, confirmed that they manured their *kpawugle* with household waste, goat and chicken manure, cowpea pods and other crop residues since at least 1900. In this village and in Lissazounme, 6 km from Abomey, women's use of sweepings and crop residues as manure on the *kpawu* increased steadily since at least World War two and especially after 1970. At the time of my research, almost all the household waste of these villages was swept straight into the nearby *kpawu*, only some maize husks and groundnut peels were still thrown on garbage heaps because they would not decompose well. This can be explained by the high C/N quotient of these two residues. The organic material was incorporated upon ridging.[59]

Fon women towards the edges of the plateau, in the villages with grey soils and soils with pebbles Aoundome, Wakon and Kana-Dodome applied some manure to the home gardens since at least the mid-20th century, but less than in the red soil villages on the plateau centre, which might be due to the fact that the fertility of the red Nitisols[60] depends more on their organic matter content than that of the grey and pebble soils[61] (section 4.2.1 and Kerkdijk 1991:71), but in the 1980s manuring practices increased in these villages too. Some women in these villages preferred 'clean' crop residues (maize husks exempted, which they preferred to burn) over 'unclean' household waste. Especially in the rainy season some of them regarded waste as unclean. Fon in Sahè, a village with slightly less degraded red soils and whose inhabitants often also had fields on the north-eastern Adja plateau, ceased to manure their Sahè fields after the 1970s, because their village chiefs labelled household waste in the fields as dirty and unhealthy and made one Sahè farmer pay a fine of 5000 FCFA for having 'dirt around his house'. Since then, no woman in this village dared to throw her sweepings into the fields anymore. One Sahè farmer said that he went to cultivate his more fertile field on the Adja plateau when he ceased manuring in Sahè.

Around the middle of the 20th century, Fon women in Gnidjazoun and Lissazounme discovered that some by-products of their processing activities were good fertilisers. Gnidjazoun women noticed that the oil-cake of palm kernels enriched the soil and even combated striga, with which the village's soils were seriously infested. Lissazounme women discovered the same for *ahwasin* (the boiling water with the skins of *Parkia biglobosa* seeds) which was a by-product of the preparation of *afintin* spices, and which they came to regard as the best fertiliser. Their discoveries were reasons for the women to specialise even more in the production of palm kernel oil and *afintin* respectively. In Gnidjazoun, kernel oil-cake even became a commodity that poor kernel oil producers sold to slightly richer farmers who wanted to fertilise their plots. Interestingly, the innovations of these women did not spread far beyond the borders of their own villages.

In general, only the nearest plots were manured, and the women did not discriminate much between nearby *kpawugle* cultivated by themselves and those cultivated by their husbands when they threw the sweepings. A few male and female cultivators on red soils also carried organic waste into the remote *kpawugle*, but in this case only in those cultivated by themselves, not in those of their spouses. Some Fon men swept their own goat and chicken pens for this purpose.

Until at least 1956 there were no nearby home gardens around Adja villages into which the women could throw their sweepings, because of the Adja's circles of bush. However, a few Adja women carried their household waste into their own fields beyond the forest zone as early as the 1950s, for example some women in the grey soil village Houédogli. One woman born in Houédogli but married in another village on grey soils also gave baskets and basins to all her neighbours and asked them to fill them with sweepings and goat droppings. She regularly collected these recipients and carried them into her own field at several hundreds of meters from the village. Also several women in villages on relatively poor red soils, for example Zouvou and Kpatohoué, carried at the time of my research a basket with sweepings into their own remote fields whenever they went to work there (own observations), and Brouwers (1993:130) observed also women in the red soil Adja villages Kokohoué, Allada and Adidevo doing so. Some poor women in Atindehouhoué carried their household waste, cassava peels from their own *gari* commodity production, and dung which they swept in the compounds of livestock keepers, into their own fields at various distances from the village. But most other Adja women did not follow these examples, arguing that their fields were still fertile, carrying organic material over long distances would be too much work, or that handling animal manure would be disgusting and not very effective (Wartena 1987: 157). The women spread the organic material in their fields without incorporating it, due to the Adja's superficial soil tillage. No Adja man whom I interviewed or observed carried organic manure into a field of more than 30 m from the village, because carrying things by head was regarded women's work.

Adja experiments with manuring the nearby *ahwegboboji* started only after clearing in the forest strip. Initially the Adja, and many do so until today, waited between one and three years after clearing woody vegetation to allow the soil organic matter to decompose in part before planting any crop. They also believed that crops would not grow well on the fresh garbage heaps which were sometimes in the woody strip; fresh *kòlújí* would be too 'hot'. Most Adja garbage heaps consisted largely in maize husks, which have a high C/N quotient and therefore need time and moisture for decomposition. Because of their fear of 'hot *kolu*', Adja men initially asked their women not to throw their maize husks and sweepings into the nearby *ahwegboboji*. After 1-3 years they planted in the whole plot, and also on the old garbage heaps. When they saw that the maize on the old heaps produced well, some farmers started to spread out the old *kolu* in the whole plot.

Not later than in the 1970s, some Adja in villages on (for Adja plateau standards) poor red soils, for example Lokogba and Zouvou, experimented with spreading out their household waste in their home gardens immediately after sweeping, instead of after composting it for 1-3 years. In Lagbahome and Atindehouhoué, on red and greyish soils respectively, from 1980 onwards some men with nearby maize gardens asked their wives to make many small garbage heaps there instead of a big heap, in the expectation that the free roaming chickens would scrape them out. Some men, occasionally, also swept themselves and threw the waste into the plot, on red more than on grey soils. But they were reluctant to apply fresh waste in cotton and chilly pepper plots. Women and girls willingly followed these instructions in the nearby *ahwegboboji* which belonged to their husbands or fathers, but not when asked to carry manure into their husband's more remote tomato plot.

When comparing Fon and Adja organic manuring practices, it appears that the Fon started earlier in history than the Adja to apply household waste to their clean weeded home gardens. In the nearest plots, up to 30 m from the village, the Fon still manure slightly more

intensively than the Adja, in an attempt to make up for the loss of soil fertility which the Adja maintain in general through a woodier vegetation. The Adja started manuring the nearest home gardens only after clearing in the strips around their villages after the 1950s, but are now rapidly catching up. When it comes to the fields between 30 and 300 m from the village, Adja women started earlier in history than Fon women to carry organic refuse there, and still seem to be slightly more inclined than Fon women to do so, but almost exclusively into their own fields. Both groups manured more on red soils than on grey soils and soils with pebbles, where concerns about the cleanliness of household waste remained stronger, especially among the Fon. See Wartena (1994a; 1994b) for a more detailed discussion per village of organic manuring practices.

Table 9.37: Organic manuring practices in some Fon and Adja plateau villages

| | Fon | | Adja | |
|---|---|---|---|---|
| Soil type[1] | Red | Pebble & grey | Red | Grey & pebble |
| Women who manure on | | | | |
| own or husband's nearby plots | 100% | 35% | 92% | 29% |
| own plots >30 m from home | 10% | 0% | 15% | 19% |
| husband's plots >30 m from home | 2% | 0% | 8% | 0% |
| Number of surveyed women | 21 | 16 | 13 | 21 |
| Men who manure on | | | | |
| own or wives' nearby plots | 15% | 33% | 29% | 12% |
| own plots >30 m from home | 10% | 0% | 0% | 0% |
| Number of surveyed men | 39 | 18 | 14 | 17 |

1 Surveyed villages on red soils: Gnidjazoun, Lissazounme, Sahè (Fon), Lagbahome, Lokogba, Zouvou (Adja). Surveyed villages on grey and pebble soils: Kana-Dodome, Aoundome, Wakon (Fon), Atindehouhoué, Houédogli, Honsouhoué (Adja).

Source: Own interviews in 1990, supported by observations.

### 9.4.2 Adja chemical fertiliser use on local food crops

This section addresses the question to which extent Fon and Adja farmers responded to more frequent cropping and soil degradation by using mineral fertiliser. Chemical fertiliser was made available to Béninese farmers together with a new cotton variety from 1964 onwards. Until 1986 only cotton cultivators and cooperatives were allowed to buy fertiliser. Cotton cultivation had already been abandoned on the Fon plateau before the 1960s, because the Fon plateau was already so degraded that cotton cultivation had become impossible, except with a double dose of fertiliser, but the yields would not justify this investment (section 7.3.3 and Table 7.15 in Appendix 7).

Fertiliser was subsidised until 1982, and it was, at least officially, sold exclusively on credit until 1986, and only to cotton cultivators and cooperatives, because repayment was easier to enforce from them. Cotton planters had little other choice than to sell their cotton to the State's cotton marketing boards (see section 7.2). In the Zou department the agricultural service further motivated its refusal to sell fertiliser for maize and groundnuts by that this investment would not pay for these crops:

> '*Au Centre-Dahomey le coût prohibitif de l'engrais (30 Fr CFA le kg) exclut sa vulgarisation pour les cultures de maïs et d'arachide dont les produits, lorsqu'ils sont commercialisés, ne rapportent respectivement au producteur que 10 et 13 Fr du Kg. A l'heure actuelle, seule la*

> *culture du coton Allen se fait obligatoirement avec un apport de 150 Kg/Ha de fumure minérale au prix soutenu de 22 Fr le Kg (le coton graine étant payé au producteur sur la base de 27 Fr 25 le kg, déduction faite du coût de la désinsectisation).'* (SATEC 1968:24).

Nevertheless, several Adja applied fertiliser to their food crops, especially maize and tomatoes, already before 1986. The Atindehouhoué and Honsouhoué farmers whom I interviewed and observed on this matter mostly used the fertiliser on infertile parts of their maize fields. They either saved some fertiliser from their cotton crops, or purchased some fertiliser from cotton cultivators or from smugglers, or used their personal relationship with extensionists to obtain fertiliser. Small farmers, including women, often used the second and some big farmers the last strategy (Wartena 1987:155b, 319-320). When I conducted a fertiliser retail experiment in 1985 in Atindehouhoué, several women and some men eagerly purchased a few kilos for their maize (see section 3.2.10). Cheap Nigerian fertiliser was sometimes smuggled into Bénin, also to the Adja plateau (verbal communication by the extensionist of Atindehouhoué 31-5-1990; Egg & Igué 1993:39-40, 60, 76). Fon plateau farmers in my research villages used much less fertiliser during this period, though some of them also declared to have obtained some fertiliser through contacts with extensionists. They mainly used it on maize on the slopes of the plateau, on the Adja plateau or in the savannah if they had fields there, and otherwise in their home gardens (own interviews in 1990).

Table 9.38: Fertiliser use per male and female Fon and Adja farmer 1980-85 as declared by themselves

| | Men | | Women | |
|---|---|---|---|---|
| | use/man/year | N | use/woman/year | N |
| Fon | 2.5 kg | 36 | 0.2 kg | 10 |
| Adja | 36.6 kg | 18 | 5.0 kg | 8 |

Source: Own interviews in Atindehouhoué and Honsouhoué (Adja) in 1985 (Wartena 1987:319-320), and in Aoundome, Gnidjazoun, Lissazounme, Sahè and Wakon (Fon) in 1990.

Official fertiliser sales do not mention any fertiliser sales at all in two sampled Fon plateau districts between 1980 and 1984, but do record sales on the Adja plateau. From 1985 onwards, official fertiliser sales also started in Abomey and Agbangnizoun districts on the Fon plateau, but continued to lag far behind those on the Adja plateau (Table 9.39), and most of the fertiliser sold in Abomey and Agbangnizoun was not used by Fon farmers on the Fon plateau itself, but by vegetable-growing women in the Couffo floodplains, by Adja immigrants who planted cotton on the north-western fringes of the Fon plateau, and by some Fon who did the same in the savannah to the north of Abomey (see section 7.3.3). From 1988 onwards, also farmers in the savannah around Djidja came to buy fertiliser in Abomey, which boosted sales after that date[62].

From 1986 onwards fertiliser was officially made available for cash to individual farmers who did not cultivate cotton. But the extension service made no efforts to inform non-cotton cultivators, and sometimes refused sales to first season Adja maize, tomato and chilly pepper growers when these endangered the fertiliser stocks reserved for the second season cotton crop[63]. It is often assumed that Sub-Saharan African farmers can not mobilise sufficient savings by themselves to buy fertiliser cash unless external credit schemes are provided, and even then they would be reluctant to apply the fertiliser to food crops or crops which they

consume themselves (Scoones & Toulmin 1998; Kuyvenhoven et al. 1999; Salasya 2005). But in 1989 and 1990 I observed, and all extensionists confirmed, that Adja farmers, men and women alike, used indeed fairly large quantities of fertiliser not only on the tomatoes and chilly peppers which they planted for sale, but also on maize and sometimes on cowpea crops which were in the first place destined for own consumption, as also sections 8.3 and 9.2 illustrate. Since fertiliser was available cash to non-cotton growers, only few Adja were still interested in buying a few kilos from me when I repeated my fertiliser retail experiment in 1990. They rather bought whole bags of 50 kg for themselves, some by paying cash and others by saving some fertiliser from their cotton, which many of them also grew. Credit sales continued to be to cotton planters only.

Table 9.39: Official fertiliser sales on the eastern Fon- and central-eastern Ehwe-Adja plateaux[1]

| | Fon | | Adja | |
|---|---|---|---|---|
| Year | Use per head (g) | Use per km$^2$ (kg) | Use per head (g) | Use per km$^2$ (kg) |
| 1980 | | | 170 | 32 |
| 1981 | | | 267 | 51 |
| 1982 | | | 1135 | 215 |
| 1983 | | | 1225 | 232 |
| 1984 | | | 2177 | 412 |
| 1985 | 324 | 83 | 3465 | 656 |
| 1986 | 371 | 96 | 4486 | 850 |
| 1987 | 414 | 108 | 2906 | 550 |
| 1988 | 665 | 173 | 3756 | 712 |
| 1989 | 422 | 110 | 5146 | 975 |
| 1990 | 736 | 192 | 6368 | 1206 |
| 1991 | 757 | 197 | 5951 | 1127 |
| 1992 | 403 | 105 | 5152 | 976 |
| 1993 | 779 | 203 | 4106 | 778 |
| 1994[2] | 982 | 255 | 3056 | 579 |

1 The table is based on some districts which are situated almost entirely on the plateaux: Abomey, Agbangnizoun (Fon), Djakotome, Klouékanme and Toviklin (Adja). Also in these Fon districts, fertiliser was mainly used on the plateau fringes.
2 The decline in fertiliser use in 1994 is probably due to the devaluation of the FCFA that year.
Sources: Rapports annuels CARDER Zou 1985-1989; verbal communication Sous-intendante Bohicon 1990; Rapports annuels CARDER Mono 1985-1989; Annuaire statistique agricole Mono 1987; personal communications S. Vodouhè and R. Mongbo.

Also some Fon on the north-eastern Adja plateau started to use fertiliser, more than their 'brothers' on the Fon plateau and on the south-eastern slopes of that plateau[64], but less than their Adja neighbours, as the comparison between fertiliser use in Fon versus Adja villages in this region shows (Table 9.42). Tables 9.40 to 9.43 in Appendix 9 indicate that, as a whole, towards 1988-1990 the Ehwe-Adja used about 10 times as much fertiliser as the Fon on and around the plateaux of South Bénin.

The Fon on the north-eastern Adja plateau used less fertiliser than their Adja neighbours because they only applied it on cotton, of which they grew less than the Adja, and not on tomatoes and maize like the Adja did[65], which is symptomatic for the Fon's lower priority on maize and their inability to mobilise labour. That the Fon on the Adja plateau used more fertiliser than those on Fon plateau can be explained, first, by the higher organic matter content of the Adja plateau, which makes that also chemical fertiliser can be utilised better, because the cation exchange capacity of Nitisols depends strongly on their soil organic

matter (Kerkdijk 1991:71). Second, the Fon on the Adja plateau learned slowly from their Adja neighbours. An Adja farmer in a mixed Fon-Adja village said:

> "The Fon learned from us to use mineral fertiliser, to grow cotton, tomatoes, okra, pigeon pea, flat cultivation on rich soil, planting cowpeas on mounds on poor soils. What we learned from them is only groundnut cultivation. We have more farming knowledge, therefore the land yields more to us." (Konyanu Kohunde, Djihami, 13-2-1991).

Gradually, knowledge of fertiliser also spread to the Fon plateau, also mainly through indigenous knowledge networks, and to a smaller extent through cooperatives. Extensionists persuaded some Fon plateau farmers to form groups and to try out fertiliser, obtained on credit, on a common field. Most groups in my research villages dissolved after one or two years when they found that the trial field had not yielded enough to reimburse the fertiliser and they found themselves in debt. Likewise, the few individual Fon plateau farmers who tried fertiliser on their own maize gave up after a onetime experiment. Tables 9.40-9.40, personal information from extensionists and my fertiliser retail experiments (see section 3.2.10) agree that among the Fon, only farmers with large areas of relatively fertile land on the slopes of the plateau and vegetable-growing Fon women in the Couffo valley continued to use fertiliser. If others purchased a few kilos of fertiliser from me, it was only for their also organically manured home gardens. The extension service should have known that agronomical trials near Abomey had already shown in 1971 that chemical fertiliser alone hardly raised maize yields there, while a combination of chemical fertiliser and manure more than doubled the maize yields (Raunet 1971:1063-1064).

Table 9.44: Credit sales of fertiliser, 1988 and 1990

| | Per head of population in 1988 | Per head of population in 1990 |
|---|---|---|
| Adja in Klouékanme district[1] | 3332 g | 8169 g |
| Fon on Fon plateau (rural) | 318 g | |
| Fon south-east of Fon plateau | 1219 g | |
| Fon on Adja plateau (Klouékanme district) | ? | 10756 g |

1 Excluding cash sales for tomatoes and other food crops, which were important in this district.
Sources: Tables 9.39-9.41.

In the beginning, fertiliser was mainly used by male Adja cotton cultivators. After some years also Adja women also started to cultivate cotton to fertilise it. Some male and female Adja farmers also fertilised those parts of their maize fields that were infertile and their chilly peppers, and men bought fertiliser for their commercial tomatoes, especially when fertiliser sales were liberalised from 1986. Hardly any fertiliser was used on the Fon plateau except in a few manured home gardens and on the slopes of the plateau.

Most Fon manured only the home gardens on degraded red soils, but not their other fields. The Adja manage soil fertility by allowing more herbs and woody species in their rotations, including oil palm 'fallows', and by a combination of mineral fertiliser use in all types of fields and some organic manuring in the fields not too far from home. Some Fon farmers in the frontier region adopt hybrid styles with some mineral fertiliser use on cotton and oil palm densities which hold the middle between normal Fon and Adja palm densities (section 6.5 and Wartena 1999), but mostly still on ridged and clean weeded fields (section 6.2). The different Fon and Adja chemical and organic manuring practices are in part adaptations to local soil conditions. On the other hand they reflect the Adja's greater willingness to invest

cash and labour in agriculture even without external credit support, and indicate that self sufficiency in maize is so important for them that they are even willing to purchase fertiliser for this crop.

## 9.5 Conclusion

In this chapter I have used extensive historical and fieldwork data to show that population density cannot account for the persistent difference in fallow vegetation between the plateaux since the 18th century. Around 1990 the Adja plateau was roughly 5 to 7 times more populated than the Fon plateau in 1856. Nevertheless, the Adja plateau vegetation never became as grassy as the Fon plateau vegetation was already in 1856, and there are no indications that it ever will. Before the 17th century the soils and spontaneous vegetation on the Ehwe-Adja and the 'Gedevi' plateaux were basically the same.

Again I had to go back in history to the trade contacts, the social relationships and the knowledge networks of the settlers of the plateaux. These local and regional social processes appeared sufficient to explain the diverging technological patterns. Knowledge of plateau-internal socio-cultural relationships was essential to understand why some settlers, respectively the Adja on the Adja plateau and the real Gede on the Fon plateau, could be dominant in trade- and knowledge networks, which favoured the spread of particular technologies irrespective of ecology.

From at least the 18th century onwards, the Fon plateau vegetation changed to savannah grassland dominated by *Andropogon gayanus*, and the Fon plateau soils became sandier and more compact. The Fon's ridge tillage techniques seem to have been a major factor in the ecological change on the Fon plateau, combined with the Fon esteem of palm oil, clean weeded land, and compound walls instead of vegetation as defence, and the Fon disdain of agricultural work and of 'backward' bush around their villages. The transformation of the Fon vegetation started already in or before the 18th century and was completed not later than the mid 19th century. At the same time, the structure of Adja plateau soils hardly changed. Their vegetation transformed after 1920 more and more into a dense oil palm 'vineyard' in rotation with annual crops, supported by the Adja's esteem for agricultural work and the low priority which they placed on palm oil. Adja plateau tree cover seems to have increased since at least the 1950s, and there is still no *Andropogon gayanus* found among the Adja. The vegetation biomass of the Adja plateau is now visibly greater than that of the Fon's, and Adja soil organic matter content is higher too. Hence Adja plateau vegetation dynamics were not simply lagging behind those of the Fon, but each plateau had its own dynamics. There was no linear relation between population pressure and ecological degradation, as the popular Homer-Dixon thesis makes believe. Vegetation was not only a result of population density but also of human practices and cultural choices.

## Notes

1 I.e. the population of the towns Abomey and Bohicon.

2 After 1894 'many' slaves and a few foreign clients of the Fon kings returned home again according to Le Herissé (1911:45). Ancient reports of the Cercle d'Abomey and Fon social customs however suggest that most domestic slaves had become Fon and preferred to stay and that it were mainly some slaves who lived in slave villages and worked on plantations at the periphery of the plateau who left. About 4000 slaves had deserted the slave village Fadégléta near Zogbodome and 600 the slave village Kenzoun between Hon and Massé on the road to Koussoukpa, which is south-east of the Abomey plateau (Rapport mensuel Cercle d'Abomey Août 1905 ANB Porto-Novo). Some slave hamlets to

the north-west of the Abomey plateau were also deserted, but the Fon's captives in the slave villages around Tandji on the Adja-side of the river Couffo stayed (Rapport Cercle d'Abomey 1908 ANB Porto-Novo). From this I estimate the number of slaves who left the plateau (not the off-plateau areas) to have been between 5000 and 8000, which was about 8-12% of the plateau population. Some free Fon also fled the plateau after the conquest but returned between 1900 and 1910 (Rapport mensuel Cercle d'Abomey Avril 1905 ANB Porto-Novo; Le Herissé 1911:45).

3 From 1960 onwards the total population pressure, including the towns of Abomey and Bohicon which are less important for agriculture, became almost equal on both plateaux.

4 Population densities were calculated from demographic data of the Subdivision d'Abomey in the Cercle d'Abomey (Fon) and the Subdivision de Parahoué in the Cercle d'Athiémé (Ehwe-Adja). In early years sometimes only the taxable population was given (males and females between 10 and 50 years); I followed Le Herrissé's (1911:46) and other administrators' practice to estimate the total population by multiplying the assessable population by 1,7. The validity of doing so was confirmed by censuses of both the assessable and the total population in 1913, 1922 and 1952. To obtain densities, only the plateau area was considered. The spatial distribution of the population over plateau- and non-plateau areas was deduced from that of the 1950s and 1960s. The censuses seem to have counted seasonal and short-term migrants in the place which they or their family declared as their principal place of residence. The following documents were used: Rapport d'ensemble Dahomey 1898-1900; Rapport Cercle d'Abomey 1908; Correspondance du cercle Grand Popo subdivision de Parahoué nº 285 du 31-11-08 et nº 99 du 25-4-09 ANB Porto-Novo; Annuaires du Gouvernement Général de l'AOF 1910; idem 1911; idem 1912; idem 1913-14; idem 1915-16; idem 1922 AOM Aix-en-Provence; Rapport politique cercle du Mono 4. trim. 1934 ANB Porto-Novo; Population du Dahomey Archives Abomey; Rapport économique Dahomey 1943; idem 1951; idem 1953; Rapport agricole Dahomey 1951; Recensements 1952 Archives Aplahoué; Annuaire des Républiques de l'Ouest Africain 1960; SATEC 1968; SATEC 1969; CARDER Mono 1983-84; CARDER Zou 1985-86; Hodonou 1976; Holonou 1980:20, 23, 32; Daane & Perthel 1988:9; INSAE 1987; INSAE/MPAE 1994; INSAE recensement 2002.

5 Hagen (1887:106), Spieth (1906:337), Baumann (1944:215), Martinelli (1984:495 figures 1 and 4), personal communications by Afio Zannou (a Gun) and Georges Adjata (a Ewe who lived amongst others in Anlo and in Atakpame). This hoe type was uncommon among the Yoruba (personal communication Tunji Olasoluwa). Also Bassar men's hoes differed from the Adja's and were especially designed for yam cultivation on rocky, sloping soils; the Adja probably did not forge it because there were very few pebbles or slopes around the isolated Tado hill and on the Adja plateau. Bassar produced several other hoe models but none which resembled the Oyo-Bariba and 'Gedevi' hoe (Martinelli 1984).

6 Own observations and interviews with many Adja and several Ewe, see on the Ewe also Fies (1898 in Seige & Liedtke 1990:133-134), Spieth (1906:339), Beck (1943:26, 36).

7 Own research and Agbo (1991:51) on the Adja, verbal communication Tunji Olasoluwa on the Yoruba.

8 Own observation near Abomey, dry season 1989.

9 The Fon's south-eastern neighbours, namely the Wemenu of the Ouémé valley and the Nago and Gun of the plateau of Avrakou-Sakété, used a hoe with a similar mode of attachment but among the Gun a larger angle (ca. 75º) which they used for flat cultivation. Only very recently they started to ridge impoverished soils and land invaded by spear grass (*Imperata cylindrica*), but continued to plant on their richer soils on the flat (personal communication about hoe types by Afio Zannou 9 March 2006, about poor versus rich soils by Jonas Wanvoéke and Bernadin Djomamou 18 June 2000, and about spear grass by Pierre Vissoh 15 January 2006). On the other ethnic groups: Baumann (1944:219-220), Martinelli (1984:499-501), personal communication by Tunji Olasoluwa (Yoruba). Also the Musée ethnographique of Porto-Novo shows a hoe of this type.

10 Own interviews with many farmers in Aoundome, Lissazounme and other villages, and with blacksmiths and traders in scrap iron in Kana-Dodome (François Daa Houngan on 9-3-1989 and Victor Azaïnon on 19-6-1989), and Ederveen (1990:48-52).

11 Most other cultural groups in Nigeria, including the Fulbe of Bornu and the Abadja and Nkanu of the Niger delta, also cultivated on ridges and mounds, but I ignore their hoe types (Own interviews; Stamp 1938:268-270; Beck 1943:26-27, 146-149; Lawes 1963:1328; Buntjer 1971:18-20; Kowal & Stockinger 1973:136; Kassam 1976:119-128; Bennet et al. 1979:24).

12 According to Crews (2003) the baobab holds magical and symbolic value for many African people and is a common meeting place and safe haven in traditional African societies.
13 Pigali, Bigot & Binswager (1984:31, 33) show that clearing land by fire requires very little labour.
14 Fairhead personal communication December 1995. In West African areas that are drier and more sparsely populated than the South Béninese plateaux, spontaneous fires cannot entirely be avoided, but excessively hot ones are prevented by early burning of still green vegetation (Fairhead & Leach 1996b:110).
15 Personal communication Georges Adjata, a Ewe who went to school in Atakpame in the 1970s.
16 One elderly farmer argued that, while the tall grass *Andropogon gayanus* is apt for incorporation, the equally sized grass *Panicum maximum* should not be incorporated but uprooted instead (Victor Lisanon, Lissazounme 8 May 1990).
17 A trial in which the tall savannah grass *Sorghum vulgare (var. Sudanense*, a grass which is less common on the Fon and Adja plateaux) was covered with soil in the process of ridging showed that the mechanical hindrance of the soil and the reduction of $O_2$ supply reduced the number of tillers per plant (Shen & Harrison 1965).
18 Beans, probably cowpeas.
19 Own interviews with amongst others the descendants of royal slaves in Kana; Le Herissé (1911:27); Bay (1983); Yélouassi (1987:27-28); Morton-Williams (1993:107, 110).
20 In Whydah, women first only came to help the men with soil tillage (Bosman 1705:214, 342-344 writing about the 1690s). Later, Whydah women even took over the greatest part of the farm work from the men, including soil tillage with iron tools (Labat 1730:226 speaking about 1725, wrote 'labour', which literally means soil tillage or ploughing; in this historical context probably superficial tillage. It is not likely that the Hweda ridged before the Fon conquest in 1727, since they do not do so today and none of their direct neighbours does so (however if they had Fon, Yoruba or Mahi slaves these might have ridged). After the Fon conquest of Whydah in 1727 women continued to till the soils there, and when the Fon conquerors introduced ridge tillage to Whydah the women also had to do this hard job. In the 1860s and 1870s women in Whydah 'ridged the ground' (Burton 1893/1966:48) and used for this 'short hoes, the iron blades being of native manufacture' (Skertchly 1874:84).
21 See section 5.2.3; Norris (1789/1968:86, 147); Dalzel (1793/1967:121); Duncan (1849:22); Law (1991:64-66, 272).
22 Sample of 13 adult men who cleared with the scythe and 29 men who ridged. The lower figure is obtained by aggregating their labour times and achieved areas, the higher figure by averaging individual speeds are averaged, which gave much weight to some slow individuals who cleared only tiny areas. 12 Fon farmers in Sahè estimated that they needed 115 h/ha for clearing and ridging together (Pijnenburg 1987:12).
23 Whether the farmer already had a *kpɛli* or still a *gbođe* played no role, both hoe types were used for both ridging techniques.
24 The Fon scythe shares the name *ada* with the ceremonial sword of the kings of Benin City in present day Nigeria. This sword has the form of a cutlass (Ben-Amos 1980:15).
25 We observed Henriette Ayinou slashing *Andropogon gayanus* with the cutlass, interviewed her in the field, and then interviewed her husband Barthelemy Ayinou in their village Aoundome, on 30 March 1990. A 19 year old woman whom we observed required 46 h/ha to slash with the scythe, while 13 adult men (between 16 and 54 years) required 32 h/ha all labour times and achieved areas aggregated together or 46 h/ha if individual speeds are averaged (which gave much weight to some slow individuals who achieved only tiny areas). 12 Fon farmers in Sahè estimated that they needed 50 h/ha for slashing with the scythe (Pijnenburg 1987:12).
26 The Zado region is on the eastern slopes and Tindji on the north of the Fon plateau.
27 As far as weed infestation, soil characteristics and workers' health and skills is concerned.
28 This also made my Adja labour time measurements relatively easy because most Adja measured already by themselves.
29 20% seems a reasonable assumption, given the precision of my observations, my sample size, standard deviation, consistency of gender- and age-specific patterns found, and the consistency between Kersten' and my measurements and the time allocation surveys by the FSA-UNB and myself.
30 With 'weeding rounds' I refer here to the removal of spontaneous vegetation in a growing crop; this differs from the Adja's concept *gblen* which they themselves usually translate with *sarclage*, but which

is any soil tillage with the hoe, including tillage before sowing. Therefore, where I count two weeding rounds with the hoe, the Adja themselves count three rounds of *sarclage*. On the other hand, uprooting weeds with the hand without hoeing is not considered *gblen* or *sarclage* by the Adja. Elderly Adja say: "*Dans ma jeunesse nous ne sarclions pas du tout, nous arrachions seulement quelques herbes avec la main"* (In my youth we deed not till the soil at all but only uprooted some weeds by hand). Such weeding without hoe has gone out of use since the early 20th century, therefore it does not enter my calculations of weeding rounds.

31 In general, only landowners may plant palms. Special Adja tenancy agreements to plant palms and let them occupy the land exist (see Tola's case in 8.3), but stipulate that the tenant has to fell the palms at maturity and quit at once.

32 Pijnenburg's (1987:23) – probably male – Adja respondents estimated to spend 'only' 125 hours per hectare on weeding maize and 142,5 hours on weeding groundnuts. According to Kersten' (1988) and my measurements averaged however, Adja men need 172-259 hours for weeding maize and 188-377 hours for groundnuts, depending on the number of weeding rounds, and Adja women need even more. The Fon weeding times I measured, though on a smaller sample, are almost equal to Fon farmers' estimations (Pijnenburg 1987:23). Kersten's (1988:32-33) measurements taken alone in Adja maize (116-174 hours) are equal to slightly higher and her measurements in groundnuts (78-156 hours) about equal to slightly lower than Pijnenburg's estimations. Differences between Kersten's and Pijnenburg's studies, both executed in 1986 in red soil villages, one hand and my measurements in 1990 in a red and a grey soil village of which the former bore much spear grass, on the other might be due to the differences in soil- and weed types and in climatic conditions between the years. The fact that my Adja measurements differed more than my Fon measurements from farmers' declarations might be explained in the first place, as for clearance, by the Adja priding themselves in working hard and fast, which made them state their best time when asked to estimate. Second, some Adja might have described the traditional situation, the average time required during the past few decades when weed infestation was less. Third, since Adja labour requirements peak during the weeding season, they typically make long working days and weed also when they are tired or sick, which depresses the average speed.

33 Plucking the groundnut pods from the uprooted plants is the task of women and children, is not included in my labour time calculations, but should not differ between Fon and Adja because they both use the same technique. My assistants recorded some labour times of this task but found it difficult to measure the achieved areas. Their data gave much higher figures for the Adja than for the Fon, which makes me doubt the data.

34 Crude measurements, partly in basins and partly with a balance, gave on average 1,4 ton/ha local maize in husks (range 0,7 to 2,5 tons) or 3 ton/ha (range 1,4 to 5 tons) of hybrid maize in husks grown in home gardens.

35 The observed plucking times of children and seniors were within the range of normal age- and gender specific indices: mostly slower than adults. Only the 9-15 year old boys (17 observations) plucked slightly faster than these, namely 150 h/ha, but they were also faster than adults in weeding maize and opening plant holes for fertiliser.

36 Local data of the 1980s show that in mixed Fon-Adja regions on the eastern Adja- and the western Fon plateaux it were mainly the Adja who grew cotton, only few Fon farmers in these regions did so. According to the *intendant* of the CARDER Abomey all the cotton of Abomey district in the 1980s was produced by Adja who lived in the Fon plateau village Détohou and by a few Fon along the river Agbo on its northern (savannah) border. This also implies that part of the cotton figured as a product of the *cercle* d'Abomey, was in fact a product of Adja not of Fon farmers! Vice versa, the Fon farmers in the ethnically mixed villages Akweveadja and Tchikpè on the eastern Adja plateau cultivated less cotton in the 1980s than their Adja neighbours, according to the local extensionist (own interview 13-2-1991).

37 At least until the end of my research.

38 Witchweed (*Striga spp*) was completely unknown in Adja fields while it was a major parasite in Fon plateau fields and also occurred in a few Fon fields on the eastern Adja plateau. *Andropogon gayanus* grew marginally in some ecologically atypical spots on the Adja plateau according to my observations. The Adja had no specific name for *Andropogon gayanus* but grouped it with other tall grasses

under the name *wushiki*. According to interviews, the whole *wushiki* category was very rare, but it was impossible to assess how much of this was *Andropogon*.

39 Ethylene produced by micro-organisms that feed on organic matter, and root excretions from non-host crops, cause witchweed seeds to germinate. If no host crop is found nearby, these *Striga* seedlings die off before they can produce seed themselves (Van Ast 2006:3-5). *Striga* seeds also loose their capacity to germinate and their viability more rapidly in moist than in dry soils (Gbèhounou et al. 2003), which is a further reason why soil organic matter content, which enhances moisture retention capacity, is inversely related to the survival of *Striga*.

40 'Long ago, Akaba became the friend of Dan here. Akaba killed Dan and planted a fence-peg in his belly. This is why Gevi-land is called 'in the belly of Dan' (Danxomɛ).' (*Akaba zun xonton xó Dan δò fí xoxo δè. Akaba hu Dan ló bó kpatin tun nyi xò ton mɛ. Nu e utú Geví tomɛ fí e ka nyi Danxomɛ*). (Fon dynastic tradition. Ségurola 1988:37).

41 His ancestors had come from Sahè on the Fon plateau.

42 The day of the Hunjro market in Abomey, on which Fon religious values prohibit farm work with iron tools.

43 Large numbers of samples would be required to determine averages for different land use categories or for the plateaux as wholes, but this would have been too costly.

44 Planters in Tchikpè village applied Ureum at all seasons if we may believe the local extensionist.

45 In 1990 I saw a tomato plant with fruits of about 1½ to 2 centimetres diameter, much smaller than any cultivated variety in Bénin, climbing on an oil palm in a field near Kpatohoué. Was this a descendant of these wild tomatoes?

46 They also found edible leaves in the bush and its early regrowth, in their order of importance *wontu (Lactuca taraxicufolia), glazui (Talium triangulare), jakunkwi (Amaranthus spinosus)*, *demi* (jute, *Corchorus oliturus*), *voyi (Momordica cissoides*, a *Cucurbitacea,* I ignore whether one eats the fruits or the leaves), and *bolo* (unidentified). They did not protect the leaves because these were so abundant. (Own interview, Atindehouhoué 23-5-1990).

47 Akuwa & Firmin Gbenaza, Zouvou 27-9-1990; Jean-Marie Ballo, Djeglo, Essoun, Kpogbeza and the father of Benoit Kakpo, Akwevɛadja 5-1-1991; Tchindo Kpadonu, Akwevɛadja 7-1-1991).

48 According to Michel Houdagba in Akwevɛadja "the principal reason for tomato cultivation is *Imperata cylindrica*. 'We' leave *Imperata* plots fallow for 2 years so that the grass grows. Then 'we' plant tomatoes and they produce well." (Own interview 9-1-1991). Houdagba himself did not grow tomatoes, but orange trees. He was a young Fon who studied at the agricultural college at Ina but failed to find a white collar job.

49 The only other crops that the Adja always grew on mounds or ridges were yams and sweet potatoes, and sometimes they made mounds for tobacco, chilly peppers and other vegetables as well, but they cultivated these crops at the time of my research less than tomatoes.

50 Possibly the East also had more *Imperata cylindrica* than the West; a Fon tradition from Klouékanme claims that the Adja gave the Fon invader Gbotan in the mid 19th century all their land with meagre *Imperata cylindrica* on it (6.3.2).

51 Own interviews and observations. Luning (1986:35, 42) confirmed this for the eastern Adja plateau villages Banigbe (Adja) and Ladikpo (Fon), and specified that the Adja farmed more than the Fon.

52 Several interviews in Lagbahome, Akwevɛadja and Atindehouhoué. Kedalo Kiki in Lagbahome had to give half of his tomato harvest to the owner his plot (interview 3 May 1990). Edja (2001:10, 20) describes tomato sharecropping by Adja sharecroppers who had to give almost one third of all tomato pickings to the landowner, except for the first picking in each crop, which was entirely for the sharecropper. Each tomato crop is picked about ten times. See also Luning (1986:35).

53 Table 7.29 in Appendix 7. Official statistics localise most Fon okra in the 1980s in Djidja district (the savannah), followed by Agbangnizoun and Abomey districts. If the figures for Agbangnizoun and Abomey are not mistaken (my respondents there neither declared much okra, nor did I see any okra fields there in 1989-1990), this okra was probably grown in valley bottoms at the edges of the two districts.

54 See also aerial photographs in the Appendix and in Brouwers (1993:87).

55 The former are often also named *bovime* ('small field'), the latter *bogan* ('big field'); see also section 8.1.3.

56 For the Adja to be a man was to have a sizeable and well maintained (maize) field in the *boji* zone, and to have many labourers to cultivate it.
57 Especially neem (*Azadirachta indica*) and teak (*Tectona grandis*), occasionally Eucalyptus spp.
58 Adja farmers may kill pigs and catch goats which they find in their fields; their owner has to pay a fine to recover his goat or the meat of his pig. But most pig and many goat keepers find these risks acceptable compared to what they can gain by not providing al the food for their animals themselves. Some liberate their animals at night or at noon when farmers are less alert.
59 Deep incorporation of fresh urban household waste with a low C/N quotient into red plateau soils near Porto-Novo gave better results than the incorporation of composted waste in trials by Grubben (1974:98) because the compost had lost some minerals, especially nitrogen.
60 Sols ferralitiques faiblement désaturés appauvris modaux sur sédiment meuble argileux du Continental Terminal (called by the Adja *nyigbanjun,* by the Fon *kovovo,* and in French *terre rouge*)
61 Sols ferralitiques faiblement désaturés appauvris modaux sur matériau argilo-sableux remanié (called *nyigbanfunfun* and *keji* in Adja and *kowiwi* and *kɛn* in Fon).
62 When the CARDER Abomey refused to sell on credit for fields in other districts because of unpaid debts, they borrowed some land in Abomey district so that they could continue to buy fertiliser in Abomey for their Djidja fields (personal communications of the *intendants* responsible for fertiliser sales of the CARDERs Abomey 19-10-1990 and Agbangnizoun 21-6-1990).
63 Logistic constraints (damage to roads and trucks etc.) often prevented the CARDER from replenishing the stocks in time.
64 The difference is slightly smaller than the comparison between Tables 9.41, 9.42 and 9.43 suggests, because 1990 was a better fertiliser-year than 1988, in particular on the Adja plateau (on the Fon plateau rains were very late in the first season of 1990, which inhibited fertiliser use) (Table 9.39), and because Klouékanme district in which most of the villages in Table 9.42 are located is the district with the highest fertiliser consumption on the Adja plateau.
65 Own interviews with the *intendante* responsible for the fertiliser sales of the CARDER Klouékanme (11-2-1991), and with an extensionist who lived and worked from 1980 to 1990 in the mixed Fon-Adja villages Akwevɛadja and Tchikpè in Klouékanme district (13-2-1991).

# 10

# Discussion: comparing the sustainability of styles

> 'But so what? The great thing about a standpoint is that you can stand on it and modify it! (..) Show me one standpoint and I will show you two dozen ways to shift out of it.' (Latour 2005:145)

This book analyses the development and sustainability of styles of making a living. Among the principal achievements of this study are the additional insights gained through the comparison of two cases in their historical process. By comparing two cultural groups and two geographical regions in a similar environment through a case study approach, I was able to use the advantages of inside analysis to draw conclusions at meso level, while avoiding the tunnel visions of both micro approaches searching for internal stability, and macro approaches searching for universal trends. This allowed me to of move on from the stalemate position in the debate between 'eco-pessimists' and 'eco-optimists'. From their tunnel positions, the 'trench warfare' between the two parties has reached a situation where the same arguments are 'fired' back and forth over and over again without having any effect. Eco-pessimists keep hammering with conventional equilibrium models and keep presenting global statistics based on aggregate data of questionable quality: guesses, discrete ratings for variables that are normally represented by a continuum, and averages which do not give much insight into conditions under which ecological variation occurs. Most eco-optimists strike back with yet another isolated case study or with pointing to the ideological roots of the conventional discourses, which does not give much insight into conditions of environmental degradation or sustainability either (section 2.2). Similar remarks could be made at a more general level about the controversy between believers in (mostly small-scale) qualitative analysis on the one hand and adherents of more universally applicable measuring, counting and modelling on the other hand. The former are mainly represented by anthropologists, micro-historians, and post-modern sociologists working in an interpretative paradigm including many adherents of the actor oriented approach. The latter are mostly found among econometrists, cliometrian historians, soil scientists, systems thinkers including Boserup, (neo)-Malthusians, systems ecologists, and those livelihood scholars who use the concept primarily as a synonym for income. Though the altercation between the adherents of qualitative case analysis and those of universal modelling based on theoretical deduction or on quantitative empirical analysis on the other has calmed down a little as both parties realise that the conventional arguments fail to convince, mutual understanding has not been reached. Whenever the discussion flares up again, for example between neo-Malthusian agronomists and environmental micro-historians, it becomes clear that the camp sites have not moved. Though this retreat into one's own trench and into one's own 'citation community' of the likeminded might be comfortable and peaceful, it does not help to find solutions to the points of mutual critique, in spite of the fact that both camps ask the same fundamental questions about, for example, the conditions for ecological or livelihood sustainability. In my view, this impasse stems from the fact that more satisfactory answers lie beyond the customary paradigmatic 'grazing grounds' of the respective camps. Case studies alone, un-precise quantitative data alone, or grand equilibrium

models alone, simply do not satisfy everyone. Therefore it is time that we leave our camps and their overgrazed surroundings and move to fresh grazing grounds.

### *Holistic comparison*

In this study I have attempted to overcome the impasse by combining the advantages of qualitative inside analysis with an approach that has so far been neglected by the contending parties, namely holistic comparison. Like almost all comparative studies, McMichael's (1990) particularising comparison exempted, my study aimed at generalising at a higher level than the two case studies alone. The facts that the historical processes which I compared (styles of making a living and plateau ecologies) started from similar situations and that their economic, political, institutional and climatic external environment remained similar through more than four centuries, makes that it may be called an almost controlled comparison. I say almost, first because the circumstances were similar but not absolutely identical, second because circumstances could not be controlled intentionally during the process under study but their similarity appeared only in hindsight, and third because absolute control as in positivist experimental settings was not what I aspired for. Therefore, I did not regard the cases as clearly demarcated and self-contained wholes which are independent from each other, but I also studied processes of boundary (trans) formation, internal differentiation, and mutual interaction.

The comparison was holistic, which means that each of the cases under study, their features and the internal linkages between them, were also studied in their own right (section 2.1.3). In this regard my comparison differed from the large-scale, mostly quantitative, comparisons of systems thinkers like Boserup, Homer-Dixon, Smaling, and users of Tylor's cross-cultural comparative method, who took a few features of a large number of cases (farms, economies, soils, ecological settings, cultures etc.) out of context and correlated traits rather at a more aggregate level than within the cases where they were found. Their approaches give little insight into why and how traits occur together within a single case, invite to the rapid conclusion that they must be functionally or causally related because they coexist, and encourage the construction of grand mechanistic theories which predict uniform trends and outcomes. The Fon and Adja case studies have shown, once more, that only holistic case analysis can give insight into how and why internal relationships occur. In yet poorly understood complex situations – a category into which most African livelihoods and ecologies fall – rapid assumptions about causality between phenomena are error prone. The Fon's expensive housing, for example, invited policymakers to conclude that the Fon's ridge tillage must be agro-ecologically more productive than the poorly housed Adja's flat tillage. However, my qualitative and holistic case analysis of Fon and Adja styles of making a living revealed that housing as well as tillage styles related more with cultural and aesthetic values regarding decent habitation and proper cultivation and to individual and family livelihood resources, than to agricultural productivity. While the prestige of Adja families hinged on agricultural production, the honour of Fon families depended rather on expensive compound walls and on non-agrarian activities. More Fon than Adja had indeed non-agrarian income and/or labour at their disposition as I have shown in Chapter 8, and used these to build their walls. How these differentiating factors related to individual or corporate actor's values, assets and choices under similar conditions could only be correctly understood, without resorting to rapid but erroneous assumptions about causalities, by studying each case holistically

from inside. Therefore, the combination of holistic case analysis with comparison was an innovative element of my research.

Due to the complexity and unexplored nature of the Fon and Adja styles of making a living and ecologies, the use of a range of methods including participant observation and open interviews to study each case as much as possible from nearby or inside, was crucial. Without such a multi-methodological, partly ethnographic, approach, I would have obtained completely different, and quite unreliable, data. In this regard my research experience endorses the methodological approaches of the eco-optimists, adding the comparison to it, and at the same time questioning the reliability of the approaches of many pessimists. In sections 1.3, 3.3, 5.2, 7.1.1 and 7.1.3 I explained why the distant observations of administrators, travellers and researchers before me revealed only 'glittering rings in treetops' and why, when I approached and 'climbed into the tree', I saw what kind of ordinary tin the rings were really made of. Distant observations gave a perspective on expensive Fon compound walls that radiated wealth, clean-weeded Fon ridges that suggested hard work, and Adja bush land that looked uncultivated and economically unproductive. Ancient travellers on the Slave Coast, colonial administrators, and societal scholars among the Fon (anthropologists, oral historians etc.) spoke and interacted almost exclusively with male key informants from the local elite, and mainly in town, as I have shown in sections 3.3.1 and 7.1.1. Their narratives portrayed their own authority and traditions as generally accepted, Fon society as hierarchical and coherent, and presented themselves, their group (the Fon), and their gods as successful in economic, agronomical, political and spiritual domains. Success narratives and culturalist portraits consequently found their way into all primary publications on the Fon and into almost all secondary publications too, because these were quite uncritically based on the primary sources. Researchers among the Adja relied mainly on standard questionnaires and rapid appraisals directed by researchers who lived in distant towns, as I have shown in section 3.3.2. These surveys were also prone to all kinds of bias and misunderstandings in data collection, failed to give a holistic insight into essential relations between observed phenomena, and could not give insight into Adja agency. Official statistics, for their part, were based on guesses by extensionists who did not venture far from their offices and from major roads, transaction figures of officially recognised traders, registered exports and the like.

When between 1984 and 1991 I made the effort to immerse myself during longer periods into everyday Fon and Adja family and village life, to observe behind Fon walls, and to gaze through the closed canopy of Adja 'wilderness', I saw much economic misfortune in Fon families, and much productive land under the 'wild' bush and wine palms. When I spent time in the fields I detected a good number of Fon working there who had previously claimed not to perform farm labour because this would be below their standing, or, in the case of women, not befitting for their gender. Already knowing social ties (kinship, affinity etc.) between many individuals in the fields, I also saw many more adolescent Adja than Fon cultivating their parents' and relatives' land without payment, in spite of popular and early administrators' beliefs that the Adja are individualised and their families less coherent than Fon families (Chapters 1 and 8). On the other hand I perceived more Fon than Adja women weeding their husband's land, in spite of the literature claim that Fon women do not till the soil (Chapter 8 and Wartena 2001). My in-depth life history interviews with several closely related individuals within kinship networks produced not only success narratives of the type given by the key informants of my predecessors, but also many stories of

economic and other misfortune. Observations and in-depth interviews on crop, oil palm and fallow vegetation histories in the fields of these families, compared where possible with aerial photographs and written information in the colonial archives, revealed that the Adja produced large quantities of food crops and *sodabi* (palm wine distillate) which neither the State nor export companies demanded, and sold them to informal traders whose transaction figures rarely appeared in commercial statistics so that the distant image of economically unproductive Adja fields was proved to be mistaken.

On the other hand, this multi-focussed and multi-methodological analysis of vegetation change indicated that official and popular opinions on ecological transformation were far besides the truth. Popular and academic opinion errs, first, in its assumption that Adja plateau tree coverage declined, while it actually increased since at least the mid-20$^{th}$ century, mainly due to expansion of oil palm, and this far beyond the maximum densities postulated by oil palm experts like Zeven (1967) and Hartley (1988). Second, official statistics considerably overestimated cassava areas as compared to farmers' declarations and my own observations, probably in the belief that 'on poor soils, farmers plant cassava'. Third, semi-spontaneous vegetation change appeared to be quite unrelated, across time and region, to human population trends, but rather to tillage and oil palm management styles. When I measured field labour investments (section 9.2), it became clear that the Adja's 'messy' fields were actually the result of more worked hours per hectare than the Fon's clean ridges. When I measured yields (which no other researcher in this part of Bénin seems to have done before me) and analysed some intensively cultivated soils on both plateaux (Appendix 9), it appeared that the Fon soils were more degraded and generally produced lower yields of annual crops than Adja soils, except in some manured home gardens. All this would have gone unnoticed without observation from nearby and inside and without establishing a longer relationship with individuals and families.

### *Comparison of networks and processes*

Another characteristic of my comparison is that it was also between emerging networks and historical processes as foci of analysis, and that I have tried to avoid rigidly predefined notions about what are the relevant differences and precise units of analysis (groups, cultures, styles) for comparison should be (section 2.1.3). This approach allowed me to observe how and why different kinship groups, different socio-cultural and linguistic identities, and different clusters of values, practices and ecological properties emerged in history, and how these were often mediated by actors' networking practices. Therefore, following processes and network ties gave a better understanding of the internal and external factors that contributed to divergence or convergence than a comparison of phenomena fixed in time and space would have done. The prime importance of the historical process for understanding the how and why of the emerging differences and similarities, was the reason why I ended up studying about 500 years instead of the 100 years that I originally intended. Principal sources of the divergences that I observed appeared to go back about 400 years. Likewise, the crucial importance of socio-technical networks for the emergence of different styles of making a living, which I define as clusters of practices that are supported by actors' values, led me to transcend the geographic (plateau) boundaries originally set for the research. To understand the socio-technological origin of the Fon and Adja's different tools and tillage styles I had to trace iron and tool trade networks stretching as far as Tado, Akpafu, Bassar, Kabiyé, Oyo, Bussa and Kano (section 4.1). To understand how assets, skills and values to

pursue particular livelihood activities were acquired, and how these resulted in diverse styles of making a living on the plateaux, it proved necessary to study kinship networks also as they stretched beyond the two plateaux (Chapter 8). The study of socio-economic relationships between Fon and Adja, sometimes explained why or elucidated how divergence between the two processes occurred, as in the case of Fon-Adja land transactions (see below). All this would have remained invisible without comparing various processes and networks.

Most other scholars whom I mentioned above studied a historical process as if it were internally homogeneous, some of them on a smaller and others on a larger aggregate scale. But admitting heterogeneity and comparing diverse processes helped me to perceive and understand causal relationships much better than the study of an allegedly single process would have done. Historical research always has to make do with piecemeal sources, and especially in Africa the gaps between these are often large. Therefore, professional as well as amateur historians tend to fill the gaps with guesses, which are often unwittingly grounded in conventional theories. It is just too tempting to fill our knowledge gaps with assumptions about functionalist relations. For example, the observation that Fon and Adja styles of farming and Fon and Adja plateau soils and vegetations differ today, led many policymakers and some farmers to assume that each style was a functional adaptation to past ecological differences when the plateaux were first colonised. Likewise, during my internship in 1985 when I studied two neighbouring Adja villages only, I was tempted by the populist view that the Adja inhabitants' ways of making a living were socially, economically and ecologically optimal in the plateau environment. If I had studied the Fon alone I would probably have assumed the same things about their styles. But when, for my PhD research, I started a more detailed comparison within the allegedly homogeneous environment, I came across many unexpected style and ecological differences and I had to question what I had taken for granted and investigate and analyse more carefully. Were past conditions less similar, or the interaction processes between humans and nature more complex than I had assumed? Comparison of two processes also allowed me to discern where divergence occurred, and hence to understand better which internal or external factors contributed to which outcomes. In many cases this investigation revealed that factors and phenomena were not as uni-causally related as assumed, or that one style or phenomenon was better adapted or more functional in the given economic or ecological environment, and the other only a sub-optimal adaptation. These insights would have hardly been obtained without a comparison of historical land use and ecological processes; proof is that the environmental ethno-historians who studied a single case perceived only good adaptation of indigenous practices to local ecologies. Therefore my comparison of ethno-histories is a scientific innovation which takes the deadlocked debate between eco-optimists contra eco-pessimists, and between the adherents of case study contra universalising approaches, to fresh grazing grounds.

### *Population density assumptions challenged*

The comparative inside analysis of processes among the Fon and Adja and the ecologies of their plateaux demystified a number of conventional assumptions about linear causal relationships. My findings first challenge the assumed determining role of human population density. The comparison between Fon and Adja styles of making a living and plateau ecologies, as well as comparisons through three or more generations show that there is no systemic relationship between human population density, on the one hand, and agricultural

system, labour investments per hectare, agricultural productivity of the land, oil palm density, deforestation, soil degradation, and violent conflicts, on the other hand. Therefore, the Fon-Adja comparison challenges at the same time Boserup, Malthus, Homer-Dixon, and Zeven. My analysis has shown that the rural population density of the Fon plateau was similar to that of the Adja plateau throughout the 20th century. Perhaps it was slightly higher among the Fon before ca 1950 and slightly lower thereafter, with the maximum deviation in both directions being about 25-30%, due to slightly higher demographic growth among the Adja, but on the whole there was no great difference (section 9.1). Nevertheless, all the above mentioned systemic properties differed throughout the 20th century between the plateaux.

First of all, the comparison between Fon and Adja shows the fallacy of both Boserupian and (neo)-Malthusian approaches, because under similar soil, climate and demographic conditions and without external industrial inputs (some recent Adja fertiliser use excluded), the Fon and Adja developed different agro-ecological 'systems'. These diverged since at least four centuries both technologically and in agricultural productivity per unit of land. Both Fon and Adja styles of farming exhibit significant local African inventiveness, which supports the point of Boserup (1965), Tiffen et al. (1994), Richards (1985), and others that indigenous agriculture can be revolutionary innovative. Examples of Fon innovations are the scythe, slashing and burning herbs instead of incorporating them, the *kpɛli* hoe, and manuring home gardens (sections 9.2 and 9.4.1). Examples of indigenous Adja innovations are the planting of oil palms to tap wine and to serve as improved 'fallow' at increasing densities, planting pigeon pea, *Mucuna pruriens* and cassava as improved fallow and to quench grasses, irrigated tomato and chilly pepper cultivation on mounds to earn cash and to combat spear grass, relais cropping with maize-cowpeas-maize or maize-cowpeas-tomatoes in order to harvest three crops per year from the same plot, soy bean cultivation, manuring home gardens, application of chemical fertiliser on food crops, of cotton insecticide on cowpea crops and in stored maize, etc. Both groups also adopted new varieties of cowpeas, cassava and maize, and the Adja also of pigeon peas, tobacco and tomatoes though informal commodity chains (sections 6.5, 7.3, 9.3, 9.4; Wartena 1988b:246; Meuleman 1990:27). External 'scientific' intervention played no role in these innovations, except that the fertiliser and insecticide which the Adja applied to their food crops was intended by the extension service, who sold these inputs, to be used on cotton.

However, in general agricultural productivity developed much more positively per unit of Adja land than per unit of Fon land, even in the absence of external industrial inputs. As a Fon farmer put it: "The land yields more to the Adja than to us Fon." Even if fallow areas are included, throughout the 20th century the Adja plateau yielded more in cash and in kind than the Fon plateau and the gap seems to increase. In my thesis I have shown that this divergent productivity should be attributed to the divergent agro-technologies that the Fon and Adja used, rather than to different intrinsic levels of fertility or to different demographic developments. Therefore, there was neither a mechanical relationship between population growth, technological innovation, and agricultural productivity growth as Boserup (1965, 1982) thinks, nor a mechanical relationship between population growth, environmental degradation, and productivity decline as the (neo)-Malthusians defend. The development may go in either direction, and can certainly not be quantified. Therefore, any attempt to construct a mathematical systems model, into which you can enter a given level of population growth, add a few economic and ecological variables, and then push on a button and compute the level of productivity growth or degradation that will follow, is nothing more

than a mathematical exercise, a game for killing time, or a method to generate questions for real research. Any ambition that goes beyond this is tantamount to fooling oneself. The first and foremost reason is that agro-technological innovation and implementation must come from the minds of human actors rather than from machines. My research has also uncovered some of the ways how Fon and Adja agency generated and applied the diverse agro-technologies; I will come to these below.

If Boserup was right, Fon and Adja styles of farming should be equally labour intensive per hectare. At best, there could be temporary differences in labour intensity, as necessary stepping stones to trigger more labour-productive innovations. However, my research has shown that the Adja devote between 1,5 and 5 times more labour to one hectare non-irrigated annual crops than the Fon in spite of similar population densities. Irrigated Adja horticulture is even about 8 to 12 times more labour intensive than Fon maize cultivation. These labour needs are direct results of Adja tillage styles and Adja agro-technological ingenuity, rather than stepping stones to innovation – though we cannot exclude that the Adja might still innovate further. It proves not only that popular and policymakers' opinion about Adja laziness is mistaken, but also that Boserup's linear model of what Geertz (1963) called involution is too simplistic. It likewise shows that the Adja pay a price for their ecologically more sustainable and technologically more productive use of the land as compared to the Fon.

Population density, combined with frequency of cultivation per unit of land, is often believed to determine fallow vegetation type and species under given geographical conditions. In this model, stages of vegetation succession and the proportion of land under each vegetation type depend on the duration of fallows, and these depend on demography. The comparison between Fon and Adja also falsifies this model, and shows that even if the proportion of land under cultivation is kept constant, much depends on farming style. First of all, Fon ridge tillage uproots spontaneous vegetation, especially woody species and spear grass, more effectively than Adja flat minimal tillage. This results in qualitatively different patterns of vegetation succession, mainly because woody species and spear grass need more time to succeed in Fon fallows, which gives herbs and savannah grasses and bush fires the opportunity to take over in the mean time (section 9.2). Second, if a Fon farmer wants to cultivate half of his land only, he typically alternates between field and fallow mixed with loosely planted oil palms every two to four years, so that the fallow never becomes more than herbaceous. But an Adja farmer who has the same area prefers to alternate between field and fallow mixed with dense oil palms every ten to twenty years, which gives also wild woody species more time to develop and in the mean time quenches grass and bush fires. Third, and related to the former, is the Fon practice to slash savannah grasses around their oil palms every year to ban fires, while the Adja clear the vegetation in their dense palm groves only once in three years to facilitate the harvesting of palm fruit; obviously these practices also affect vegetation succession (section 6.5). Therefore, the Adja plateau vegetation is more ligneous than the Fon's, especially if oil palm coverage is included.

Historical changes in tree and oil palm coverage on the Adja plateau studied in isolation deviate considerably from what is commonly assumed to occur under demographic developments like those among the Adja. While oil palm experts like Zeven (1967) and Hartley (1988) postulate that oil palm density increases with human population density until the threshold of about 200 oil palms with 250 inhabitants per hectare, and declines again when human population density continues to increase, the Adja plateau had already 300-700 oil palms with about 90 inhabitants per hectare in the mid-1950s, and roughly 500 oil palms

with 240 inhabitants per hectare in 1986, and both densities continued to grow after that date. The Adja achieved these palm densities by indigenous experimentation defying all hegemonic expert knowledge. In the early 20th century they planted groves with 600-1000 palms per hectare to tap wine, but gradually increased densities to 1000-1600 palms per hectare when they noticed that palms were a kind of improved fallow. The dense palm groves also constituted a favourable micro-climate for semi-spontaneous shrubs and trees to grow under the palms. Therefore, the expansion of oil palms on the Adja plateau more than made up for the decline of woody fallow without oil palms, at least after 1956.

Taken alone, the Adja case would clearly support Boserup, because they developed indigenous agricultural innovations, were willing to work much more hours per hectare, and achieved ecologically sustainable growth of agricultural production per unit of land. Yet, compared with Fon plateau agriculture, Boserup's mechanistic model does not satisfy. The Fon also innovated but much less than the Adja, hardly increased neither their agricultural labour input nor their farm output per unit of land, and their farming styles were ecologically unsustainable in the long run. Taken alone, the Fon case would rather support Malthus and Homer-Dixon, except for some reservations to which I come below.

Both Fon and Adja history defy Homer-Dixon's (1999) thesis that environmental ingenuity can only prosper with economic affluence, strong States, financial agencies, educational and research institutions, large-scale coalitions, and horizontally as well as vertically managed integration between system levels, but not in poor countries or with narrow coalitions within small groups. These factors played no role in the Fon and Adja's ingenuity. On the contrary, the Adja were vertically less integrated into (national) State and educational institutions (Chapter 7), but innovated more in agriculture and were better environmental managers than the Fon.

Finally, Homer-Dixon's (1999) trivial theory that population growth and environmental degradation trigger violent conflicts, which has already received much scholarly critique (see section 2.2.2), is refuted once more by South Béninese history. It is common knowledge that the pre-colonial Fon used violence, especially until 1850, to raid slaves for sale abroad as well as for settling them on their own already densely populated and ecologically degrading plateau, and also for political expansion, but not to obtain access to vacant non-human natural resources. During the 20th century, South Béninese population density and environmental degradation increased but the area was relatively peaceful, compared to pre-colonial times, and in recent years also compared to most neighbouring countries with lower population densities. Since 1900, the inhabitants of the crowded South Bénin prefer to find creative non-conflictive solutions to coexist quite tacitly within very limited geographical spaces. They mostly seem to agree to remain silent about past inflictions. Historical conflicts between cultural groups, like those which I presented in sections 5.3 and 6.3, were no themes of public discourse at the time of my research, certainly not beyond their own locality, and most young Fon and Adja even seemed to ignore accounts about how their own lineage or village was wronged in the past. Most villagers probably prefer to keep it that way in order not to jeopardise local peace and quiet.

### *Homogenising markets and policies challenged*

A second set of theories that the comparison between Fon and Adja demystifies, are those that predict a homogenising impact of markets and policies on the socio-technological organisation of production and on types and volumes of commodities produced (section 2.3).

Fon and Adja markets offered similar prices for the same commodities. Governmental and non-governmental policies and programmes mostly stimulated agrarian commodity production of the same crops by means of the same standardised techniques throughout the plateau zone. Neither food crop cultivation nor non-agrarian production were encouraged very much, and the production and sale of some commodities was even declared illicit during large parts of the 20th century. Commodities that the State demanded were mainly palm oil and kernels, cotton, coffee, tobacco, until the 1960s also castor bean and groundnut, and during some years before 1946 briefly maize. Favoured technologies included amongst others ridging, ox ploughing, and loose planting of hybrid oil palms – technologies which came close to Fon farming styles except for the hybrids and the oxen. (Sections 7.1.3, 7.2 and 7.3)

Commoditisation and commercialisation theories suggest that market production is an externally determined process. They defend that government policies, aided a little by market prices, are instrumental in triggering commoditisation or commercialisation. They seem to assume that the only choice that producers face is between producing for own consumption or selling the commodities that the State and markets demand. Furthermore, they assert that market production goes hand in hand with individualisation of productive enterprises, which means that productive assets like land and labour are more and more mobilised through individual competitive universalistic market relations, instead of through non-commoditised particularistic social ties. If this model of external determination of commoditisation or commercialisation were right, the Fon and Adja would sell the same mix of palm oil, kernels, cotton, coffee, tobacco, castor and groundnut, in volumes only depending on current policies and prices, use the same mix of commercially acquired assets to produce them, and would sell nothing else. This was not what they did. All Fon and Adja families made their living increasingly through markets, but they all eked out their own trajectories in doing so. Fon and Adja farmers often did respond to commodity prices, as price-related fluctuations in their cropped areas and sales over the years show (Chapters 6, 7 and 8), but prices were not the only factor that determined their productive choices. Economic policies and extension programmes, for their part, hardly impressed Fon and Adja producers at all, except in some cases if they happened to be supported by market prices. But even prices, good or bad, could not keep Fon and Adja producers from diverging each into their own niche markets. Proof is that Fon and Adja families throughout the 20th century quite consistently each specialised in the production and sale of their own commodities and other cash-earning activities, most of which were not demanded by the State. Fon market oriented portfolios mostly comprised several of the following activities, varying in importance between families: groundnut cultivation, palm oil production, crafts like weaving, tailoring, carpentry, forging, and mechanics, sale of magic and religious services, trade, hunting, trapping, charcoal production, wage labour on local farms and palm oil industries, and (Para)State wage employment. Cash-generating elements in Adja livelihood portfolios comprised cultivating maize, cassava, tomato, chilly peppers, groundnuts, cotton, and until the 1960s castor, producing palm wine and *sodabi*, and minor involvement in crafts and trade. Most of these commercial activities were not supported by policies and programmes, but rather demanded by local and regional customers and traders. Therefore Fon and Adja developed their commodity chains largely by themselves, in interaction with inter-local traders and commodity networks, and independently from the State. Nor did they use the same input mix.

Commodity theory also emphasises commodity producers' growing dependency on markets to mobilise means of production, resulting in 'individualisation' of productive

enterprises, and suggests that this occurs in a linear way. If this were true, the commoditisation of labour and of arable land, which are the Fon and Adja's principal means of rural production, would keep step with each other. In reality however, land as a means of agricultural production became a commodity to the Adja but not to the Fon, while labour became more a commodity in Fon than in Adja production. The inhabitants of the Fon plateau villages I studied used more wage labour than the Adja in farming and in processing farm products (especially palm fruit), and performed more wage labour themselves too, as the case studies in Chapter 8 illustrate. The Adja mobilised much more labour through various non-commercial ties, like unpaid family labour, labour exchange groups, payment in kind, or labour in exchange for an unspecified reward at a later date, for example a new years' gift to a woman who harvested cotton or the payment of bridewealth for a first wife for a son who helped his father during many years. On the other hand, my own research and that of others have shown that arable land became a highly prized commodity among Adja cultivators during the 20th century, and that the Adja now stand out in South Bénin for their well developed market for farmland. Adja farmers increasingly buy, rent or sharecrop the land on which they grow their crops against relatively high prices or shares of the harvest fixed in advance. In striking contrast to this, Fon farmers hardly ever acquire Fon plateau land as a means for agricultural production on the market. Fon plateau land is never rented or sharecropped against a fixed share. Until today it can easily be borrowed, even by non-residents of the owners' village, with no other obligation than to protect the trees that grow on it, especially oil palms, against bush fires through permanent cultivation. Gifts to the owner are merely symbolical and omitted altogether on the central plateau where land is poor (section 6.5.2 and Chapter 8). This difference in commodity value of Fon and Adja plateau farmland seems strange under the conditions of equally high demographic pressure and 'resource scarcity' on both plateaux, but there is sufficient evidence for my findings. Sale of Fon plateau land occurs almost exclusively with the purpose to build houses or plant trees on it, but hardly ever to grow annual crops. Buyers of this land are often urban dwellers, who plant fruit trees, or sometimes oil palms or timber, as a title deed and as a future asset, and lend the plot to local cultivators to guard the land and trees against fires and against claims from others by planting annual crops. Therefore, I can safely say that Fon plateau land, as a means to produce annuals, is acquired outside the market. It has market value only as a means of investment, and as substratum to install houses or trees.

Permanent (or long term) individual rights to land and security of tenure are often believed to be conditions for farmers to make investments that enhance ecological sustainability. A frequently heard argument is that customary African land tenure regimes allow only landowners to plant trees. Conservationists therefore advise to devote significant efforts and resources to land registry. However, South Béninese examples suggest that temporary and otherwise diffuse rights to land contribute to afforestation rather than inhibit it. In the absence of written title deeds, trees constitute unwritten title deeds almost everywhere in Africa. Not only on the Fon, but also on the Adja and Allada plateaux arrangements between givers and temporary takers of land mostly involve trees. Adja landowners prefer to rent out young palm groves rather than bare land to mark their ownership claims and to make sure that the tenant will be squeezed out from the land when the palms mature (sections 6.5 and 8.3). Urban buyers of the Allada plateau land use it in the same way as their colleague buyers on the Abomey plateau. If land rights were unambiguous, some South Béninese landowners might refrain from planting trees, and this could well be the case in other African regions too.

These differences in commoditisation and commodity value between land and labour can only partly be explained by the poverty of the Fon plateau land, for also on the eastern Adja plateau and on the coast, many Adja farmers rent or sharecrop land from Fon landowners, but almost never the other way round (sections 6.3.4, 8.1.2). They also reflect the greater value that the Adja, as compared to the Fon, attach to the cultivation of annual crops in their livelihood portfolios, the Adja's greater ability to mobilise agricultural labour, and the Adja's greater skills and better techniques to make farmland productive. Most Fon who abandon their land to Adja farmers, motivate this by saying that they lack family labour to cultivate it themselves. This is explained by that the Adja, landowners included, are more willing than the Fon to work long hours on the land without cash payment. The Fon in these mixed regions say that the land yields more to the Adja than to them, the Fon. The difference there does not reside in the quality of the land but in the use that Fon and Adja make of it. This cultural divergence in Fon and Adja valuation of land and labour would have been difficult to discern without comparing members of the two groups in social interaction with each other. This is an example of where comparison between networks and processes was more illuminating than a 'controlled' comparison between independent, self-contingent units with fixed boundaries would have been.

The different mixes of land and labour as commoditised or non-commoditised means of Fon and Adja commodity production indicate that commoditisation or commercialisation are no socially homogenising and linear processes. Social relations of and in commodity production do not become dominated by (the logic of) Capital, as commoditisation scholars think, but are actively developed by the commodity producers themselves. This resulted in different styles of social organisation of commodity production among the Fon and Adja, which also imply that the individualisation of productive enterprises cannot be measured on a linear scale. Are the Adja who work with family labour on commercially acquired land more, or less individualised than the Fon who employ wage labour on borrowed land?

Also cooperative versus commoditised labour cannot be measured on a linear scale. In early colonial times neither Fon nor Adja plateau land were a commodity yet, but already at that time the Fon cooperated less on each other's land than the Adja. For example, most adolescent Fon boys and many Fon wives already had a plot to cultivate own their own account, called *gbadagle* (evening field) in Fon, in the late 19th century. Among the Adja, individual plots only became popular around the middle of the 20th century, first for wives and then for sons, so that the Adja have no term for them yet (section 8.1.3). However, throughout the 20th century the Fon cooperated more than the Adja in the symbolical domain. The Fon always pooled more labour and assets in cash and kind than the Adja to build compound walls, to conduct family rites and ceremonies, and to defend Fon dynastic and religious traditions. The products of this Fon cooperation were highly visible and prestigious, but did not have much economic value as long they could not be 'sold' to tourists and ignorant foreign anthropologists (see section 3.3.1). Nevertheless, their visibility triggered the popular opinion, voiced by early colonial administrators in Chapter 1, that the Fon are less individualised and their families better organised than is the case among the Adja. From the administrator's development economic point of view this was probably a misconception.

Articulation of modes of production theories defend that, with the encroachment of homogenising capitalist markets, women become increasingly responsible for agrarian subsistence production, while men become active in the capitalist sector, either by wage labour migration or by producing agricultural commodities on their own account. The comparison

between Fon and Adja challenges this theory on several points. First, Fon and even more so Adja men continued to plant food crops for family consumption. Second, most Fon and Adja women with own plots sold part of their crops on their own account, though all of them also contributed to subsistence. Third, though Fon men engaged more in non-agrarian activities and migrated more than Adja men, Adja women's farming on their own account rose much faster than that of Fon women, and bypasses the Fon's since about 1950. In recent years again some Fon women abandon their farms, although also their men withdraw more and more from cultivation. Fon women, especially those without land, contribute more to their family's livelihood through trade and through tilling their husband's land, while Adja women contribute more through own cultivation and through harvesting and irrigating their husbands' land – which facilitates Adja production of harvest-intensive crops like cotton, castor, chilly peppers and tomato. The former is in line with a general process of de-agrarianisation and stigmatisation of agriculture among the Fon, men and women alike. Therefore, the Fon public account that 'our women do not till the land, that would be below their standing', which was blindly believed by Baumann (1928), Herskovits (1938) and Boserup (1970), cannot be taken at face value. I found it to be untrue since at least king Agaja's (1708-1734) time (sections 1.3, 5.2).

All activities taken together, Fon and Adja women's contribution to family livelihood was probably similar, but their contribution was not only through subsistence cultivation as articulation of modes of production theory asserts. Their agrarian and non-agrarian commodity production rather supports commercialisation approaches. Their similar contributions leave functionalist anthropologists, who assume a causal relationship between bridewealth value and women's labour with the mystery why then Adja bridewealth is about 1.5 times higher than Fon bridewealth (section 1.3). The Fon and Adja themselves describe the gift of bridewealth by the groom's father to the parents of the bride as a reward for the son's labour for his dad, but not as a compensation for the labour of the bride (sections 6.3.3, 8.2 and 8.3). This makes sense, for bridewealth difference is indeed more in line with differences in labour contributions of Fon and Adja sons to their fathers than with women's livelihood contributions. In conclusion, the different Fon and Adja patterns of gendered livelihood activities, gendered labour organisation, and gendered subsistence contributions show that neither female subsistence cultivation nor female commodity production depend on market incorporation in general or male involvement in the commodity sector in particular. Rather, the socio-cultural valuation of self-sufficiency in basic staples, gender division of subsistence responsibilities, and socio-cultural valuation of agrarian versus non-agrarian activities should also be taken into account. (Section 7.3 and Chapter 8).

The impact of external policies and programmes, coming from the State and from (what goes for) science, on Fon and Adja farming techniques was extremely marginal. Therefore these programmes failed to standardise Fon and Adja styles of farming. Most of the proposed technologies, if they differed from what cultivators already did, were so poorly adapted to local social organisation or ecologies that even those few farmers who tried them, abandoned them again. This was the case of hybrid oil palms, hybrid maize, cocoa cultivation, ox ploughing, denser sowing combined with thinning, and among the Adja also ridge tillage and lower oil palm densities. Castor and cotton cultivation were the principal innovations that the Adja accepted from the extension service as long as their price was good, but the Fon rejected also these when they found them too demanding in soil fertility and labour (sections 7.1.3, 7.3, 9.2).

### *Ontology of styles*

Wherefrom did the clusters of practices, which I call styles, and the clusters of ecological characteristics among the Fon and Adja originate if not from homogenising impacts of population density, geographical conditions, markets or policy? This research has revealed that variation was not spread evenly over the plateaux and over the Fon and Adja, but that there were clusters of technology, vegetation patterns, labour organisation, livelihood portfolios etc., and that these clusters were often connected to socio-technological networks. Therefore, the study of historical processes and socio-technological networks contributed to understanding how and why styles emerged.

Indigenous ingenuity and experimentation and 'horizontal' socio-technical network relationships with African neighbours had much more impact on Fon and Adja farming techniques than 'vertical' policies and programmes authored by the State and 'science'. Regional trade networks appeared instrumental in spreading tools and tillage techniques and innovations both in pre-Columbian times (section 4.1) and when Fon blacksmiths invented the scythe and a new hoe type in the early 20$^{th}$ century (section 9.2). Pre-existing commodity chains and social ties between customers and appeared often more important for farmers' choices where and which tools to acquire, and consequently which clearing and tillage techniques to adopt, than the intrinsic technological qualities of these tools. This led Fon farmers to adopt ridging hoes from Yoruba, Hausa and Bariba traders, and later the scythe from blacksmiths on the Abomey and Kana markets, in spite of the fact that these were sub-optimal technologies for sustainable plateau agriculture. That all Fon went once in a while to Abomey or Kana to buy, to sell, or for social interaction, was pivotal in making slashing with the scythe a standard Fon practice within ten to twenty years. This indicates that indigenous socio-technical networks may contribute even more to technological standardisation than the external 'scientific' technological and administrative task environment (TATE, see section 2.3.2) does.

Social neighbourhood ties also incited some Fon and Adja farmers on the north-eastern Adja plateau to experiment with the other cultural groups' farming techniques. A few Fon farmers there tilled part of their land on the flat (section 9.2). A few Adja farmers in this region tried planting groundnuts on ridges, but none of them adopted ridge tillage in the long run or for all their crops. Several Fon farmers in the frontier area developed a mixed oil-wine palm management style, with oil palm densities and ages that held the middle between Adja and Fon plateau styles. These experiments did not spread beyond the frontier region, in spite of strong ties between the inhabitants of this region with members of their language group on the central plateaux. Though most Fon on the north-eastern Adja plateau regularly visited their Fon plateau villages of origin, and several of them returned there in older age (sections 6.3 and 8.1), they neither introduced flat tillage nor mixed oil-wine palm cultivation to the central Fon plateau, arguing that the soils there would already be too poor for these practices. Only on the south-eastern slopes of the Fon plateau, whose soils were less suitable for palm fruit production, many Fon adopted mixed oil-wine palm cultivation styles. Though many Adja, all over the plateau, recognised that ridge tillage could be a last resort to grow crops on extremely poor soils, they preferred to avoid ridges as long as possible, arguing that they were not skilled and trained in ridging, that ridging destroys the semi-spontaneous vegetation (which was regarded as agriculture's 'host') and the soil structure and hence soil fertility, and that it takes too much time for land preparation so that they could not sow enough land at the proper time. These arguments of their Adja neighbours

did not convince the vast majority of Fon farmers on the north-eastern Adja plateau; most of them continued ridging also their relatively fertile land. The same was observed around the Fon enclave on the plateau of Atakpame in Togo; there, too, the warnings of the local Ewe to avoid ridges mostly fell into deaf ears (section 9.2).

Assets such as occupational skills, information, material inputs, labour, contacts to resource persons, social values etc., which are instrumental for the pursuit of most livelihood activities, were mostly acquired through kinship and neighbourhood networks. Members of the same lineages and villages often cooperated in trade, learned crafts from each other, migrated to the same destinations, acquired skills to produce particular crops from each other, and lobbied for each other on the job market. Therefore, families and villages tended to specialise in particular crafts, trades, and crops, and several Fon found employment in companies were their close relatives worked already. The multiple generation family histories in Chapter 8 have shown how the crafts, trades, agricultural wage labour in particular off-plateau areas, or employment in the railway service, of one or a few individuals sometimes had snowball effects in their lineage and village. Likewise, from the 1920s onwards Adja farmers in the village Lagbahome gradually acquired tomato cultivation and trading skills through a combination of own experimentation, learning from their fathers, and cooperation with peers. The soils around their village appeared suitable for tomatoes, and soon the village specialised in this crop.

Some style differences were quite specific for a whole language group, and quite homogenous within it. These were, besides innovations like the scythe which spread rapidly through the Fon markets, fairly sustainable elements of styles. My historical analysis over more than 400 years allowed me to trace the roots of these divergences in pre-colonial times, first in trade- and culture contacts with neighbours (section 4.1), and then in the socio-economic and cultural practices of the slave raiding and trading Fon on the one hand and of the agrarian Adja hiding from slave raiders on the other (sections 5.2 and 5.3). The emerging divergences included the prestige attached to occupations like agriculture, forging, trade and religious activities, the socio-cultural valuation of inhabited areas, of dense vegetation around the village, and of open field, the preference for foods like maize or millet, palm oil or palm wine, *Parkia biglobosa* or *Prosopis africana* spices, the importance attached to self-sufficiency in basic staples, notions about the sanctity of oil palms which are not to be 'killed' for tapping wine, ridge- versus flat tillage styles, and norms about proper ways for juniors to show filial respect to seniors (sections 5.4, 6.2, 6.5, 7.1.2, 7.3, 9.2). The first and the last were crucial for the development of agriculture, for Adja sons showed obedience by working on their father's land, while Fon juniors honoured their seniors by participation in family rites and building compound walls. These examples show that the different styles of making a living were generated historically by individual actors in social-technical networks, including kinship networks, neighbourhood ties, and commodity chains. Small or temporary differences in economic opportunities or ecological conditions, for example soil subtypes, were sometimes but not always taken into consideration. These styles, once established, changed only gradually over time.

### *Back to the models*

Now we are able to blend the insights gained from mirroring the processes on the Fon and Adja plateaux against population density models, on the one hand, and against market

incorporation models, on the other hand. In both mirrors the socio-cultural valuation of labour emerges as an important factor that contributes to the Fon and Adja divergence, each in opposite directions, from the predicted trends. Adja styles always valued agrarian livelihood activities, while since the rise of the transatlantic slave trade the ideal typical Fon stigmatises agriculture as being slave labour and rather values crafts, trade, and religious activities. Concomitantly the Adja value physical vigour and vegetative faculty, called *hlonhlon* in Adja and Fon, and the ability to work hard on the land. The Fon rather value socio-political and spiritual agency and power, *acɛ* in Fon and Adja, and chiefly or priestly status symbols and the appearance of success in secular or religious business that go with *acɛ* (sections 5.2.3, 5.4 and 8.2). While the Adja are proud to work long hours in their own and their relatives' fields even without payment, the Fon regard farm labour as shameful drudgery to be reduced to the strict minimum unless paid or coerced.

The Fon and Adja's divergent socio-cultural valuation of agricultural labour, combined with their divergent socio-technological networks which led to different tillage and oil palm management styles, explains why we perceive a Boserupian trend among the Adja and a more Malthusian one among the Fon. It also explains part of their different styles and trajectories of commoditisation, namely why the Adja marketed much of their produce as well as their land, but kept their labour mostly in the non-commodity sphere, while the Fon commoditised large parts of their production and of their labour, but kept arable land outside the market. Finally it explains why Adja styles of making a living remained largely agrarian, while those of the Fon de-agrarianised in spite of similar economic, infrastructural, political and initial ecological environments.

It even suggests that the nicknames which the Béninese gave to the leading Fon and Adja politicians during the last 15 years would symbolise or stand for the labels given to Fon and Adja lifestyles in general. The Adja candidate Bruno Amoussou (president of the Assemblée Nationale from 1995 to 1999, then *Ministre d'Etat* who ended third in the presidential elections of 2006 and fourth in those of 1996 and 2001), is called *Dadjê national* by the Béninese media and population, which means 'young man in the prime of life' in Adja. The Fon candidate Nicéphore Soglo was nicknamed *Nicéfaible* since he fell ill during the elections in 1991 that brought him to the presidential seat, and continued to suffer from bad health until he was replaced again by Kérékou in 1996. He was said to be victim of magic called *cakatu* against which he had no defence because he was not religious. The nicknames signified that Soglo, who appeared Nicé*fort* at first sight, but was in reality *faible* because he lacked physical and spiritual power (*hlonhlon* and *acɛ*). Amoussou was a vigorous young man in growing (*hlonhlon*) but still ignorant as compared to Kérékou, who was nicknamed *Le vieux* and praised for his experience (Table 5.4 and section 7.1.2). The fact that an Adja word was used to characterise Amoussou, while Adja was not at all a trade language and *dajɛ* was probably the only Adja word that most non-Adja knew, suggest that the Béninese consider 'young man' an appropriate label to stereotype the Adja, who value juvenile athletic strength, juvenile humbleness and docility in working for the elders, but tend to be youthfully naïve in non-agrarian commodity and labour markets. On the other hand, the characterisation of Soglo as someone who is or appears initially (socio-politically and physically) strong but is soon found to be (physically and spiritually) weak, fits well with the qualification of Fon styles of making a living as glamorous, but whose initial success is sometimes ephemeral because built on weak foundations and on too much glitter.

This study has shown that Adja styles of making a living were in the long run ecologically more sustainable than Fon styles. Over the period of the last 500 years, the similar forest-savannah mosaic vegetations and similar soils of the two plateaux diverged into different directions, with lower vegetation biomass and soil organic matter and clay contents on the Fon as compared to the Adja plateau. However, the question is however how performing were the different styles of making a living for their adherents. This question may sound trivial, for a style is by definition regarded by its adherents as the right way to act (section 2.5), and in this regard performing. Nevertheless, not all actors are equally satisfied with the outcomes of their actions, some succeed better than others in reaching their own livelihood goals, and some complain openly. Therefore this question requires a complex answer on the basis of more elaborate research than mine. I did not measure satisfaction levels statistically, and can therefore only simplify, but in general if inhabitants of the Fon plateau complained about their situation, they did so by either envying the Adja for their more fertile soils and greater food security (section 1.3) or by envying their relatives with successful non-agrarian livelihoods. The Adja never envied Fon plateau farmers, though some of them complained about their own lack of land, strenuous labour, or lack of access to non-agrarian resources and opportunities.

Among the Adja's primary goals are self sufficiency in maize, sustainable productivity of their land, sufficient cash income, cooperation within the family, and the reputation of being a good farmer. So far they were able to reach these goals when rainfall and the prices of their farm products were good enough compared to the amount of land they had at their disposal. The price of *sodabi* has particular importance for Adja farmers with sufficient own land to achieve self sufficiency combined with sustainability. Adja farmers with little land may not be self sufficient in maize, but often live well from horticulture, though the incomes from horticultural livelihoods vary strongly from year to year with rainfall and vegetable price fluctuations. Therefore, Adja farmers would benefit most from a favourable infrastructural and economic climate for their agricultural and horticultural products, including 'forgotten' local foods. Perhaps *sodabi* exports under an Eko-Fair trade label could also be attempted, together with noise about the soil-sustaining qualities of the 'wine' palm.

Fon livelihood goals are more diverse, including cash income maximisation, leisure, white collar employment, flourishing trades, prestigious housing, socio-religious titles, the upkeep of religious and cultural values, and the reputation of success in al of these. My research revealed much socio-economic differentiation between and within Fon families, more than among the Adja (Chapter 8 and Wartena 2001). Some Fon were successful in reaching their livelihood goals. Many petty trades, crafts, and Fon plateau farms were only marginally rather than maximally productive, certainly if combined with leisure. Several businesses, religious and others, turned from initial success into bankruptcy or in some cases madness, due to inexperience combined with price- and/or spiritual risks. The Fon were, however, quite successful in guarding their religious and cultural values, especially in the centre of the plateau were soils are poor. These areas are rich in historical and cultural capital, and might perhaps gain from developing tourism as a source of livelihood. So far, tourism was mainly restricted to Abomey town and the palace museum there, but the Fon plateau has much more to offer, each village has its own history and its own monuments, for example the palace ruins of all kings from Agaja onwards in Kana. But in exploring the possibilities of tourism, the socio-cultural difficulties involved should not be lost out of sight (section 3.3.1).

Is there anything that the Fon, the Adja, and policymakers can learn from my comparative study? This study has shown that throughout the last five centuries Fon and Adja farmers acquired more agro-technological knowledge through horizontal socio-technical networks that linked them to their neighbours, including those from other language groups, than through vertical relationships extension programmes. Secondly, that local styles of making a living are sometimes sub-optimal solutions to local environments. These two findings show that the Fon and Adja, and most likely other African farmers, could learn still more from each other about sustainable agriculture. Policy and external programmes should play a facilitating role in this, by facilitating communication between farmers in different groups and networks, but without dictating the themes and content of farmers' discourse. Much of what is labelled until today as farmers' participation does not meet this criterion for free and un-steered horizontal communication.

Furthermore, my study has shown that also policymakers themselves can gain better insight in local situations and livelihoods by really spending time there and listening to local people with an open mind, instead of speaking only with key informants and project participants, doing rapid appraisals, or reading statistics and external expert reports. These conventional approaches are prone to urban, roadside, project, elite, male and adopter biases, and produced distorted images of the Fon and Adja in the past (sections 1.3 and 3.3). Rather, policymakers should take a 'chameleon perspective' and make an effort to observe from nearby to observe what kind of material the glittering rings are really made of.


**The return of the chameleon**

Cartoon published in *West Africa* no 4093, April 1996, at the occasion of Kérékou's return on the presidential seat in replacement of Soglo. Kérékou was sometimes nicknamed chameleon because he changed repeatedly, over the years, his political and religious colour.

Bush fire in *Andropogon gayanus* on the Fon plateau

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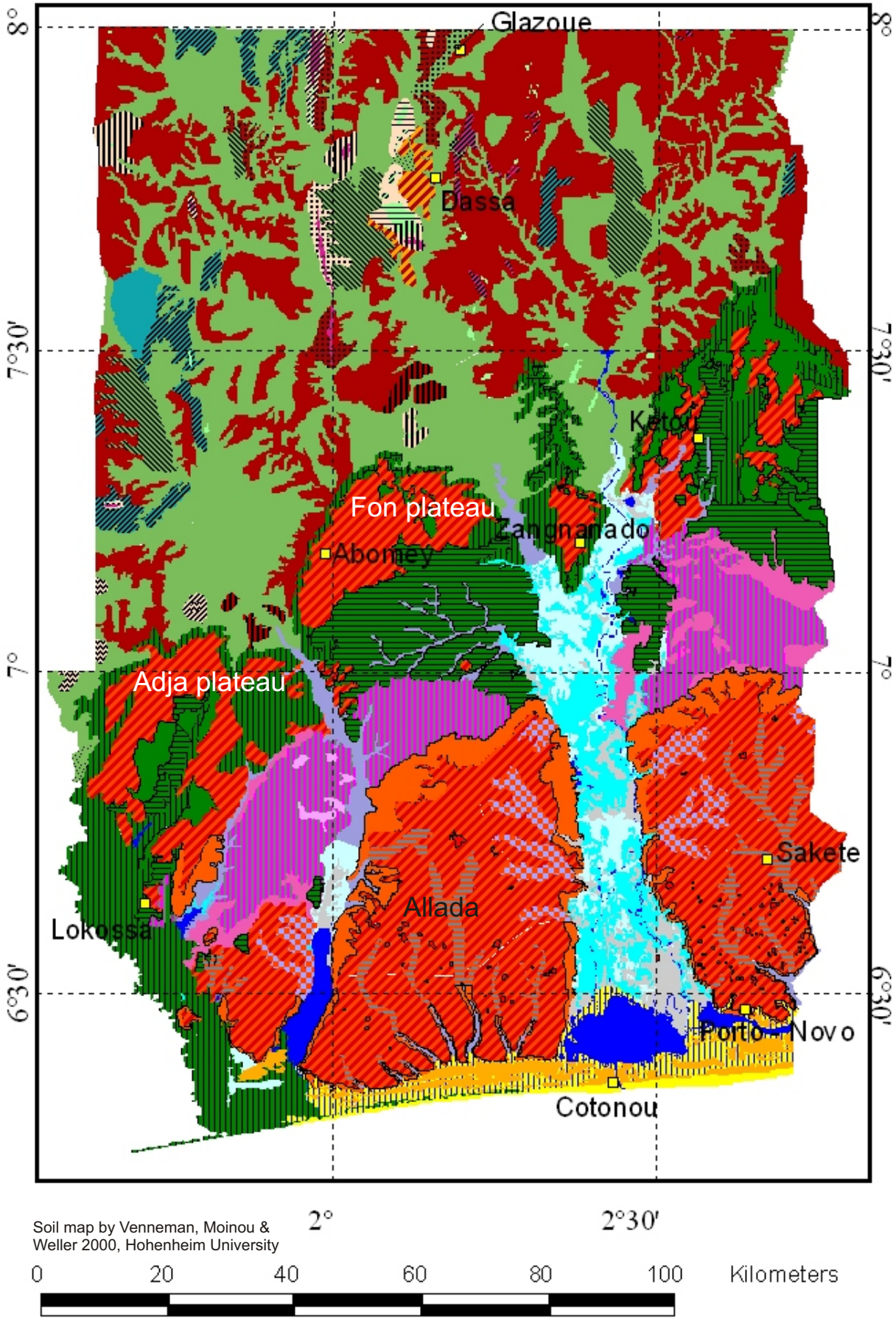
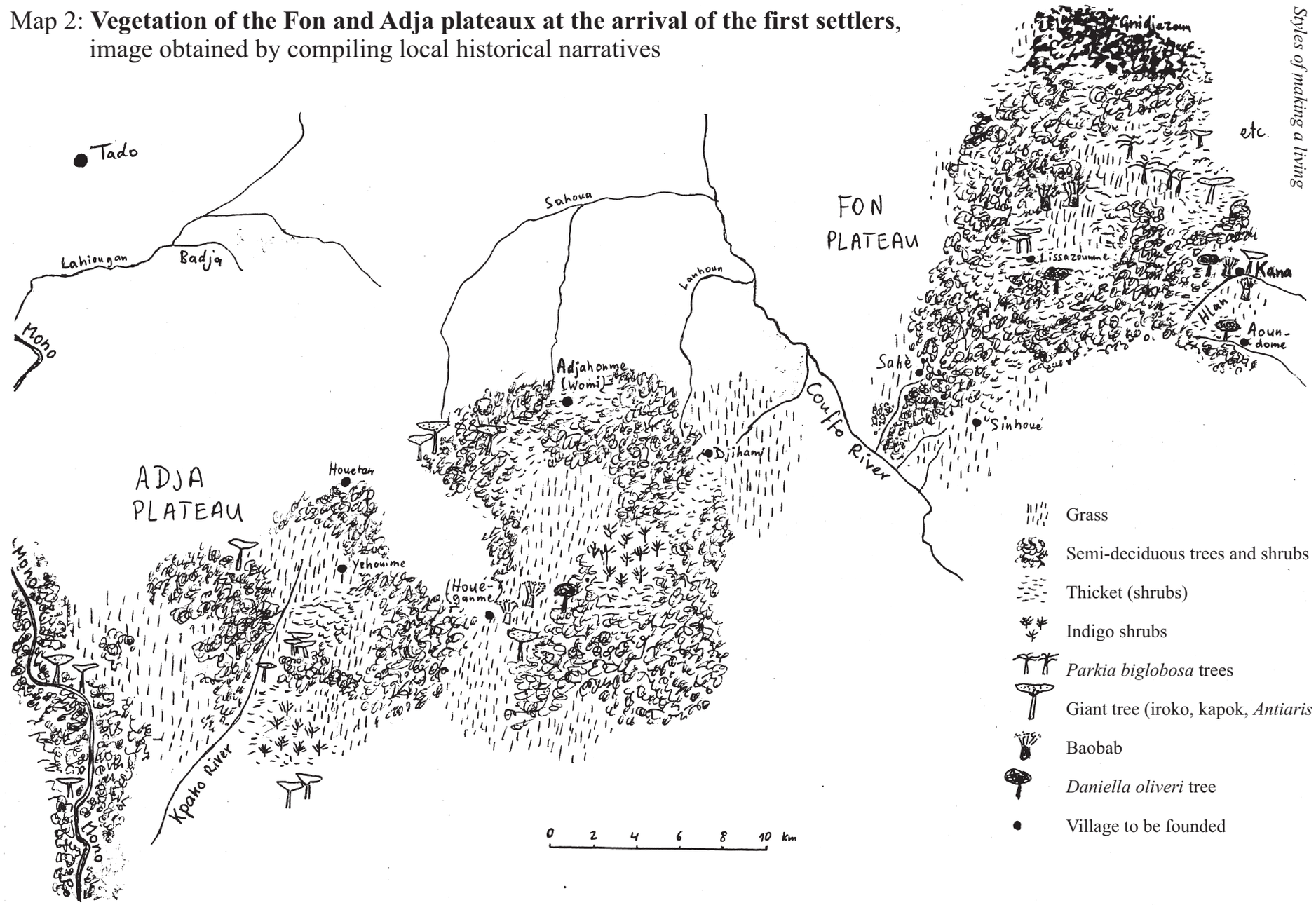
## Appendix 1

Map 1: **The Fon and Adja plateaux in South Bénin**

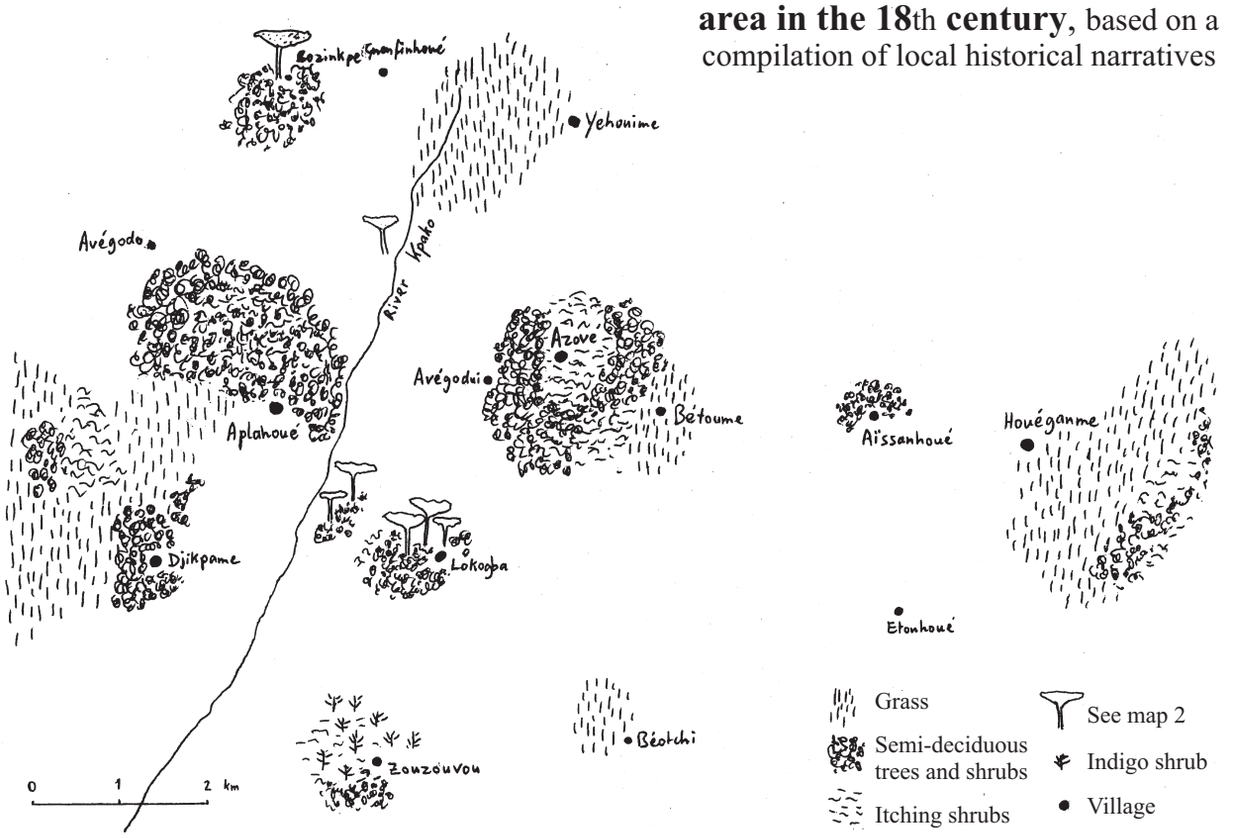



Soil map by Venneman, Moinou & Weller 2000, Hohenheim University

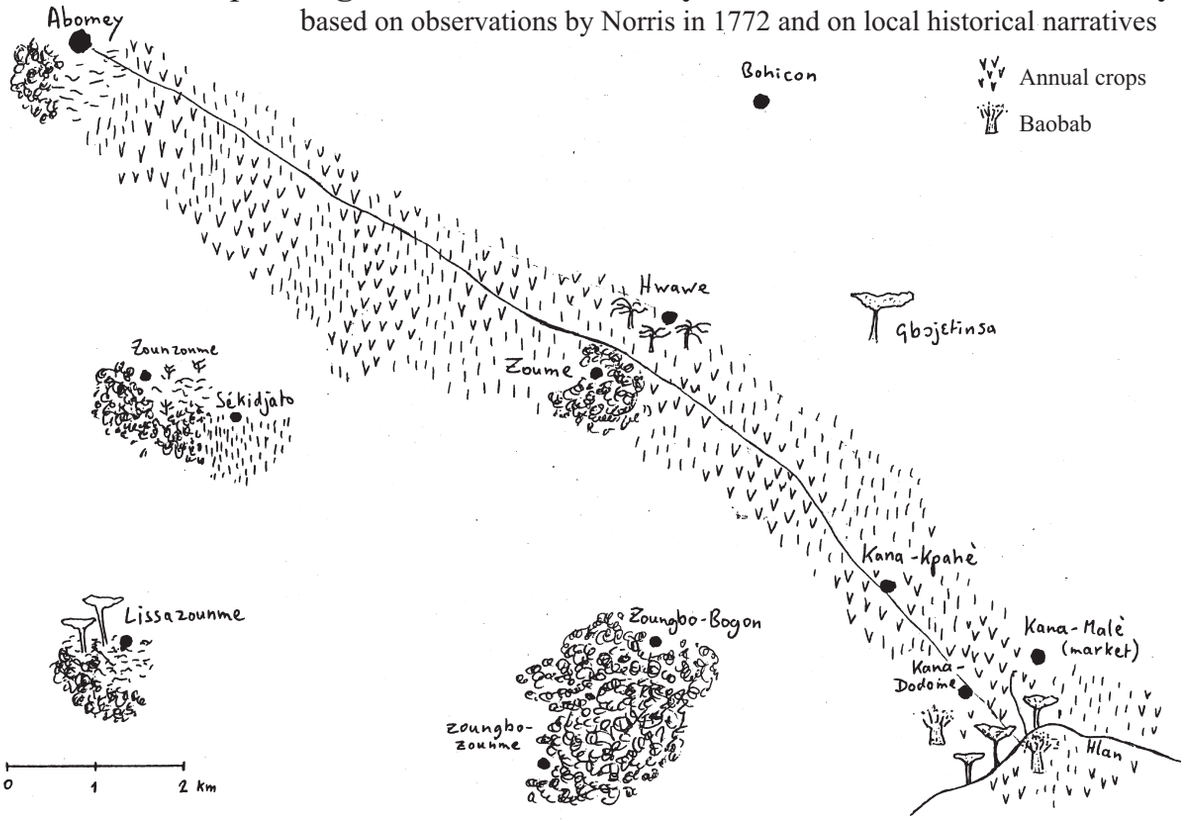
Map 2: **Vegetation of the Fon and Adja plateaux at the arrival of the first settlers**, image obtained by compiling local historical narratives



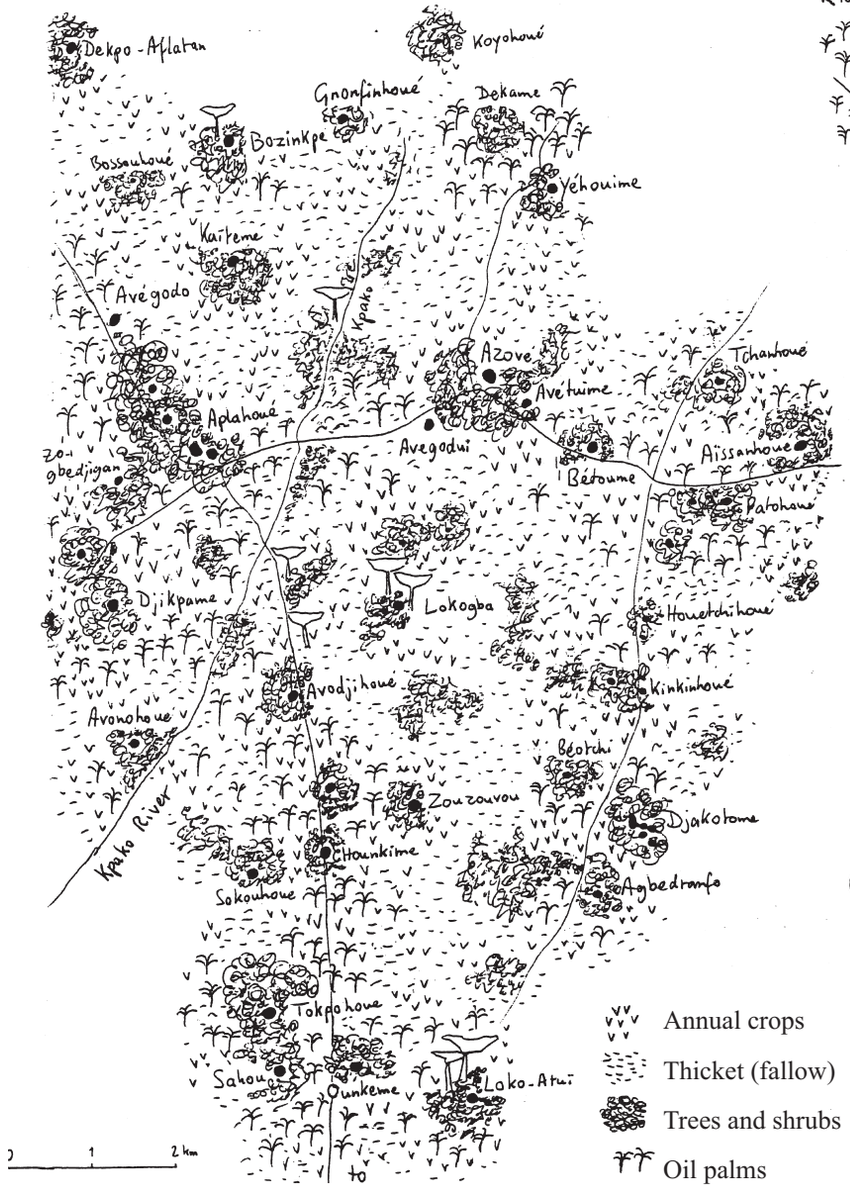
Map 3: **Vegetation of the Aplahoué-Azové area in the 18th century**, based on a compilation of local historical narratives




Map 4: **Vegetation of the Abomey-Kana area in the 18th century**, based on observations by Norris in 1772 and on local historical narratives



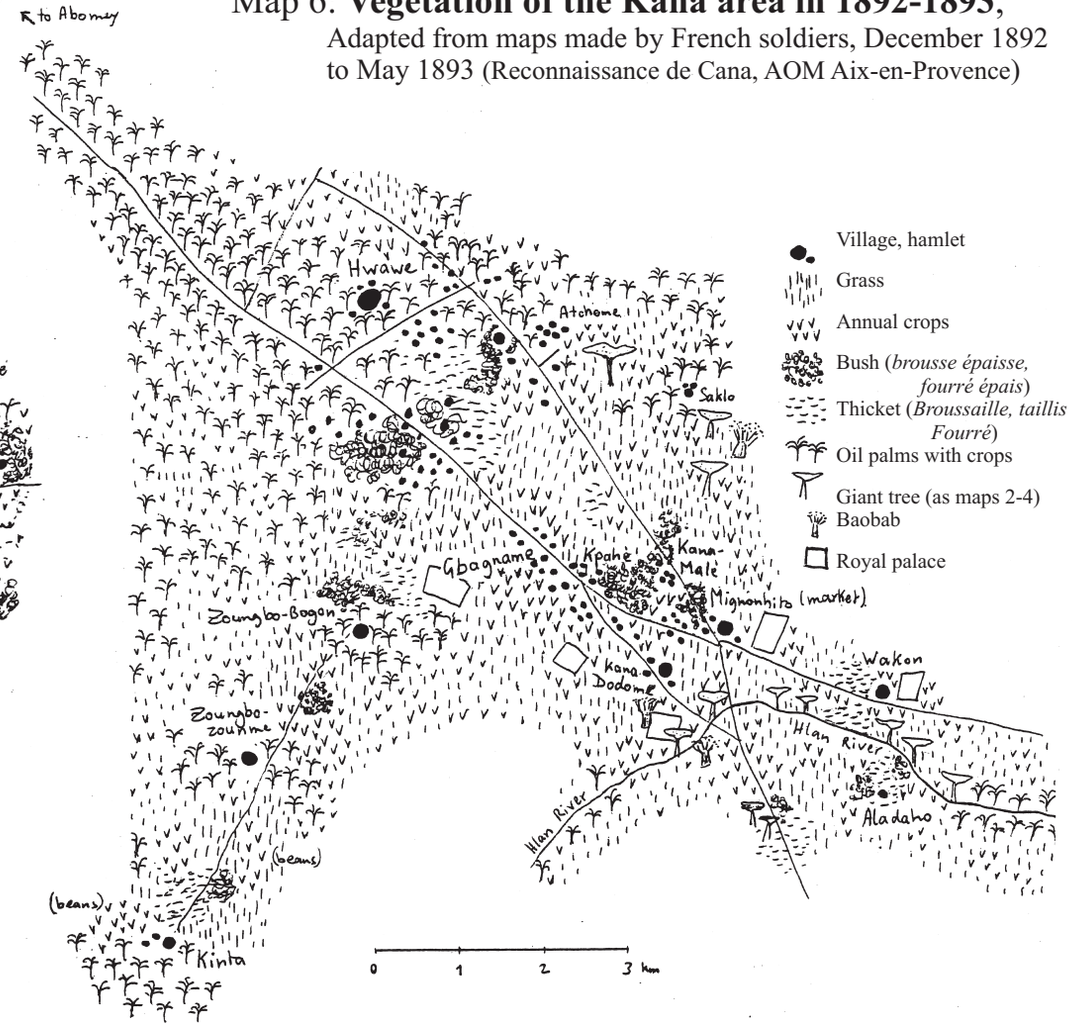
Map 5: **Vegetation of the Aplahoué area in 1889**




Annual crops
Thicket (fallow)
Trees and shrubs
Oil palms

Map 6: **Vegetation of the Kana area in 1892-1893**,

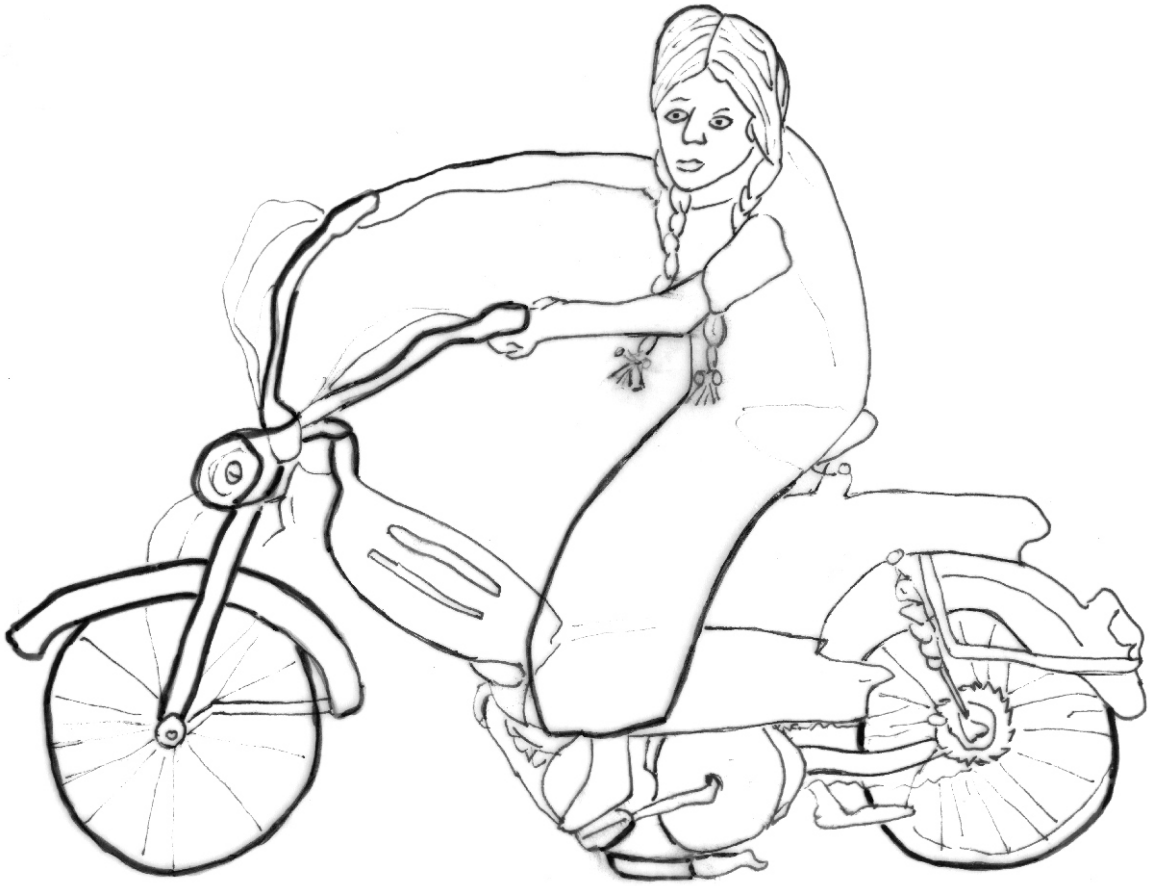
Adapted from maps made by French soldiers, December 1892 to May 1893 (Reconnaissance de Cana, AOM Aix-en-Provence)




Village, hamlet
Grass
Annual crops
Bush (*brousse épaisse, fourré épais*)
Thicket (*Broussaille, taillis Fourré*)
Oil palms with crops
Giant tree (as maps 2-4)
Baobab
Royal palace

## Appendix 2

Figure 1: ‘Madame Peugeot’, the researcher portrayed by a child in Atindehouhoué



Working out fieldnotes under the observing eye of children in Atindehouhoué

Pencil drawings by Etienne N’dé, 8 years

Fig. 2: **Adja hoe**
(Source: Ederveen 1990:68b)

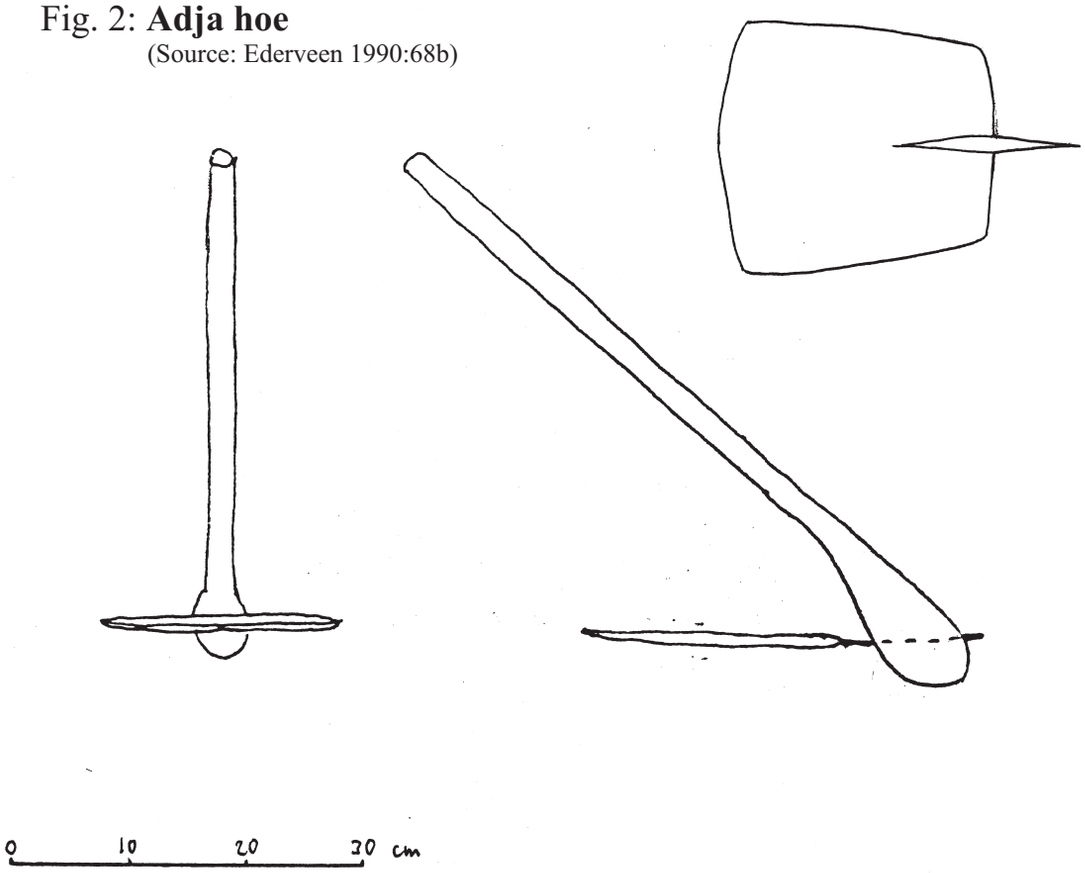



Fig. 3: **Old Fon hoe *gbođɛ,***
model in use until the 1940s,
slightly worn out
(Source: Ederveen 1990:68a)

Old Fon technique: pushing herbs
To the ground to incorporate them
into the ridge (Ederveen 1990:68c)

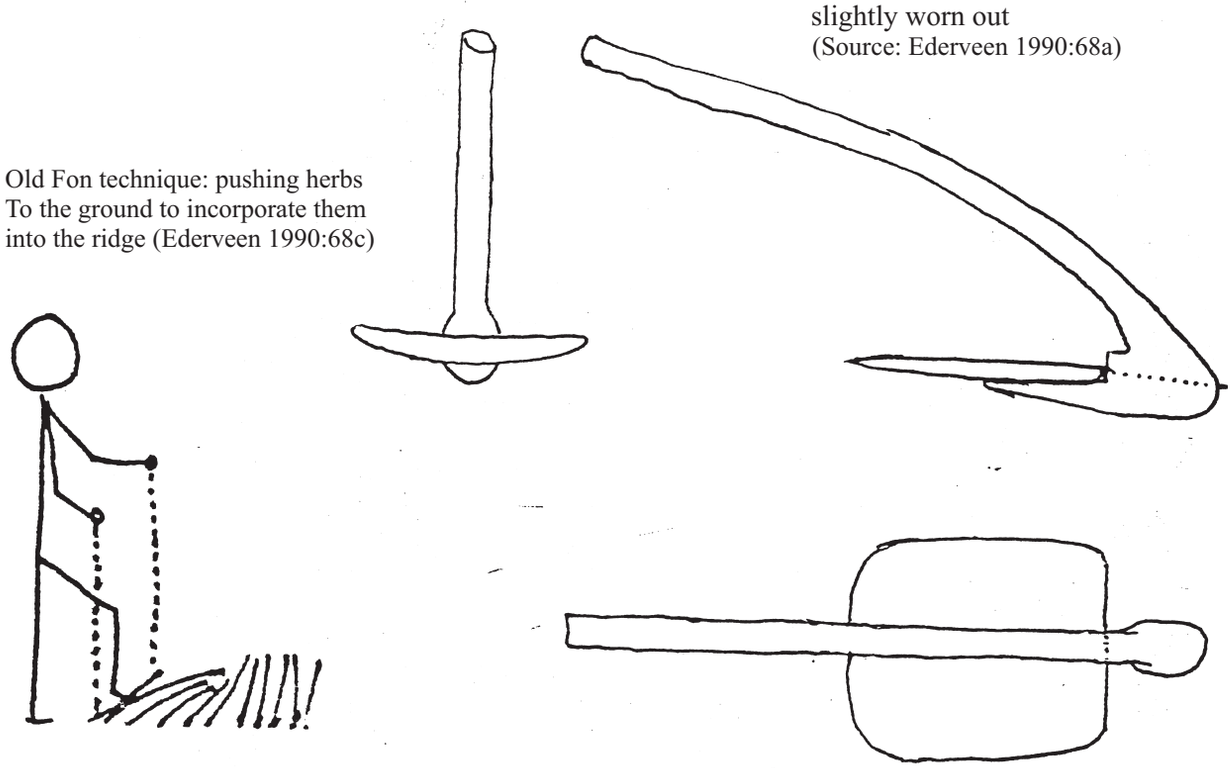
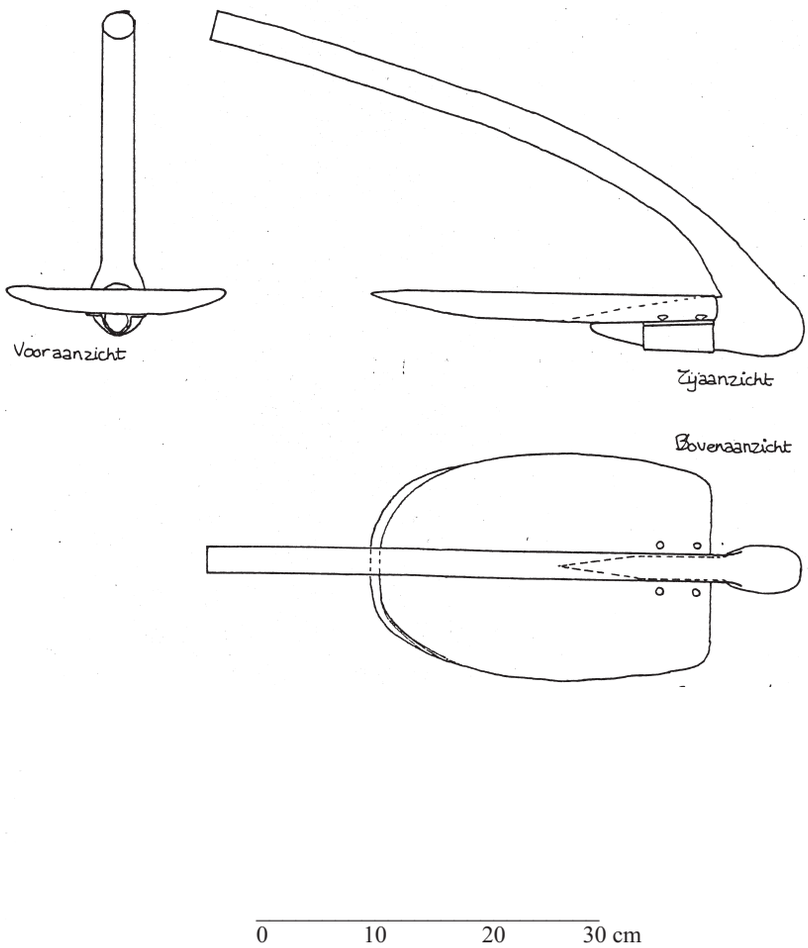


Fig. 4: **New Fon hoe *kpɛli*,**
model in use since the 1940s
(Source: Ederveen 1990:69)



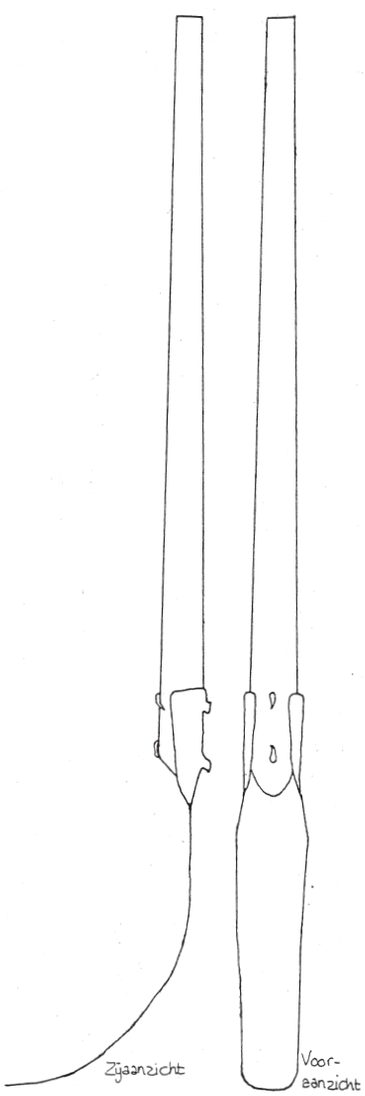




Fig. 5: **Fon scythe *ada***
(Source: Ederveen 1989:54)

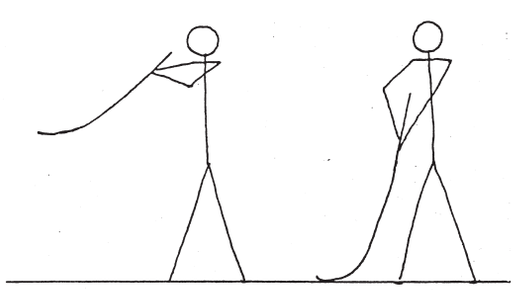


Figure 6: **Memorial cloth of the Adja-Tado dynasty**: symbols and hypothetical dates of reigns of the *nyigbafio*

(As exposed in the *nyigbafio*'s palace in Tado. According to Pazzi (1979), Acideku reigned around 1775. Kpoyizun signed a treaty with the French in 1893 and was exiled in 1900. Alokpeto reigned until 1957).


Figure 7: **Symbols and approximate dates of reigns of the Fon kings**

(From Agaja onwards, dates are reasonably well confirmed by traveller accounts)

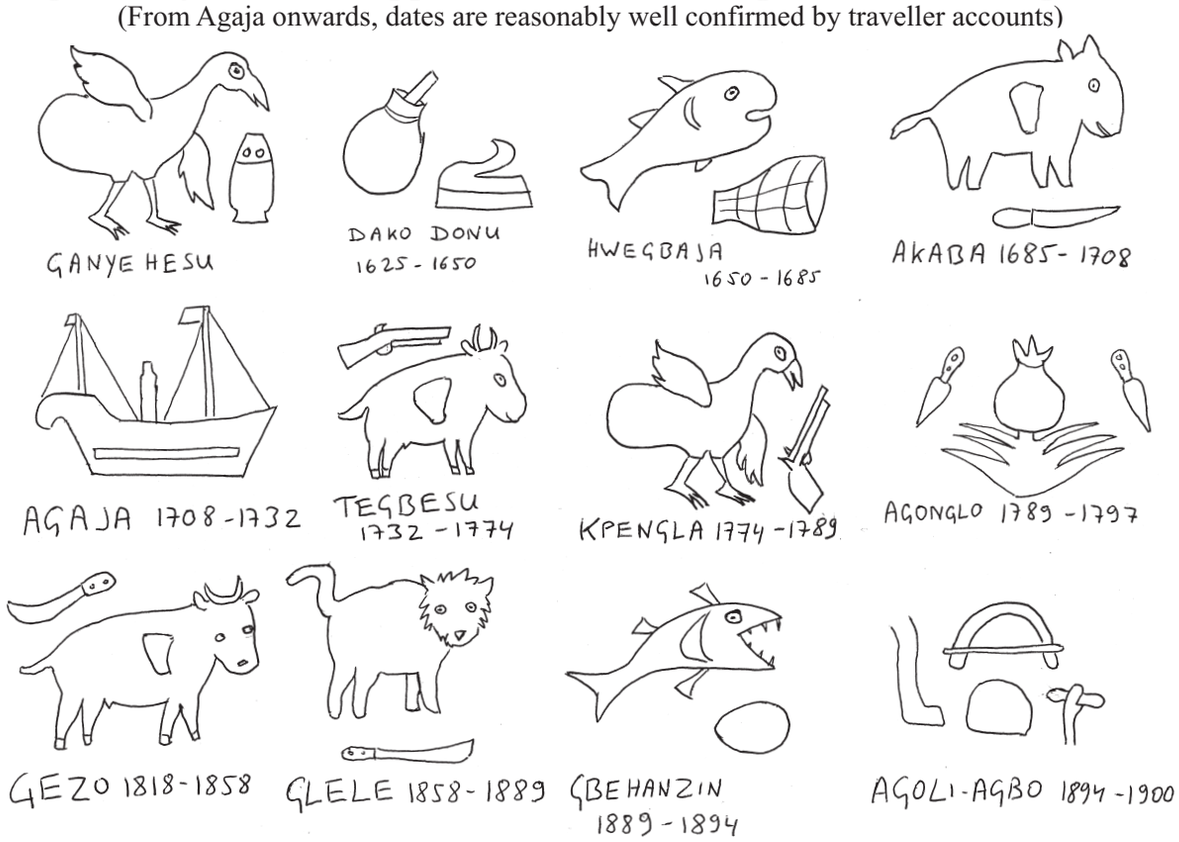


Fig. 8: **Founding lineages of Lissazounme**

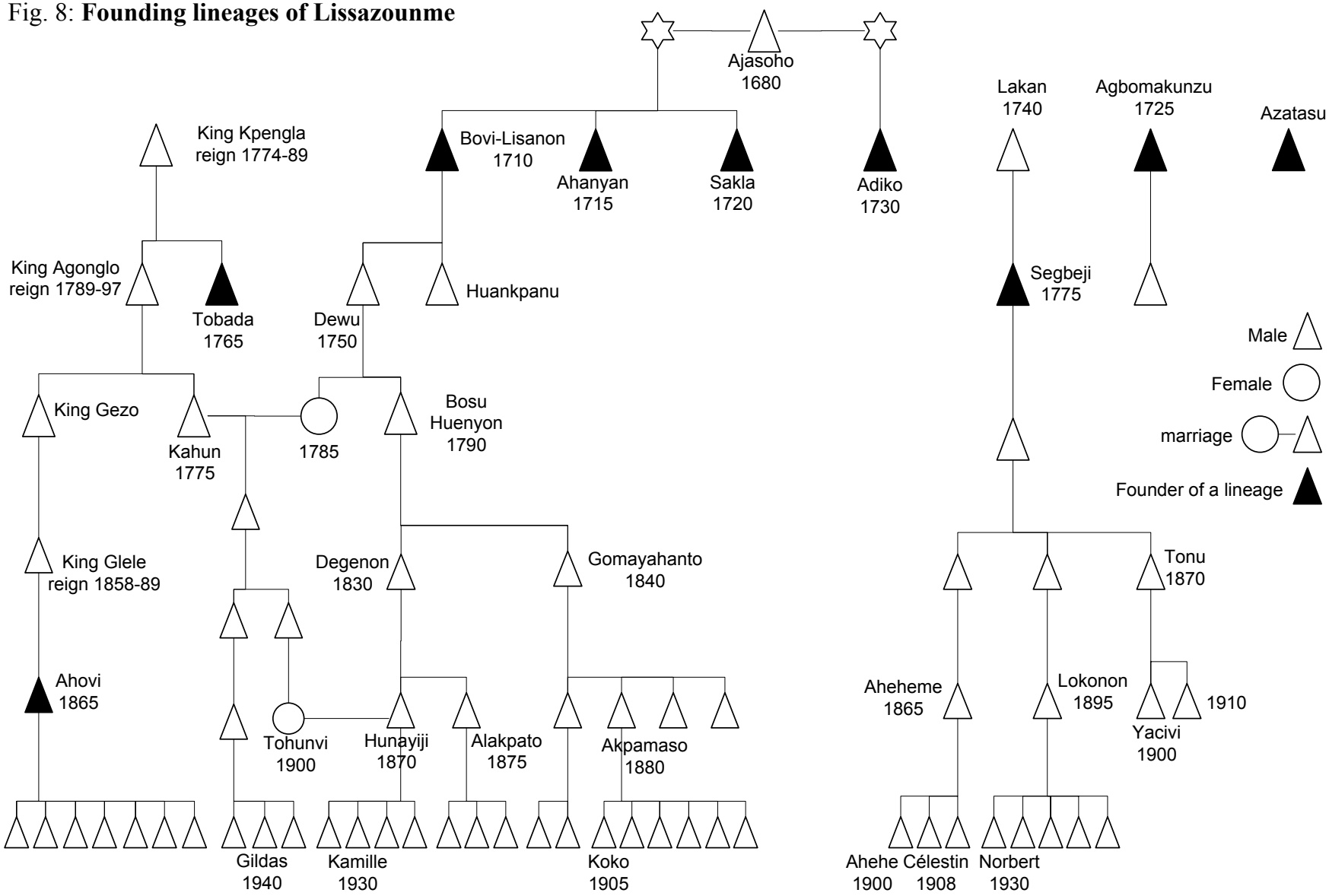


Fig. 9a: **Genealogy of Lisanon lineage**, Degenon and Kahun branches

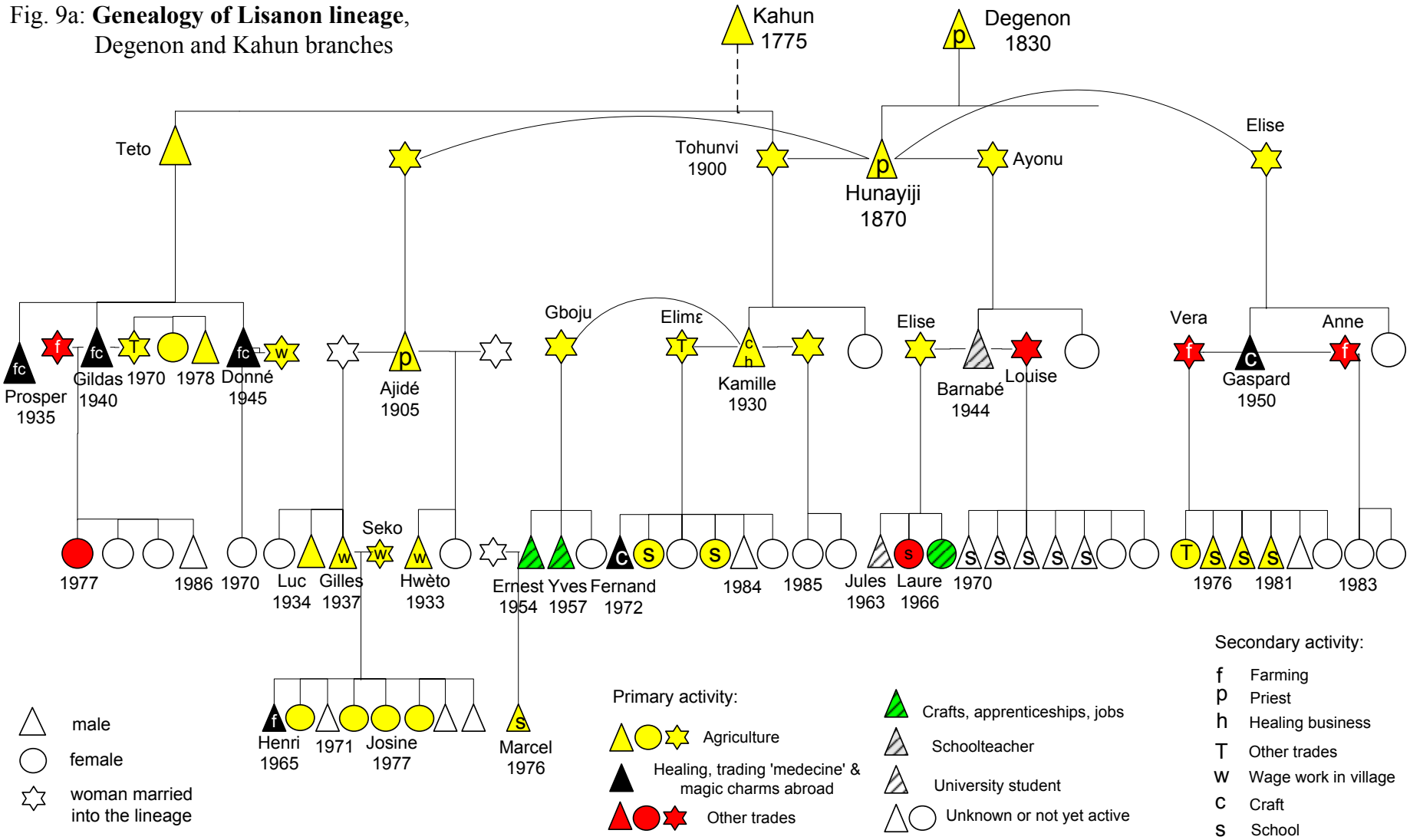


Fig. 9b: **Genealogy of Lisanon lineage**, Gomayahanto branch

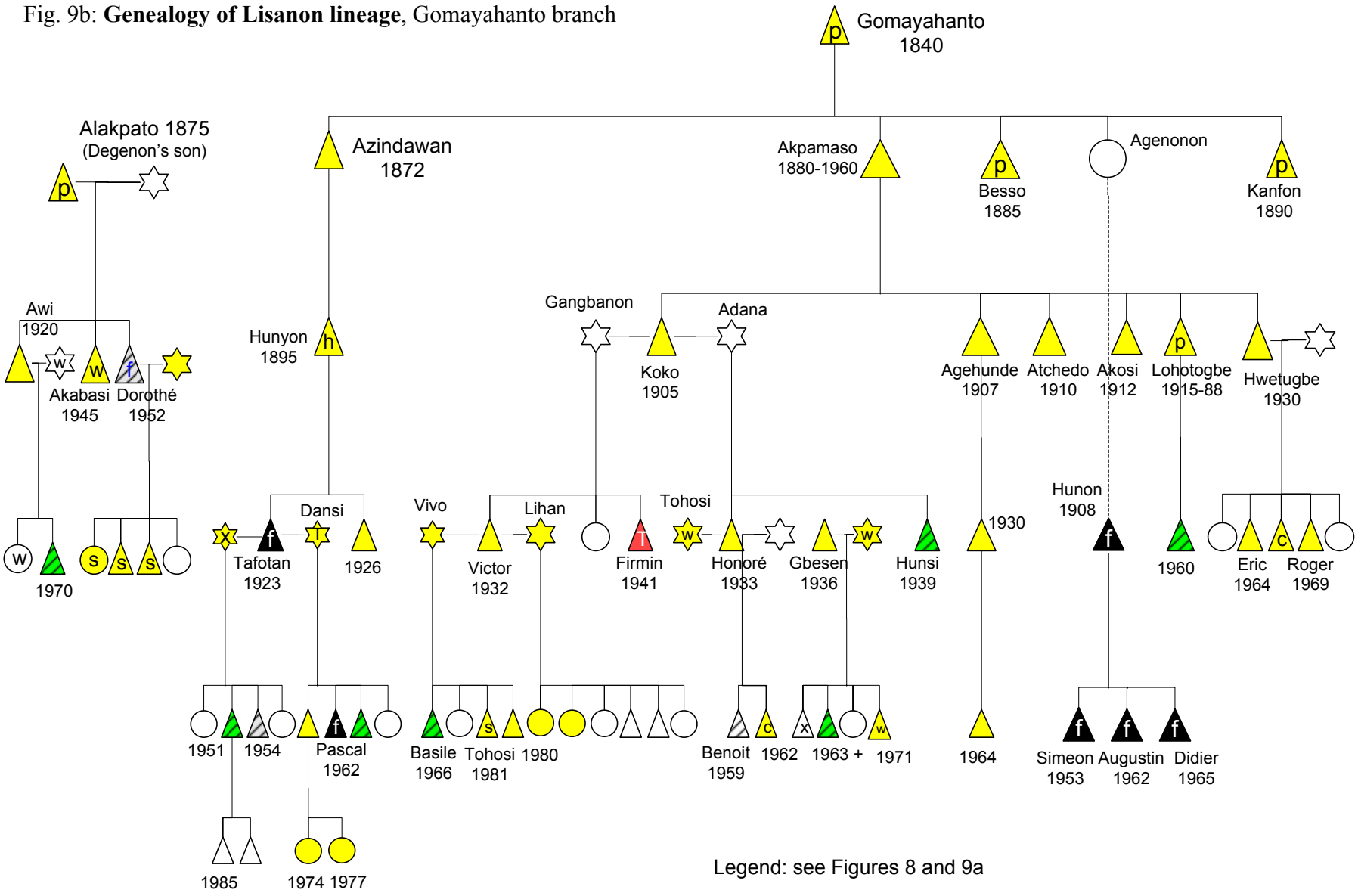


Figure 10a: **Genealogy of the Salaga family in Atindehouhoué**, Seboka branch

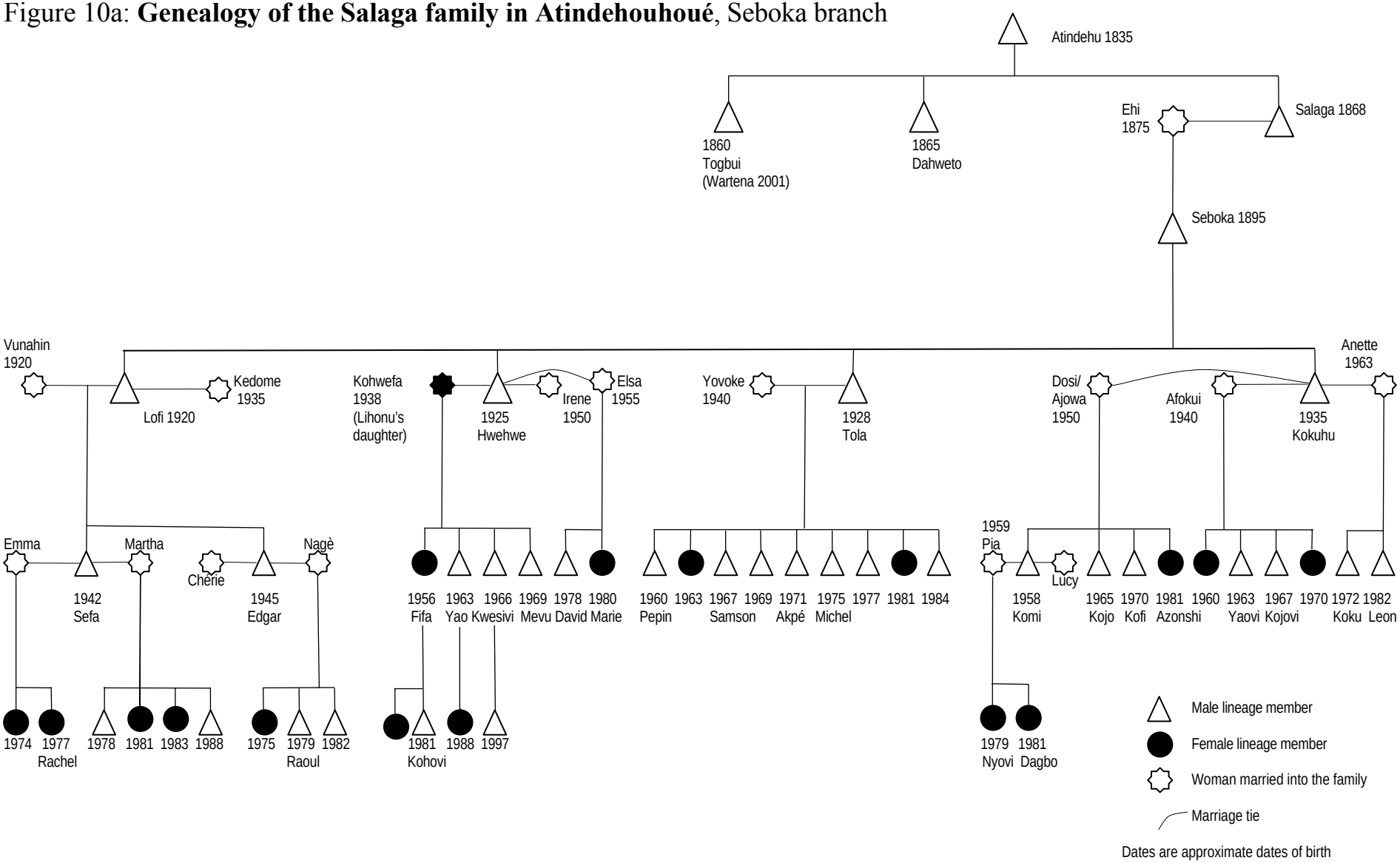
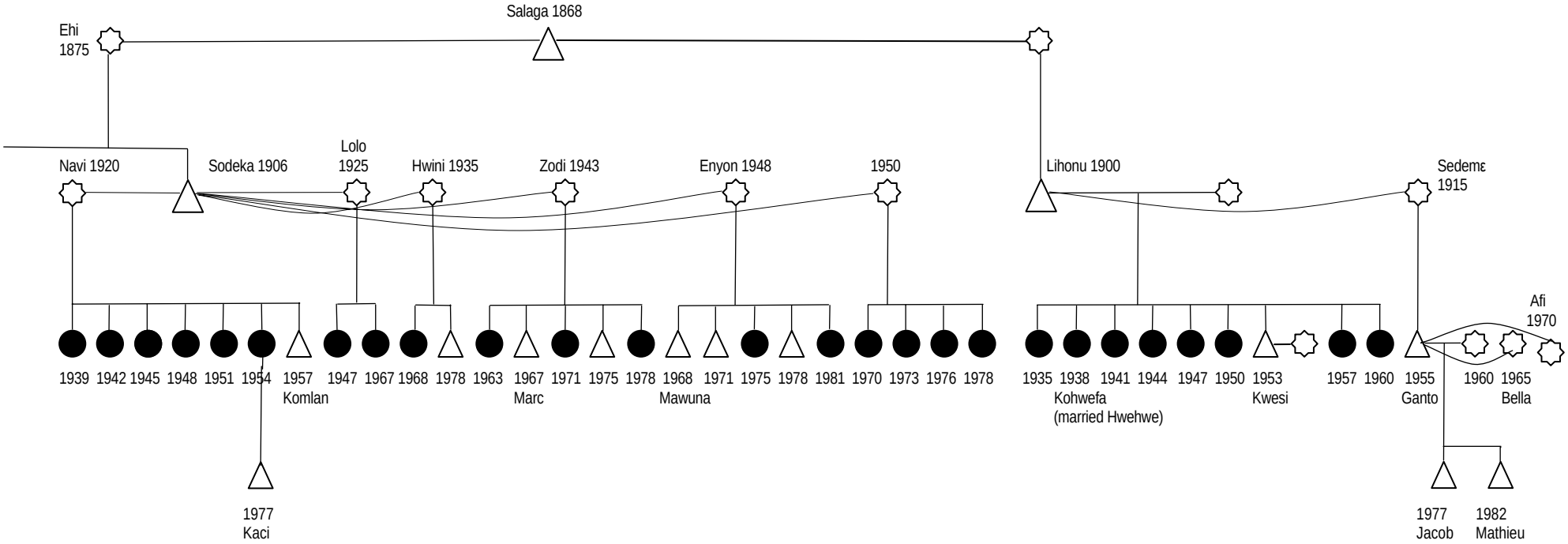


Figure 10b: **Genealogy of the Salaga family in Atindehouhoué**, Sodeka and Lihonu branches




Explanation of symbols: see Figure 10a.

# Appendix 3

### Unexplored files in the Archives d'Abomey and d'Aplahoué

Files that I studied in the local archives are listed in section 3.2.6. For the sake of future researchers I list below those which I did not study.

Archives d'Abomey: *Allocutions, Assemblée consulaire section agriculture, Assistance publique secours aux indigènes sinistrés, Bordereaux, Budget primitif, Budget supplémentaire, Chronique locale d'Abomey* (journal articles), *Concours, Congés, Correspondances UMA, Demandes permis d'importation, Déplacements, Enseignement, Etat civil, Factures, Foire agricole de Bohicon, France-Dahomey, Journal officiel du Dahomey, Mandat de paiement, Météo, Ordres de mission, Personnel des différents services, Service topo-cartographie, Tournées, Visites* (of the *gouverneur*).

Archives d'Aplahoué: *Banque du Bénin, Budget SP-58, Canton Lonkly, Conseil des notables, Débiteurs à voir, Elections, Electricité, Enseignement, Factures, FIDES 5e tranche, FIDES principes personnel, Gendarmerie, Impôt M.F., Intérieur, Mutuelle Azové, Mutuelles Banque Bénin, Mutuelle Lonkly, Mutuelles PRD-UDD-Ange Marie, Mutuelles principes, Pension, Personnel affaires reservées, Plan principes, PRD-UDD-tournées manifestations politiques, Prison, PTT, Routes, Santé, SMDR, SP divers organisation, Taxe de cercle budget 58, 1e Tranche du IIIe plan, Travail, Travaux, Tribunaux droit local.*

### Time allocation questionnaire Adja

| | | | | | |
|---|---|---|---|---|---|
| Date | Jour | | | | |
| Travail ou activité fait(e) | | Pour qui ou dans quel champ | | | Durée (h) |
| Marchandises vendues | Quantité | Prix | Bénéfice (montant & bénéficiaire) | | Lieu de vente |
| Marchandises achetées | Quantité | Prix | Avec l'argent de… | Acheté pour[a] | Lieu d'achat |
| Cadeaux reçus | Quantité ou prix | | De qui | | |
| Cadeaux données | Quantité ou prix | | A qui | | |

Note: La ou les personnes qui recevront la marchandise, par exemple vous-même, votre ménage etc.

### Time allocation questionnaire Fon

Questions à poser chaque jour:

1. Date et jour (a. jour de la semaine locale, b. jour de la semaine occidentale)
2. Quel travail avez vous fait (spécifier les travaux, surtout les travaux du champ)
3. Durée de chaque travail en heures
4. Pour qui avez vous travaillé? (Précisez de quelle façon vous êtes parenté à la personne, soit si vous avez travaillé pour de l'argent ou pour un *so* (groupe entraide))
5. Est-ce que quelqu'un d'autre a travaillé pour vous? Si oui, qui? (Précisez de quelle façon vous êtes parenté à la personne, soit s'il a travaillé pour de l'argent ou comme entraide. Mentionnez catégorie d'âge et sexe de la personne: ≤12 ans; 12-15 ans; 16-55 ans; ≥56 ans).
6. Quel travail celui-là a-t-il fait pour vous?
7. Est-ce que vous avez vendu un produit de votre champ? Si oui, quoi et quelle quantité? (En mesures locales ou sacs)
8. Où est-ce que vous avez vendu? (Maison, village, marché, au bord du chemin)

NB Questions 1 to 4 have the same content as the first questions in the Adja questionnaire of 1985. Although the wording on paper differs slightly, my oral explanations to the assistants about the meaning and the purpose of the questions made that they understood and asked the same.

## Questionnaire for labour time measurements

1. Activity and crop (and tool used, unless this is obvious)
2. Date
3. Name of the worker
4. Gender
5. Age
6. How is your health today? Do you have handicaps?
7. Start of the work or of the observation (hour and minutes)
8. End of the work or of the observation (hour and minutes)
9. Name or location of the field
10. Name of the person who exploits the crop
11. Soil type (unless this is evident from question 9)
12. If you don't exploit the field on which you work yourself , what is the reason for your work: Mutual help (reciprocal aid *so, efibobo, efidodo,* or other)
    Unpaid family labour
    Wage labour (if so, state wage level)
13. Area achieved. Measure the plot and make a sketch, or give it in local units (Adja: *abowo, abonyi*, Fon: *kantin*)
13. Principal weeds in the plot (this question was omitted in some cases)
14. Number of large trees in the plot (this question was omitted in some cases)
15. For sowing and applying fertiliser:
    a. Which crop or fertiliser?
    b. Distance between 'plant' holes
    c. Which other crops are already in the field?
16. For harvesting:
    a. Number of *sogo*, 'large basins' (30 l) or 'half basins' (15 l) harvested during the measured time by the worker. If this is impossible to determine for individual workers, give the total volume harvested by all the workers in the field that day, and answer the questions above for each worker separately.
    b. Distance between the plants
    c. Other crops in the field

## Yield measurement questionnaire for annual crops

1. Crop and variety
2. Weight of the harvest of the sample area. On Fon fields the sample area is the 10$^{th}$, the 20$^{th}$ and the 30$^{th}$ ridge, counted from entering the field. On Adja fields the sample is (part of) the day's labour.
3. In which form did you weigh the harvest (for example grains, pods, cobs with husks, cobs without husks, ears, etc.)
4. How humid was the harvest you weighted (dry, wet, dried for ... days) (If possible, weigh wet lots a second time after they have dried)
5. Fon: Length of each ridge whose harvest was measured, in meters. Adja: surface of the sample area, in square *abo*.
6. For the Fon: Distance between the 1$^{th}$ and the 30$^{th}$ ridge, in meters.
7. Number of plants of the harvested crop on the sample area.
8. Which other crops are there in the plot? Number of plants of each of the other crops in the sample area.
9. What are the most important weeds in the plot? Cite them in the order of their importance.
10. Name of the field* and name of its manager.

* The name of the field indicates its location and its soil type.

## Palm fruit yield questionnaire

1. Name of the field and name of its manager.
2. Count the number of oil palms in one *abowo* (400 $m^2$) or one *kantin* (576 $m^2$) of each of the following age groups: …... 0-6 years, ……. 7-12 years, …… 13-20 years, …… 20-40 years, …… more than 40 years.
3. Soil type.
4. What are the most important weeds in the plot? Cite them in the order of their importance.
5. If annual crops were grown between the palms in the second season of 1990, which ones?
6. If the soil under the palms was uncultivated,
   – Since when?
   – How many times was the spontaneous vegetation cleared during this fallow period?
   – Was the spontaneous vegetation burned and if so, was it burned by hunters, or by the farmer himself, and was it piled up before burning?
7. Total area of the field.
8. Distance between the field and the village.
9. Where the palms pruned last year and if so, how many leaves were left on the palms?
10. How many *tohungolo* of palm fruit did you harvest in the whole field since our last visit?

## Vegetation history survey

1. Estimate respondent's age by means of the local historical calendar.
2. Name the fields on which you helped farming in your childhood and where you continued to cultivate until recently. Give the soil type and the location of the fields. (If there are several fields, choose only one for the remainder of this survey. If the fields have different soil types, including red soil *nyigbanjun* or *kovovo*, choose a field on red soil. If there are several fields on red soil, choose one on average distance from the village. Indicate which field you chose).
3. Cite the years that you cleared fallows on the field.
4. Cite the years that you planted oil palms in the field.
5. Cite all the years that you gave the field over to fallow, including 'oil palm fallow'. Draw a time line on which you indicate the above-mentioned events.
6. Which trees, shrubs and herbs did you see in the field when you first started to help there? Classify them in their order of importance.
7. Cite for each year that you cleared fallow, which trees, shrubs and herbs you saw in the field. Classify them in their order of importance.
8. Cite for each last year before you left the plot fallow, which shrubs and herbs you weeded between your crops there. Classify them in their order of importance.
9. If you still hold the plot, which trees, shrubs and herbs are there now? If you gave it to someone else, which trees, shrubs and herbs were there before you abandoned it?
10. Name herbs and shrubs which improve the soil when their leaves fall. (Extra question for Fon only: which leaves improve the soil when they are incorporated into the ridge?)
11. Name herbs and shrubs whose presence indicates that the soil is good for planting maize.

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Notes to p. 595

1 The informant-lists of Elwert (1972), Garcia (1971-75) and Bay (1984) are exhaustive according to themselves for their Fon plateau research. The other authors might have interviewed more people, but these are the only ones they mention by name. Manning studied mainly written documents, only in his endnotes he mentions one interview.

2 For Le Herissé's informants: place where he was *chef* or *garde*. For all others: place of the interview. Probably these were the places of residence of the informants. All localities except Allada are on the Abomey plateau.

3 In the pre-colonial Fon kingdom.

Sources: Elwert (1973:185); Manning (1982:300); Oké (1984:49, 53, 58-63); Garcia (1988:25-26, 28, 36, 71, 79, 134-135, 139, 147, 188, 198, 233, 237, 241, 243, 248, 258); Bay (1987:18-19, 26, 29, 31; 1995:9-10, 12-13, 22); Avolonto (1990: 14-28, 64-71). Classification by social position and gender is added by me on the base of the knowledge that *daa* means lineage head and that Soglo is a princely family.

## Principal informants of researchers on the Abomey plateau

| Researcher & interview dates | Informants[1] | Social position | Gender & locality[2] |
|---|---|---|---|
| Le Herissé 1904-1908 | Agbidinoukoun Glele | Prince & *chef de canton* | Male, Sinhoué |
| | Degan Glele | Prince & *chef de canton* | Male, Oumbegame |
| | Zodeougan Glele | Prince & *chef de canton* | Male, Zogbodome |
| | Ouanilo Glele | Prince & *chef de canton* | Male |
| | Ahouagbe Béhanzin | Prince & *chef de canton* | Male |
| | Fiogbe | Minister[3], *chef de canton* | Male, Tandji |
| | Tokoudagba | *Ahwangan, chef de quartier* | Male, Abomey |
| | Dosou | *Chef de quartier* (?) | Male, Abomey |
| | Houn-Ouanou | *Garde de cercle* (?) | Male, Abomey (?) |
| | Pélipézè | King's 'servant' | Male |
| | Zempe | King's 'servant' | Male |
| Herskovits 1931 | René Aho | Prince | Male, Abomey |
| | 25 others | Mostly high ranking | Mostly males in Abomey |
| Manning 1967 | René Aho | Prince | Male, Abomey |
| Oké 1971 | René Aho | Prince | Male, Abomey |
| | Agodéka Béhanzin | Son of Béhanzin | Male, Abomey |
| | Daa Kanvou Gbole | Lineage head | Male, ? |
| | Da Djénoulon Aplogan | Lineage head | Male, Allada? |
| Elwert 1972 | Sagbaju | 'King' | Male, Abomey |
| | Etienne Soglo | Prince | Male, Abomey |
| | René Soglo | Prince | Male, Abomey |
| | Bodéa | ? | Male, Abomey |
| Garcia 1971-75 | Sagbaju | 'King' | Male, Abomey |
| | Agodéka Béhanzin | Son of Béhanzin | Male, Abomey |
| | Kpliguidi Béhanzin | Prince | Male, Abomey |
| | Daa Agoliagbo | Princely lineage head | Male, Abomey |
| | Other members of Agoliagbo lineage? | Princes | |
| Bay 1972 | René Aho | Prince | Male, Abomey |
| | Sagbaju | 'King' | Male, Abomey |
| | Daa Adonon | Represents queen mother | Male?, Abomey |
| Bay 1984 | Daa Agoliagbo | Princely lineage head | Male, Abomey |
| | Daa Ayiho Gomesin | Lineage head | Male, Hoja |
| | Gounon Simon Akati | Smith (and priest of Gu?) | Male, Abomey |
| | Jean Abiala | Member of forging family | Male, Abomey |
| | Aloxa Agbakodji | Member of forging family | Male, Abomey |
| | Etienne Agbakodji | Member of forging family | Male, Abomey |
| | Jean Domonhedo | Member of forging family | Male, Abomey |
| | Maturin Hunkpatin | Member of forging family | Male, Bohicon |
| | Gerome Alitonu | Member of forging family | Male, Bohicon |
| | Protais Chaba | Weaver? | Male, Abomey |
| | Felix Hunsunugan | Smith | Male, Abomey |
| | Bashuru Nondichao | Weaver? | ?, Abomey |
| | Christophe Badiji | Smith | Male, Hoja |
| | Yemadji lineage group | Member of weaving family | Abomey |
| Avolonto ≤1990 | Daa Dagba | Lineage head | Male, Abomey |
| | Daa Jɛwinni | Lineage head | Male, ZaKpota |
| | Daa Lɛnkpehun | Lineage head | Male, Abomey |
| | Daa Kpomalenyi | Lineage head | Male, Abomey |
| | Agowanu Gansɛ | ? | ? |

← Notes on p. 594

# Appendix 4

Table 4.1: West African centres of iron smelting before 1500

| Localities | Earliest date of smelting attested by $^{14}C$ analysis | Source |
|---|---|---|
| Tado | Probably 10th century (no $^{14}C$ analysis) | Gayibor 1996:24 |
| West of Tado: | | |
| Akim Kotoku (mouth river Volta) | 15-90 AD | Adandé 1993:80 |
| Kpone West (near Accra) | 150-75 AD | Adandé 1993:80 |
| Hani (central Ghana) | 130-80 AD | Adandé 1993:80 |
| Akam (central Ghana) | 320-30 AD | Adandé 1993:80 |
| North-west of Tado: | | |
| Gonja (central-northern Ghana) | 60-140 BC | Adandé 1993:79 |
| Bassar (north Togo) | 960-1360 AD | de Barros 1986:160 |
| North of Tado: | | |
| Do Dimmit (Termit mountains, Niger) | 678-120 BC | Adandé 1993:79; Kiethega 1993:223 |
| In Gall-Tegiddan Temset (North Ader, Niger) | 500 BC | Echard 1986:27 |
| Tigidit (Niger, south of Agadès) | 490-100 BC | Adandé 1993:79 |
| Rim (north Burkina Faso) | 440-220 BC or 200 AD | Adandé 1993:79; Kiethega 1993:245 |
| Jenné-Jeno (Mali) | ca. 250 BC | Togola 1996:107 |
| Méma (Mali) | 342-442 AD | Togola 1996:105, 107 |
| East and north-east of Tado: | | |
| Nok and Taruga (central Nigeria) | 660-95 BC | Adandé 1993:79 |
| Iffe-Ijumu (northeast Yorubaland) | 80 AD ± 125 years, more certain 840 AD ± 80 years | Oyelaran 1998:68, 72 |
| Bussa (northwest Nigeria) | Before 1600 AD | Own interviews; Adandé 1993:81 |
| Ife and Oyo (Yorubaland) | Not later than the 13th century | Own interviews; Pazzi 1979:136 |

Table 4.5: Some ancient villages on the Fon plateau and its eastern slopes[1]

| Village | Date of foundation | Location on the plateau | Origin | Sources |
|---|---|---|---|---|
| **Wemɛnu villages** | | | | |
| Gbesehoué | < 1600 | East | Jigbe-Wemɛ | Own interview |
| Dokon? | < 1600 | Centre-northwest | Jigbe-Wemɛ | Own interview; Mondjannagni 1977:557 |
| Gnidjazoun-Dakpa | ± 1630 | Centre | Jigbe-Wemɛ via Houawe | Own research |
| Zounzonme | < 1650 | Centre | Jigbe-Wemɛ | Own interview |
| Zoungoudo | 1685-1708 | Southwest | Jigbe-Wemɛ | Mondjannagni 1977:557 |
| Tanta | 1685-1708 | Southwest | Jigbe-Wemɛ | Mondjannagni 1977:557 |
| Zoungbo-Bogon | 1685-1708 | Kana | Jigbe-Wemɛ | Mondjannagni 1977:560 |
| Zoungbo-Kpatinme | 1708-1734 | Kana | Jigbe-Wemɛ | Mondjannagni 1977:560 |
| Zoungbo-Tossota | 1708-1732 | Kana | Jigbe-Wemɛ | Mondjannagni 1977:560 |
| Houndo | 1732-1774 | Centre-southeast | Zoungbo | Own interview 23-3-1989 |
| **Za villages** | | | | |
| Zakpotota | << 1600 | Northeast | | Own interview |
| Zado | < 1600 | Southeast | | Le Herissé 1911:277 |
| Zavé | < 1625 | East | | Le Herissé 1911:282 |
| Zakpo | < 1625 | Centre-northeast | | Le Herissé 1911:283 |
| Avokanzoun | 1625-1650 | Centre-northeast | Zakpo | Le Herissé 1911:283 |
| **Ayizo villages** | | | | |
| Aoundome | < 1600 | Southeast | Akpè via Zakpota | Own interview |
| Gnidjazoun-Zakpo | ± 1630 | Centre | Sèhoué via Houawé | Own interview |
| Kana-Gbamè | 1645-1685 | Kana | Akpè | |
| **Nago villages** | | | | |
| Nègbanli (Abomey) | < 1625 | Centre | Nago | Le Herissé 1911:280 |
| Gnanlanvi (Djegbe) | < 1625 | Centre | Nago | Le Herissé 1911:281 |
| Dido | < 1650 | North | Nago | Le Herissé 1911:285; Oké 1984:65 |
| **Dasa or Mèdasaénu villages** | | | | |
| Koklofɛnta | < 1625 | Centre-northeast | ? | Own research; Iroko 1989 |
| Zogbozoun | < 1650 | East | ? | Iroko 1989 |
| **Gedevi villages** | | | | |
| Kana-Mignonhito | << 1600 | Kana | Oyo | Own research |
| Kana-Tota (Dodome) | < 1600 | Kana | Kana-Kpota (Mignonhito) | Own research |
| Kana-Gbangname | < 1600 | Kana | Kana-Kpota? | Own research; Yélouassi 1987:27 |
| Kana-Kpahè | < 1600 | Kana | Kana-Kpota? | Own research; Yélouassi 1987:27 |
| Gnidjazoun | < 1600 | Centre | | Own research |

Table 4.5 (cont.)

| Village | Date of foundation | Location on the plateau | Origin | Sources |
|---|---|---|---|---|
| Dokon? | < 1600 | Centre-northwest | Kana-Houawe region | Avolonto 1990:25 |
| Adingnigon? | < 1600 | Centre | Kana-Houawe region | Avolonto 1990:25 |
| Houawe-Hwenli | < 1600 | Centre | Kana-Houawe region | Avolonto 1990:25 |
| Agrime | < 1600 | Southeast | Kana-Houawe region | Avolonto 1990:25 |
| Ahouaga (Abomey) | < 1600 | Centre | Kana-Houawe region | Avolonto 1990:25 |
| Agrigome (Abomey) | < 1625 | Centre | ? | Le Herissé 1911:284 |
| **Adja villages on the Fon plateau**[2] | | | | |
| Sinhoué | < 1600 | Southwest (Source Sinhoué river) | Tado | Le Herrissé 1911:274; Pazzi 1979:84, 86 |
| Sahè | < 1600? | Southwest (Source Sahè river) | Tado | Le Herrissé 1911:274; Pazzi 1979:84, 86 |
| Zansa | < 1600 | West | Adja | Le Herrissé 1911:274 |
| Allomankanme | < 1600 | West | Adja | Le Herrissé 1911:274 |
| Hùngeme (Lissazoume) | < 1675 | Centre-southwest | Adja | Own research; Pazzi 1979:84, 86 |
| Houawé | ± 1625 | Centre-east | Tado via Allada & Kana | many sources |
| Adingnigon? | < 1650 | Centre | Adja-Kpokpo | Mondjannagni 1977:560 |
| Dékanme | < 1650 | Centre-southwest | Tado via Allada | Mondjannagni 1977:560 |
| Sahè-Abigo | < 1650 | Southwest (Source Sahè river) | Adja | Own interview |
| Sahè-Loukpè | 1645-1685 | Southwest (Source Loukpè river) | Adja via Abomey | Gléle, Béhanzin & Adjademe 1984:3 |
| Gboli | < 1675 | Centre-southwest | Adja | Le Herissé 1911:287,293; Pazzi 1979:198 |
| Avali | 1727 | Southwest | Adja-Tado | Mondjannagni 1977:557 |
| **Villages of unknown origin** | | | | |
| Tindji | < 1625 | Northeast | ? | Le Herissé 1911:282 |
| Tranzoume | < 1625 | East | ? | Le Herissé 1911:279 |
| Mougnon-Kosou | < 1625 | Northwest | ? | Le Herissé 1911:283 |
| Ahwakanme | ± 1700 | South-east | ? | Cornevin 1981; Ederveen 1990:28 |
| Lokokanme | < 1780 | Centre | ? | Mondjannagni 1977:558 |
| Zakanme | < 1780 | | ? | Mondjannagni 1977:559 |

1 The ethnic and/or regional origin of villages marked with ? is unclear or contested. Some of them occur twice, under different headings, in this table because different sources attribute different origins to them. The information given by Mondjannagni and Avolonto must be taken with caution. Mondjannani tried to relate the foundation of villages to the reigns of kings and (consequently?) antecedated too few villages to the foundation of the Fon kingdom. Avolonto seems to have relied rather uncritically on a very small number of oral sources.

2 Some of these Adja were replaced by Fon in the 18th century. The village Hùngeme had its name changed into Lissazounme when the Adja were chased in the early 18th century and replaced by some Fon from Zounzonme (of Wemenu descent) in the mid-18th century. My own research cannot confirm Pazzi's (1979:84) claim that the first Adja arrived in Hùngeme before 1600, but the Adja must have arrived before 1675.

Table 5.1: Origins, dates and reasons of foundation of some Ehwe-Adja villages

| Village | Date of foundation | Location on the plateau | Origin | Reason for settling | Sources |
|---|---|---|---|---|---|
| On the Adja plateau | | | | | |
| Adjahonme (Womí) | << 1600 | Northeast (Source Sahoua river) | Tado | | Own research; Pazzi 1979:85; Olou 1986 |
| Avégame | << 1700 | North (Source Sahoua river) | Bè (Lomé) | Hunting, farming maize, yam, beans | Own interviews |
| Heteta (now Djihami) | << 1700 | Northeast (Source Lahoun river) | Tado | Hunting, farming | Olou 1986:19-20 |
| Yéhouime | 1550-1720 | Northwest (Source Kpako river) | Houdjou (near Tado) via Avégame | Hunting, farming maize, yam, beans | Own interviews |
| Koutime | 1645-1685 | East | Tado | | Mondjannagni 1977:547 |
| Toviklin | 1685-1708 | Centre-east | Tado | | Mondjannagni 1977:548 |
| Houéganme | < 1700 | Centre | Tado | | Pazzi 1979:84 |
| Tchikpè | < 1700 | East | Tado | Blacksmithing, hunting, farming | Own interview; Olou 1986:19 |
| Tchanvedji | < 1700 | East | Tado | Farming, hunting | Olou 1986:19 |
| Gnigbo | < 1700 | Northeast | Tado | Hunting, farming | Olou 1986:19 |
| Tokanme-Kpodji | < 1700 | Northeast (Source Lahoun river) | | | Ivens 1997:19 |
| Touvou | ± 1700 | Northwest (Source Kpako river) | Abomey plateau via Adjahonme | Fon wars at Abomey and Adjahonme | Own interview 6-11-1990 |
| Houétan | ± 1700 | Northwest (Source Kpako river) | Adjahonme | Hunting, farming, water | Own interview; Pazzi 1979:84 |
| Tokanme-Aliho | 1704-1740 | Northeast (Source Lahoun river) | Gnavihoué and/or Tado | Farming, lack of land at Gnavihoué | Own research; Ivens 1997:19 |
| Avedjin | 1708-1774 | Centre-east | Tado | | Mondjannagni 1977:546 |
| Djikpame-Afikoue | 1710-1780 | West | Tado | Blacksmithing, hunting, farming | Own interview |
| Alagbame | < 1750 | | Tado via Djakotome | Hunting | Own interview |
| Aïssanhoué | < 1750 | Centre | Avégame | Hunting, water | Own interview |
| Loko-Atuï | 1750-1800 | Centre-west | Aïssanhoué | Hunting, Fon war at Aïssanhoué | Own interview |
| Atohoué | 1750-1775 | Northwest (Source Kpako river) | | Farming, hunting, animal husbandry | Own interview |
| Gnonfinhoué | 1750-1780 | Northwest (Source Kpako river) | Adjahonme | | Own interview |
| Azové | << 1775 | West (Kpako river) | Houdjou (Tado) | | Own interview |
| Hedotoume | << 1780 | North | | | Own interview; Pazzi 1979:84 |
| Lagbahome | < 1785 | Centre | | | Own research |
| Gbofoli-Tokouhoué | < 1795 | West | | | Own interview |
| Etonhoué | ± 1750 | Centre | Bè (Lomé) via Avégame | Farming (lack of land at Avégame) | Own interview |
| Houetchihoué | ± 1768 | North | Tado via Abomey and Adjahonme | Hunting | Own interview |
| Djikpame-Djadjehoué | ± 1775 | West | Ato | Hunting, water | Own interview |
| Tchanhoué | ± 1775 | West | Sahoué via Azové | Farming | Own interview |
| Dekpo | 1770-1780 | Northwest | Hedotoume | Fon war at Hedotoume | Own interview |
| Dekanme | 1740-1780 | Northwest (Source Kpako river) | Tado via Yéhouime and Abomey | Fon war at Abomey, oil palm farming | Own interview |
| Damakahoué | 1760-1800 | Centre-west | Tado via Adjahonme | | Own interview |
| Bozinkpe | << 1800 | West (Kpako river) | Tado | Farming, hunting | Own interview |
| Aplahoué | << 1800 | West (Kpako river) | Adjahonme | | Own interview |
| Lokogba | << 1800 | West (Kpako river) | Yéhouime | Farming, hunting | Own interview |
| Patohoué | < 1800 | Centre-west | South Mono | Hunting | Own interview 1-11-1990; De Zeeuw 1986 |
| Lagbahome-Davohoué | < 1800 | Centre | | | Own interview; Vodouhè 1996 |
| Houédogli | < 1800 | Centre | Waci-Comè (south Mono) | Farming | Own research |
| Ablome | 1770-1805 | Centre-west | Comè via Houédogli | Farming on forest land | Own interview |

Table 5.1 (cont.)

| Village | Date of foundation | Location on the plateau | Origin | Reason for settling | Sources |
|---|---|---|---|---|---|
| Bétoume | 1780-1800 | Centre-west | Alagbame | Harvesting *imperata cylindrica* | Own interview |
| Sahou-Vounouhoué | ± 1796 | West | Tokouhoué near Gbofoli | Hunting, farming | Own interview |
| Atchouhoué | ± 1800 | Centre-west | Lagbahome via Patohoué | Farming, lack of land at Lagbahome | Own interview |
| Kaïteme | 1800-1820 | Northwest (Kpako river) | Hedotoume | Fon war & lack of water at Hedotoume | Own interview 6-11-1990 |
| Bossouhoué | 1800-1810 | Northwest (Kpako river) | Tado via Hedotoume | War at Tado, lack water at Hedotoume | Own interview |
| Hedjinawa | ± 1810 | | Adjahonme | Conflict at Adjahome | Own interview |
| Nangbohoué | 1810-1825 | Centre-north | Tchanhoué | Farming | Own interview |
| Ganmehouégbo | 1740-1850 | Centre | Ana (Atakpame in Togo) | Yoruba war against Atakpame | Own interview |
| Domi | 1740-1850 | Centre | Ana (Togo) via Gamehouegbo | Fon wars against Ana; farming | Own interview |
| Houégame | 1850 | Centre | Domi via Abomey | Supervising 'slaves' for Gezo | Own interview |
| Aname | < 1850 | Centre | Ana-Atakpame (Togo) | | Own interview |
| Agbedranfo | 1780-1855 | Centre-west | Aname | Farming forest land (lack of it at Aname) | Own interview |
| Gangbenouhoué | < 1850 | Centre | | | Own interview |
| Tintongon | ± 1850 | Centre | Ganmehouégbo | Farming | Own interview |
| Djakotome | 1800-1860 | West | Tado via Damakahoué | Farming | Own interview |
| Houngbame | 1830-1840 | Centre-north | Dekanme | Farming (lack of land at Dekanme) | Own interview |
| Kodjahoué | 1840-1850 | Centre-north | Ato-Sevonhoué | Farming (lack of land at Ato) | Own interview |
| Djikpame-Tchigluihoué | 1840-1850 | Northwest | Lodji | Hunting, farming | Own interview |
| Djikpame-Tchiglidji | ± 1850 | Northwest | Djikpame-Afikoué | Hiding from Fon chief in Afikoué | Own interview |
| Atindehouhoué | 1820-1855 | Centre | Tchanhoué + Tokanme | Fon threats at Tokanme | Own research |
| Zouvou | 1818-1889 | Northeast | Heteta | Fon raids, farming, dying cloth | Own interviews; Olou 1986:19-20 |
| Honsouhoué | 1830-1880 | Centre | Abomey | Fon raids at Mahi | Own research |
| Dedahoué | 1830-1880 | Centre | Abomey | | Own research |
| Tchankada | 1830-1880 | Centre | Abomey | | Own research |
| Kinkinhoué | 1850-1875 | Centre-West | Comè via Houédogli & Patohoué | Fon wars at Comè, farming | Own interview |
| Houngba | 1860-1870 | | Tado | Excessive demands of Tado's chiefs | Own interview |
| Zouzouvou | 1900-1910 | West | A neighbouring village | Disease in village of origin, farming | Lof 1987:3 |
| Adja on the Fon plateau | | | | | |
| Sinhoué | < 1600 | Southwest (Source Sinhoué river) | Tado | | Le Herrissé 1911:274; Pazzi 1979:86, 198 |
| Sahè | < 1600? | Southwest (Source Sahè river) | Tado | | Le Herrissé 1911:274; Pazzi 1979:86, 198 |
| Zansa | < 1600 | West | Adja | | Le Herrissé 1911:274 |
| Allomankanme | < 1600 | West | Adja | | Le Herrissé 1911:274 |
| Hungeme (Lissazounme) | < 1675[1] | Centre-southwest | Adja | | Own research; Pazzi 1979:84, 86 |
| Adingnigon | < 1650 | Centre | Adja-Kpokpo | | Mondjannagni 1977:560 |
| Dékanme | < 1650 | Centre-southwest | Tado via Allada | | Mondjannagni 1977:560 |
| Sahè-Abigo | < 1650 | Southwest (Source Sahè river) | Adja | | Own interview |
| Sahè-Loukpè | < 1650 | Southwest (Source Loukpè river) | Adja | Access to water | Gléle, Béhanzin & Adjademe 1984:3 |
| Gboli | < 1675 | Centre-southwest | Adja | | Le Herissé 1911:287,293 |
| Avali | 1727 | Southwest | Adja-Tado | | Mondjannagni 1977:557 |

1 My own research cannot confirm Pazzi's (1979:84) claim that the Adja arrived before 1600, but they must have arrived before 1675.

# Appendix 6

Table 6.1: Maize exports by waterway on the river Mono, by railway from the Fon plateau, and from the Adja region to Togo, in kg 1905-1913.

***River Mono & Lokossa market***

| Year | Ounkémé (Ehwe-Adja port) | Ports near Athiémé[1] and Lokossa | Overland to Togo | *Cercle* d'Athiémé total |
|---|---|---|---|---|
| 1905[2] | ± 2099 | ± 6296 | Some | 8395 |
| 1906 | 13525 | 15175 | – | 28700 |
| 1907[3] | 39305 | 474736 | – | 514041 |
| 1908 | 206822 | 0 | – | 206822 |
| 1909 | 22494 | 578378 | – | 600872 |
| 1910 | 27215 | 144605 | Some | 171820 |
| 1911[4] | 2820 | 25710 | – | 28530 |
| 1913 | 323500 | 1294000 | 137000 | 1294000 |
| Annual average | **79722** | **317363** | **137000** | **356648** |

***Fon plateau railway stations***[5]

| Year | Ouansougon | Bohicon | Akiza, Kinta, Kana and Passagon | *Cercle* d'Abomey total |
|---|---|---|---|---|
| 1905[3] | | | | |
| 1906 | | | | |
| 1907[4] | 36340 | 17900 | 4420 | 58660 |
| 1908 | 753080 | 1737030 | 1120 | 2491230 |
| 1909 | 445320 | 351900 | 6680 | 803900 |
| 1910 | 20040 | 3400 | 2990 | 26430 |
| 1911[5] | | | | |
| 1913 | | | | |
| Annual average | **313695** | **527558** | **3803** | **845055** |

1 Tokpli, Athiémé, Ahoho, Medenta and Jonougoui.
2 For 1905 I found only the total export figure of the *Cercle* d'Athiémé. I estimated Ounkémé's share on the base of its' share in 1906-1911.
3 These figures reveal that the merchants exaggerated when they complained in August 1908 that railroad tarrifs would have been too high so far for profitable maize exports from the Fon plateau (Rapports mensuels Juillet & Octobre 1907 Cercle d'Abomey, ANB Porto-Novo), and that Manning (1982:95-96) erred that maize exports were until 1908 only profitable by waterway.
4 Averse weather conditions for maize, in the first season especially in the Mono area, and in the second season in particular on the Abomey and Zagnanado plateaux (Rapport d'ensemble Dahomey 1911, 14 Mi 1661 série 2G 11-14, AOM Aix-en-Provence).
5 Including some Ehwe-Adja maize (Manning 1982:148).

Sources: Rapports mensuels Poste d'Athiémé 1905, 1906, 1907, 1910, 1911; Correspondance cercle de Grand-Popo subdivision de Parahoué 1908-1910; Rapport général sur l'année 1910 cercle d'Abomey).

Table 6.4: Palm oil and -kernel exports from the Ehwe-Adja's port Ounkémé and from the Fon plateau railway stations, in tonnes 1905-1911.

***Ehwe-Adja port: Ounkémé***

| Year | **Palm oil** | **Kernels** | Kernels/Oil |
|---|---|---|---|
| 1905 | 3 | 38 | |
| 1906 | 4 | 121 | |
| 1907 | 1 | 13 | |
| 1908 | 3 | 50 | |
| 1909 | 3 | 8 | |
| 1910 | 4 | 7 | |
| 1911 | 5 | 12 | |
| Annual average | **3** | **36** | **12** |

| ***Fon plateau railway stations***: Passagon Bohicon, Kana, Kinta, Ouansougon, Akiza[1] | | | | ***Fon plateau railway/Ehwe-Adja at Ounkémé sales*** | |
|---|---|---|---|---|---|
| Year | **Palm oil** | **Kernels** | Kernels/Oil | **Palm oil** | **Kernels** |
| 1905 | | | | | |
| 1906 | | | | | |
| 1907 | 129 | 1067 | | | |
| 1908 | 4 | 759 | | | |
| 1909 | 50 | 1801 | | | |
| 1910 | 681 | 3139 | | | |
| 1911 | | | | | |
| Annual average | **215** | **1692** | **8** | **72** | **47** |

1 Railroad figures might comprise small quantities of (eastern) Adja plateau products, but probably no large quantities, at least not until 1908. Until 1907 according to the *commandant* of Abomey next to no Ehwe-Adja products were exported by rail. At the end of 1907 he proposed to build a network of roads from the Adja plateau to Ouansougon, the railway station nearest to the Adja plateau, to stimulate both commodity production by the Ehwe-Adja and the rail transport of their products (Rapports mensuels Cercle d'Abomey Octobre & Novembre 1907, ANB). The Adja-Ouansougon road project never seems to have been realized. It was neither mentioned in later colonial reports nor in oral accounts that I came accross, nor is it visible on aerial photographs of 1949-1955 (these show only one narrow path from the Adja plateau to Ouansougon). After railroad prices fell from August 1908 onwards, some Ehwe-Adja maize, palm oil and kernels were exported by rail. This probably does not alter the conclusion that the Ehwe-Adja sold more kernels compared to oil than the Fon.

Sources: Rapports mensuels poste d'Athiémé 1905, 1906, 1907, 1910, 1911; Correspondance cercle de Grand-Popo subdivision de Parahoué 1908-1910; Rapport général sur l'année 1910 cercle d'Abomey)

Table 6.6: Semi-spontaneous vegetation on Dɛngbɛnɛn's land at *gbedumɛ*

| **1906**<br>Clearance | **1915**<br>End cultivation period | **1930**<br>After palm 'fallow' | **1939**<br>End cultivation period |
|---|---|---|---|
| *Antiaris africana* (t) | *Brachiaria deflexa* (g) | *Antiaris africana* (t) | *Brachiaria deflexa* (g) |
| *Blighia sapida* (t) | *Portulaca meridiana* (h) | *Adansonia digitata* (t) | *Portulaca meridiana* (h) |
| '*Dokocu*' (t) | *Rottboellia cochin-chinensis* (g) | *Bombax costatum* (t) | *Lactuca taraxicufolia* (h) |
| *Acanthospermum hispidum? ('Dangbɛ')* | *Panicum maximum* (g) | *Blighia sapida* (t) | '*Demeyi*' (h) |
| *Phyllantus discoideus* (t) | '*Dotawu*' (grass similar to *Brachiaria deflexa)* | *Acanthospermum hispidum* (s) | *Cassia sp. ('Lonlwi')* (h) |
| *Bombax costatum* (t) | *Momordica charantia* (h) | *Albizia zygia* (t) | *Rhynchelytrum repens? ('Dotawu')* (g) |
| *Chlorophora excelsa* (t) | *Lactuca taraxicufolia* (h) | *Holarrhena floribunda* (t) | *Rottboellia cochin-chinensis* (g) |
| *Adansonia digitata* (t) | *Momordica cissoides* (h) | *Phyllantus discoideus* (t) | *Panicum maximum* (g) |
| *Albizia zygia* (t) | *Cassia sp. ('Lonlwi')* (h) | '*Dokocu*' (t) | |
| *Spondias mombin* (t) | '*Demeyi*' (h) | *Acanthospermum hispidum? ('Dangbɛ')* | |
| '*Agbakan*' (l) | | '*Agbakan*' (l) | |
| *Triclisia subcordata? ('ekanhwihwi')* (l) | | *Triclisia subcordata? ('ekanhwihwi')* (l) | |
| '*Trubukan*' (l) | | '*Trubukan*' (l) | |
| '*Vedo*' | | '*Vedo*' | |
| '*Gbagbe*' | | | |

| **1953**<br>After palm 'fallow' | **1963**<br>End cultivation period | **1970**<br>After palm 'fallow' | **1990**<br>Cultivation period |
|---|---|---|---|
| *Antiaris africana* (t) | *Rhynchelytrum repens? ('Dotawu')* (g) | *Mallotus oppositifolius* | *Rhynchelytrum repens? ('Dotawu')* (g) |
| *Albizia zygia* (t) | *Brachiaria deflexa* (g) | *Deinbollia pinnata? ('kokokwi')* | *Brachiaria deflexa* (g) |
| '*Adeci*' (h) | *Panicum maximum* (g) | *Securinega virosa* (s) | *Portulaca meridiana* (h) |
| *Spondias mombin* (t) | *Portulaca meridiana* (h) | *Combretum hispidum* (s) | '*vegle*' |
| *Bombax costatum* (t) | *Andropogon gayanus* or *Pennisetum violaceum* (g) | *Bombax costatum* (t) | *Rhynchelytrum repens? ('sogbe')* (g) |
| *Chlorophora excelsa* (t) | *Cassia sp. ('Lonlwi')* (h) | *Antiaris africana* (t) | *Mezoneurum bentham-ianum* |
| *Adansonia digitata* (t) | '*Klandokpo*' | *Adansonia digitata* (t) | *Hibiscus surrattensis? ('kpode')* |
| *Triclisia subcordata? ('ekanhwihwi')* (l) | *Momordica cissoides* (h) | *Cassia sp. ('Lonlwi')* (h) | *Acanthospermum hispidum ('sovi')* (s) |
| *Blighia sapida?* (t) | *Combretum hispidum* (s) | *Momordica cissoides* (h) | '*didicu*' |
| *Holarrhena floribunda* (t) | *Mallotus oppositifolius* (s) | | *Heliotropum indicum* (h) |
| *Acanthospermum hispidum? ('Dangbɛ')* | | | |
| *Daniella oliveri (aza)* (s) | | | |
| *Millettia thonningii* (s) | | | |
| *Acanthospermum hispidum* (s) | | | |
| '*Dokocu*' (t) | | | |
| *Phyllantus discoideus* (t) | | | |
| '*Agbakan*' (l) | | | |

(Sonyonu Dɛngbɛnɛn, Edahoué 12-6-1990)
(t = tree; l = liana; h = herb; g = grass; s = shrub).
Agbakan = *Adenia lobata?* (Passifloraceae); Dangbe = *Acanthospermum hispidum?*; Demeyi = *Corchorus oliturus?*; Drema = *Portulaca meridiana?*; Gbagbe = *Rauvolfia vomitoria?*; Vɛdo = *Grewia carpinifolia?*

Table 6.7: Semi-spontaneous vegetation on Soton's land at Atindehouhoué

| **1930**<br>End cultivation period | **1942**<br>After palm 'fallow' | **1949**<br>End cultivation period |
|---|---|---|
| *Combretum hispidum* (s) | *Combretum hispidum* (s) | *Portulaca meridiana* (h) |
| *Brachiaria deflexa* (h) | *Mallotus oppositifolius* (s) | *Bracharia deflexa* (g) |
| *Mallotus oppositifolius* (s) | *Securinega virosa* (s) | *Rottboellia cochenchinensis* (g) |
| *Securinega virosa* (s) | *Menzoneuron benthamimum* (s) | *Mallotus oppositifolius* (s) |
| *Urena lobata* or *Triumfetta rhomboidea* (h) | *Panicum maximum* (g) | *Combretum hispidum* (s) |
| *Lecaniodiscus cupanoides* (s) | *Lecaniodiscus cupanoides* (s) | *Panicum maximum* (g) |
| *Panicum maximum* (g) | *'Kanyi'* (liana) | *Lecaniodiscus cupanoides* (s) |
| *Rottboellia cochenchinensis* (g) | *Deinbollia pinnata* (s) | *Securinega virosa* (s) |
| *Antiaris africana* (t) | | *Andropogon gayanus* or *Pennisetum violaceum* (g) |
| | | *Deinbollia pinnata* (s) |

| **1961**<br>After palm 'fallow' | **1990**<br>End cultivation period |
|---|---|
| *Mallotus oppositifolius* (s) | *Bracharia deflexa* (g) |
| *Combretum hispidum* (s) | *Mallotus oppositifolius* (s) |
| *Securinega virosa* (s) | *Portulaca meridiana* (h) |
| *Panicum maximum* (g) | *Rhynchelythrum repens?('dotawu')* (h) |
| *Antiaris africana* (t) | *Combretum hispidum* (s) |
| *Lecaniodiscus cupanoides* (s) | *Securinega virosa* (s) |
| *Rottboellia cochenchinensis* (g) | *Andropogon gayanus* or *Pennisetum violaceum* (g) |
| *Portulaca meridiana* (h) | *Rottboellia cochenchinensis* (g) |
| *Deinbollia pinnata* (s) | *Deinbollia pinnata* (s) |
| | *Cyperus esculentus* (g) |
| | *Lecaniodiscus cupanoides* (s) |

t = tree; s = shrub; h = herb; g = grass.

Table 6.8: Semi-spontaneous vegetation in Marsaye Kiki's palm grove at Lagbahome

| 1932<br>Clearance | 1941<br>End cultivation period | 1957<br>After palm 'fallow' | 1965<br>End cultivation period |
|---|---|---|---|
| *Milletia thonningii* (s) | *Mallotus oppositifolius* (s) | *Mallotus oppositifolius* (s) | *Mallotus oppositifolius* (s) |
| *Mallotus oppositifolius* (s) | *Mezoneum benthamiamum* (s) | *'Hɛndeci'* (s) | *Combretum hispidum* (s) |
| *Mezoneum benthamiamum* (s) | *Talium triangulare* (h) | *Combretum hispidum* (s) | *Rottboelllia cochinchinensis* (g) |
| *Mimosa invisa* (s) | *Lactuca taraxicufolia* (h) | *Spondias mombin* (t) | *Panicum maximum* (g) |
| *Lecaniodiscus cupanioides* or *Holarrhena floribunda* | *Spondias mombin* (t) (s) | *Phyllantus discoideus* (t) | *Albizia zygia* (t) |
| *Albizia zygia* (t) | *Milletia thonningii* (s) | *Albizia zygia* (tree) | *Lecaniodiscus cupanioides or Holarrhena* (s) |
| *Phyllantus discoideus* (t) | *Awankan* (l) | *Lecaniodiscus cupanioides or Holarrhena floribunda* | *Phyllantus discoideus* (t) |
| *Spondias mombin* (t) | '*Hɛndeci*' (s) | *Acanthospermum hispidum* (s) | *Spondias mombin* (t) |
| '*Hɛndeci*' (s) | *Phyllantus discoideus* (t) | *Triclisia subcordata? (ekanyi)* (l) | *Mezoneum benthamiamum* (s) |
| *Zanthoxylum zanthoxyloides* (s) | *Zanthoxylum zanthoxyloides* (s) | *Antiaris africana* (t) | *Triclisia subcordata? (ekanyi)* (l) |
| *Antiaris africana* (t) | | *'Awankan'* (l) | *Milletia thonningii* (s) |
| *Triclisia subcordata? (ekanyi)* (l) | | *Chlorophora excelsa* (t) | *Indigofera tinctoria* (s) |
| *Chlorophora excelsa* (t) | | *Indigofera tinctoria* (s) | |
| *Indigofera tinctoria* (s) | | | |

| 1975<br>After palm 'fallow' | 1982<br>End cultivation period | 1970<br>After palm 'fallow' | 1990<br>Cultivation period |
|---|---|---|---|
| *Mallotus oppositifolius* (s) | *Mallotus oppositifolius* (s) | *Mallotus oppositifolius* | *Rhynchelythrum repens (dotawu)* (h) |
| *'Hɛndeci'* (s) | *Combretum hispidum* (s) | *Deinbollia pinnata ('Kokokwi')* (s) | *Brachiaria defexa* (h) |
| *Combretum hispidum* (s) | *Securinega virosa* (s) | *Securinega virosa* (s) | *Portulaca meridiana* (h) |
| *Spondias mombin* (t) | *Lecaniodiscus cupanioides* or *Holarrhena* (s) | *Combretum hispidum* (s) | *'vegle'* |
| *Phyllantus discoideus* (t) | *Panicum maximum* (g) | *Bombax costatum* (t) | *'sogbe'* |
| *Mezoneum benthamiamum* (s) | *Rottboelllia cochinchinensis* (g) | *Antiaris africana* (t) | *Mezoneum benthamiamum* (s) |
| *Triclisia subcordata? (ekanyi)* (l) | *Brachiaria deflexa* (g) | *Adansonia digitata* (t) | *Hibiscus surrattensis? ('kpode')* |
| *Andropogon gayanus* (g) | *Rhynchelythrum repens (dotawu)* (g) | *Cassia spp.* (h) | *Acanthospermum hispidum* (s) *'sovi'* |
| *Albizia zygia* (tree) | *'Hɛndeci'* (s) | *Momordica cissoides* (h) | *Chassalia kolly? ('didicu')* |
| *Antiaris africana* (t) | | | *Heliotropium indicum* (h) |
| *Milletia thonningii* (s) | | | |
| *Indigofera tinctoria* (s) | | | |
| *Lecaniodiscus cupanioides* or *Holarrhena* (s) | | | |
| *'Awankan'* (liana) | | | |

(Marsaye Kiki, Lagbahome 13-6-1990)
t = tree; s = shrub; h = herb; g = grass.

Table 6.9: Semi-spontaneous vegetation in Idrisu Kiki's palm grove at Lagbahome

| **1932**<br>Clearance | **1940**<br>End cultivation period | **1949**<br>After palm 'fallow' | **1957**<br>End cultivation period |
|---|---|---|---|
| *Milletia thonningii* (s) | *Milletia thonningii* (s) | *Milletia thonningii* (s) | *Mallotus oppositifolius* (s) |
| *Spondias mombin* (t) | *Spondias mombin* (t) | *Spondias mombin* (t) | *Rhyncheythrum repens (dotawu)* (g) |
| *Mallotus oppositifolius* (s) | *Mallotus oppositifolius* (s) | *Mallotus oppositifolius* (s) | *Commelina spp.* (h) |
| *'Cikplanlin'* (s) | *'Cikplanlin'* (s) | '*Cikplanlin*' (s) | *Securinega virosa* (s) |
| *Combretum hispidum* (s) | *Combretum hispidum* (s) | *Combretum hispidum* (s) | *Spondias mombin* (t) |
| *Securinega virosa* (s) | *Rhynchelythrum repens (dotawu)* (g) | *Uvaria chamae* (s) | *Milletia thonningii* (s) |
| *Lecaniodiscus cupanioides* or *Holarrhena* (s) | *Commelina spp.* (h) | *Zanthoxylum zanthoxyloides* (s) | *Zanthoxylum zanthoxyloides* (s) |
| *Uvaria chamae* (s) | *Lecaniodiscus cupanioides* or *Holarrhena* (s) | *Securinega virosa* (s) | *Lecaniodiscus cupanioides or Holarrhena* (s) |
| *Zanthoxylum zanthoxyloides* (s) | *Uvaria chamae* (s) | | *'Cikplanlin'* (s) |
| | *Zanthoxylum zanthoxyloides* (s) | | *Combretum hispidum* (s) |
| | *Securinega virosa* (s) | | |

| **1965**<br>After palm 'fallow' | **1978**<br>End cultivation period | **1970**<br>After palm 'fallow' | **1990**<br>Cultivation period |
|---|---|---|---|
| *Spondias mombin* (t) | *Rhynchelythrum repens (dotawu)* (h) | *Mallotus oppositifolius* | *Rhynchelythrum repens (dotawu)* (h) |
| *Mallotus oppositifolius* (s) | *Commelina diffusa* (h) | *'Kokokwi'* | *Brachiaria defexa* |
| *Milletia thonningii* (s) | *Mallotus oppositifolius* (s) | *Securinega virosa* (s) | *Portulaca meridiana* (h) |
| *Combretum hispidum* (s) | *Securinega virosa* (s) | *Combretum hispidum* | *'vegle'* |
| *'Cikplanlin'* (s) | *Combretum hispidum* (s) | *Bombax costatum* | *'sogbe'* |
| *Securinega virosa* (s) | *'Cikplanlin'* (s) | | *Mezoneum benthamiamum* (s) |
| *Uvaria chamae* (s) | *Milletia thonningii* (s) | *Adansonia digitata* (t) | *Hibiscus surrattensis? ('kpode')* |
| *Lecaniodiscus cupanioides* or *Holarrhena* (s) | *Spondias mombin* (t) | *Cassia spp.* (h) | *Acanthospermum hispidum* (s) *'sovi'* |
| *Zanthoxylum zanthoxyloides* (s) | *Uvaria chamae* (s) | *Momordica cissoides* (h) | *Chassalia kolly? ('didicu')* |
| | | | *Heliotropium indicum* (h) |

(Idrisu Kiki, Lagbahome 15-6-1990)
t = tree; s = shrub; h = herb; g = grass.

Table 6.10: Fallow species in Fon and Adja fields in the 20th century

| Scientific name | Adja name | Fon name | Form | Ecological zone | Use [1] |
|---|---|---|---|---|---|
| *Acanthospermum hispidum* | *Kpafin, sovi, dangbe* | *Togba, senuswe* | Shrub | | Medicinal, ritual |
| *Adansonia digitata* L. | *Lagba* | *Kpasa, zunzon* | Large tree | Savannah | |
| *Adenia lobata* (Jacq.) Engl. | *Agbakan?* | *Dema* | Liana | | |
| *Albizia adiantifolia* (Schum.) W.Wight | *Kpahunkpahun* | *Agla* | Small tree | Long fallows | |
| *Albizia zygia* (DC.) J.F.MacBr. | *Zinwa* | *Agla* | Small tree | Long fallows | |
| *Amarantus hybridus* | *Fotɛtɛ, kaya* | *Fotɛtɛ* | Herb | | Edible leaves |
| *Amarantus spinosus* | *Jankukui, shivegbe* | *Togba* | Herb | | |
| *Andropogon gayanus* Kunth var. *gayanus* | *Wushiki* | *Fan* | Tall grass | Savannah | |
| *Annona senegalensis* Pers. | *Nyiglu* | *Anyungle* | Shrub | Poor fallows | Edible fruits |
| *Anogeissus leiocarpa* (DC.) Guill. & Perr | | *Hlihon* | | | |
| *Antiaris africana* | *Gbexo* | *Guxo* | Giant tree | Forest margins | |
| *Blighia sapida* Koenig | *Acan(-hwi)* | *Lisɛ* | Tree | | |
| *Boerhavia diffusa*, *B. erecta* | *Hwasɛ* | *Handukpo* | Herb | | |
| *Bombax costatum* Pellegr. & Vuill. | *Ehùn* | *Hùn* | Large tree | Savannah | |
| *Brachiaria deflexa* (Schum.) Robyns | *Sogbu* | *Adontun asu* | Small grass | Poor soils | |
| *Bridelia ferruginea* Benth., *B. micrantha* | *Hon, awlin, hlinwi* | *Honsukokwe* | Small tree | | |
| *Byrsocarpus coccineus* | *Shintobui* | *Ganganlisɛ* | Shrub | Young fallows | |
| *Cassia hirsuta*, *C. tora* | *Lalwi-asu, kpanhun* | *Kpanhun* | Herb | | |
| *Cassia occidentalis* | *Lalwi-asi* | *Kinkiniba* | Herb | | |
| *Chlorophora excelsa* | *Loko* | *Loko* | Giant tree | Forest margins | |
| *Combretum hispidum* Laws | *Danklanmi* | *Absent* | Shrub | | |
| *Commelina diffusa, -erecta, -bengalensis, -forskalei* | *Botomakui, hadogogo, gbetomakui* | *Hanwihanwi, glesimaku* | Herb | Poor soils | |
| *Corchorus oliturus* L. | *Demi, (demeyi)* | *Nɛnwi* | Herb | Rich soils | Edible leaves |
| *Cyperus esculentus* | *Ekwi* | *Adantofio* | Cyperacea ('grass') | Poor soils | |
| *Daniella oliveri* (Rolfe) Hutch & Dalziel | *Za* | *Za* | Tree | Savannah | |
| *Deinbollia pinnata* (Poir.) Schum. & Thonn. | *Kokukokwi* | *Ganhotin* | Shrub | | |
| *Dialium guineense* Willd. | *Totwe* | *Asiswɛ* | Small tree | Long fallows | |
| *Dichapetalium guineense* | *Gbonyɛmisu* | *Gbaglo* | Shrub | | Edible leaves |
| *Dichrostachys* spp. | *Klikan* | *Badawɛn* | Shrub | | |
| *Digitaria* spp. | *Ekwi, hantaya* | *Adontun* | Cyperacea ('grass') | Poor soils | |
| *Dracaena arborea* (Willd.) Link | *Anya* | *Anya* | Shrub (agave) | | |
| *Euphorbia hirta* | *Hunma, anonshi* | *Hundihundiasu* | Herb | | |
| *Ficus exasperate* Vahl | *Axla, hlosu* | *Axlosutin* | Shrub | | |
| *Ficus capensis* | *Sevu, avove* | *Votin* | Shrub | | |
| *Gardenia erubescens* Stapf & Hutch., *G. ternifolia* Schumach. & Thonn. | *Finfinci* | *Dakpla* | Shrub | | |
| *Heliotropium indicum* | *Koklo sude* | *Koklosu dɛnpaja* | Herb | | |
| *Holarrhena floribunda* (G.Don) Dur. & Schinz | *Sesewu, ganwuci* | *Lɛtin, lɛtun* | Small tree | | Hoe handles |
| *Hymenocardia acida* | | *Ative* | Shrub/tree | Savannah | |
| *Imperata cylindrica* (L.) Raeuschel | *Ebe* | *Sɛ* | Medium grass | | Thatching roofs |

Table 6.10 (cont.)

| | | | | | |
|---|---|---|---|---|---|
| *Indigofera tinctoria* | *Zunzun* | *Doho, agonjɛ* | Shrub | | |
| *Ipomoea involuncrata* | *Vundranlɛn* | *Hundrɛlɛn* | Herb | Poor soils | |
| *Irvingia gabonensis* (Aubrey Lecomte) | *Ato* | *Asro* | Tree | | Edible fruits |
| *Lactuca taraxicufolia* | *Wontu* | *Nyantoto* | Herb | | Edible leaves |
| *Lecaniodiscus cupanioides* Planch. | *Ganwuci, ganwutin* | *Ganhotin* | Shrub | | Drumstick |
| *Lonchochocarpus sericeus* (Poir.) Kunth | *Lonba* | *Batin, honsubada* | Shrub/tree | | |
| *Mallotus oppositifolius* (Geisel.) Müll.Arg. | *Nyacivi* | *Kisɛkisɛ, wɛtin* | Shrub | Young fallows | |
| *Mezoneuron benthamiamum* Baill. | *Kpofɛn, kpofun* | *Kpovɛhun* | Thornbush | | |
| *Millettia thonningii* (Schum. & Thonn) Baker | *Citin* | *Asinyasinyatin* | Shrub/tree | Hoe handles | |
| *Momordica charantia* L. | *Jukɛ* | *Adukɛn, xlosikan* | Herb | Rich soils | Medicinal (edible) |
| *Momordica cissoides* Benth. | *Voyi* | | Herb | Rich soils | Edible leaves |
| *Morinda lucida* Benth. | *Cikemashu* | *Xwɛnsin* | Shrub | Young fallows | |
| *Newbouldia laevis* (P. Beauv.) | *Aflama, desre* | *Kpatin, desrege* | Shrub | | Fence |
| *Panicum maximum* Jacq. | *Klogbu* | *Weko* | Tall grass | Savannah | |
| *Parkia biglobosa* (Jacq.) R.Br. ex G.Don f. | *Ewa* | *Ahwa* | Tree | Savannah | Edible fruits |
| *Paullinia pinnata* L. | *Eyican* | *Ganganlisɛ* | Shrub | | |
| *Pericopsis laxiflora* (Benth.) van Meeuwen | | *Sɛndon* | Shrub | | |
| *Phyllantus discoideus* | *Hehe, gosan* | *Gbafla* | Shrub | Long fallows | |
| *Portulaca meridiana* | *Adri* | *Dri, adrɛma* | Small herb | Poor soils | |
| *Prosopis africana* (Guill. & Perr.) Taub. | *Kakɛ* | *Kakɛ* | Tree | Savannah | Wood: tools; charcoal: smithies; roots: medicine; seeds: Adja-spice |
| *Pterocarpus erinaceus*, *P. santalinoides* DC. | *Hundihundi, aswin* | *Kozo, gbɛgbɛtin* | Shrub | | Timber |
| *Rhynchelythrum repens* | *Dotawu, sogbe* | *Sogbeja* | Grass | | |
| *Rottboellia cochinchinensis* | *Azwi* | | Grass | Poor soils | |
| *Securinega virosa* | *Hetre* | *Hunvijayɛ, cakɛ* | Small tree | | |
| *Sida acuta* Burm f. subsp. *acuta* | *Aboma, avonha* | *Tengbe tengbe* | Herb | | |
| *Spondias mombin* L. | *Kuko, towuko* | *Akinkon* | Tree | | Edible fruits |
| *Sporobolus pyramidialis* P. Beauv. | *Ekwi* | | Small grass | Poor soils | |
| *Striga* spp. | Absent | *Do* | Semi-parasite herb | Very poor soils | |
| *Talium triangulare* (Jacq.) Willd. | *Glazwi* | *Sinswɛn, totwe* | Herb | | Edible leaves |
| *Terminalia glaucescens* | *Dogbeci* | *Alotun* | | | |
| *Triclisia subcordata* Oliv. | *Ekan, viaka* | *Dodwɛn, dovo* | Liana | | |
| *Tridax procumbens* | *Wɛdɛmɛgbe, zinbatogbe* | *Wɛnmi* | Herb | | |
| *Triplochiton scleroxyllon* K. Schum. | *Ciwu* | *Xwetin* | Tree | Forest margins | |
| *Triumfetta rhomboidea* | *Jabobuishi* | *Ajatunkan, dɛkpodɛ* | Herb | | |
| *Urena lobata* | *Jabobuishi* | *Ajatunma* | Herb | | |
| *Uvaria chamae* P. Beauv. | *Gbanna* | *Ayadaha* | Shrub | | |
| *Vernonia cinerea* (L.) Less | *Hunshikonu* | *Hunsikusɛ* | Shrub | | |
| *Vitex doniana* Sweet | Almost absent | *Fontin* | Shrub | Sandy soils | Edible fruits + leaves |
| *Zanthoxylum zanthoxyloides* | *Exe* | *Xɛtin* | Shrub | Poor fallows | |

1 Almost all species have some medicinal use, I don't name them all.

Sources: Own interviews with Fon and Adja farmers about the species that they encountered in their fields. I identified local plant names, samples and descriptions given by respondents with the help of the botanists Ebenezer Ewèdje and Aristide Adomou of the UNB, the agronomist Anne Floquet, the Herbarium Vadense of Wageningen University, and the following literature: De Souza (1988), ESYCTRA (1988), Adjanohoun (1989), Akobundu & Agykwa (1987), Brouwers & Dangbenon (1991), Brouwers (1993) and Adomou (2005:115-131). See also my notes on methodology in 3.2.9.

# Appendix 7

Table 7.2: Primary school attendance in the *subdivisions* d'Abomey and Parahoué, 1905-1950

| Year | *Subdivision* Parahoué[1] | *Subdivision* Abomey[2] | Abomey town[3] | Year | *Subdivision* Parahoué[1] | *Subdivision* Abomey[2] | Abomey town[3] |
|---|---|---|---|---|---|---|---|
| 1905 (Jan) | 0 | 52 | 52 | 1928 | – | – | 435 |
| 1905 (Oct)[4] | 0 | 55 | 55 | 1929 | – | – | 378 |
| 1906 | 0 | 72 | 58 | 1930 | – | – | 357 |
| 1907 | 0 | – | 87 | 1931 | – | – | 389 |
| 1908[5] | 0 | – | 64 | 1932 | – | – | 473 |
| 1909 | 0 | 213 | 195 | 1933 | – | – | 455 |
| 1910 | 0 | 235 | 171 | 1934 | – | – | 463 |
| 1911 | 11 | – | 158 | 1935 | – | – | 360 |
| 1912 | – | – | 95 | 1936 | – | – | 274 |
| 1913 | – | – | 120 | 1937 | – | – | 274 |
| 1914 | – | – | 136 | 1938 | – | – | 338 |
| 1915[6] | – | 295-297 | 179-181 | 1939 | – | – | 379 |
| 1916 | – | – | 164 | 1940 | – | – | 383 |
| 1917 | – | – | 144 | 1941 | – | – | 438 |
| 1918[7] | 0 | 162-249 | 93-150 | 1942 | – | – | 444 |
| 1919 | 0 | – | 163 | 1943-44 | – | – | 438 |
| 1920 | 0 | 355 | 108 | 1944-45 | – | – | 371 |
| 1921 | – | – | 190 | 1945-46 | – | – | 508 |
| 1922 | >0 | – | 226 | 1946-47 | – | – | 503 |
| 1923 | 58 | – | 204 | 1947-48 | – | – | 595 |
| 1924 | – | – | 217 | 1948-49 | – | – | 656 |
| 1925[8] | 87 | 324-643 | 201-520 | 1949-50 | – | – | 797 |
| 1926 | – | – | 175 | 1950-51 | – | – | 768 |
| 1927 | – | – | 257 | | | | |

1 Until 1952 only public schools. 1911-1924 one school in Aplahoué only, from 1925 one in Aplahoué and in Adjahonme. In 1952 a catholic school was opened in Azové, and in 1957 a public school in Lonkly (INSAE, calendrier historique province du Mono).

2 Including from 1911 Bohicon's public school. By 1960 Bohicon had also a catholic teacher training college for boys (Cornevin 1965/1970:118).

3 Figures for the end of the school years, from 1939 including the vocational school, which had ±20 pupils each year during the 1940s. Until then the primary schools of all wards in Abomey town would have been counted, but the large gap between figures after ±1920 makes me suspect that the catholic schools might have been excluded from that date. Principal source: Groupes scolaires d'Abomey, Archives Abomey.

4 25 in Abomey's public and 30 in its catholic school.

5 80 in Abomey's public school only.

6 217 in Abomey, 78 in Bohicon

7 Including 79 in Bohicon and 15 in Abomey's catholic school. Figures for Abomey range from 93 to 150, depending on the source. Of the *subdivision*'s lower figure, 146 are boys and 16 girls.

8 58 in Aplahoué, 29 in Adjahonme, 123 in Bohicon, 201-520 in Abomey depending on the source. The higher figure includes 161 boys and 46 girls in Abomey's catholic schools.

Sources: Rapports mensuels Février et Octobre 1905 Cercle d'Abomey, ANB Porto-Novo; Rapport d'ensemble 1909 Dahomey, enseignement, 14 Mi 1651 série 2G 9-16, AOM Aix-en-Provence; Rapport mensuel Novembre 1910 poste d'Athiémé, ANB Porto-Novo; Rapport mensuel Avril 1911 poste d'Athiémé et Parahoué, ANB Porto-Novo; Rapport d'ensemble Dahomey 1911, 14 Mi 1661 série 2G 11-14, AOM Aix-en-Provence; Rapport mensuel cercle du Mono Décembre 1918, ANB Porto-Novo; Rapport mensuel Cercle d'Abomey Décembre 1918, Archives Abomey; Rapport trimestriel Cercle d'Abomey 2e trimestre 1923 Cercle d'Abomey, ANB Porto-Novo; Rapport 3e trimestre 1925 Cercle d'Abomey, ANB Porto-Novo; Groupes scolaires Abomey - monographie, Archives Abomey; Garcia 1971:70, 76-77, 91-94.

Table 7.3: School attendance of Fon boys in Lissazounme (Lisanon, Segbeji and Kpleli lineage)

| Birth year | Primary | Secondary grades 1-3 | Beyond grade 4 | Illiterate | Sample size |
|---|---|---|---|---|---|
| < 1940 | 0 | 0 | 0 | 100% | 60 |
| 1940-49 | 10% | 0 | 25% | 65% | 20 |
| 1950-59 | 14% | 0 | 36% | 50% | 14 |
| 1960-64 | 11% | 22% | 11% | 56% | 18 |
| 1965-69 | 25% | 8% | 33% | 33% | 12 |
| 1970-73 | 36% | 29% | 7% | 29% | 14 |
| 1974-77 | 53% | 20% | 0 | 27% | 15 |
| 1978-81 | 67% | 0 | 0 | 33% | 24 |
| Total | 32% | 10% | 15% | 43% | 117 |

Source: Own interviews 1989-90

Table 7.4: School attendance of Adja boys in Atindehouhoué (Atindehu and Klakla lineage)

| Birth year | Primary | Secondary grades 1-3 | Beyond grade 4 | Illiterate | Sample size |
|---|---|---|---|---|---|
| < 1940 | 0 | 0 | 0 | 100% | 68 |
| 1940-49 | 0 | 13% | 7% | 80% | 15 |
| 1950-59 | 0 | 0 | 5% | 95% | 21 |
| 1960-64 | 0 | 17% | 0 | 83% | 6 |
| 1965-69 | 0 | 11% | 22% | 67% | 9 |
| 1970-73 | 40% | 10% | 0 | 50% | 10 |
| 1974-77 | 54% | 0 | 0 | 46% | 13 |
| Total | 8% | 4% | 3% | 86% | 142 |

Source: Own interviews 1985 (mostly) and 1990

Table 7.5: School attendance of Fon girls in Lissazounme (Lisanon, Segbeji and Kpleli lineage)

| Birth year | Primary | Secondary grades 1-4 | Beyond grade 4 | Illiterate | Sample size |
|---|---|---|---|---|---|
| < 1940 | 0 | 0 | 0 | 100% | 9 |
| 1940-49 | 0 | 0 | 0 | 100% | 5 |
| 1950-59 | 0 | 0 | 10% | 90% | 10 |
| 1960-64 | 0 | 0 | 14% | 86% | 7 |
| 1965-69 | 0 | 8% | 17% | 75% | 12 |
| 1970-73 | 14% | 0 | 0 | 86% | 14 |
| 1974-77 | 38% | 0 | 0 | 63% | 16 |
| 1978-81 | 41% | 0 | 0 | 59% | 17 |
| Total | 19% | 1% | 5% | 75% | 81 |

Source: Own interviews 1989-90

Table 7.6: School attendance of Adja girls in Atindehouhoué (Atindehu and Klakla lineage)

| Birth year | Primary | Secondary grades 1-4 | Beyond grade 4 | Illiterate | Sample size |
|---|---|---|---|---|---|
| < 1940 | 0 | 0 | 0 | 100% | 35 |
| 1940-49 | 0 | 0 | 0 | 100% | 19 |
| 1950-59 | 6% | 0 | 18% | 76% | 17 |
| 1960-64 | 0 | 14% | 36% | 50% | 14 |
| 1965-69 | 22% | 22% | 44% | 11% | 9 |
| 1970-73 | 56% | 0 | 0 | 44% | 16 |
| 1974-77 | 21% | 0 | 0 | 79% | 19 |
| Total | 12% | 3% | 9% | 75% | 129 |

Source: Own interviews 1985 (mostly) and 1990

Table 7.9: Dahomey's exports of industrial versus manually produced palm oil 1950-1974 (estimations by Prudencio 1976) and total manual production 1950-1970 (estimations by the agricultural service), in tons

| Year | Total palm oil exports[1] | Grade 1-2 'from mills'[2] | Grade 3-5 'from market'[3] | % from local markets | Total rural production[4] |
|---|---|---|---|---|---|
| 1950 | 12,269 | 0 | 12,269 | 100% | 30,612 |
| 1951 | 14,559 | 990 | 13,569 | 93% | 32,279 |
| 1952 | 9,031 | 406 | 8,625 | 96% | 26,142 |
| 1953 | 16,358 | 2,281 | 4,077 | 25% | 32,699 |
| 1954 | 17,359 | 5,433 | 11,926 | 69% | 27,551 |
| 1955 | 17,448 | 6,447 | 10,701 | 61% | 29,641 |
| 1956 | 19,887 | 10,621 | 9,267 | 47% | 23,820 |
| 1957 | 13,473 | 9,053 | 4,420 | 33% | 21,784 |
| 1958 | 18,596 | 9,521 | 9,075 | 49% | 25,266 |
| 1959 | 12,865 | 8,027 | 4,837 | 38% | 24,921 |
| 1960 | 16,014 | 10,649 | 5,365 | 34% | 24,259 |
| 1961 | 11,030 | 9,342 | 1,688 | 15% | 25,625 |
| 1962 | 8,670 | 7,560 | 1,110 | 13% | 31,290 |
| 1963 | 9,242 | 8,059 | 1,183 | 13% | 35,240 |
| 1964 | 12,718 | 12,239 | 0,484 | 4% | 19,934 |
| 1965 | 13,257 | 9,969 | 3,268 | 25% | 20,890 |
| 1966 | 12,723 | 10,636 | 2,087 | 16% | 22,302 |
| 1967 | 7,447 | 7,266 | 0,181 | 2% | 10,117 |
| 1968 | 10,234 | 9,247 | 0,287 | 3% | 18,754 |
| 1969 | 13,483 | 12,831 | 0,652 | 5% | 14,007 |
| 1970 | 16,967 | 15,524 | 1,443 | 9% | 16,651 |
| 1971 | 19,157 | 16,915 | 2,242 | 12% | |
| 1972 | 8,207 | 8,083 | 0,124 | 2% | |
| 1973 | 8,117 | 7,970 | 0,147 | 2% | |
| 1974 | 12,741 | 12,104 | 0,637 | 5% | |

1 Prudencio's total palm oil export figures differ slightly from those of Sedjro (1980:24) and Manning (1982:382) for the same years (see table 7.41). I have no explanation for this.
2 Based on Prudencio's assumption that all oil exported as grades 1 or 2 was from the State's oil mills.
3 Based on the assumption that all oil exported as grades 3, 4 or 5 was manually manufactured oil exported from local markets by private firms.
4 Figures for 1967, 1968 and 1969 are quantities 'controlled' on local markets, probably by tax collectors. They probably underestimate oil sales. Figures for all other years are estimated production. Based on Rapports Annuels 1950-1971 Service de l'Agriculture, Porto-Novo.
Source: Prudencio (1976:244, 246).

Table 7.10: Palm wine and *sodabi* prices on the Adja plateau, in FCFA/l

| | Palm wine | *Sodabi* | *Sodabi* / Palm oil price[1] |
|---|---|---|---|
| 1945[2] | 4 | 80 | 13.7 |
| 1985 | | 350-450 | ca. 1.3 |
| 1992 | | 200-350 | ca. 1.5 |
| 2004 | | 550 | |
| 2006 | | 900 | |

1 In 1945 based on average local prices, in 1985-2006 on local Adja plateau prices.
2 'Average' price, probably around Athiémé or otherwise in Cotonou. High demand for palm wine and *sodabi* in wartime due to shortage of imported alcohol.
Sources: Notice sur le palmier à huile et sur sa protection, dossier Eaux et Forêts (± 1945), Archives Abomey; Wartena (1987:329); Kater (1993:29); Clément Gbehi personal communication 2005 and 2006.

Table 7.13: Maize 'exports'[1] 1942-1985 from the *Cercles* d'Abomey and d'Athiémé (in kg)

| Year | Subdivision / Sous-préfecture d'Abomey | Cercle d'Abomey (incl Zagnanado)[a] | Subdivision / Sous-préfecture d'Aplahoué | Cercle d'Athiémé[b] |
|---|---|---|---|---|
| 1922 | 50,213[c] | | | |
| 1942[d] | | 1,188,000 | | 3,374,000 |
| 1943[d] | | | | 3,635,000 |
| 1954 | | | 0 | |
| 1955 | 0 | 0 | | |
| 1956 | 0 | 0 | | 3,800,000[e] |
| 1957 | | | 1,950,000 | 7,150,000[f] |
| 1958 | | | 1,281,000 | 2,562,000[f] |
| 1961 | 0 | 0 | | 887,000[g] |
| 1962 | 1,600,000[h] | 1,600,000[h] | 565,000 | 1,250,000 |
| 1963 | | | 604,000[i] | 2,269,000[i] |
| 1963 | 1,900,000[k] | 2,817,500 | 3,850,000[i] | 6,950,000[i] |
| 1964 | 0 | 1,435,000 | 4,200,000 | 6,700,000 |
| 1965 | | 1,535,000 | 940,000 | 2,242,000 |
| 1974 | | | 6,850,000 | 7,169,000 |
| 1975 | | | 0 | 0 |
| 1976 | | | 0 | 1,500,000[l] |
| 1977 | 753,718 | 880,813 | 541,052[m] | 1,427,548[n] |
| 1985[m] | 1,587,400 | | | |

1 From 1946 'exports' to other *Cercles*, since international exports were forbidden (Desanti 1945:150, 170; Dissou 1970: 12).
a But excluding Kétou.
b Including the Sudivisions/Postes/Sous-préfectures Parahoué and Athiémé, but excluding Bopa and Grand Popo. In the 1950[ies] this area was called *Cercle* du Mono (still excluding Bopa and Grand Popo).
c Loaded at the Fon plateau railway stations; some of this maize probably came from the east and west.
d Sales to meet wartime export quota.
e Expected exports.
f The first figure are the 'probable exports' and the last figure the 'controlled exports' as given by the Rapport annuel 1957 service agricole cercle du Mono.
g May and September to December only.
h It is not clear whether this figure is for the *Cercle* or the *Sous-préfecture* d'Abomey.
i The higher figures are from the Rapport annuel 1963 Service de l'agriculture du Mono (ANB Porto-Novo), the lower from the Bulletin économique et statistique République du Dahomey (Archives Abomey).
k Possibly including maize from Savalou, Save and Dassa.
l Only Dogbo district exported, the other districts imported because of a severe drought according to the Rapport annuel 1976 CARDER Mono.
m Maize purchased or controlled by the CARDER Mono only.
n Sales controlled by the CARDER Zou.

Sources: 1942-1943: Rapport économique Dahomey 1943, Archives Abomey. 1954: Rapport agricole 1954 secteur agricole centre, Archives Abomey. 1955: Rapport annuel 1955 Service de l'agriculture secteur agricole centre Cercle d'Abomey, Archives Abomey. 1956: Rapport agricole 1956 Cercle d'Abomey, Archives Abomey; Rapport annuel 1956 Cercle du Mono, ANB Porto-Novo. 1957: Rapport annuel 1957 du service agricole Cercle du Mono, ANB Porto-Novo. 1961, 1963-1965: Bulletin économique et statistique République du Dahomey, Archives Abomey. 1962: Rapport annuel 1962 Service de l'agriculture du Dahomey, ANB Porto-Novo. 1963: Rapport annuel 1963 Service de l'agriculture du Dahomey; Rapport annuel 1963 Service de l'agriculture du Mono, ANB Porto-Novo. 1963-1965: Rapport annuel 1964 Service de l'agriculture du Dahomey; Bulletin économique et statistique République du Dahomey, Archives Abomey (figure for 1965 and the lower figure for Athiémé in 1963). 1974: Rapport 1974 opération de développement intégré de la province du Zou; Rapport annuel 1974 CARDER Mono. 1975: Rapport annuel 1975 CARDER Mono. 1976: Rapport annuel 1976 CARDER Mono. 1977: Rapport annuel 1977 CARDER Zou; Rapport annuel 1977 CARDER Mono. 1985: Rapport annuel 1985 CARDER Zou.

Table 7.14: Maize areas 1951-1986 in hectares per year, both rainy seasons added together

| Year | Sous-préfecture d'Abomey (excl. Zagnanado) | Sous-préfecture d'Abomey (incl. Kétou & Zagnanado) | Abomey plateau only | Sous-préfecture d'Aplahoué | Sous-préfectures Athiémé + Aplahoué |
|---|---|---|---|---|---|
| 1951 | | 15,300 | | | |
| 1954 | | 20,000 | | 7,000 | |
| 1955 | | 15,000 | | | |
| 1956 | | 14,000 | | 27,000 | 51,500 |
| 1957 | | [b] | | 27,000 | 32,000 |
| 1963 | 10,000 | 14,375 | | 24,000 | 44,500 |
| 1964 | 7,600 | 11,800 | | 23,400 | 43,900 |
| 1968 | 18,040 | | 15,011 | | |
| 1969 | 42,710 | | 37,660 | | |
| 1970 | 27,230 | | | | |
| 1971 | 30,900 | | | | |
| 1972 | 29,065 | | | | |
| 1973 | 30,646 | | | | |
| 1974 | 21,931 | | | | |
| 1975 | | | | 14,495 | 18,173[a] |
| 1976 | | | | 13,636 | 20,110[a] |
| 1977 | 12,587 | | | 24,099 | 35,420[a] |
| 1978 | 48,701 | | | | |
| 1979 | 30,787 | | | | |
| 1980 | 25,791 | | | | |
| 1983 | 26,081 | 35,177 | | 35,300 | 49,215[a] |
| 1985 | 23,080 | | | 35,167 | 47,328[a] |
| 1986 | | | | 29,235 | 45,404[a] |

a Including Aplahoué, Djakotome, Klouékanme, Toviklin, Dogbo and Lalo districts, but excluding Lokossa and Athiémé (which were also part of the former *Cercle* d'Athiémé).

b Declining areas except in the canton Zogbodome; maize is more and more substituted by sorghum (Rapport agricole Cercle d'Abomey 1957, Archives Abomey)

Sources: 1951: Rapport économique 2ème semestre Cercle d'Abomey 1951. 1954: Rapport annuel secteur agricole centre 1954, Archives Abomey. 1955: Rapport annuel 1955 Service de l'agriculture secteur agricole centre Cercle d'Abomey, Archives Abomey. 1956: Rapport agricole 1956 Cercle d'Abomey, Archives Abomey; Rapport annuel 1956 Cercle du Mono, ANB Porto-Novo. 1957: Rapport annuel 1957 service agricole Cercle du Mono, ANB Porto-Novo. 1961-1965: Bulletin économique et statistique République du Dahomey, Archives Abomey. 1962: Rapport annuel 1962 service de l'agriculture du Dahomey, ANB Porto-Novo. 1963: Rapport agricole Dahomey 1963; Rapport annuel 1963 service de l'agriculture du Mono. 1964: Rapport annuel 1964 service de l'agriculture du Dahomey. 1974: Rapport annuel 1974 CARDER Mono; Rapport 1974 opération de développement intégré de la province du Zou. 1975: Rapport annuel 1975 CARDER Mono. 1976: Rapport annuel 1976 CARDER Mono. 1977: Rapport annuel 1977 CARDER Mono, Rapport annuel 1977 CARDER Zou. 1985: Rapport annuel 1985 CARDER Zou.

Table 7.15: Cotton[1] yields in kg/ha, 1927 and 1983-1985

| | Fon, from 1973 mostly with fertiliser[2] | | | Adja | |
|---|---|---|---|---|---|
| | Abomey plateau soils | Zogbodome (eastern slopes) | Djidja (savannah) | Plateau with fertiliser | Plateau without fertiliser |
| 1927 | 102 | | | | 196 |
| 1973-78 | 640 | 492 | | | |
| 1983 | 350 | 700 | 500 | | |
| 1984[3] | | | | 1,000 | 700 |
| 1985[4] | 588 | 660 | 677 | | |

1 From the early 1960s the higher yielding variety Allen.
2 Figures for the Fon after 1973 are probably ±20% too high. Adja plateau extensionists collectively underestimated plot areas by 20% in order to make cotton yields appear higher, on their superiors' orders (own observations and oral communication 1985 by extensionist Edou Gnagnimon 1985). Therefore, I corrected the official Adja cotton yields by ±20%, but not the official Fon yields.
3 Own calculations based on cotton areas and cotton sales of individual planters in Atindehouhoué and Honsouhoué as measured by myself and/or the local extensionist.
4 With fertiliser. Calculations by Baar (1986) on the base of registered cotton areas, harvest and fertiliser use (209 ha in the *secteur* Abomey, 92 ha in Zogbodome and 1735 ha in Djidja).
Sources: Note sur le rapport annuel agricole Dahomey 1927, AOM Aix-en-Provence; Rapport annuel 1983 CARDER Zou; Baar (1986:83, 90); Wartena (1987).

Table 7.16: Production and export sales of cotton in the *Cercle* d'Abomey and the *Subdivision* d'Aplahoué 1905-1986, in kg of unginned cotton (until the 1950s sales, from the 1960s production unless stated differently)

| Year | **Cercle d'Abomey** (excl. Zagnanado) | Cercle d'Abomey (incl. Zagnanado) | Abomey plateau only (kg and % of whole *cercle*) | **Subdivision Aplahoué** | Cercle d'Athiémé (incl Aplahoué) | Aplahoué plateau only (kg and % of whole *subdivision*) |
|---|---|---|---|---|---|---|
| 1905 | 5,000 | | | | | |
| 1906 | 37,000 | | | | | |
| 1907 | ±33,480 | | | | | |
| 1908 | ±26,640 | | | | | |
| 1909 | ±46,800 | | | 0 | | |
| 1910 | ±43,200 | | | | | |
| 1911 | ±47,520 | | | 10,000 | | |
| 1912 | ±44,280 | | | | | |
| 1913 | 61,560 | | | | | |
| 1918 | | | | | | |
| 1922 | 12,063 | | | | | |
| 1923 | 97,894 | | | 22,806 | | |
| 1924[a] | ±217,000 | | Seed given 32% | 60,000 | | 20,000 (33%) |
| 1925 | | | | 266,500 | | |
| 1926 | | | | 409,000 | | |
| 1929 | 1,800,000 | 1,814,000 | | | | |
| 1930 | 1,600,000 | 1,640,000 | | | | |
| 1931 | 710,000 | 730,000 | | | | |
| 1932 | 516,000 | 517,000 | | | | |
| 1933 | 350,000 | | | | | |
| 1934 | 325,000 | | | | | |

Table 7.16 (cont.)

| Year | **Cercle d'Abomey** (excl. Zagnanado) | Cercle d'Abomey (incl. Zagnanado) | Abomey plateau only (kg and % of whole *cercle*) | **Subdivision Aplahoué** | Cercle d'Athiémé (incl Aplahoué) | Aplahoué plateau only (kg and % of whole *subdivision*) |
|---|---|---|---|---|---|---|
| 1939 | | | | 584,340 | | |
| 1940 | | | | 667,260 | | |
| 1941 | | | | 1,116,543 | | |
| 1942[b] | | 1,292,000 | | | 1,170,000 | |
| 1943[c] | | 472,364 | | | 150,000 | |
| 1944[b] | | 986,086 | | | | |
| 1944[c] | | 1,013,000 | | | | |
| 1945[b] | | 234,367 | | | | |
| 1945[c] | | 233,482 | | | | |
| 1946[b] | | 368,176 | | | | |
| 1946[c] | | 363,723 | | | | |
| 1947[b] | | 608,856 | | | | |
| 1947[c] | | 553,077 | | | | |
| 1947[d] | | 496,000 | | | | |
| 1948[b] | | 828,666 | | | | |
| 1948[d] | | 580,864 | | | | |
| 1948[d] | | 576,000 | | | | |
| 1948[d] | | 679,000 | | | 242,000 | |
| 1949 | | 496,000 | | | 90,000 | |
| 1949[c] | | 491,000 | | | | |
| 1950[d] | | 808,995 | | | 241,155 | |
| 1950[d] | | 724,000 | | | 208,300 | |
| 1950[e s] | | 700,046 | | 250,000 | | |
| 1950[p] | | 850,000 | | 600,000 | | |
| 1951[d] | | 184,827 | | | 65,541 | |
| 1951[d] | | 207,000 | | | 66,000 | |
| 1952 | | 633,000 | | | | |
| 1953[c] | | 378,575 | | | 84,356 | |
| 1953[b] | | 232,600 | | 43,500 | | |
| 1953[e] | | 395,000 | | | | |
| 1954[e] | | 249,000 | | | | |
| 1954[c] | | 298,000 | | | | |
| 1954[s] | | 435,000 | | 65,000 | | |
| 1954[p] | | 485,000 | | 85,000 | | |
| 1954[s] | | 261,000 | | | 37,000 | |
| 1955[s] | | 280,000 | | | 2,000 | |
| 1955 | | 296,300 | | | | |
| 1956[sk] | | 128,000 | | | 9,728 | |
| 1956[pk] | | 190,000 | | | >>9,728 | |
| 1957 | | 163,300 | | | 0 | |
| 1958 | | 154,000 | | | | |
| | | | | | **Athiémé + Aplahoué** | |
| 1962 | | 300,000 | | 32,500 | 64,500 | |
| 1963[f] | 242,000 | 250,250 | | 44,500 | 78,500 | |
| 1963[p] | 442,000 | 450,250 | | 45,000 | 80,000 | |
| 1964[f] | 100,000 | 108,625 | | 96,100 | 112,000 | |
| 1964[p] | 107,000 | 116,900 | | 105,000 | 156,000 | |
| 1965[p] | | | | 356,000 | 458,000 | |
| 1966[p] | | | | 1,535,000 | 1,858,000 | |
| 1967[p] | | | | 2,273,000 | 2,872,000 | |
| 1968[p] | 253,000 | | 0 (0%) | | 2,893,000 | |

Table 7.16 (cont.)

| Year | **Cercle d'Abomey** (excl. Zagnanado) | Cercle d'Abomey (incl. Zagnanado) | Abomey plateau only (kg and % of whole *cercle*) | **Subdivision Aplahoué** | Cercle d'Athiémé (incl Aplahoué) | Aplahoué plateau only (kg and % of whole *subdivision*) |
|---|---|---|---|---|---|---|
| 1969[p] | 398,000 | | 13 (0%) | 2,893,000 | 3,877,000 | |
| 1970 | 1,304,000 | | | 6,515,000 | 7,701,000 | |
| 1971 | 3,098,186 | 3,886,588 | | 5,834,000 | 7,751,000 | |
| 1972 | 4,114,000 | | | 4,891,000 | 6,039,000 | |
| 1973 | 2,979,000 | | | 3,394,000 | 4,367,000 | |
| 1973[g] | 179,418 | 259,209 | | | | |
| 1974 | 1,300,700 | | | 3,311,000 | 4,462,000 | |
| 1975 | | | | 1,664,000 | 2,753,000 | |
| 1975 | | | | 1,677,889 | 2,059,731 | |
| 1975 | | | | 440,119 | 501,133 | |
| 1976 | | | | 278,000 | 351,000 | |
| 1977[h] | 168,947 | 226,622 | | | | |
| 1977[i] | 255,200 | | | 686,000 | 794,000 | |
| 1978[l n] | 1,516,900 | | | 377,000 | 409,000 | |
| 1978[m o] | 767,550 | | | | | |
| 1979[l] | 1,908,410 | | 488,810 (26%) | | | |
| 1979[m] | 1,363,405 | | 349,405 (26%) | | | |
| 1980[l] | 1,391,810 | | 368,410 (26%) | 1,209,000 | 1,300,000 | |
| 1980[m] | 929,660 | | 198,660 (21%) | | | |
| 1981 | 25,700 | | | 397,000 | 445,000 | |
| 1982 | | | | 1,047,000 | 1,074,000 | |
| 1983 | 465,550 | | 74,550 (16%) | 933,000 | 1,052,000 | |
| 1984 | | | | | | |
| 1985 | 1,830,000 | | 641,000 (35%) | 7,611,000 | | |
| 1986 | | | | 10,586,995 | 12,291,282 | 6,362,550 (60%) |

a Aplahoué's sales in 1924 are estimations by the administrator. Abomean sales are my estimations based on the seed distributed per Fon and Adja *canton* and on the Adja's yield returns to the seed sown in 1923-1924 (on the base of the information that the plateau Adja wasted some of their seeds in 1923 and that the savannah usually sowed twice as much as the plateau, I estimated that the Adja harvested ca. 3.5 times the weight of the seed they sowed).
b Figures provided by the administration.
c Figures provided by IRCT (Institut de Recherche des Cotons et Textiles).
d Administrative reports written in different years sometimes give different figures for a particular year.
e Figures provided by Enquêtes économiques 1955.
f 'Exports'.
g Figures provided by Opération de Développement Intégrée du Zou.
h Production controlled by the CARDER.
i Total production as stated by the CARDER.
k The *Cercle* d'Abomey included the *Subdivision* Kétou in these years. Abomey's local consumption was estimated at 62,000 kg.
l For Abomey: estimation on the base of hectares and the 1977 yield of 700 kg/ha
m For Abomey: estimation on the base of hectares and the 1977 yield of 350 kg/ha on the plateau, 700 kg/ha in Zogbodome and 500 kg/ha in Djidja districts.
n Figures provided by the study 'Structure des exploitations agricoles traditionelles'
o Figures provided by the SONAGRI.
p 'Production'. From 1965 I assumed this to be equal to cotton sales to the CARDER.
s 'Sales'. (For the 1950s these are apparently estimated by the Agricultural service on the base of the estimated production and the estimated consumption).

Sources: 1905-1906: Rapport mensuel Juillet 1906 cercle d'Abomey, ANB Porto-Novo. 1907-1910: Rapport général de l'année 1910 cercle d'Abomey, Archives Abomey. 1910 Adja: Rapport mensuel Octobre1910 poste d'Athiémé, ANB Porto-Novo. 1910-1911: Rapport d'ensemble 1911 agriculture Dahomey, AOM Aix-en-Provence. 1909-1913: Rapport annuel 1913 service de l'agriculture Dahomey, AOM Aix-en-Provence; Manning 1982:368. 1914: Rapport mensuel Juin 1914 cercle d'Abomey, ANB Porto-Novo. 1917: Extrait du rapport mensuel Février 1917 cercle du Mono, ANB Porto-Novo. 1918: Rapport annuel 1918 service agriculture Dahomey, AOM Aix-en-Provence; Rapport mensuel Janvier –Février 1918

Table 7.16 (cont.)

cercle du Mono, ANB Porto-Novo. 1922: Rapport 4. trimestre 1922 cercle d'Abomey, Archives Abomey. 1923: Rapport 4. trimestre 1923 cercle d'Abomey, ANB Porto-Novo; Rapport mensuel Juin 1923 cercle d'Abomey, ANB Porto-Novo; Rapport mensuel Octobre 1923 cercle d'Abomey, Archives Abomey. 1924: Rapport mensuel Avril 1924 cercle d'Abomey subdivision Parahoué, ANB Porto-Novo; Rapport mensuel Juin 1924 cercle d'Abomey, ANB Porto-Novo. 1925-1926: Bulletins commerciaux de 1925 et 1926 de la subdivision Parahoué, Archives Aplahoué. 1929-1933: Rapport Agricole Dahomey 1933, AOM Aix-en-Provence. 1934: Rapport agricole Dahomey 1934, AOM Aix-en-Provence. 1939-1941: Relève général de la campagne 1941 station de Parahoué, ANB Porto-Novo. 1940: Rapport économique Dahomey 1939-40, Archives Abomey; Rapport économique 2. semestre 1951 Cercle d'Abomey, Archives Abomey. 1942-1943: Rapport économique Dahomey 1943, Archives Abomey. 1943-1947: Rapport annuel 1948 service agricole cercle d'Abomey, Archives Abomey. 1944-1954: Enquêtes économiques 1955 cercle d'Abomey, Archives Abomey. 1947-1952: Rapport économique 1. semestre 1952 cercle d'Abomey, Archives Abomey. 1948: Rapport annuel 1956 cercle du Mono service de l'agriculture, ANB Porto-Novo. 1950: Rapport agricole Dahomey 1950. 1953: Rapport économique 1953 Dahomey, Archives Abomey. 1953-54: Rapport annuel secteur agricole centre 1954, Archives Abomey; Rapport économique 2. semestre 1954 cercle d'Abomey, Archives Abomey. 1954-1955: Rapport économique 1. semestre 1955 Dahomey, Archives Abomey. 1955-1957: Rapport agricole 1957 cercle d'Abomey, Archives Abomey. 1956-1957: Rapport annuel 1956 cercle du Mono service de l'agriculture, ANB Porto-Novo; Rapport agricole de l'année 1956 cercle d'Abomey, Archives Abomey; Rapport annuel 1957 cercle du Mono service de l'agriculture, ANB Porto-Novo. 1958: Rapport mensuel décembre 1958 région agricole centre, Archives Abomey. 1962: Rapport agricole annuel Dahomey 1962, ANB Porto-Novo; Rapport agricole annuel Dahomey 1963, ANB Porto-Novo. 1963: Rapport agricole annuel Dahomey 1963, ANB Porto-Novo. 1964: Rapport agricole annuel Dahomey 1964, ANB Porto-Novo. 1965-1985 Mono: Albersen 1985. 1966 Zou: Situation agricole du département du Zou 1966, Archives Abomey. 1966-1972 Zou: SATEC rapport 1972. 1973 Zou: SATEC rapport 1973; Rapport 1973 Opération de Développement Intégrée du Zou. 1974 Zou: SATEC rapport 1974. 1975-1976 Mono: Rapport annuel 1976 CARDER Mono. 1976-1977 Zou: Rapport annuel 1977 CARDER Zou. 1977 Mono: Rapport annuel 1977 CARDER Mono. 1978 Zou: Structure des exploitations agricoles traditionnelles; SONAGRI Campagne agricole 1978-1979 province du Zou. 1979-1982, 1984 Zou: Personal communication CARDER Zogbodome 1989. 1983 Zou: Rapport annuel 1983 CARDER Zou. 1985 Zou: Rapport annuel 1985 CARDER Zou; Rapport annuel 1987 CARDER Zou. 1986: Rapport annuel 1986 CARDER Mono.

Table 7.17: Exports of castor bean, in kg

| Year | *Subdivision* d'Aplahoué | *Cercles* Save, Dassa, Savalou | *Cercle* d'Abomey | Total Dahomey |
|---|---|---|---|---|
| 1916 | – | – | | ±15.000 |
| 1917 | ±3.500 | – | | – |
| 1942 | 378.000[1] | 225.000[2] | | 603.000 |
| 1943 | 367.000[1] | 219.000[2] | 0[c] | 586.000 |
| 1944 | | | 0[c] | |
| 1945 | | | 21[c] | |
| 1944-45[3] | 540.000[1] | 540.000 | 110.000[3] | 1.200.000[4] |
| 1946 | | | 202[c] | 1.110.000 |
| 1947 | | | 230[c] | 1.076.000 |
| 1948 | | | 308[c] | 1.139.000 |
| 1949[5] | | | | 1.800.000 |
| 1950[5] | | | | 816.000 |
| 1951[5] | | | | 564.000 |
| 1952 | 326.547 | | | 841.000 |
| 1953 | 400.300 | 294.500 | 0 | 694.800 |
| 1953[5] | | | | 726.000 |
| 1954[5] | 518.881 | 310.838 | 7.227 | 837.000 |
| 1955[5] | 630.000[6] | | 4.614 | 868.000 |
| 1956 | 430.000[6] | 321.981 | | |
| 1957 | 346.250[6] | 137.000 | 2.895[7] | |
| 1962 | 689.000[1] | 428.000[2] | | 1.117.000 |
| 1963 | 240.000 | 44.750 | 38.800[7] | 335.625[8] |
| 1964 | 100.000 | 23.000 | 0 | 123.000 |

1 Probably including a little from Bopa and Grand Popo; in 1963 Bopa and Grand Popo grew together about 5% of Aplahoué's castor production.
2 Perhaps including a little from Abomey.
C Including Zagnanado (Rapport annuel service de l'Agriculture cercle d'Abomey 1948, Archives Abomey).
3 Export quotas, not exports. It is unlikely that the Fon plateau met the quota.
4 Including 10 t from Parakou.
5 According to the Rapport économique Dahomey 1er semestre 1955, Archives Abomey.
6 The eastern Adja sold most of their castor in Bohicon, which is not figured here.
7 Probably produced by the Adja on the east of the Adja plateau and sold in Bohicon.
8 Including 12075 kg from Bopa and Grand Popo.

Sources: Rapport mensuel Octobre 1917 cercle du Mono, ANB Porto-Novo; Rapport 2. trimestre 1917 cercle du Mono poste d'Athiémé, ANB Porto-Novo; Circulaire du Gouverneur du Dahomey à tous Cercles 13 mars 1944, ANB Porto-Novo; Rapport annuel service de l'Agriculture cercle d'Abomey 1948, Archives Abomey; Rapport annuel secteur agricole centre 1954, Archives Abomey; Rapport économique Dahomey 1er semestre 1955, Archives Abomey; Traitement ricin par S.P. 1957-58, Archives Aplahoué; Organico, Archives Aplahoué; Rapport agricole Dahomey 1963; Rapport agricole Dahomey 1964.

Table 7.18 (cont.)
(Unspecified figures could be either 'sales' or 'exports' or 'production').
Sources: Rapport général sur l'année 1910 cercle d'Abomey p. 17, Archives Abomey; Rapport 4. trimestre 1922 cercle d'Abomey; Rapport économique Dahomey 1943, Archives Abomey; Enquêtes économiques 1955, Archives Abomey; Rapport économique 1. semestre 1950 cercle d'Abomey, Archives Abomey; Annuaire statistique de l'AOF 1950-1954, Archives Abomey; Rapport économique Dahomey 1951, Archives Abomey; Rapport agricole Dahomey 1951, Archives Abomey; Rapport économique 2. semestre 1951 cercle d'Abomey, Archives Abomey; Rapport économique 1. semestre 1952 cercle d'Abomey, Archives Abomey; Rapport annuel 1954 secteur agricole centre, Archives Abomey; Enquêtes économiques 1955, Archives Abomey; Rapport économique 1. semestre 1955 Dahomey, Archives Abomey; Rapport annuel 1955 secteur agricole centre, Archives Abomey; Rapport agricole 1956 cercle d'Abomey, Archives Abomey; Rapport agricole 1956 cercle du Mono, ANB Porto-Novo; Rapport agricole 1957 cercle du Mono, ANB Porto-Novo; Rapport agricole 1957 cercle d'Abomey, Archives Abomey; Traite des produits - Arachides, Archives Abomey; Rapport agricole annuel Dahomey 1962; Rapport agricole annuel Dahomey 1963; Rapport agricole annuel Dahomey 1964; Situation agricole du département du Zou 1966, Archives Abomey; Rapport annuel 1974 CARDER Mono; Rapport 1974 opération de développement intégrée de la province du Zou; Rapport annuel 1975 CARDER Mono; Mondjannagni (1977 :240).

Table 7.18: Official groundnut exports 1907-88 from the *Cercles* d'Abomey and d'Athiémé/du Mono and from the *Subdivision* d'Aplahoué (in kg of unpeeled[a] groundnuts)

| Year | Cercle d'Abomey (incl. Zagnanado 1961-1971) | Subdivision d'Aplahoué | Cercle d'Athiémé / du Mono (incl. Aplahoué) | Year | Cercle d'Abomey (incl. Zagnanado 1961-1971) | Subdivision d'Aplahoué | Cercle d'Athiémé / du Mono (incl. Aplahoué) |
|---|---|---|---|---|---|---|---|
| 1907 | 352070 | | 0 | 1951[e b] | 532000 | | 0 |
| 1908 | 123070 | | 0 | 1952 | 1514547 | | – |
| 1909 | 68750 | | 0 | 1953 | 1544148 | | – |
| 1910 | 0 | | 0 | 1953 | 1041218 | | – |
| 1922 | 198962 | | 0 | 1954 | 2221073 | | |
| | | | | 1954[s] | 3041529 | 530000 | – |
| 1942[e] | 895615 | | 0 | 1954[e] | 4154079 | – | 581571 |
| 1943[e] | 207264 | | 0 | 1955[e] | 7643505 | – | 1137447 |
| 1944 | 1037693 | | 0 | 1955[s] | 8100000 | – | – |
| 1945 | 2987 | | 0 | 1956 | 6608739 | | |
| 1946 | 2416093 | | 0 | 1956[s] | 7800000 | 722606 | 755955 |
| 1947 | 2726793 | | 0 | 1957[s] | 8633369 | 650000 | 700000 |
| 1947 | 2873101 | | 0 | 1958[f] | 4279176 | 151947 | – |
| 1948 | 3938846 | | 0 | 1962[s] | 5500000 | 1455000 | 1550000 |
| 1948 | 4448456 | | 0 | 1963[s] | 4750000 | 2630000 | 2667500 |
| 1948 | 4744867 | | 671580 | 1964[s] | 4475000 | 1400000 | 1415000 |
| 1949 | 3590181 | | 14000 | 1966[s] | 3857713 | – | – |
| 1949 | 3567139 | | 0 | 1967[s] | 6500000 | | |
| 1950 | 10829410 | | 0 | 1974[sc] | 178302 | 600000 | 685000 |
| 1950[s] | 11693997 | | 5987335 | 1985[s] | 614 | | – |
| 1951[s b] | 866897 | | 0 | 1988 | 212689 | | |

Some years are listed two or three times, with different figures. This is due to contradictions between different sources. I listed all the sources because I am unable to select which one (if any) is right.

a Groundnuts were usually sold unpeeled. Between 1942 and 1958 part of the groundnuts were listed as peeled and the rest as unpeeled ones. I recalculated the weight of the peeled groundnuts as unpeeled ones, assuming that 1 kg unpeeled = 0,662 kg peeled ones. This is the average of 5 different extraction rates (ranging from 64% to 70%) measured by myself and given in Rapport économique 1. semestre 1955 territoire du Dahomey, the Rapport économique Dahomey 1951, and the Rapport économique Dahomey 1943, (all Archives Abomey). Statistics before 1923 and after 1961 do not specify whether groundnuts were peeled or not, I assumed them to be unpeeled. If this is wrong this would probably make no difference for the relative proportion of groundnuts sold by each *cercle* or *subdivision*.

b In 1950 the Fon priests of the thunder-*vodun* Heviosso campaigned against groundnut production, announcing that it would not rain anymore if groundnut areas were not reduced.

c Figures for 1974 omit the sales of the *Secteur* Klouékanme in the (former) *Subdivision* d'Aplahoué. This *secteur* produced about half of the groundnuts of Aplahoué. The same year in the Zou province as a whole (far) less than 4% of the produced groundnuts would have been purchased by the official marketing board OCAD, 'more than 6%' by private traders, and 'more than 90%' would have been used for family consumption and seed according to OCAD's estimations. This auto-consumed percentage however seems far too high. The CARDER Zou blamed farmer's non-utilisation of 'improved' varieties and fertiliser for (presumably) low yields, causing (presumably) high rates of auto-consumption, and for low sales to OCAD. Probably the CARDER really wanted to downplay the percentage purchased by private traders. (CARDER Zou 1974:129-130; Mongbo 1985: 65, 70).

e 'Exports' (note that in 1954 exports are higher than sales. Either, part of the 1953 sales were exported in 1954, or the figures are unreliable).

f February sales to export companies on the plateaus only.

s 'Sales': probably only sales to French export companies and (from 1965) to the marketing board OCAD (from 1965 OCAD officially received a trade monopoly on groundnuts) but not sales to small and medium private traders (who purchased the bulk of the groundnuts from the later 1950s). In some years, sales were possibly estimated by subtracting estimated consumption from estimated production rather than obtained from export companies.

← Continued on p. 618

Table 7.19 Areas of each crop in the *Cercle* d'Abomey 1951-1985 according to official statistics (from 1979 districts d'Abomey, Agbanizoun, Djidja, Bohicon, Za-Kpota and Zogbodome)

7.19a: Cropped areas of the *Cercle* d'Abomey[1] 1951-1969, in hectares per year

| | Cercle d'Abomey 1950s, in ha/year | | | | | | Cercle d'Abomey 1960s, in ha/year (excluding Kétou-Zagnanado) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Including Kétou & Zagnanado | | | Estimation excluding Kétou-Zagnanado | | | | | | |
| | 1951 | 1955 | 1956 | 1951 | 1955 | 1956 | 1963 | 1964 | 1968 | 1969 |
| Maize | 15300 | 15000 | 14000 | 8000 | 7500 | 7000 | 10000 | 7600 | 18040 | 42710 |
| Pearl millet | 3700 | 2000 | 2000 | 3600 | 1950 | 1950 | 1500 | 300 | | |
| Sorghum | 500 | 1500 | 1300 | 490 | 1470 | 1275 | 500 | 500 | 4761 | 8440 |
| Yam | 4000 | 6000 | 2800 | 3900 | 5900 | 2700 | 3600 | 3500 | 3875 | 4490 |
| Cassava | 3800 | 5000 | 4000 | 3000 | 4000 | 3000 | 6000 | 4500 | 4366 | 14148 |
| Cowpea | 13400 | 16000 | 15000 | 9000 | 11000 | 10000 | 10000 | 7800 | 9124 | 16840 |
| Pigeon pea | | | | | | | | | 458 | 744 |
| Groundnut | 6100 | 26000 | 30000 | 5000 | 20000 | 25000 | 30000 | 1900 | 39619 | 57100 |
| Bambara | | | | | | | 100 | 150 | 379 | 696 |
| Cotton | 9000 | 4700 | 3200 | 8800 | 4600 | 3100 | 3400 | 2140 | 3278 | 1978 |
| Tomato | | | | | | | 0 | 0 | 495 | 400 |
| Okra | | | | | | | 0 | 0 | 285 | 484 |
| Capsicum | | | | | | | 0 | 0 | 102 | 268 |
| **Total** | **55800** | **76200** | **72300** | **41790** | **56420** | **54025** | **65100** | **28390** | **84782** | **148298** |

1 In the 1950s the *Cercle* d'Abomey included the small sous-préfectures Kétou and Zagnanado. I estimated Abomey's areas without Kétou and Zagnanado on the base of local figures for some years.

Sources: Annual reports from the Agricultural service

7.19b: Cropped areas of the '*Cercle* d'Abomey'[1] 1970-1985, in hectares per year

| | Cercle d'Abomey 1970-1985 (from 1979 the 6 southern districts of Zou province), in hectares per year | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1970 | 1971 | 1972 | 1973 | 1974 | 1977 | 1978 | 1979 | 1980 | 1983 | 1985 |
| Maize | 27230 | 30900 | 29065 | 30646 | 21931 | 12587 | 29421 | 30787 | 25791 | 26081 | 23080 |
| Pearl millet | | | | | | | | | | | |
| Sorghum | 3710 | 2100 | 2905 | 8294 | 1234 | 1124 | 7001 | 3150 | 6148 | 3262 | 2581 |
| Yam | 3200 | 4140 | 3670 | 3050 | 3040 | 3549 | 1812 | 2403 | 3671 | 8191 | 5065 |
| Cassava | 3290 | 3400 | 3344 | 2236 | 980 | 8040 | 6012 | 7269 | 10700 | 7044 | 4256 |
| Cowpea | 10705 | 9400 | 10052 | 8602 | 8300 | 9672 | 16953 | 19142 | 17552 | 10606 | 10250 |
| Pigeon pea | 175 | 90 | 130 | 0 | 0 | 268 | 258 | | | | 0 |
| Groundnut | 34700 | 33325 | 33059 | 14624 | 10734 | 10366 | 24474 | 22650 | 23400 | 14720 | 18280 |
| Bambara | 390 | 877 | 633 | 0 | 0 | 147 | 258 | 137 | 409 | 0 | 527 |
| Cotton | 1264 | 2603 | 4085 | 4892 | 2747 | 360 | 2167 | 3116 | 1986 | 893 | 2384 |
| Tomato | 195 | 375 | 285 | 0 | 0 | 213 | 241 | 458 | 1126 | | 170 |
| Okra | 265 | 475 | 370 | 0 | 0 | 224 | 130 | 556 | 1018 | | 112 |
| Capsicum | 235 | 285 | 259 | 0 | 0 | 223 | 162 | 457 | 1168 | | 139 |
| **Total** | **85359** | **87970** | **87857** | **72344** | **48966** | **46773** | **88889** | **90125** | **92969** | **70797** | **66844** |

1 From 1970 to 1972 the former *Cercle* d'Abomey was called *Sous-préfecture* d'Abomey, from 1973 it was split into Abomey and Bohicon districts, from 1978 into Abomey, Bohicon and Zogbodome district, and from 1979 into Abomey, Agbanizoun, Djidja, Bohicon, Za-Kpota and Zogbodome district.

Sources: as Table 7.19a

7.19c: Cropped areas of the *Cercle* d'Abomey[1] 1951-1985, in percentages (averages for periods of 2-6 years)

| | Averages Cercle (including Zogbodome (Zado) and Djidja (savannah) | | | | | | | | | Plateau only (Abomey, Bohicon, Agbanizoun + Zakpota districts) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1955-56 | 1950s | 1963-64 | 1968-69 | 1960s | 1970-74 | 1977-79 | 1980-83 | 1980-85 | 1980-83 | 1980-85 | 1979-85 |
| Maize | 13% | 14% | 19% | 26% | 24% | 37% | 32% | 32% | 33% | 26% | 31% | 28% |
| Pearl millet | 4% | 3% | 2% | 0% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Sorghum | 2% | 1% | 1% | 6% | 4% | 5% | 5% | 6% | 5% | 11% | 8% | 9% |
| Yam | 5% | 5% | 8% | 4% | 5% | 4% | 3% | 7% | 7% | 0% | 0% | 0% |
| Cassava | 6% | 8% | 11% | 8% | 9% | 3% | 9% | 11% | 10% | 4% | 3% | 4% |
| Cowpea | 19% | 17% | 19% | 11% | 13% | 12% | 20% | 17% | 17% | 26% | 26% | 26% |
| Pigeon pea | | | | 1% | | 0% | | | | | | |
| Groundnut | 46% | 46% | 34% | 41% | 39% | 33% | 25% | 23% | 24% | 26% | 27% | 27% |
| Bambara | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Cotton | 6% | 5% | 6% | 2% | 3% | 4% | 2% | 2% | 2% | 1% | 2% | 2% |
| Tomato | | | | 0% | 0% | 0% | 0% | 1% | 1% | 1% | 0% | 1% |
| Okra | | | | 0% | 0% | 0% | 0% | 1% | 1% | 3% | 1% | 1% |
| Capsicum | | | | 0% | 0% | 0% | 0% | 1% | 1% | 4% | 0% | 1% |
| **Total** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** |

1 See note to Tables 7.19a and 7.19b.
Sources: Tables 7.19a and b

7.19d: Cropped areas of the Fon plateau including the south-eastern slopes 1968-1985, in %. (Abomey, Bohicon, Agbangnizoun, Zakpota + Zogbodome districts)

| | 1968-69 | 1979 | 1980-83 | 1983-85 | 1985 |
|---|---|---|---|---|---|
| Maize | 26% | 36% | 38% | 39% | 41% |
| Pearl millet | 0% | 0% | 0% | 0% | 0% |
| Sorghum | 6% | 4% | 6% | 6% | 5% |
| Yam | 1% | 0% | 0% | 0% | 0% |
| Cassava | 8% | 10% | 11% | 9% | 4% |
| Cowpea | 12% | 23% | 17% | 17% | 18% |
| Pigeon pea | 0% | | | | 0% |
| Groundnut | 44% | 24% | 25% | 26% | 29% |
| Bambara | 0% | 0% | 0% | 0% | 0% |
| Cotton | 1% | 0% | 1% | 1% | 0% |
| Tomato | 0% | 0% | 0% | 0% | 0% |
| Okra | 0% | 1% | 1% | 1% | 0% |
| Capsicum | 0% | 0% | 1% | 1% | 0% |
| **Total** | **100%** | **100%** | **100%** | **100%** | **100%** |

7.19e: Cropped areas Zogbodome 1978-85, in %

| | 1978-79 | 1980-83 | 1980-85 | 1985 |
|---|---|---|---|---|
| Maize | 50% | 50% | 51% | 56% |
| Pearl millet | 0% | 0% | 0% | 0% |
| Sorghum | 0% | 0% | 0% | 0% |
| Yam | 0% | 0% | 0% | 0% |
| Cassava | 13% | 17% | 15% | 7% |
| Cowpea | 14% | 9% | 10% | 16% |
| Pigeon pea | | | | 0% |
| Groundnut | 21% | 23% | 22% | 20% |
| Bambara | 0% | 0% | 0% | 0% |
| Cotton | 1% | 0% | 0% | 1% |
| Tomato | 0% | 0% | 0% | 0% |
| Okra | 0% | 1% | 0% | 0% |
| Capsicum | 0% | 0% | 0% | 0% |
| **Total** | **100%** | **100%** | **100%** | **100%** |

Table 7.20 Areas of each crop in the *Subdivision* d'Aplahoué 1956-1986 according to official statistics (in the 1960s *Sous-Préfecture* d'Aplahoué, in the 1970s and 1980s districts Aplahoué, Djakotome, Klouékanme and Toviklin)

7.20a: Cropped areas *Subdivision* d'Aplahoué 1956-1986, in percentages

| | 1956 | 1957 | 1963 | 1975 | 1976 | 1977 | 1983 | 1985 | 1986 |
|---|---|---|---|---|---|---|---|---|---|
| Maize | 50% | 49% | 52% | 44% | 49% | 55% | 60% | 53% | 42% |
| Sorghum | | | 0% | 3% | 0% | 0% | 0% | | |
| Yam | 0% | 1% | 1% | 0% | 1% | 1% | 1% | 1% | 0% |
| Cassava | 11% | 11% | 13% | 5% | 7% | 8% | 7% | 8% | 10% |
| Sweet potato | | | 0% | | | | 0% | 1% | 0% |
| Cowpea | 18% | 12% | 8% | 9% | 19% | 14% | 13% | 9% | 11% |
| Pigeon pea | | | | | | | 1% | 1% | 1% |
| Groundnut | 12% | 19% | 22% | 23% | 17% | 15% | 7% | 10% | 13% |
| Soybean | | | | | | | 0% | | 0% |
| Cotton | 1% | 0% | 1% | 7% | 1% | 2% | 6% | 13% | 16% |
| Tomato | 1% | 1% | 1% | 2% | 3% | 3% | 2% | 3% | 4% |
| Okra | | | | 0% | 1% | 1% | 1% | 1% | 1% |
| Capsicum | | | | 6% | 3% | 1% | 2% | 1% | 2% |
| Castor | 5% | 6% | 1% | | | | | | |
| Tobacco | 0% | 0% | 0% | 1% | 0% | 0% | 0% | 0% | 0% |
| Coffee | | | 0% | | | | | | |
| Rice | | | | 0% | 0% | 0% | 0% | | 0% |
| **Total** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** |

7.20b: Cropped areas *Subdivision* d'Aplahoué 1956-1986, in hectares per year

| | 1956 | 1957 | 1963 | 1975 | 1976 | 1977 | 1983 | 1985 | 1986 |
|---|---|---|---|---|---|---|---|---|---|
| Maize | 27000 | 27000 | 24000 | 14495 | 13636 | 24099 | 35551 | 35322 | 29472 |
| Sorghum | | | 0 | 861 | 12 | 0 | 108 | | |
| Yam | 190 | 800 | 600 | 0 | 219 | 580 | 341 | 474 | 247 |
| Cassava | 6000 | 6200 | 6000 | 1804 | 2008 | 3468 | 4418 | 5310 | 6731 |
| Sweet potato | | | 0 | | | | 177 | 360 | 212 |
| Cowpea | 9700 | 6800 | 3780 | 2958 | 5172 | 6153 | 7480 | 6288 | 7480 |
| Pigeon pea | | | | | | | 375 | 564 | 539 |
| Groundnut | 6600 | 10400 | 10400 | 7628 | 4658 | 6442 | 3978 | 6406 | 9198 |
| Soybean | | | | | | | 6 | | 95 |
| Cotton | 700 | 0 | 450 | 2320 | 400 | 857 | 3554 | 8769 | 11265 |
| Tomato | 350 | 400 | 400 | 507 | 846 | 1379 | 1413 | 1803 | 2596 |
| Okra | | | | 0 | 158 | 386 | 714 | 614 | 660 |
| Capsicum | | | | 2138 | 728 | 611 | 961 | 865 | 1147 |
| Castor | 2930 | 3450 | 600 | | | | | | |
| Tobacco | 15 | 60 | 100 | 488 | 99 | 202 | 15 | 55 | 45 |
| Coffee | | | 2 | | | | | | |
| Rice | | | | 13 | 17 | 3 | 1 | | 0 |
| **Total** | **53485** | **55110** | **46332** | **33212** | **27953** | **44180** | **59092** | **66830** | **69687** |

Sources: Annual reports of the Agricultural Service

Table 7.21: Cropped areas of the *Cercle* d'Athiémé (*Subdivisions*/*Sous-préfectures* Aplahoué + Athiémé) 1956-1986, in % according to official statistics

| | 1956 | 1957 | 1963 | 1975 | 1976 | 1977 | 1983 | 1985 | 1986 |
|---|---|---|---|---|---|---|---|---|---|
| Maize | 63% | 58% | 61% | 45% | 54% | 61% | 63% | 54% | 47% |
| Sorghum | | | 0% | 2% | 0% | 0% | 0% | | |
| Yam | 1% | 1% | 2% | 0% | 1% | 1% | 0% | 1% | 0% |
| Cassava | 11% | 13% | 14% | 5% | 8% | 6% | 8% | 9% | 10% |
| Sweet potato | | | 0% | | | | 0% | 1% | 0% |
| Cowpea | 16% | 11% | 6% | 8% | 15% | 12% | 12% | 9% | 10% |
| Pigeon pea | | | | | | | 0% | 1% | 1% |
| Groundnut | 6% | 13% | 15% | 20% | 14% | 12% | 5% | 8% | 11% |
| Soybean | | | | | | | 0% | | 0% |
| Cotton | 1% | 0% | 1% | 10% | 1% | 2% | 5% | 12% | 14% |
| Tomato | 0% | 0% | 1% | 2% | 3% | 3% | 2% | 3% | 4% |
| Okra | | | | 0% | 0% | 1% | 1% | 1% | 1% |
| Capsicum | | | | 6% | 3% | 2% | 2% | 2% | 2% |
| Castor | 2% | 3% | 1% | | | | | | |
| Tobacco | 0% | 0% | 0% | 1% | 0% | 0% | 0% | 0% | 0% |
| Coffee | | | 0% | | | | | | |
| Rice | | | | 1% | 0% | 0% | 0% | | 0% |
| Total | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |

Sources: Annual reports of the Agricultural Service.

Table 7.22: Cropped areas* (without oil palm) on surveyed fields of 40 Adja men

7.22a: In percentages

| | 1906-10 | 1910s | 1920s | 1930s | 1941-45 | 1946-50 | 1951-55 | 1956-60 | 1961-65 | 1966-70 | 1971-75 | 1976-80 | 1981-85 | 1986-90 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Maize | 46% | 42% | 52% | 57% | 57% | 52% | 48% | 50% | 56% | 57% | 60% | 64% | 62% | 57% |
| Yam | 0% | 1% | 7% | 5% | 4% | 5% | 2% | 1% | 2% | 2% | 1% | 1% | 0% | 0% |
| Cassava | 0% | 0% | 1% | 4% | 3% | 4% | 4% | 3% | 6% | 1% | 2% | 3% | 4% | 5% |
| Cowpea | 34% | 51% | 32% | 27% | 26% | 26% | 29% | 25% | 15% | 8% | 11% | 13% | 12% | 10% |
| Pigeon pea | 8% | 4% | 1% | 1% | 0% | 2% | 0% | 0% | 1% | 1% | 0% | 0% | 0% | 0% |
| Groundnut | 0% | 0% | 3% | 6% | 7% | 5% | 11% | 11% | 5% | 4% | 4% | 4% | 4% | 5% |
| Cotton | 12% | 0% | 2% | 0% | 0% | 0% | 0% | 6% | 12% | 25% | 19% | 7% | 12% | 16% |
| Castor | 0% | 0% | 0% | 0% | 3% | 6% | 5% | 1% | 0% | 0% | 0% | 0% | 0% | 0% |
| Tomato | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 2% | 0% | 1% | 4% | 4% | 3% |
| Capsicum | 0% | 0% | 0% | 0% | 0% | 1% | 1% | 0% | 1% | 1% | 1% | 3% | 1% | 0% |
| Sweet potato | 0% | 2% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Okra | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Tobacco | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 2% | 1% | 1% | 1% | 0% | 0% | 0% |
| Orange | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 1% | 2% |
| Coffee | 0% | 0% | 1% | 0% | 0% | 0% | 0% | 2% | 0% | 0% | 0% | 0% | 0% | 0% |
| Soya | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Taro | 0% | 0% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| **Total** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** |
| Respondents | 1 | 2 | 7 | 17 | 21 | 24 | 23 | 24 | 27 | 28 | 30 | 33 | 39 | 36 |

* Counted per season and relative area that the crop occupies in the field in each season; if a crop occupies the field during two seasons the relative areas of each season are summed up.
Source: Own interviews with the cultivators of the surveyed fields.

7.22b: In hectares per year

| | 1906-10 | 1910s | 1920s | 1930s | 1941-45 | 1946-50 | 1951-55 | 1956-60 | 1961-65 | 1966-70 | 1971-75 | 1976-80 | 1981-85 | 1986-90 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Maize | 2.78 | 2.08 | 9 | 21.75 | 35.16 | 30.54 | 245 | 260.6 | 378.8 | 477.4 | 495.4 | 761.2 | 1031.8 | 842.8 |
| Yam | 0 | 0.06 | 1.2 | 1.93 | 2.2 | 2.74 | 9.8 | 7.2 | 14.4 | 13.2 | 8.4 | 7.2 | 4.2 | 2.4 |
| Cassava | 0 | 0 | 0.19 | 1.38 | 1.88 | 2.18 | 22 | 13.8 | 37.6 | 9.6 | 18.8 | 36.2 | 64 | 80.8 |
| Cowpea | 2.02 | 2.53 | 5.63 | 10.29 | 16.12 | 15.32 | 149.2 | 130.6 | 100.8 | 69.6 | 89.8 | 152.8 | 193 | 143.6 |
| Pigeon pea | 0.46 | 0.19 | 0.15 | 0.22 | 0.1 | 0.98 | | 1 | 4.8 | 11.4 | | 5.6 | 2.6 | 4.2 |
| Groundnut | 0 | 0 | 0.53 | 2.4 | 4.48 | 2.76 | 57.4 | 57 | 34.2 | 29.8 | 32 | 49 | 64.8 | 73.6 |
| Cotton | 0.74 | 0 | 0.34 | 0 | 0 | 0 | | 30.4 | 83.2 | 212 | 157.2 | 87 | 194 | 242 |
| Castor | 0 | 0 | 0 | 0 | 1.62 | 3.8 | 23 | 4.4 | | | | | | |
| Tomato | 0 | 0 | 0 | 0.19 | 0 | 0.06 | 0.2 | 1.8 | 12.6 | 2.8 | 10.4 | 43.2 | 59 | 47 |
| Capsicum | 0 | 0 | 0 | 0 | 0.2 | 0.52 | 2.6 | | 3.8 | 5.8 | 8.4 | 39.2 | 8.8 | 5.8 |
| Sweet potato | 0 | 0.1 | 0.06 | 0.12 | 0.28 | 0 | | | | | | 2.8 | 5.4 | 4.4 |
| Okra | 0 | 0 | 0 | 0 | 0 | 0 | | | | | 0.6 | | 5.6 | 6.2 |
| Tobacco | | 0 | 0 | 0 | | | | 8.4 | 3.8 | 5 | 5.4 | 5.4 | 5 | 4 |
| Orange | | 0 | 0 | 0 | | | | | | | | | 20.4 | 28.6 |
| Coffee | 0 | 0 | 0.11 | 0 | 0 | 0 | | 8.4 | 2.8 | | | | | |
| Soya | | 0 | 0 | 0 | | | | | | | | | 2.2 | |
| Taro | | 0 | 0.21 | 0 | | | | | | | | | | |
| **Total** | **6** | **4.96** | **17.42** | **38.28** | **62.04** | **58.9** | **509.2** | **523.6** | **676.8** | **836.6** | **826.4** | **1189.6** | **1660.8** | **1485.4** |
| Respondents | 1 | 2 | 7 | 17 | 21 | 24 | 23 | 24 | 27 | 28 | 30 | 33 | 39 | 36 |

* Counted per season and relative area that the crop occupies the field in each season; if a crop occupies the field during two seasons the relative areas of each season are summed up.
Source: Own interviews with the cultivators of the surveyed fields.

Table 7.23: Cropped areas* (without oil palm) on surveyed fields of 112 Adja women

7.23a: In percentages

| | 1931-35 | 1936-40 | 1941-45 | 1946-50 | 1951-55 | 1956-60 | 1961-65 | 1966-70 | 1971-75 | 1976-80 | 1981-85 | 1986-90 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Maize | 53% | 56% | 54% | 57% | 54% | 56% | 54% | 53% | 56% | 56% | 58% | 59% |
| Yam | 3% | 2% | 1% | 0% | 1% | 1% | 0% | 0% | 0% | 0% | 0% | 0% |
| Cassava | 5% | 4% | 4% | 6% | 5% | 10% | 9% | 8% | 8% | 8% | 6% | 6% |
| Cowpea | 16% | 23% | 24% | 27% | 28% | 20% | 20% | 20% | 21% | 21% | 18% | 14% |
| Pigeon pea | 6% | 4% | 5% | 3% | 2% | 1% | 2% | 1% | 2% | 2% | 2% | 1% |
| Groundnut | 7% | 5% | 8% | 7% | 7% | 6% | 8% | 9% | 7% | 7% | 6% | 6% |
| Cotton | 8% | 4% | 3% | 0% | 3% | 3% | 3% | 6% | 3% | 3% | 7% | 12% |
| Leaves | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0.1% |
| Tomato | 0% | 0% | 0% | 0% | 0.4% | 0.5% | 0.8% | 0.8% | 0.8% | 0.8% | 0.9% | 0.6% |
| Capsicum | 0.8% | 0.4% | 0.2% | 0.1% | 0.5% | 0.6% | 0.7% | 1.0% | 1.3% | 1.3% | 1.3% | 0.7% |
| Sweet potato | 0% | 0% | 0% | 0% | 0.05% | 1.1% | 0.9% | 0.8% | 0.7% | 0.7% | 0.1% | 0.0% |
| Okra | 0% | 0.8% | 0.5% | 0.3% | 0.4% | 0.2% | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.0% |
| Tobacco | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0.1% |
| Soya | 0% | 0% | 0% | 0% | 0% | 0.5% | 0.5% | 0.2% | 0.3% | 0.3% | 0.2% | 0.3% |
| **Total** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** |
| Respondents | 8 | 16 | 24 | 32 | 47 | 52 | 70 | 74 | 81 | 93 | 110 | 112 |

* Counted per season and relative area that the crop occupies the field in each season; if a crop occupies the field during two seasons the relative areas of each season are summed up.
Source: Own interviews with women about their own and their mothers' fields.

7.23b: In hectares per year

| | 1931-35 | 1936-40 | 1941-45 | 1946-50 | 1951-55 | 1956-60 | 1961-65 | 1966-70 | 1971-75 | 1976-80 | 1981-85 | 1986-90 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Maize | 263.64 | 555.72 | 826.43 | 1381.19 | 2023.46 | 2426.09 | 2926.28 | 3325.23 | 3745.04 | 3931.32 | 4823.13 | 5221.41 |
| Yam | 15.86 | 16.32 | 15.95 | 0 | 25.81 | 21.68 | 24.22 | 22.17 | 0 | 0 | 0 | 0 |
| Cassava | 26.52 | 42.16 | 60 | 152.46 | 179.55 | 413.09 | 478.87 | 491.52 | 571.22 | 598.28 | 510.48 | 525.31 |
| Cowpea | 80.6 | 226.28 | 369.45 | 658.65 | 1060.21 | 858.41 | 1075.76 | 1281.48 | 1385.8 | 1451.67 | 1527.43 | 1283.54 |
| Pigeon | 28.34 | 44.24 | 77.67 | 61.79 | 71.17 | 60.13 | 90.93 | 85.17 | 131.82 | 138.11 | 141.16 | 107.68 |
| Groundnut | 36.66 | 48.28 | 117.88 | 164.99 | 246.64 | 271.39 | 435.89 | 579.39 | 473.2 | 496.02 | 506.7 | 538.2 |
| Cotton | 39.52 | 39 | 39.75 | 0 | 100.17 | 145.52 | 178.22 | 359.1 | 223.08 | 233.64 | 572.7 | 1064.13 |
| Castor | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4.47 |
| Tomato | 0 | 0 | 0 | 0 | 14.35 | 21.68 | 45.64 | 47.55 | 54.08 | 56.67 | 74.72 | 49.39 |
| Capsicum | 4.16 | 4 | 3.75 | 3.63 | 17.01 | 25.75 | 40.11 | 63.48 | 84.5 | 88.59 | 107.98 | 58.33 |
| Sweet potato | 0 | 0 | 0 | 0 | 1.76 | 45.85 | 45.99 | 51 | 43.94 | 46.09 | 8.31 | 0 |
| Okra | 0 | 8.16 | 7.6 | 7.29 | 14.86 | 8.7 | 5.39 | 6.36 | 6.76 | 7.1 | 8.32 | 0 |
| Tobacco | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4.49 |
| Soya | 0 | 0 | 0 | 0 | 0 | 23.54 | 29.47 | 15.75 | 16.9 | 17.7 | 16.6 | 22.45 |
| Oil palm[a] | 24.18 | 19.88 | 0 | 0 | 0 | 0 | 0 | 3.21 | 6.76 | 7.09 | 8.31 | 8.96 |
| Fallow | 0 | 16 | 0 | 0 | 36.90 | 28.17 | 10.64 | 31.8 | 23.66 | 24.81 | 4.16 | 76.13 |
| Total | 519.48 | 1020.04 | 1518.48 | 2430 | 3791.89 | 4350 | 5387.41 | 6363.21 | 6766.76 | 7097.09 | 8310 | 8964.49 |
| Respondents | 8 | 16 | 24 | 32 | 47 | 52 | 70 | 74 | 81 | 93 | 110 | 112 |

* Counted per season and relative area that the crop occupies the field in each season; if a crop occupies the field during two seasons the relative areas of each season are summed up.
a Incomplete data (I did not ask systematically all women for their oil palm areas), therefore not counted among the percentages in Table 7.23a
Source: Own interviews with women about their own and their mothers' fields.

Table 7.24: Cropped areas* (without oil palm) on surveyed fields of 31 Fon plateau men (villages Aoundome, Lissazounme, Sahè and Gnidjazoun)

7.24a: In hectares per year

| | 1920s | 1930-35 | 1936-40 | 1941-45 | 1946-50 | 1951-55 | 1956-60 | 1961-65 | 1966-70 | 1971-75 | 1976-80 | 1981-85 | 1986-90 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Maize | 3090 | 1883 | 2210 | 2120 | 2498 | 2371 | 1848 | 1617 | 1723 | 1660 | 1714 | 1496 | 1633 |
| Pearl millet | 1208 | 857 | 1158 | 1173 | 1153 | 982 | 873 | 240 | 200 | 169 | 169 | 74 | 0 |
| Sorghum | 182 | 184 | 568 | 622 | 873 | 873 | 684 | 694 | 743 | 678 | 618 | 412 | 403 |
| Cowpea | 1088 | 951 | 1179 | 1073 | 1112 | 966 | 877 | 712 | 700 | 689 | 718 | 827 | 1011 |
| Groundnut | 620 | 1383 | 1935 | 2399 | 2913 | 2561 | 2108 | 1627 | 1652 | 1456 | 1248 | 1384 | 1365 |
| Bambara | 264 | 76 | 76 | 30 | 30 | 30 | 52 | 52 | 28 | 22 | 22 | 22 | 0 |
| Pigeon pea | 20 | 12 | 12 | 7 | 7 | 7 | 7 | 7 | 7 | 0 | 0 | 0 | 3 |
| Yam | 18 | 17 | 285 | 285 | 285 | 285 | 36 | 50 | 44 | 41 | 41 | 27 | 27 |
| Cassava | 20 | 33 | 33 | 37 | 30 | 29 | 78 | 79 | 74 | 89 | 105 | 104 | 77 |
| Sweet potato | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cotton | 84 | 66 | 66 | 2 | 2 | 5 | 5 | 0 | 0 | 0 | 13 | 17 | 51 |
| Tomato | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Okra | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 14 | 14 | 14 |
| Leaves | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Orange | 0 | | | | | | | | | | | | |
| **Total** | **6594** | **5462** | **7524** | **7750** | **8905** | **8111** | **6570** | **5078** | **5171** | **4818** | **4662** | **4377** | **4586** |
| Respondents | 10 | 16 | 18 | 20 | 21 | 21 | 22 | 22 | 22 | 22 | 22 | 25 | 31 |

7.24b: In percentages

| | 1920s | 1930-35 | 1936-40 | 1941-45 | 1946-50 | 1951-55 | 1956-60 | 1961-65 | 1966-70 | 1971-75 | 1976-80 | 1981-85 | 1986-90 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Maize | 47% | 34% | 29% | 27% | 28% | 29% | 28% | 32% | 33% | 34% | 37% | 34% | 36% |
| Pearl millet | 18% | 16% | 15% | 15% | 13% | 12% | 13% | 5% | 4% | 4% | 4% | 2% | 0% |
| Sorghum | 3% | 3% | 8% | 8% | 10% | 11% | 10% | 14% | 14% | 14% | 13% | 9% | 9% |
| Cowpea | 16% | 17% | 16% | 14% | 12% | 12% | 13% | 14% | 14% | 14% | 15% | 19% | 22% |
| Groundnut | 9% | 25% | 26% | 31% | 33% | 32% | 32% | 32% | 32% | 30% | 27% | 32% | 30% |
| Bambara | 4% | 1% | 1% | 0% | 0% | 0% | 1% | 1% | 1% | 0% | 0% | 1% | 0% |
| Pigeon pea | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Yam | 0% | 0% | 4% | 4% | 3% | 4% | 1% | 1% | 1% | 1% | 1% | 1% | 1% |
| Cassava | 0% | 1% | 0% | 0% | 0% | 0% | 1% | 2% | 1% | 2% | 2% | 2% | 2% |
| Sweet potato | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Cotton | 1% | 1% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 1% |
| Tomato | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Okra | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Leaves | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| **Total** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** |
| Respondents | 10 | 16 | 18 | 20 | 21 | 21 | 22 | 22 | 22 | 22 | 22 | 25 | 31 |

* Counted per season and relative area that the crop occupies the field in each season; if a crop occupies the field during two seasons the relative areas of each season are summed up.
Source: Own interviews.

Table 7.25: Cropped areas* (without oil palm) on surveyed fields of 90 Fon women

7.25a: 90 Fon women (60 plateau + 30 Zado), in hectares per year

| | 1920s | 1930s | 1940s | 1950s | 1960s | 1970-74 | 1975-79 | 1980-84 | 1985-90 |
|---|---|---|---|---|---|---|---|---|---|
| Maize | 4.24 | 7.76 | 14.2 | 15.78 | 17.94 | 18.66 | 17.72 | 18.64 | 19.06 |
| Pearl millet | 1.62 | 2.44 | 3.26 | 2.58 | 1.6 | 0.06 | 0.06 | 0.06 | 0.06 |
| Sorghum | 0.04 | 0.28 | 0.32 | 0.52 | 1 | 1.16 | 2.24 | 2.38 | 2.74 |
| Yam | 0 | 0.08 | 0.1 | 0.04 | 0.04 | 0.12 | 0.1 | 0.1 | 0.08 |
| Cassava | 0.02 | 0.14 | 0.24 | 0.5 | 0.4 | 0.14 | 0.24 | 0.42 | 0.22 |
| Cowpea | 2.6 | 5.14 | 8.3 | 9.92 | 10.74 | 10.16 | 10.52 | 11.46 | 11.62 |
| Pigeon | 0 | 0.04 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Groundnut | 0.3 | 2.36 | 7.42 | 10.6 | 12.38 | 10.3 | 10.08 | 10.6 | 10.64 |
| Bambara | 0 | 0.02 | 0.02 | 0.02 | 0 | 0 | 0 | 0 | 0 |
| Cotton | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vegetable | 0 | 0.3 | 0.86 | 0.76 | 1.28 | 1.86 | 1.88 | 3.26 | 3.62 |
| Tomato | | | | 0.16 | 0.24 | 0.12 | 0.12 | 0.12 | 0.12 |
| Leaves | | | | | 0.12 | 0.16 | 0.16 | 0.16 | 0.16 |
| **Total** | **8.82** | **18.56** | **34.72** | **40.88** | **45.74** | **42.74** | **43.12** | **47.2** | **48.32** |

7.25b: 60 Fon plateau women, in hectares per year

| | 1920s | 1930s | 1940s | 1950s | 1960s | 1970-74 | 1975-79 | 1980-84 | 1985-90 |
|---|---|---|---|---|---|---|---|---|---|
| Maize | 3.54 | 5.36 | 9.18 | 9.4 | 8.06 | 8.58 | 9.04 | 9.14 | 9.96 |
| Pearl millet | 1.62 | 2.44 | 3.26 | 2.58 | 1.6 | 0.06 | 0.06 | 0.06 | 0.06 |
| Sorghum | 0.04 | 0.08 | 0.06 | 0.24 | 0.66 | 0.86 | 0.98 | 1.06 | 1.42 |
| Yam | 0 | 0.06 | 0.06 | 0 | 0 | 0.1 | 0.1 | 0.1 | 0.08 |
| Cassava | 0.02 | 0.14 | 0.16 | 0.34 | 0.24 | 0 | 0.04 | 0.04 | 0.04 |
| Cowpea | 2.2 | 4.16 | 6.76 | 6.88 | 5.64 | 5.06 | 5.66 | 5.86 | 6.3 |
| Pigeon | 0 | 0.04 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Groundnut | 0.3 | 1.92 | 5.86 | 8.18 | 7.92 | 6.02 | 6.32 | 6.36 | 6.1 |
| Bambara | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cotton | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Okra | 0 | 0 | 0 | 0 | 0.3 | 0.3 | 0.18 | 0.18 | 0.14 |
| Tomato | | | | 0.16 | 0.24 | 0.12 | 0.12 | 0.12 | 0.12 |
| Leaves | | | | | 0.12 | 0.16 | 0.16 | 0.16 | 0.16 |
| **Total** | **7.72** | **14.2** | **25.34** | **27.78** | **24.78** | **21.26** | **22.66** | **23.08** | **24.38** |

7.25c: 30 Fon women on the south-eastern slopes of the plateau (Zado), in hectares per year

| | 1920s | 1930s | 1940s | 1950s | 1960s | 1970-74 | 1975-79 | 1980-84 | 1985-90 |
|---|---|---|---|---|---|---|---|---|---|
| Maize | 0.7 | 2.4 | 5.02 | 6.38 | 9.88 | 10.08 | 8.68 | 9.5 | 9.1 |
| Pearl millet | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sorghum | 0 | 0.2 | 0.26 | 0.28 | 0.34 | 0.3 | 1.26 | 1.32 | 1.32 |
| Yam | 0 | 0.02 | 0.04 | 0.04 | 0.04 | 0.02 | 0 | 0 | 0 |
| Cassava | 0 | 0 | 0.08 | 0.16 | 0.16 | 0.14 | 0.2 | 0.38 | 0.18 |
| Cowpea | 0.4 | 0.98 | 1.54 | 3.04 | 5.1 | 5.1 | 4.86 | 5.6 | 5.32 |
| Pigeon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Groundnut | 0 | 0.44 | 1.56 | 2.42 | 4.46 | 4.28 | 3.76 | 4.24 | 4.54 |
| Bambara | 0 | 0.02 | 0.02 | 0.02 | 0 | 0 | 0 | 0 | 0 |
| Cotton | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Okra | 0 | 0.3 | 0.86 | 0.76 | 0.98 | 1.56 | 1.7 | 3.08 | 3.48 |
| Tomato | | | | | | | | | |
| Leaves | | | | | | | | | |
| **Total** | **1.1** | **4.36** | **9.38** | **13.1** | **20.96** | **21.48** | **20.46** | **24.12** | **23.94** |

7.25d: 90 Fon women (60 plateau + 30 Zado), in percentages

| | 1920s | 1930s | 1940s | 1950s | 1960s | 1970-74 | 1975-79 | 1980-84 | 1985-90 |
|---|---|---|---|---|---|---|---|---|---|
| Maize | 48% | 42% | 41% | 39% | 39% | 44% | 41% | 39% | 39% |
| Pearl millet | 18% | 13% | 9% | 6% | 3% | 0% | 0% | 0% | 0% |
| Sorghum | 0% | 2% | 1% | 1% | 2% | 3% | 5% | 5% | 6% |
| Yam | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Cassava | 0% | 1% | 1% | 1% | 1% | 0% | 1% | 1% | 0% |
| Cowpea | 29% | 28% | 24% | 24% | 23% | 24% | 24% | 24% | 24% |
| Pigeon | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Groundnut | 3% | 13% | 21% | 26% | 27% | 24% | 23% | 22% | 22% |
| Bambara | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Cotton | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Vegetable | 0% | 2% | 2% | 2% | 3% | 4% | 4% | 7% | 7% |
| Tomato | 0% | 0% | 0% | 0% | 1% | 0% | 0% | 0% | 0% |
| Leaves | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| **Total** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** |

7.25e: 60 Fon plateau women, in percentages

| | 1920s | 1930s | 1940s | 1950s | 1960s | 1970-74 | 1975-79 | 1980-84 | 1985-90 |
|---|---|---|---|---|---|---|---|---|---|
| Maize | 46% | 38% | 36% | 34% | 33% | 40% | 40% | 40% | 41% |
| Pearl millet | 21% | 17% | 13% | 9% | 6% | 0% | 0% | 0% | 0% |
| Sorghum | 1% | 1% | 0% | 1% | 3% | 4% | 4% | 5% | 6% |
| Yam | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Cassava | 0% | 1% | 1% | 1% | 1% | 0% | 0% | 0% | 0% |
| Cowpea | 28% | 29% | 27% | 25% | 23% | 24% | 25% | 25% | 26% |
| Pigeon | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Groundnut | 4% | 14% | 23% | 29% | 32% | 28% | 28% | 28% | 25% |
| Bambara | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Cotton | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Okra | 0% | 0% | 0% | 0% | 1% | 1% | 1% | 1% | 1% |
| Tomato | 0% | 0% | 0% | 1% | 1% | 1% | 1% | 1% | 0% |
| Leaves | 0% | 0% | 0% | 0% | 0% | 1% | 1% | 1% | 1% |
| **Total** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** |

7.25f: 30 Fon women on the Zado slopes, in percentages

| | 1920s | 1930s | 1940s | 1950s | 1960s | 1970-74 | 1975-79 | 1980-84 | 1985-90 |
|---|---|---|---|---|---|---|---|---|---|
| Maize | 64% | 55% | 54% | 49% | 47% | 47% | 42% | 39% | 38% |
| Pearl millet | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Sorghum | 0% | 5% | 3% | 2% | 2% | 1% | 6% | 5% | 6% |
| Yam | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Cassava | 0% | 0% | 1% | 1% | 1% | 1% | 1% | 2% | 1% |
| Cowpea | 36% | 22% | 16% | 23% | 24% | 24% | 24% | 23% | 22% |
| Pigeon | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Groundnut | 0% | 10% | 17% | 18% | 21% | 20% | 18% | 18% | 19% |
| Bambara | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Cotton | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Okra | 0% | 7% | 9% | 6% | 5% | 7% | 8% | 13% | 15% |
| Tomato | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Leaves | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| **Total** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** |

* Counted per season and relative area that the crop occupies the field in each season; if a crop occupies the field during two seasons the relative areas of each season are summed up. Source: Own interviews.

Table 7.26: Professions practised by graduates of the Abomean primary schools, by year of graduation[1]

| | Graduations[1] | School teacher | Trader[2] | Medical Doctor | Nurse | Agric. extensionist | Clerk etc.[3] | Total employed |
|---|---|---|---|---|---|---|---|---|
| 1912 | | | | | 1 | | | 1 |
| 1913 | | | 1 | | | | | 1 |
| 1914 | | | | | | | | 0 |
| 1915 | | | | | | | | 0 |
| 1916 | | | 1 | | | | | 1 |
| 1917 | | | | | | | | 0 |
| 1918 | | | 1 | 1 | | | 3 | 5 |
| 1919 | | | | | | | | 0 |
| 1920 | | 2 | 1 | | | | | 3 |
| 1921 | | | | 1 | | | | 1 |
| 1922 | | 1 | 2 | | | | | 3 |
| 1923 | | | 1 | | | | | 1 |
| 1924 | | | | | | | | 0 |
| 1925 | | | | | | | | 0 |
| 1926 | | | | 2 | | | 1 | 3 |
| 1927 | | 4 | | 2 | | | | 6 |
| 1928 | | 3 | | | 1 | 1 | 1 | 6 |
| 1929 | | | | 1 | | | | 1 |
| 1930 | | 3 | | | | | 3 | 6 |
| 1931 | | | | 1 | 1 | | 1 | 3 |
| 1932 | | | | | | 2 | 1 | 3 |
| 1933 | | | | | | 1 | | 1 |
| 1934 | | 1 | | | | 1 | | 2 |
| 1935 | | 1 | | | | | | 1 |
| 1936 | | 1 | 2 | | | | 1 | 4 |
| 1937 | 4 | 1 | 1 | | | | 1 | 3 |
| 1938 | 6 | 1 | | | | | 1 | 2 |
| 1939 | 16 | 1 | | | | | 2 | 3 |
| 1940 | 9 | 1 | | | | 4 | 3 | 8 |
| 1941 | 25 | | 7 | | 1 | | 1 | 9 |
| 1942 | 26 | | 7 | | | 1 | | 8 |
| 1943 | 19 | 9 | 2 | | 1 | | | 12 |
| 1944 | 3 | | | | | 1 | | 1 |
| 1945 | 16 | 1 | | | | | | 1 |
| 1946 | 31 | 1 | 2 | | | 1 | | 4 |
| 1947 | 38 | 4 | 6 | | 1 | 1 | 3 | 15 |
| 1948 | 20 | 9 | 3 | | 1 | 1 | 3 | 17 |
| 1949 | 31 | 1 | 3 | | | 2 | 1 | 7 |
| 1950 | 22 | 4 | 4 | | | 1 | 1 | 10 |
| 1951 | | | 2 | | | | | 2 |
| **Totals** | **266** | **49** | **46** | **8** | **7** | **17** | **27** | **154** |
| % of employments | | 32% | 30% | 5% | 5% | 11% | 18% | 100% |

1 Graduates who obtained the CEPE at the end of the sixth year of the primary school.
2 '*Commis expéditionnel*' (cohorts 1914-1947) and '*commerce*' (cohorts 1941-1950); the latter were (in part) private traders while the former were employees of trade companies.
3 Including 4 customs officers, 8 typists, 7 post office- and 2 radio employees, and 6 printers.
Source: Groupes scolaires Abomey - monographie, Archives Abomey.

Table 7.27: Registered maize sales of some sectors to other regions 1960-1963, in tons[1]

| | | Abomey | Athiémé | Aplahoué | Allada | Grand Popo + Bopa |
|---|---|---|---|---|---|---|
| 1960 | | | | | 2000 | |
| 1961 | May | | 217 | | 2000 | |
| | September | | 183 | | 1800 | |
| | October | | 228 | | 1750 | |
| | November | | 140 | | 1750 | |
| | December | | 119 | | 1700 | |
| **Total 1961** | | **0** | **887** | | **9000** | |
| 1962 | August | | 191 | | 750 | |
| | September | | 210 | | 1905 | |
| | October | | 230 | | 1800 | |
| | November | | 275 | 50 | 1360 | |
| | December | | 275 | 50 | 1360 | |
| **Total 1962** | | **0** | **1181** | **100** | **7175** | |
| 1963 | January | | 214 | 45 | | 23 |
| | February | | 254 | | | |
| | March | | 104 | | | 25 |
| | April | | 121 | | | 25 |
| | May | 50 | 259 | | | 15 |
| | June | 50 | 231 | 95 | | 31 |
| | July-Aug | | 540 | 230 | | 124 |
| | September | | 116 | 45 | | 75 |
| | October | | 130 | 39 | | 54 |
| | Nov-Dec | | 300 | 150 | | 80 |
| **Total 1963** | | **100** | **2269** | **559** | | **452** |

1 Not all sales were registered, but it seems that the most important ones during the months following the harvests were. Nevertheless, absence of records does not mean that there were no sales.

Sources: Bulletins économiques et statistiques République du Dahomey 1960-1963, AOM Aix-en-Provence.

Table 7.28: Registered maize and sorghum sales of some sectors to other regions in 1965, in tons[1]

| | Abomey | Athiémé | Aplahoué | Allada | Gr. Popo + Bopa |
|---|---|---|---|---|---|
| January | 293 | | 70 | 73 | 135 |
| February | 200 | | 68 | 76 | 105 |
| March | 150 | 105 | | 69 | 93 |
| Apr-May | 400 | 224 | | 148 | 222 |
| June | 120 | | | 80 | 43 |
| July-Aug | 230 | | | 210 | 158 |
| September | 98 | | | 85 | 192 |
| October | 85 | | | 131 | 140 |
| Nov-Dec | 180 | | | 216 | 214 |
| **Total 1965** | **1756** | **329** | **138** | **1088** | **1302** |

1 Not all sales were registered, but it seems that the most important ones during the months following the harvests were. Nevertheless, absence of records does not mean that there were no sales. Maize harvests were poor but sorghum harvests good this year.

Source: Bulletin économique et statistique République du Dahomey 1965, AOM Aix-en-Provence.

Table 7.29: Registered *gari* sales of some sectors to other regions 1960-1965, in tons[1]

| | | Abomey | Athiémé | Aplahoué | Allada | Gr. Popo + Bopa |
|---|---|---|---|---|---|---|
| 1960 | | | | 30 | | |
| 1961 | May | | 241 | | 90 | |
| | October | | 74 | | 90 | |
| | November | | 203 | | 92 | |
| | December | | 52 | | 52 | |
| **Total 1961** | | **0** | **570** | | **324** | |
| 1962 | August | | 100 | | 80 | |
| | September | | 171 | | 90 | |
| | October | | 203 | | 90 | |
| | November | 75 | 180 | 35 | 95 | |
| | December | 75 | 180 | 35 | 95 | |
| **Total 1962** | | **150** | **834** | **70** | **450** | |
| 1963 | January | | 136 | 32 | | |
| | February | | 168 | | | 15 |
| | March | | 90 | | | 20 |
| | April | | 112 | 80 | | 25 |
| | May | | 132 | 96 | | 15 |
| | June | | 127 | 72 | | 20 |
| | July-Aug | | 240 | | 120 | 350 |
| | September | | 47 | 45 | 50 | 110 |
| | October | | 65 | 45 | 100 | 81 |
| | Nov-Dec | | 190 | 130 | 350 | 106 |
| **Total 1963** | | **0** | **1307** | **500** | **620** | **742** |
| | | Abomey | Athiémé | Aplahoué + Dogbo | Allada | Gr. Popo + Bopa |
| 1965 | January | | 56 | 90 | 28 | 129 |
| | February | | 52 | 85 | 21 | 111 |
| | March | | 60 | | 27 | 28 |
| | Apr-May | | 142 | | 64 | 88 |
| | June | | | | 40 | 51 |
| | July-Aug | | | 350 | 36 | 152 |
| | September | 50 | | 119 | 40 | 161 |
| | October | 30 | | | 34 | 149 |
| | Nov-Dec | 50 | | | 230 | 130 |
| **Total 1965** | | **130** | **310** | **644** | **520** | **999** |

1 Not all sales were registered, but it seems that the most important ones during the months following the harvests were. Nevertheless, absence of records does not mean that there were no sales.

Sources: Bulletins économiques et statistiques République du Dahomey 1960-1963, AOM Aix-en-Provence.

Table 7.30: Exchange rates between Dahomean/Béninese and French francs

| Period | Dahomean/Béninese francs obtained for 1 French franc |
|---|---|
| Until 26 January 1948[1] | 1.00 |
| 26-1-1948 to 27-11-1958 | 0.85 |
| 27-11-1958 to 1994 | 50.00 |
| From January 1994 | 100.00 |

1 Until this date, Dahomey used French francs; from then onwards its currency was called franc des colonies françaises d'Afrique, in short FCFA.

Sources: Own interviews; Djagoun (1982:226).

Table 7.31: Prices of unginned cotton[1] 1898-2002, in local francs per kg

| Year[2] | Export price[3] | F.O.B. | Abomey | Bohicon | Athiémé | Lonkly | Other |
|---|---|---|---|---|---|---|---|
| 1898-1900 | | | | | | | 0.30 |
| 1904 | 0.24 | | | | | | |
| 1905 | | | | | | | |
| 1906 | | | | | | | |
| 1907 | 0.86 | | | | | | |
| 1908 | 0.93 | | | | | | |
| 1909 | 1.00 | | | | | | |
| 1910 | 1.17 | | | | | | |
| 1911 | 1.25 | | | | | | |
| 1912 | 1.25 | | | | | | |
| 1913 | 1.25 | | | | | | |
| 1914 | 1.24 | | | | | | |
| 1915 | 1.25 | | | | | | |
| 1916 | 1.27 | | | | | | |
| 1917 | 1.25 | | | | | | |
| 1918 | 0.83 | | | | | | |
| 1919 | 2.84 | | | | | | |
| 1920 | 10.42 | | | | | | |
| 1921 | 3.96 | | | | | | |
| 1922 | 3.45 | | | | | | |
| 1923 | 3.50 | | 1.00-2.25 | | | 0.45-0.50 | |
| 1924[4] | 6.01 | | 1.25-3.75 | 2.50 | | 0.60 | |
| 1925 | 7.00 | | 2.00 | 2.00 | | | |
| 1926 | 9.37 | | 2.00-2.62 | 2.00-2.62 | | 1.75-2.25 | |
| 1927 | 8.25 | | | | | | |
| 1928 | 7.02 | | | | | | |
| 1929 | 7.54 | | | | | | |
| 1930 | 8.03 | | | | | | |
| 1931 | 7.23 | | | | | | |
| 1932 | 3.50 | | | | | | Savalou |
| 1933 | 3.65 | | | | | | 0.75 |
| 1934 | 3.48 | | | | | | |
| 1935 | 3.26 | | | | | | |
| 1936 | 2.25 | | | | | | |
| 1937 | 5.73 | | | | | | |
| 1938 | 4.78 | | | | | | |
| 1939 | 4.64 | | | | | | |
| 1940 | 5.02 | 10.30 | | | | | |
| 1941 | 9.96 | | | | | | |
| 1942 | 13.30 | | | | | | Nu à bord |
| 1943 | | 16.09 | | 2.50 | | | 12.13 |
| 1944 | 17.56 | 16.30 | | 2.50 | | | 12.24 |
| 1945 | 14.78 | 22.30 | | 4.30 | | | 18.90 |
| 3-1946 | | 31.10 | | | | | 18.90 |
| 1946 | 13.57 | 39.00 | | 7.30 | | | 31.81 |
| 1947 | 35.93 | | 7.40 | 7.00-7.30 | | | |
| 1948 | 76.22 | | | 8.00-15.90 | | | |
| 1949 | 83.61 | | | 15.84-16.00 | | | |
| 1950 | 132.81 | | | 11.10-11.25 | 18.00-19.00 | | |
| 1951 | 179.06 | | | 18.00-22.00 | 29.00-30.50 | | |
| 1952 | 143.82 | | | | 24.00-25.00 | | |
| 1953 | 126.67 | | | 25.00-29.00 | 24.00-25.00 | | |
| 1954 | 119.16 | | | 24.50-25.50 | | | |
| 1955 | 123.10 | | | 24.50-25.50 | | | |
| 1956 | 103.34 | | | 22.00-27.00 | | | |
| 1957 | 124.89 | | | 25.50 | | | |
| 1958 | 119.82 | | | | | | |
| 1959 | 79.21 | | | | | | |

Table 7.31 (cont.)

| Year[2] | Export price[3] | F.O.B. | Abomey | Bohicon | Athiémé | Lonkly | Other |
|---|---|---|---|---|---|---|---|
| 1960 | 118.55 | | | | | | |
| 1962 | | 148.73 | | | | | |
| 1963 | | 127.48 | | 25.00-32.50 | 25.00-32.50 | | |
| | | | | Zou | | Mono | |
| 1966 | | | | 26.00-27.00 | | | |
| 1968 | | | | 27.20 | | | |
| 1969 | | | | 27.20 | | | |
| 1970 | | | | 34.00 | | 34.00 | |
| 1971[5] | | | | 34.00-34.75 | | 34.00 | |
| 1972[5] | | | | 34.75-36.75 | | 34.75 | |
| 1973[6] | | | | 36.75-40.00 | | 36.75 | |
| 1974[7] | | | | 36.00-45.00 | | 36.00-37.00 | |
| 1975[7] | | | | 37.50-50.00 | | 37.50-40.00 | |
| 1976[7] | | | | 40.00-50.00 | | 40.00-42.00 | |
| 1977[7] | | | | 42.50-50.00 | | 42.00-42.50 | |
| 1978 | | | | 55.00 | | 42.00 | |
| 1979 | | | | 55.00 | | 55.00 | |
| 1980 | | | | 60.00 | | 60.00 | |
| 1981 | | | | 80.00 | | 80.00 | |
| 1982 | | | | 85.00 | | 85.00 | FOB +subsidy |
| 1983 | | 408.17 | | 100.00 | | 100.00 | 493.42 |
| 1984 | | | | 100.00 | | 100.00 | |
| 1985 | | 429.80 | | 110.00 | | 110.00 | 483.95 |
| 1986 | | | | 110.00 | | 110.00 | |
| 1987 | | | | 100.00 | | 100.00 | |
| 1988 | | | | 105.00 | | 105.00 | |
| 1989[8] | | | | 95.00-110.00 | | 95.00-110.00 | |
| 1990[8] | | | | 95.00-110.00 | | 95.00-110.00 | |
| 1991 | | | | 100.00 | | 100.00 | |
| 1992[9] | 255.95 | | | 95.00-100.00 | | 95.00-100.00 | |
| 1993[9] | 637.40 | | | 95.00-110.00 | | 95.00-110.00 | |
| 1994[9] | 744.68 | | | 100.00-110.00 | | 100.00-110.00 | |
| 1995 | 231.41 | | | 140.00 | | 140.00 | |
| 1996 | | | | 165.00 | | 165.00 | |
| 1997 | | | | 200.00 | | 200.00 | |

1 From 1964 onwards, most cotton was classified as first grade. Most statistics state first grade prices only and I follow this general usage. Price ranges in my figures for some years reflect ambiguities in the sources. These differences in the sources were probably either due to (exceptional) price changes during the year, or to second grade prices included in the source, or to the fact that cotton was often sold and usually exported in the calendar year after it was grown, which caused confusion regarding the year for which a price applied.

2 Numbers 1-12 preceding year-numbers indicate months.

3 Calculated by dividing export values by exported volumes as given by Sedjro (1980:23-24) and Manning (1982:365, 382).

4 In March the Abomean price descended from 3.750 to 1.700 fr/t, in April it was 2.500 fr/t in Abomey-Bohicon and only 600 fr/t in Lonkly. In September the Abomean price descended to 1.250 fr/t. Transport costs Abomey/Bohicon-Cotonou was 82 francs/t and Lonkly-Cotonou 666 francs/t. Due to the lower price paid to Lonkly farmers, their cotton valued 2.626 fr/t and that of the Fon plateau (in April) 9.082 fr/t in Cotonou.

5 The lower figure is from Djagoun (1982:291), the higher one from Dovonou (1980:141).

6 The price was changed by government decree on 21 December 1972 from 34.75 to 36.75 FCFA/kg.

7 The lower figure is from Djagoun (1982:291), the higher figure from Mongbo (1985:70), only for the Mono in 1977 it is the other way round.

8 The lower figures are from Brüntrup (1996:85), the higher ones from INSAE (2002). According to Brüntrup, since 1988 a 'surprix' of 5 FCFA/kg (not included in my figures for 1990-1992) was paid for positive results of the SONAPRA in the preceding campaign.

9 The higher figures are from Dèdèhouanou (2003:108).

Sources: Rapport d'ensemble Dahomey 1898-1900, Archives Abomey; Rapport trimestriel Cercle d'Abomey 4e trimestre 1923, ANB Porto-Novo; Rapport mensuel Cercle d'Abomey Mars 1923, ANB Porto-Novo; Rapport agricole 1er trimestre 1924, AOM Aix-en-Provence; Rapport mensuel Cercle d'Abomey Mars 1924, ANB Porto-Novo; Rapport mensuel Cercle

Table 7.31 (cont.)

d'Abomey Août 1924, ANB Porto-Novo; Rapport trimestriel Cercle d'Abomey 3e trimestre 1925, ANB Porto-Novo; Rapport d'ensemble Dahomey 1926, AOM Aix-en-Provence; Rapport agricole Dahomey 1926, AOM Aix-en-Provence; Lettre du directeur de la station cotonnière au chef service Agriculture et Forêts, Savalou 7-6-1933, ANB Porto-Novo; Lettre du 24 Février 1940, ANB Porto-Novo; Rapport économique Dahomey 1947, Archives Abomey; Rapport agricole 1947, Archives Abomey; Rapport économique semestriel Cercle d'Abomey premier semestre 1950, Archives Abomey; idem deuxième semestre 1950, Archives Abomey; Rapport économique Cercle d'Abomey 1er semestre 1951, Archives Abomey; Rapport économique Dahomey 1951, AOM Aix-en-Provence; Rapport annuel secteur agricole centre 1954, Archives Abomey; Enquêtes économiques 1955, Archives Abomey; Rapport économique Dahomey 1er semestre 1955, Archives Abomey; Rapport agricole Cercle d'Abomey 1956, Archives Abomey; Rapport agricole Cercle d'Abomey 1957, Archives Abomey; Rapport annuel service de développement rural 1963, ANB Porto-Novo; Situation agricole du département du Zou 1966, Archives Abomey; SATEC (1972:94; 1973:111); Dovonou (1980); Djagoun (1982); Manning (1982:368, 383); Mongbo (1985:70); Neefjes (1986:77, annexe 7); Baar (1986:97, 107-110); INSAE (2002:50, 53); Dèdèhouanou (2003:108).

Table 7.32: Palm oil prices 1889-1988, in local francs per litre

| Year[1] | Export price[2] | F.O.B.[3] grades 3-5 | Abomey | Bohicon | Aplahoué | Dogbo, Athiémé | 'Local average' | Other |
|---|---|---|---|---|---|---|---|---|
| 1889 | 0.50 | | | | | | | |
| 1890 | 0.50 | | | | | | | |
| 1891 | 0.50 | | | | | | | |
| 1892 | 0.50 | | | | | | | |
| 1893 | 0.55 | | | | | | | |
| 1894 | 0.46 | | | | | | | |
| 1895 | 0.46 | | | | | | | |
| 1896 | 0.52 | | | | | | | |
| 1897 | 0.43 | | | | | | | |
| 1898 | 0.45 | | | | | | 0.25-0.33 | |
| 1899 | 0.52 | | | | | | | |
| 1900 | 0.60 | | | | | | | |
| 1901 | 0.42 | | | | | | | |
| 1902 | 0.43 | | | | | | | Grand Popo |
| 1903 | 0.42 | | | | | | | 0.46 |
| 1904 | 0.45 | | | | | | | |
| 1905 | 0.43 | | | | | | | |
| 1906 | 0.43 | | | | | | | |
| 1907 | 0.44 | | | | | | | |
| 1908 | 0.48 | | | | | | | |
| 1909 | 0.43 | | | | | | | |
| 1910 | 0.43 | | | | | | | 0.50-0.56 |
| 1911 | 0.53 | | | | | | | |
| 1912 | 0.53 | | | | | | | |
| 1913 | 0.49 | | | | | | | |
| 1914 | 0.84 | | | | | | | |
| 1915 | 0.50 | | | | | | | 0.41-0.50 |
| 1916 | 0.54 | | | | | | | |
| 1917 | 0.81 | | | | | | | |
| 1918 | 1.79 | | | | | | | |
| 1919 | 0.90 | | | | | | | |
| 1920 | 1.28 | | | | | | | |
| 1921 | 1.34 | | | | 'Mono' | | | |
| 1922 | 1.13 | | | | 1.40 | | | |
| 1923 | 1.35 | | 1.85-2.05 | | | | | |
| 1924 | 1.83 | | 1.90-2.40 | | | | | |
| 1925 | 2.49 | | 2.50-2.80 | | | | | |
| 1926 | 3.85 | | | | 2.60-2.90 | 2.75-5.00 | | |
| 1927 | 2.54 | | | | | | 2.50-3.00 | |
| 1928 | 2.42 | | | | | | 2.73-3.08 | |
| 1929 | 2.45 | | | | 2.60-3.00 | 1.81 | | |
| 1930 | 1.90 | | | | | | 1.05 | |

Table 7.32 (cont.)

| Year[1] | Export price[2] | F.O.B.[3] grades 3-5 | Abomey | Bohicon | Aplahoué | Dogbo, Athiémé | 'Local average' | Other |
|---|---|---|---|---|---|---|---|---|
| 1931 | 1.32 | | | | | | 0.76 | |
| 1932 | 0.82 | | | | | | 0.15-0.60 | |
| 1933 | 0.56 | | | | | | 0.41 | |
| 1934 | 0.45 | | | | | | 0.35 | |
| 1-1934 | | | 0.30 | | | 0.34 | | |
| 2-1934 | | | 0.30 | | | 0.38 | | |
| 3-1934 | | | 0.20-0.22 | | | 0.26 | | |
| 4-1934 | | | 0.21 | | | 0.16 | | |
| 5-1934 | | | 0.18-0.21 | | | 0.22 | | |
| 6-1934 | | | 0.20-0.23 | | | | | |
| 7-1934 | | | 0.22 | | | | | |
| 8-1934 | | | 0.24-0.30 | | | | | |
| 9-1934 | | | 0.32 | | | | | |
| 10-1934 | | | 0.25 | | | 0.28-0.33 | | |
| 11-1934 | | | 0.31-0.35 | | | 0.37-0.40 | | |
| 12-1934 | | | 0.34-0.39 | | | 0.42 | | |
| 1935 | 0.71 | | | | | | 0.83 | |
| 1936 | 1.05 | | | | | Athiémé | 1.27 | Cotonou[4] |
| 10-12 1936 | | | | | | 1.52-2.10 | | 1.69-2.50 |
| 1937 | 1.91 | | | | | | 1.41 | |
| 1938 | 1.74 | | | | | | 1.40-1.73 | 1.40-1.82 |
| 1939 | 1.53 | | | | | | 1.48-1.72 | 1.50-1.70 |
| 1940 | 1.84 | | | | | | 1.28 | 1.43-1.95 |
| 1941 | 1.97 | | | | | | 1.66-1.86 | |
| 1-5 1942 | 3.38 | | | | | | | 2.40 |
| 6-12 1942 | 3.38 | | | | | | | 3.20 |
| 1943[5] | 4.12 | | | | | | 6.00 | 3.00-3.20 |
| 1944[5] | 4.13 | | | | | | 6.00 | 3.10-3.30 |
| 1945 | 4.20 | | | | | | | 3.20 |
| 1946 | 4.19 | | | | | | | 7.70 |
| 1947 | 13.07 | | 11.52 | 11.41 | | 11.59 | | 12.40-15.20 |
| 1948 | 33.02 | | 14.00-24.75 | | | 23.00 | 18.00-26.00 | |
| 1949 | 39.63 | | 13.10 | | | 14.00-38.00 | 25.00 | |
| 1950 | 39.60 | | 28.00-37.79 | 17.00-35.00 | 17.00-25.00 | 10.00-35.00 | 28.00 | 28.00 |
| 1951 | 64.31 | 58.50 | 40.00-45.00 | 31.00-52.00 | 36.50-57.16 | | 39.00 | 30.00-54.00 |
| 1952 | 38.21 | 47.50 | | | | | 22.00 | |
| 1953 | 36.86 | 45.00 | | 20.40-28.00 | 19.00-27.00 | | 25.00 | |
| 1954 | 42.51 | 47.00 | 21.88-31.70 | | | | 28.00 | |
| 1955 | 40.41 | 39.00 | 23.82-31.50 | 22.88-30.88 | | | 26.50 | |
| 1956 | 41.89 | 37.00 | 21.00-27.30 | | | | 25.00 | |
| 1957 | 40.97 | 44.00 | 22.00-40.00 | | 25.80 | | 26.50 | |
| 1958 | 49.07 | | 26.38-27.30 | | | | | |
| 1959 | 44.09 | 48.00 | | | | | 32.50 | |
| 1960 | 50.15 | 36.00 | | | | | 30.00 | |
| 1961 | 47.07 | 37.00 | | | | | 26.50 | |
| 1962 | 50.35 | 38.70 | 30.00-40.00 | **C.I.F.** | 26.00-30.00 | | 30.00 | |
| 1963 | 50.59 | 34.00 | | 57.00 | | | 28.00 | |
| 1964 | 51.62 | 36.00 | | 66.25 | | | 24.00 | |
| 1965 | 56.18 | 36.30 | | 57.40 | | | 30.00 | |
| 1966 | 45.20 | 35.30 | | 48.06 | | | 30.00 | |
| 1967 | 31.02 | 35.00 | | 41.52 | | | 37.50 | |
| 1968 | 41.39 | 35.30 | | 69.40 | | | 32.50 | |
| 1969 | 34.85 | 32.90 | | 72.90 | | | 23.00 | 45.00 |
| 1970 | 57.90 | 35.00 | | 60.50 | | | 29.00 | |
| 1971 | 60.67 | 45.00 | | 62.70 | | | 27.00 | |
| 1972 | 52.14 | 40.00 | | 164.70 | | | 27.50 | |
| 1973 | 58.70 | 42.00 | | | | | 40.00 | |
| 1974 | 76.94 | 63.00 | | 164.70 | | | 62.50 | Local average[6] |
| 1975 | 69.12 | | | | | | | 165.00 |
| 1976 | 68.24 | | | | | | | 143.00 |
| 1977 | 88.76 | | | | | | | 225.00 |

Table 7.32 (cont.)

| Year[1] | Export price[2] | F.O.B.[3] grades 3-5 | Abomey | Bohicon | Aplahoué | Dogbo, Athiémé | 'Local average' | Other |
|---|---|---|---|---|---|---|---|---|
| 1-1978 | 23.00 | | | | | | | 200.00 |
| 2-1978 | | | | | | | | 250.00 |
| 3-7 1978 | | | | | | | | 200.00 |
| 8-11 1978 | | | | | | | | 225.00 |
| 12-1978 | | | | | Azové | Dogbo | | 250.00 |
| 1984 | | | | | 419 | | | |
| 1985 | | | | | 365 | | | |
| 2-1985 | | | | | 270-300 | | | |
| 3-1985[7] | | | | | 225-325 | | | |
| 4-1985[7] | | | | | 300 | 395 | | |
| 5-1985[7] | | | | | 250-300 | 345 | | |
| 6-1985[7] | | | | | 300 | 400 | | |
| 7-1985[7] | | | | | 300 | 400 | | |
| 10-1985 | | | | | 300-330 | 400 | | |
| 4-1986 | | | | | 188 | 180 | | |
| 6-1986[7] | | | | | 213 | 170 | | |
| 7-1986[7] | | | | | 202 | 166 | | |
| 8-1986[7] | | | | | 209 | 157 | | |
| 1986 | | | | | 226 | | | |
| 1987 | | | | | 192 | | | |
| 6-1988 | | | | | 219 | 234 | | |
| 7-1988 | | | | | 164 | 135 | | |
| 8-1988 | | | | | 168 | 143 | | |
| 9-1988 | | | | | 206 | 220 | | |

1 Numbers 1-12 preceding year-numbers indicate months.
2 Calculated by dividing export values by exported volumes as given by Sedjro (1980:23-24) and Manning (1982:365, 382).
3 From 1950 to 1957 Prudencio (1976:246) assumes that 'low grades' F.O.B. prices were identical to average 'all grades' F.O.B prices. According to him manually produced oil was almost always of the low grades 3, 4 or 5.
4 Prices 1938-1944 are Nu-Bascule-Cotonou (Rapport économique Dahomey 1943, Archives Abomey). The price mentioned for 1969 is that on the consumer market of Akpakpa in eastern Cotonou (Djagoun 1982).
5 Local prices rose far beyond official ones, but the price of 6000 fr/t given by the *Rapport économique Dahomey 1943* was probably the upper limit.
6 Average local figures 1975-1980 are for December except where stated differently. Djagoun (1982:258) gives these figures for the whole of Bénin; there is a small chance that they apply for Cotonou only.
7 Surveys by my assistants; some of them might have confused litre- and beer bottles (2/3 l).
8 Oil prices at Dogbo declined while those at Azové rose partly because especially in Dogbo, State officials confiscated oil which they suspected to be made from fruit stolen palm from the State grove at Houin-Agame (Dandjinou 1986: 88).

Sources: Rapport d'ensemble Dahomey 1898-1900, Archives Abomey; Rapport annuel Cercle de Grand Popo 1903, ANB Porto-Novo; Rapport d'ensemble Agriculture Dahomey 1911; AOM Aix-en-Provence; Rapport politique Dahomey 3e trimestre 1915, AOM Aix-en-Provence; Rapport trimestriel Cercle du Mono 4e trimestre 1922, ANB Porto-Novo; Rapport trimestriel Cercle d'Abomey 4e trimestre 1923, ANB Porto-Novo; Rapport mensuel Cercle d'Abomey Août 1924, ANB Porto-Novo; Rapport mensuel Cercle d'Abomey Septembre 1924, ANB Porto-Novo; Rapport trimestriel Cercle d'Abomey 4e trimestre 1924, ANB Porto-Novo; Rapport trimestriel Cercle d'Abomey 3e trimestre 1925, ANB Porto-Novo; Rapport d'ensemble Dahomey 1926, AOM Aix-en-Provence; Rapport agricole Dahomey 1933, AOM Aix-en-Provence; Rapport agricole Dahomey 1934, AOM Aix-en-Provence; Rapport économique Dahomey 1939-1940, Archives Abomey; Rapport économique Dahomey 1943, Archives Abomey; Rapport agricole 1947, Archives Abomey; Rapport économique semestriel Cercle d'Abomey premier semestre 1950, Archives Abomey; idem deuxième semestre 1950, Archives Abomey; Rapport agricole Dahomey 1950, AOM Aix-en-Provence; Rapport économique Cercle d'Abomey 1er semestre 1951, Archives Abomey; Rapport agricole Dahomey 1951, AOM Aix-en-Provence; Rapport économique Dahomey 1951, AOM Aix-en-Provence; Rapport agricole 1953, Archives Abomey; Rapport annuel secteur agricole centre 1954, Archives Abomey; Rapport annuel secteur agricole centre Cercle d'Abomey 1955, Archives Abomey; Rapport agricole Cercle d'Abomey 1956, Archives Abomey; Prix des produits 1957, Archives Aplahoué; Rapport agricole Cercle d'Abomey 1957, Archives Abomey; Rapport mensuel Région agricole Centre Décembre 1958, Archives Abomey; Rapport annuel service de développement rural 1963, ANB Porto-Novo; Prudencio (1976:249-250); Hodonou (1976 :262) ; Mondjannagni (1977:439); Holonou (1980:34); Sedjro 1980:23-24); Djagoun (1982:247); Manning (1982:365, 382); Annuaire statistique agricole Mono 1987; Dandjinou (1986:87, 89); Wartena (1987:329); Quenum (1988:136).

Table 7.33: Palm kernel prices 1889-1988, in local francs per kg

| Year[1] | Export price[2] | Official price | Abomey | Bohicon etc. | Aplahoué, Azové | Dogbo, Athiémé | 'Local average'[3] |
|---|---|---|---|---|---|---|---|
| 1889 | 0.25 | | | | | | |
| 1890 | 0.24 | | | | | | |
| 1891 | 0.23 | | | | | | |
| 1892 | 0.25 | | | | | | |
| 1893 | 0.23 | | | | | | |
| 1894 | 0.23 | | | | | | |
| 1895 | 0.22 | | | | | | |
| 1896 | 0.22 | | | | | | |
| 1897 | 0.23 | | | | | | |
| 1898 | 0.23 | | | | | | 0.15-0.20 |
| 1899 | 0.31 | | | | | | |
| 1900 | 0.30 | | | | | | |
| 1901 | 0.19 | | | | | | |
| 1902 | 0.25 | | | | | | |
| 1903 | 0.25 | | | | | | 0.20 |
| 1904 | 0.21 | | | | | | |
| 1905 | 0.23 | | | | | | |
| 1906 | 0.23 | | | | | | |
| 1907 | 0.25 | | | | | | |
| 1908 | 0.24 | | | | | | |
| 1909 | 0.24 | | | | | | Porto-Novo |
| 1910 | 0.29 | | | | | | 0.30-0.34 |
| 1911 | 0.32 | | | | | | |
| 1912 | 0.36 | | | | | | |
| 1913 | 0.38 | | | | | | |
| 1914 | 0.36 | | | | | | Grand Popo |
| 1915 | 0.24 | | | | | | 0.20-0.23 |
| 1916 | 0.30 | | | | | | |
| 1917 | 0.35 | | | | | | |
| 1918 | 0.46 | | | | | | |
| 1919 | 0.66 | | | | | | |
| 1920 | 1.41 | | | | | | |
| 1921 | 0.80 | | | | | | |
| 1922 | 0.67 | 0.75 | | | | | |
| 1923 | 0.87 | | 0.98-1.20 | | | | |
| 1924 | 1.40 | | 1.20-1.80 | | | | |
| 1925 | 1.65 | | 1.60-1.70 | | 'Mono' | Local average | |
| 1926 | 2.28 | | | | 2.00 | 1.67-3.00 | |
| 1927 | 1.70 | | | | | | 1.60-1.90 |
| 1928 | 1.89 | | | | | | 1.75-1.85 |
| 1929 | 1.66 | | | | 1.45-1.80 | 0.92 | |
| 1930 | 1.25 | | | | 0.73-1.29 | 0.91 | |
| 1931 | 0.79 | | | | Aplahoué | | 0.62 |
| 1932 | 0.58 | | | | 0.29-0.31 | | 0.48 |
| 1933 | 0.42 | | | | 0.26-0.28 | | 0.30 |
| 1934 | 0.33 | | | | 0.24-0.25 | | 0.28 |
| 1935 | 0.46 | | | | | | 0.43 |
| 1936 | 0.64 | | | | | Athiémé | 0.50 |
| 10-12 1936 | | | | | | 0.69-1.14 | 0.90-1.38 |
| 1937 | 1.08 | | | | | | 0.98-1.50 |
| 1938 | 1.49 | 0.80-1.10 | | | | 0.80-1.10 | 0.83-1.04 |
| 1939 | 0.90 | 0.80-1.00 | | | | 0.80-1.10 | 0.83-0.92 |
| 1940 | 1.03 | 0.85-0.99 | | | | | 0.80-0.98 |
| 1941 | 1.02 | | | | | | 0.91 |
| 1-5 1942 | | 1.30 | | | | | |
| 6-12 1942 | 1.89 | 1.80 | | | | | |
| 1943 | 2.19 | 1.80 | | | | | |
| 1944 | 2.25 | 1.77 | | | | | |
| 1945 | 2.48 | | | | | 1.65 | |

Table 7.33 (cont.)

| Year[1] | Export price[2] | Official price | Abomey | Bohicon etc. | Aplahoué, Azové | Dogbo, Athiémé | 'Local average'[3] |
|---|---|---|---|---|---|---|---|
| 1946 | 4.49 | | | | | 7.00 | |
| 1947 | 7.94 | | 5.44-6.30 | 6.50 | 6.20 | 6.50-8.40 | |
| 1948 | 15.19 | | 6.25-10.32 | | | 11.90 | 13.00 |
| 1949 | 20.74 | | 24.50-24.63 | | | 14.50 | 8.00-17.00 |
| 1950 | 26.83 | | 15.00-24.90 | 15.60-26.00 | 13.00-24.00 | 12.50-22.50 | 20.50 |
| 1951 | 37.05 | | | 16.00-33.00 | 16.50-31.00 | 20.00-34.00 | 25.00 |
| 1952 | 24.72 | | | | | | 15.00 |
| 1953 | 28.92 | | 18.00-22.90 | 16.00-23.50 | 11.00-20.50 | | 20.00 |
| 1954 | 26.13 | | 15.82-22.80 | | | | 17.50 |
| 1955 | 23.01 | | 15.14-17.99 | 14.70-18.03 | | | 16.00 |
| 1956 | 22.18 | | 13.50-19.00 | | | | 16.50 |
| 1957 | 23.62 | | 15.00-22.00 | | 19.11 | | 18.50 |
| 1958 | 27.29 | | 25.50-24.60 | | | | |
| 1959 | 29.28 | | | | | | 29.00 |
| 1960 | 35.53 | | | | | | 27.00 |
| 1961 | 28.01 | | | | | | 18.50 |
| 1962 | 26.31 | | 21.00-25.00 | C.I.F. | 21.00-25.00 | | 22.00 |
| 1963 | 32.26 | | | 42.80 | | | 25.50 |
| 1964 | 31.10 | 18.00 | | 42.40 | | | 25.50 |
| 1965 | 35.84 | 18.00 | | 35.70 | | | |
| 1966 | 38.97 | 18.00 | | 45.90 | | | |
| 1967 | 35.00 | 18.00 | | 37.70 | | | |
| 1968 | 4.60 | 18.00 | | 45.30 | | | |
| 1969 | 32.11 | 18.00 | | 44.70 | | | |
| 1970 | 39.83 | 18.00-20.00 | | 34.75 | | | |
| 1971 | 40.46 | 21.00 | | | | | |
| 1972 | 31.22 | 21.00 | | | | | |
| 1973 | 1.69 | 21.00 | | | | | |
| 1974 | 18.60 | 21.00-22.00 | | | | | 4.20 |
| 1975 | 6.06 | 31.00 | | | | | 4.20 |
| 1976 | 10.25 | 31.00 | | | | | 4.20 |
| 1977 | 13.82 | 31.00 | | | | | 4.80 |
| 1978 | 13.64 | | | | Azové | | 4.80 |
| 1979 | | | | | | | 4.80 |
| 1980 | | | | | | | 6.00 |
| 1984 | | | | | 82.5 | | |
| 1985 | | | | | 71.0 | | |
| 3-1985[4] | | | 95 | | 65 | | |
| 4-1985[4] | | | 95 | | 65 | | |
| 5-1985[4] | | | 95 | | 65 | | |
| 6-1985[4] | | | 95 | | 75 | | |
| 7-1985[4] | | | 95 | | 75 | Dogbo | |
| 4-1986 | | | 16 | | 45 | 56 | |
| 6-1986 | | | 26 | | 36 | 23 | |
| 7-1986 | | | 30 | | 38 | 32 | |
| 1987 | | | | | 32 | | |
| 6-1988 | | | | | 20 | 15 | |
| 7-1988 | | | | | 22 | 18 | |
| 8-1988 | | | | | 28 | 25 | |
| 9-1988 | | | | | 35 | 30 | |

1 Numbers 1-12 preceding year-numbers indicate months.
2 Calculated by dividing export values by exported volumes as given by Sedjro (1980:23-24) and Manning (1982:365, 382). Almost identical to F.O.B. prices in 1962 (27.01 FCFA/kg) and 1963 (32.18 FCFA/kg).
3 Producer prices 1974-1980 given by Baar (1986:98, based on INSAE and BCEAO) seem incredibly low.
4 Figures for Azové in *tohungolo*, which is ± 1 kg.
Sources: as the table of palm oil prices; Djagoun (1982:291); Lettre du 18 Janvier 1955 de l'administrateur commandant le Cercle d'Abomey à Monsieur l'Inspecteur de la France d'Outre-Mer, dossier enquêtes économiques 1955, Archives Abomey.

Table 7.34: Exports of palm fruit products from Dahomey/Bénin 1889-1978, in tons

| Year | Palm oil* | Kernels | Kernel oil | Kernel cake | Kernels/ Oil | Year | Palm oil* | Kernels | Kernel oil | Kernel cake | Kernels/ Oil |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1889 | 4.069 | 11.637 | | | 2.9 | 1934 | 13.697 | 57.989 | | | 4.2 |
| 1890 | 5.336 | 14.892 | | | 2.8 | 1935 | 23.905 | 61.123 | | | 2.6 |
| 1891 | 7.344 | 18.367 | | | 2.5 | 1936 | 24.956 | 74.743 | | | 3.0 |
| 1892 | 5.600 | 17.626 | | | 3.1 | 1937 | 15.068 | 47.743 | | | 3.2 |
| 1893 | 6.427 | 20.213 | | | 3.1 | 1938 | 8.961 | 38.887 | | | 4.3 |
| 1894 | 8.418 | 23.702 | | | 2.8 | 1939 | 9.475 | 30.205 | | | 3.2 |
| 1895 | 11.683 | 21.883 | | | 1.9 | 1940 | 9.443 | 36.213 | | | 3.8 |
| 1896 | 5.525 | 25.152 | | | 4.6 | 1941 | 14.494 | 39.018 | | | 2.7 |
| 1897 | 4.077 | 12.875 | | | 3.2 | 1942 | 6.059 | 34.798 | | | 5.7 |
| 1898 | 6.060 | 18.091 | | | 3.0 | 1943 | 4.861 | 38.564 | | | 7.9 |
| 1899 | 9.650 | 21.851 | | | 2.3 | 1944 | 8.006 | 38.061 | | | 4.8 |
| 1900 | 8.920 | 21.986 | | | 2.5 | 1945 | 3.215 | 32.120 | | | 10.0 |
| 1901 | 11.291 | 24.212 | | | 2.1 | 1946 | 570 | 22.046 | | | 0.0 |
| 1902 | 12.291 | 29.778 | | | 2.4 | 1947 | 711 | 25.713 | | | 0.0 |
| 1903 | 6.964 | 21.685 | | | 3.1 | 1948 | 9.959 | 38.572 | | | 3.9 |
| 1904 | 8.368 | 25.997 | | | 3.1 | 1949 | 6.864 | 44.204 | | | 6.4 |
| 1905 | 5.637 | 17.480 | | | 3.1 | 1950 | 10.125 | 46.140 | | | 4.6 |
| 1906 | 6.378 | 18.835 | | | 3.0 | 1951 | 13.263 | 32.334 | | | 2.4 |
| 1907 | 7.835 | 18.811 | | | 2.4 | 1952 | 7.694 | 38.313 | | | 5.0 |
| 1908 | 9.521 | 23.036 | | | 2.4 | 1953 | 15.111 | 47.584 | | | 3.1 |
| 1909 | 15.016 | 33.224 | | | 2.2 | 1954 | 12.914 | 47.800 | | | 3.7 |
| 1910 | 14.628 | 34.784 | | | 2.4 | 1955 | 16.427 | 50.634 | | | 3.1 |
| 1911 | 15.252 | 39.346 | | | 2.6 | 1956 | 16.185 | 49.910 | | | 3.1 |
| 1912 | 11.917 | 37.296 | | | 3.1 | 1957 | 10.399 | 44.667 | | | 4.3 |
| 1913 | 7.971 | 26.371 | | | 3.3 | 1958 | 12.350 | 61.009 | | | 4.9 |
| 1914 | 6.622 | 21.238 | | | 3.2 | 1959 | 5.943 | 50.372 | | | 8.5 |
| 1915 | 9.597 | 23.224 | | | 2.4 | 1960 | 10.727 | 61.274 | | | 5.7 |
| 1916 | 12.633 | 28.477 | | | 2.3 | 1961 | 11.100 | 48.500 | | | 4.4 |
| 1917 | 11.633 | 17.013 | | | 1.5 | 1962 | 9.300 | 43.900 | | | 4.7 |
| 1918 | 7.637 | 26.250 | | | 3.4 | 1963 | 9.300 | 50.600 | | | 5.4 |
| 1919 | 22.512 | 68.982 | | | 3.1 | 1964 | 12.700 | 56.200 | | | 4.4 |
| 1920 | 11.411 | 29.342 | | | 2.6 | 1965 | 13.200 | 16.700 | 16.700 | 16.100 | 1.3 |
| 1921 | 4.862 | 25.444 | | | 5.2 | 1966 | 9.900 | 5.800 | 11.700 | 11.700 | 0.6 |
| 1922 | 11.646 | 34.726 | | | 3.0 | 1967 | 8.500 | 4.000 | 16.400 | 21.100 | 0.5 |
| 1923 | 13.701 | 36.967 | | | 2.7 | 1968 | 10.100 | 7.200 | 22.700 | 23.500 | 0.7 |
| 1924 | 17.195 | 45.654 | | | 2.7 | 1969 | 12.600 | 9.000 | 25.800 | 23.500 | 0.7 |
| 1925 | 16.852 | 45.228 | | | 2.7 | 1970 | 16.000 | 9.800 | 18.600 | 18.100 | 0.6 |
| 1926 | 17.909 | 42.066 | | | 2.3 | 1971 | 18.400 | 10.500 | 27.100 | 22.000 | 0.6 |
| 1927 | 16.375 | 48.250 | | | 2.9 | 1972 | 7.000 | 5.000 | 17.800 | 22.200 | 0.7 |
| 1928 | 9.759 | 31.606 | | | 3.2 | 1973 | 5.400 | 1.300 | 8.500 | 15.700 | 0.2 |
| 1929 | 15.328 | 36.046 | | | 2.4 | 1974 | 1.600 | 0.500 | 0.300 | 9.800 | 0.3 |
| 1930 | 21.587 | 51.701 | | | 2.4 | 1975 | 5.700 | 1.800 | 5.400 | 19.100 | 0.3 |
| 1931 | 15.934 | 46.953 | | | 2.9 | 1976 | 10.600 | 4.000 | 33.200 | 24.500 | 0.4 |
| 1932 | 11.070 | 49.915 | | | 4.5 | 1977 | 6.300 | 3.400 | 12.500 | 15.400 | 0.5 |
| 1933 | 8.564 | 38.125 | | | 4.5 | 1978 | 0.800 | 1.100 | 3.800 | 4.300 | 1.4 |

* Prudencio (1976) gives slightly different figures for total palm oil exports between 1950 and 1974, see Table 7.9.
Sources: Sedjro (1980:23-24); Manning (1982:365, 382).

Table 7.35: Groundnut prices 1897-1987, in local francs per kg of unshelled[1] groundnuts

| Year[2] | Export price[3] | Official price | F.O.B. | Local average | Abomey local | Bohicon local | Aplahoué, Azové | Dogbo, Athiémé |
|---|---|---|---|---|---|---|---|---|
| 1897 | 0.25 | | | | | | | |
| 1898 | 0.29 | | | 0.30-0.35 | | | | |
| 1899 | 0.30 | | | | | | | |
| 1900 | 0.26 | | | | | | | |
| 1901 | 0.29 | | | | | | | |
| 1902 | 0.25 | | | | | | | |
| 1903 | 0.25 | | | | | | | |
| 1904 | 0.26 | | | | | | | |
| 1905 | 0.24 | | | | | | | |
| 1906 | 0.25 | | | | | | | |
| 1907 | 0.10 | | | | | | | |
| 1908 | 0.10 | | | | | | | |
| 1909 | 0.11 | | | | | | | |
| 1910 | 0.13 | | | | | | | |
| 1911 | 0.10 | | | | | | | |
| 1916 | 0.17 | | | | | | | |
| 1921 | 0.92 | | | | | | | |
| 1922 | 1.00 | | | | | | | |
| 1923 | 1.50 | | | | | | | |
| 1924 | 1.50 | | | | | | | |
| 1925 | 1.20 | | | | | | | |
| 1926 | 1.51 | | | | | | | |
| 1927 | 1.00 | | | | | | | |
| 1928 | 1.52 | | | | | | | |
| 1929 | 1.48 | | | | | | | |
| 1930 | 1.32 | | | | | | | |
| 1931 | 1.00 | | | | | | | |
| 1-3 1933[4] | | | | | 0.60 | | | ±0.60 |
| 7-9 1933[4] | | | | | 0.25 | | | ±0.15 |
| 1934 | 0.43 | | | | | | | |
| 1935 | 1.22 | | | | | | | |
| 1936 | 1.33 | 1.33 | | | | | | |
| 1-1937 | 1.21 | 1.36 | | | | | | |
| 4-1937 | | 1.22 | | | | | | |
| 7-1937 | | 1.06 | | | | | | |
| 10-1937 | | 1.00 | | | | | | |
| 1-1938 | 1.43 | 1.27 | | | | | | |
| 4-1938 | | 1.21 | | | | | | |
| 7-1938 | | 1.00 | | | | | | |
| 10-1938 | | 1.10 | | | | | | |
| 1-1939 | 1.28 | 1.22 | | | | | | |
| 4-1939 | | 1.00 | | | | | | |
| 7-1939 | | 0.95 | | | | | | |
| 10-1939 | | 0.95 | | | | | | |
| 1-1940 | 1.42 | 1.33 | | | | | | |
| 4-1940 | | 1.39 | | | | | | |
| 1941 | 1.99 | 1.37 | | | | | | |
| 1942 | 2.56 | 1.93 | | | | | | |
| 1943 | 2.62 | 2.65 | | | | | | |
| 1944 | 2.81 | 2.66 | 3.70 | | | 2.42 | | |
| 1945 | 4.10 | | 4.50 | | | 3.20 | | |
| 1946 | 4.70 | | 6.80 | | | 4.33 | | |
| 1947 | 9.64 | | 11.50 | | 5.00-5.30 | 8.42 | 5.00 | 5.00 |
| 1948 | 19.43 | | 25.70 | | 8.00-12.00 | 4.78-5.50 | 8.00-12.00 | 8.00-12.00 |
| 1949 | 27.61 | | 31.50 | | | 6.00-6.25 | | |
| 1-6 1950 | 29.24 | 11.34-11.84 | 29.20 | | 10.00-14.00 | 12.25-12.40 | | |
| 7-12 1950 | | 11.90-12.00 | | | 10.00-16.00 | 12.00 | | |
| 1951 | 51.19 | 18.60-23.30 | 25.00-30.00 | | 14.20-19.68 | | | |

Table 7.35 (cont.)

| Year[2] | Export price[3] | Official price | F.O.B. | Local average | Abomey local | Bohicon local | Aplahoué, Azové | Dogbo, Athiémé |
|---|---|---|---|---|---|---|---|---|
| 1952 | 42.28 | | | | | | | |
| 1953 | 42.87 | | | | ±17.00 | 15.20-18.80 | 14.80-17.00 | |
| 1954 | 40.91 | | | | 16.60-20.06 | | 15.00-19.00 | |
| 6-1954 | | 17.70-20.60 | | | | | | |
| 7-12 1954 | | 20.00-22.00 | | | | | | |
| 1955[5] | 42.87 | | | | 19.32 | 17.92-19.82 | 17.18 | |
| 1956 | 41.57 | 17.00-20.70 | | | 17.00-20.70 | 17.00-20.70 | | |
| 1957[5] | 39.77 | 11.00-18.00 | | | 10.00-18.00 | 10.00-18.00 | | |
| 1-1958[6] | 45.65 | | | | | 16.40 | | 15.50 |
| 2-1958[6] | | | | | | | 12.00-13.00 | |
| 7-8 1958 | | | | | 30.00 | 30.00 | | |
| 1959 | 62.56 | | | | | | | |
| 1960 | 44.20 | 17.00 | | | 17.00 | | 15.60 | |
| 1963 | | | | | | | 18.00-30.00 | |
| 1966 | | | | Dasa[7], Savalu | 17.50 | | | |
| 1968 | | | | 14.00 | | | | |
| 1969 | | | | 14.00 | | | | |
| 1970 | | 16.00 | | 14.00-16.00 | | | | |
| 1971 | | 16.00 | | 16.00-18.50 | | | | |
| 1972 | | 16.00 | | 18.50-19.50 | | | | |
| 1973[8] | | 18.50-40.00 | | 19.50-25.00 | | | | |
| 1974[8] | | 19.00-40.00 | | 25.00-30.00 | | | | |
| 1975[8] | | 25.00-40.00 | | 30.00-40.00 | | | | |
| 1976[8] | | 40.00-41.00 | | 40.00 | | | | |
| 1977 | | 40.00 | | 40.00 | | | | |
| 1978 | | 40.00 | | 40.00 | | | | |
| 1979 | | 40.00 | | 40.00 | | | | |
| 1980 | | 50.00 | | | | | | |
| 1981 | | 60.00 | | | | | | |
| 1982 | | 40.00 | | | | | | |
| 1983 | | 45.00 | | | | | Azové | |
| 1984 | | | | | | | 94.00 | |
| 1-3 1985 | | | | | | | 130.00 | |
| 4-1985 | | | | | | | 145-175.00 | |
| 5-1985 | | | | | | | 130.00 | |
| 6-1985 | | | | | | | 165.00 | Dogbo |
| 1985 | | | | | | | 55.00 | |
| 1986 | | | | | | | 85.00 | |
| 4-1986 | | | | | | | 193.00 | 174.00 |
| 6-1986 | | | | | | | 137.00 | 105.00 |
| 8-1986 | | | | | | | 101.50 | 110.50 |
| 1987 | | | | | | | 88.00 | |

1 Groundnuts were mostly sold unshelled, and most statistics list unshelled prices. If a source did not mention whether groundnuts were shelled or unshelled I assumed them to be unshelled. In some cases I or even the source might err in this regard, which might explain some apparent price differences between years or locations.
2 Numbers 1-12 preceding year-numbers indicate months.
3 Calculated by dividing export values by exported volumes as given by Manning (1982:368, 383).
4 Prices of unshelled groundnuts in Athiémé estimated on the base of shelled ones.
5 Early in 1955 the maximum price of 97 C.I.F. *logé* was abandoned because local producers' prices became 2-3 francs higher than in 1953 (Rapport économique territoire du Dahomey 1er semestre 1955, Archives Abomey). The guaranteed bottom price for the season 1956-57 was fixed at 92 francs *non logé* and for the season 1957-58 at 95 francs *non logé* (maximum price 98.50 francs). (Traite des produits - Arachides, Archives Abomey).
6 Official prices.
7 Prices stated for Dassa and Savalou seem to be official ones, source: Dovonou (1980:141).
8 The lower official figure is from Djagoun (1982:290-291), the higher one from Mongbo (1985:70), only for 1976 it is the other way round.

Sources: Rapport d'ensemble Dahomey 1898-1900, Archives Abomey; Rapport agricole Dahomey 1933, AOM Aix-en-Provence; Rapport économique Dahomey 1943, Archives Abomey; Rapport agricole 1947, Archives Abomey; Rapport

Table 7.35 (cont.)

économique semestriel Cercle d'Abomey premier semestre 1950, Archives Abomey; idem deuxième semestre 1950, Archives Abomey; Rapport agricole Dahomey 1950, AOM Aix-en-Provence; Rapport économique Cercle d'Abomey 1er semestre 1951, Archives Abomey; Rapport agricole Dahomey 1951, AOM Aix-en-Provence; Rapport économique Dahomey 1951, AOM Aix-en-Provence; Rapport annuel secteur agricole centre 1954, Archives Abomey; Rapport économique Cercle d'Abomey 1er semestre 1954, Archives Abomey; Rapport économique Cercle d'Abomey 2e semestre 1954, Archives Abomey; Enquêtes économiques 1955, Archives Abomey; Rapport économique territoire du Dahomey 1er semestre 1955, Archives Abomey; Rapport annuel secteur agricole centre Cercle d'Abomey 1955, Archives Abomey; Rapport agricole Cercle d'Abomey 1956, Archives Abomey; Rapport agricole Cercle d'Abomey 1957, Archives Abomey; Dossier Arachides (1957-1958), Archives Aplahoué; Dossier traite de produits - Arachides (1957-1958), Archives Abomey; Dossier Q Affaires économiques, Bulletin économique Février 1960, Archives Abomey; Bulletin économique et statistique 1960, AOM Aix-en-Provence; Rapport annuel service de développement rural 1963, ANB Porto-Novo; Dovonou (1980:141); Mongbo (1985:70); Dandjinou (1986: 85); Wartena (1987:328); Annuaire statistique Mono 1987.

Table 7.36: Maize prices 1889-1988, in local francs per kg

| Year[1] | Export price[2] | Official price | Abomey | Bohicon | Aplahoué, Azové | Dogbo, Athiémé | South Mono | Other |
|---|---|---|---|---|---|---|---|---|
| 1889 | 0.18 | | | | | | | |
| 1890 | 0.19 | | | | | | | |
| 1891 | 0.12 | | | | | | | Local? |
| 1898 | 0.35 | | | | | | | 0.40-0.50 |
| 1899 | 3.00 | | | | | | | |
| 1900 | 0.39 | | | | | | | |
| 1903 | 0.21 | | | | | | | |
| 1904 | 0.20 | | | | | | | |
| 1905 | 0.05 | | | | | | | Porto-Novo export |
| 1906 | 0.05 | | | | | | | 0.05 |
| 1907 | 0.05 | | | | | | | 0.05 |
| 1908 | 0.06 | | | | | | | 0.04-0.05 |
| 1909 | 0.07 | | | | | | | 0.05-0.09 |
| 1910 | 0.08 | | | | | | | 0.15-0.20 |
| 1911 | 0.08 | | | | | | | 0.25-0.30 |
| 1912 | 0.08 | | | | | | | |
| 1913 | 0.08 | | | | | | | <0.10 |
| 1914 | 0.08 | | | | | | | |
| 1915[3] | | | | | | | | 0.13 |
| 1918[4] | 0.36 | | | | | | | 0.50 |
| 1920 | 0.31 | | | | | | | |
| 1921 | 0.69 | | | | | | | |
| 1922 | 0.15 | | | | | | | |
| 1923 | 0.40 | | | | | | | |
| 1924 | 0.33 | | | | | | | 'Prix maïs' |
| 1925 | 0.45 | | 0.40-1.00 | | | | | 0.90 |
| 1926 | 1.25 | | | | | | Bopa | 1.00-1.60 |
| 1929 | | | | | | | | 1.50 |
| 1930 | | | | | | | | 1.00 |
| 1931 | | | | | | | | 0.50 |
| 1932[5] | 0.70 | | | | | Athiémé | 0.25 | 0.25 |
| 1-3 1933 | | | 0.60 | | | 1.20 | | 0.20 |
| 4-6 1933 | | | 0.35 | | | 0.90 | | |
| -9 1933 | | | 0.25 | | | 0.25 | | |
| 10-12 1933 | | | 0.30 | | | 0.40 | | |
| 1935 | 0.32 | | | | | | | |
| 1936 | 0.52 | | | | | | | |
| 1937 | 0.56 | | | | | | | |
| 1938 | 0.65 | | | | | | Gr. Popo | |

Table 7.36 (cont.)

| Year[1] | Export price[2] | Official price | Abomey | Bohicon | Aplahoué, Azové | Dogbo, Athiémé | South Mono | Other |
|---|---|---|---|---|---|---|---|---|
| 1939 | 0.53 | | | | | | 0.53 | |
| 1940 | 0.47 | | | | | | | |
| 1941 | 0.55 | | | | | | | |
| 1942 | 0.49 | | | | | | | Porto-Novo |
| 1943[6] | 1.18 | 1.00 | 2.86 | 2.86 | 2.86 | 2.86 | 2.86 | 0.86-0.89 |
| 1944 | 1.24 | | | | | | Bopa, Popo | 1.75 |
| 1945[7] | 0.90 | 1.28-1.43 | 1.28-1.31 | | | 1.32-1.35 | 1.28-1.35 | 1.40-1.43 |
| 1946 | 2.07 | | | | Aplahoué | | Grand Popo | |
| 1947 | | | <3.70 | <3.70 | <3.70 | <3.70 | <3.70 | |
| 1950 | | | 13.0-38.0 | | 12.0-50.0 | | 12.0-45.0 | |
| 1-6 1950 | | | 12.0-18.0 | | | | | |
| 12-1950 | | | 30.0-35.0 | | | | | |
| 1-6 1951 | | | 25.0-60.0 | | | | 40.0 | |
| 6-1951 | | | 40.0 | | 40.0 | | | |
| 12-1951 | | | 23.0 | | 35.0 | | | |
| 1953 | 13.9 | | | | | | | |
| 1-6 1954 | | | 17.0-20.0 | | | | | |
| 1954 | 15.5 | | 15.0-20.0 | | 15.0-20.0 | | | |
| 1955 | 22.1 | | 9.0-28.0 | 14-27 | | | | |
| 1956[8] | | | 7.0-14.0 | 6.0-13.0 | | | | |
| 7-1957 | 11.4 | | 7.5-8.0 | | | | | |
| 1-6 1958 | | | | | 14.00 | | | |
| 7-1958 | | | 25.0 | | 18.00-20.00 | | | |
| 5-1961 | | | | | | 60.0 | | |
| 9-10 1961 | | | | | | 12.5 | | |
| 11-1961 | | | | | | 17.5 | | |
| 12-1961 | | | | | | 50.0 | | |
| 8-1962 | | | 20.0 | | | 22.5 | | |
| 9-1962 | | | 20.0 | | | 15.0 | | |
| 10-1962 | | | 22.0 | | | 20.0 | | |
| 11-12 1962 | | | | | | 10.0 | Bopa, Popo | Porto-Novo |
| 1-1963 | | | | | 25.0 | 14.0 | 10.0-30.0 | 7.0-17.0 |
| 2-1963 | | | 14.0-28.0 | | 8.0-18.0 | 25.0 | | |
| 3-1963 | | | | | | 30.0 | | |
| 4-1963 | | | | | | 35.0 | | |
| 5-1963 | | | | | | 33.0 | | |
| 6-1963 | | | | | 11.0 | 25.0 | | |
| 7-8 1963 | | | | | 10.0 | 8.0 | | |
| 9-1963 | | | | | 10.0 | 8.0 | | |
| 10-1963 | | | 23.0 | | 9.0 | 18.0 | | |
| 11-12 1963 | | | 21.0 | | 12.0 | 20.0 | | |
| 1964 | | | 17.0-32.0 | | 15.0-20.0 | 10.0-35.0 | 18.0-30.0 | 8.0-20.0 |
| 1-1965 | | | | | 15.0-20.0 | 20.0 | 12.0-35.0 | 15.0-18.0 |
| 2-1965 | | | 23.0 | | | 20.0 | | |
| 3-1965 | | | 30.0 | | | 22.0 | | |
| 4-5 1965 | | | 28.0 | | | 25.0 | | |
| 6-1965 | | | 25.0 | 10.0 | | 20.0-45.0 | | |
| 7-8 1965 | | | 13.0 | 16.0 | | | | |
| 9-1965 | | | 8.0 | 20.0 | | | | |
| 10-1965 | | | 13.0 | 20.0 | | | | |
| 11-12 1965 | | | 18.0 | 27.0 | | | | |
| 1966 | | | 14.0-22.0 | 16.0-23.0 | 17.0-25.0 | 15.0-35.0 | 12.0-45.0 | |
| 1967 | | | 9.0-30.0 | 13.0-20.0 | 9.0-20.0 | 15.0-25.0 | 9.0-30.0 | |
| 1968 | | | 22.0-23.0 | 10.0-20.0 | 11.0-25.0 | 10.0-25.0 | 15.0-22.0 | Cotonou |
| 1969 | | | 20.0-25.0 | 20.0-25.0 | 15.0-35.0 | 15.0-35.0 | 12.0-50.0 | 31.0-36.0 |
| 1970 | | 20.0 | 20.0-30.0 | 22.0-29.0 | 15.0-30.0 | 17.0-25.0 | 15.0-50.0 | |
| | | | Djidja | | | | | |
| 1971 | | 20.0 | 22.0 | 15.0 | | | | |
| 1972 | | 20.0 | 25.0 | 16.0 | | | | |
| 1973[9] | | 15.0-22.0 | 20.0 | 16.0 | | | | |
| 1974[9] | | 17.0-23.5 | 17.0 | 17.0 | | | | Local average[10] |
| 1975[9] | Import[11] | 25.0-30.0 | 30.0 | 30.0 | | | | 44 |
| 1976[12] | 12.11 | 30.0 | 40.0 | 31.0 | | | | 55 |

Table 7.36 (cont.)

| Year[1] | Export price[2] | Official price | Abomey | Bohicon | Aplahoué, Azové | Dogbo, Athiémé | South Mono | Other |
|---|---|---|---|---|---|---|---|---|
| 1977[9] | 37.46 | 30.0-35.0 | 50.0 | 33.0 | | | | 56 |
| 1-1978 | | 30.0 | 30.0 | 25.0 | | | | 56 |
| 2-1978 | | | | | | | | 69 |
| 3-5 1978 | | | | | | | | 63 |
| 6-10 1978 | | | | | | | | 38 |
| 11-1978 | | | | | | | | 50 |
| 12-1978 | | | | | | | | 50-113 |
| 1979 | 27.47 | 30.0 | 45.0 | 35.0 | | | | 113 |
| 1980 | 2.82 | 30.0 | 70.0 | 69.0 | | | | 125 |
| 1981 | | 30.0 | 85.0 | 80.0 | | | | |
| 1982 | 63.01 | | 88.0 | 115.0 | | | | |
| 1983 | | | 90.0 | 135.0 | | | 'Mono' | |
| 1984 | | | | | Azové | Dogbo | 99 | |
| 1-1985 | | | | | | 70-80 | | |
| 2-1985 | | | | | 55-70 | 70-80 | | |
| 3-1985 | | | | | 55-75 | 80-100 | | |
| 4-1985 | | | | | 75 | 90-80 | | |
| 5-1985 | | | | | 50-78 | 82 | | |
| 6-1985 | | | | | 50-70 | 67 | | |
| 7-1985 | | | | | 45-75 | 67 | | |
| 8-1985 | | | | | 35-50 | 47 | | |
| 9-1985 | | | | | 36-50 | 43 | | |
| 10-1985 | | | | | 45 | 58-62 | | |
| 11-1985 | | | | | 60 | 62.5 | | |
| 12-1985 | | | | | 65 | | | |
| 4-1986 | | | | | 96 | 99 | 76 | |
| 6-1986 | | | | | 66 | 79 | | |
| 7-1986 | | | | | | | | |
| 8-1986 | | | | | 41 | 41 | | |
| 1987 | | | | | | | 78 | Cotonou |
| 7-1987 | | | | | 61 | 66 | | |
| 8-1987 | | | | | 45 | 55 | | |
| 9-1987 | | | | | 51 | 55 | | |
| 10-1987 | | | | | 66 | 75 | | |
| 11-1987 | | | | 67-71 | 66 | 73 | | 77-81 |
| 12-1987 | | | | 65-73 | 61 | 70 | | 77-84 |
| 1-1988 | | | | 62-91 | 76 | 86 | | 77-98 |
| 2-1988 | | | | 84-94 | 94 | 98 | | 108-120 |
| 3-1988 | | | | 82-83 | 96 | 97 | | 96-106 |
| Averages 1985-1990 | | | | | | | | |
| January | | | | 83.3 | 70.0 | | | |
| February | | | | 84.0 | 78.8 | | | |
| March | | | | 88.5 | 93.3 | | | |
| April | | | | 94.2 | 92.5 | | | |
| May | | | | 92.2 | 91.3 | | | |
| June | | | | 89.5 | 86.5 | | | |
| July | | | | 81.7 | 72.0 | | | |
| August | | | | 71.2 | 55.0 | | | |
| September | | | | 65.5 | 47.7 | | | |
| October | | | | 77.7 | 54.5 | | | |
| November | | | | 69.0 | 63.7 | | | |
| December | | | | 69.5 | 64.2 | | | |

1 Numbers 1-12 preceding year-numbers indicate months.
2 Calculated by dividing export values by exported volumes as given by Manning (1982:366, 383).
3 0.13 fr/kg maize was the maximum price that France wanted to pay in Dahomean ports (or 0.22 francs in Bordeaux). France wanted 2000 t maize to distil alcohol and sell it a.o. in Dahomey, Côte d'Ivoire and Sénégal to replace German imports. (Maïs 1908-1915 Dossier 5 bis Dahomey XIII série géographie; AOM Aix-en-Provence).
4 Drought and maize deficiency in the whole of South Dahomey. Local price in August in Porto-Novo 0.5 fr/kg, in Sakété 0.2-0.25 Fr.
5 Hard maize seeds distributed to farmers in Bopa.
6 Local prices rose far beyond official ones, but the general local price mentioned by the *Rapport économique 1947* was probably more or less the upper limit. The figure for Porto-Novo is the official price (see the next note)

Table 7.36 (cont.)

7 Official prices. Lower figure detail, higher figure bulk price.
8 In Bohicon yellow maize 1 franc cheaper than the preferred white maize. In Abomey only yellow maize was listed, which suggests that white maize was hardly available due to the bad harvest that year.
9 Djagoun (1982:290-291) and Mongbo (1985) give deviating figures for official prices 1973-1975 and 1977; the lower ones are from Djagoun.
10 The average local figures for 1974-1977 and 1979-1980 are for December. Source: Djagoun (1982:258-259, 290) presents them as national figures and emphasises that they exceed official prices.
11 Calculated by dividing official import values by official imports as given by INSAE (MDRAC 1985). The figure for 1980 seems unreliable.
12 The official price stated is the official producer price. Retailers were allowed to demand 45 fr/kg in Abomey, Bohicon and Zogbodome, and 44-46 fr/kg in the Mono (Ehuzu 14-10-1976 quoted in Mensah 1980:243, 245).

Sources: Rapport d'ensemble Dahomey 1898-1900, Archives Abomey; Rapport d'ensemble Agriculture Dahomey 1911, AOM Aix-en-Provence; Rapport d'ensemble Dahomey 1913, AOM Aix-en-Provence; Rapport annuel service de l'agriculture et des forêts Dahomey 1918, AOM Aix-en-Provence; Rapport d'ensemble Dahomey 1926, AOM Aix-en-Provence; Proces verbal de la section Bopa de la Société de prévoyance du Mono en sa séance du 12.12.1932, ANB Porto-Novo; Rapport agricole Dahomey 1933; AOM Aix-en-Provence; Lettres de 29 Octobre 1943 et 23 Décembre 1944, ANB Porto-Novo; Arrêté fixant par point de traite les prix de gros et de détail pour le maïs de la campagne 1944-1945, ANB Porto-Novo; Rapport économique Dahomey 1947, Archives Abomey; Rapport agricole 1947, Archives Abomey; Rapport économique détail Cercle d'Abomey premier semestre 1950, Archives Abomey; idem deuxième semestre 1950; idem premier semestre 1951; idem premier semestre 1954; Rapport économique Dahomey 1951, AOM Aix-en-Provence; Bulletins trimestriels d'Information et de Statistique Dahomey 1953; AOM Aix-en-Provence; Rapport annuel secteur agricole centre 1954, Archives Abomey; Rapport agricole cercle d'Abomey 1956, Archives Abomey; Agriculture 1958, Archives Aplahoué; Disette région agricole centre Septembre 1958, Archives Abomey; Bulletin économique et statistique République du Dahomey 1963, AOM Aix-en-Provence; Rapport annuel service de développement rural 1963, ANB Porto-Novo; Mondjannagni (1977:434); Mensah (1980:151, 234); Kakpo (1981:80); Djagoun (1982:247, 258-259); Manning (1982:366, 383); Mongbo (1985:66); Neefjes (1986:52); Dandjinou (1986:84); Neefjes (1986 annexe 6); Wartena (1987:327); Annuaire statistique agricole Mono 1987; Van Lohuizen & Warner (1988:95); Lutz (1994:134); Fanou (1994:110).

Table 7.37: Gari prices 1946-1987, in local francs per kg

| Year[1] | Abomey | Bohicon | Aplahoué | Athiémé | Dogbo | Porto-Novo |
|---|---|---|---|---|---|---|
| 1946 | | | | | | <5.0 |
| 1947 | | | | | | <7.5 |
| 1950 | 7-14 | | 10-15 | | | |
| 12-1950 | 12 –18 | 12-18 | | | | |
| 1-16 1951 | 20-25 | 20-25 | | | | |
| 6-1951 | 28 | | 28 | | | |
| 12-1951 | 15 | | 15 | | | |
| 1-6 1954 | 8-15 | 8-15 | | | | |
| 7-12 1954 | 11-13 | 11-13 | | | | |
| 1955 | 14-18 | 12-17 | | | | |
| 1-6 1956 | 8-12 | 8-12 | | | | |
| 1957 | 6-14 | 9-25 | | | | |
| 7-1957 | 8-9 | 8-9 | | | | |
| 7-1958[3] | 18 | 18 | 8-10 | | | |
| 5-1961 | | | | 15 | | |
| 10-1961 | 20 | | | 13 | | |
| 11-1961 | 23 | | | 13 | | |
| 12-1961 | | | | 13 | | |
| 8-1962 | 25 | | | 13 | | |
| 9-1962 | 40 | | | 13 | | |
| 10-1962 | | | | 10 | | |
| 11-12 1962 | | | | 20 | | |
| 1-1963 | | | 10 | 13 | | |
| 2-1963 | | | | 18 | | |
| 3-1963 | | | | 17 | | |
| 4-1963 | | | | 20 | | |
| 5-1963 | 22 | | 10 | 12 | | |
| 6-1963 | 23 | | 10 | 12 | | |
| 7-8 1963 | | | | 12 | | |
| 9-1963 | | | 14 | 11 | | |
| 10-1963 | | | 15 | 15 | | |
| 11-12 1963 | | | 17 | 10 | | |
| 1-1965 | | | 12 | 11 | | |
| 2-1965 | | | 13 | 13 | | |
| 3-1965 | 20 | | | | | |
| 4-5 1965 | 20 | | | | | |
| 6-1965 | 15 | | | | | |
| 7-8 1965 | 17 | | | | | |
| 9-1965 | | | | | | |
| 10-1965 | | | | | | |
| 11-12 1965 | | | | | | Cotonou |
| 1969 | | | | | | 21-26 |
| | | | | | Local average[3] | |
| 12-1975 | | | | | | 44 |
| 12-1976 | | | | | | 75 |
| Producer 1976[4] | 40 | 40 | 40 | 40 | 40 | 40 |
| Retail 1976[4] | 42-44 | 42-44 | 42-45 | 42-45 | 42-45 | |
| 12-1977 | | | | | | 100 |
| 1-2 1978 | | | | | | 100 |
| 4-5 1978 | | | | | | 125 |
| 6-1978 | | | | | | 75 |
| 7-1978 | | | | | | 88 |
| 8-1978 | | | | | | 94 |
| 9-1978 | | | | | | 88 |
| 10-1978 | | | | | | 94 |
| 11-1978 | | | | | | 100 |
| 12-1978 | | | | | | 94-100 |
| 12-1979 | | | | | | 100 |
| 12-1980 | | | | | | 175 |
| 1984 | | | Azové | 121 | | |
| 1985 | | | ±60-65 | 78 | ±60-65 | |
| 1986 | | | | 72 | | |

Table 7.37 (cont.)

| Year[1] | Abomey | Bohicon | Aplahoué | Athiémé | Dogbo | Porto-Novo |
|---|---|---|---|---|---|---|
| 4-1986 | | | 84 | | 76 | |
| 5-1986 | | | 77 | | 74 | |
| 6-1986 | | | 75 | | 58 | |
| 7-1986 | | | 76 | | 64 | |
| 8-1986 | | | 82 | | 74 | |
| 1987 | | | | 103 | | Cotonou |
| 7-1987 | | | 113 | | 118 | |
| 8-1987 | | | 110 | | 116 | |
| 9-1987 | | | 102 | | 110 | |
| 10-1987 | | | 86 | | 100 | |
| 11-1987 | | 78-93 | 92 | | 94 | 94-104 |
| 12-1987 | | 75-116 | 79 | | 86 | 97-115 |
| 1-1988 | | 69-84 | 85 | | 89 | 111-118 |
| 2-1988 | | 73-89 | 78 | | 80 | 111 |
| 3-1988 | | 66-79 | 83 | | 83 | 112 |

1 Numbers 1-12 preceding year-numbers indicate months.
2 Aplahoué sells in Abomey and Cotonou.
3 Average local figures 1975-1980 are for December except where stated differently. Djagoun (1982:258-259) gives these figures for the whole of Bénin, there is a small chance that they apply for Cotonou only.
4 Official prices (Mensah 1980:243, 245).

Sources: Rapport économique Dahomey 1947, Archives Abomey; Rapport économique Dahomey 1951, AOM Aix-en-Provence; Rapp économique Cercle d'Abomey 2. Semestre 1950, Archives Abomey; Rapport économique Dahomey 1951, AOM Aix-en-Provence; Rapport économique Cercle d'Abomey 1. semestre 1951, Archives Abomey; Rapport annuel secteur agricole centre Cercle d'Abomey 1955, Archives Abomey; Rapport économique Cercle d'Abomey 1. semestre 1956, Archives Abomey; Rapport agricole Cercle d'Abomey 1957, Archives Abomey; Disette région agricole centre septembre 1958, Archives Abomey; Agriculture 1958, Archives Aplahoué; Bulletin économique et statistique République du Dahomey, Archives Abomey; Mensah (1980:243, 245); Djagoun (1982:247, 258-259); Dandjinou (1986:86); Wartena (1987); Annuaire statistique agricole Mono 1987; Van Lohuizen & Warner (1988:95); Fanou (1994:110).

# Appendix 8

Table 8.1: Ethnic composition of some towns and provinces in 1964, 1979, 1984 and 1992, in percentages of the total population

| | Fon[1] | | Adja (large sense)[2] | |
|---|---|---|---|---|
| | Urban | Total territory | Urban | Total territory |
| 1964 | | | | |
| Cotonou | 43.9% | | 2.0% | |
| Outer quarters of Cotonou | 36.2% | | 6.4% | |
| 1979 | | | | |
| Cotonou | 61.9 | | 12.6 | |
| Abomey | 95.3 | | 3.3 | |
| 1984 | | | | |
| Abomey | 88.9% | | <3% | |
| Bohicon | 79.9% | | <3% | |
| Lokossa | 36.6% | | 25.2% | |
| Parakou | 21.6% | | negligible | |
| Natitingou | 18.5% | | negligible | |
| Zou province | | 74.2 | | 0.6 |
| Mono province | | 17.4 | | 60.9 |
| Total Bénin | | 39.2 | | 11.0 |
| 1992 | Fon proper | Fon-related[3] | Adja proper | Adja- related[4] |
| Total Bénin | 19.9 | 22.3 | 8.6 | 7.0 |

1 Excluding Gun, Ayizo, Wemɛnu and Tofi, but possibly including some smaller groups, see note 3.
2 Excluding Mina, Waci, Pedah and Pla (= Popo or Hwla), but possibly including Sahwè.
3 Speakers of the Fon-related languages Gun 7.9%, Ayizo 4.9%, Wemɛ 2.6 %, Torri 2.5%, Mahi 2%. Kotafon 1.4%, Tofi 1.4%, Seto 0.3%, and Aguna 0.1%.
4 Speakers of the Adja-related languages Sahwè 2.5%, Mina 1.3 %, Hula 1.3 %, Hweda 1%, and Waci 0.6 %. The geographical borderline between Fon-related and the Adja-related language speakers corresponds more or less with the river Couffo.
Sources: Mondjannagni (1977:336-337); INSAE (1987:24, 27); URBANOR (1984); INSAE/MPAE (1994).

Table 8.3: Migration rates of living Adja men found by Den Ouden's systematic search for migrants compared to rates of men born between 1906 and 1973 disclosed by my research

| | Adja | | | Fon | | |
|---|---|---|---|---|---|---|
| | Atindehouhoué | Komihoué[1] | Houé[2] | Lissazounme | Kana | Aoundome |
| All migrants | 30.5% | 38.9% | 38.7% | 61.4% | 64.9% | 28.9% |
| Short term | 11.4% | | | 42.3% | 8.8% | 18.9% |
| Long term | 19.2% | | | 19.2% | 56.1% | 10.0% |
| Sample size | 141 | 149 | 111 | 130 | 57 | 90 |

1 Pseudonym for an Ehwe-Adja village near Dogbo, source: Den Ouden (1990:26-27).
2 Pseudonym for a Dogbo-Adja village, source: Den Ouden (1989:42-43)
Source for the other villages: Table 7.33.

Table 8.7: Principal occupations of Kana-Dodome men (lineages Sesinu and Mawuhwe)

| Birth years | 1840-1905 | | 1906-1929 | | 1930-1956 | | 1957-1973 | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % |
| Farmer in Kana | 12 | 46.5 | 14 | 51.1 | 4 | 9.3 | 9 | 18.8 |
| Farmer elsewhere | 1 | 4.6 | 1 | 3.6 | 12 | 30.0 | | |
| Agric wage labour in Kana | | | | | 1 | 2.5 | 1 | 2.1 |
| Agric wage labour elsewhere | | | | | | | | |
| Palm oil wage labour Kana | | | | | 1 | 2.5 | | |
| Teacher elsewhere | | | | | 4 | 10.0 | | |
| Soldier elsewhere | | | | | 1 | 2.5 | | |
| (Para)state employee[1] | 5 | 19.2 | 2 | 7.1 | 9 | 22.5 | 8 | 16.7 |
| Colonial *chef* & *Ahwangan*[2] | 1 | 3.9 | | | | | | |
| Other wage labour elsewhere | | | | | 4 | 10.0 | 4 | 8.3 |
| Blacksmith in Kana | 3 | 11.5 | 5 | 17.9 | | | | |
| Other crafts in Kana | | | | | 1 | 2.5 | 3 | 6.3 |
| Other crafts elsewhere | | | 1 | 3.6 | 2 | 5.0 | 6 | 12.5 |
| Apprentice elsewhere | | | | | | | 6 | 12.5 |
| Merchant in Kana | 1 | 2.7 | 2 | 7.1 | 1 | 2.5 | | |
| Merchant elsewhere | | | | | | | 1 | 2.1 |
| *Vodun* priest in Kana | 2 | 7.7 | 2 | 6.1 | 1 | 2.5 | | |
| Healer & diviner in Kana | 1 | 3.9 | 1 | 3.6 | | | | |
| Healer & diviner elsewhere | | | | | | | | |
| Schooling in Kana | | | | | | | 6 | 12.5 |
| Schooling elsewhere | | | | | | | 4 | 8.3 |
| Other | | | | | | | | |
| Activity totals | 26 | | 28 | | 40 | | 48 | |
| Number of men | 13 | | 14 | | 20 | | 24 | |

1 The railway service, the wharf and later the port of Cotonou, SBEE (national water & electricity service), the SONAPRA palm oil factory, and the extension service. The category includes all types of work and ranks within the organization. All employees migrated at least part time. Railway employees often worked all along the railway line including Kana. Two employees of the SONAPRA and the extension service worked towards the end of their career in Bohicon while living in Kana.

2 Warlord under a Fon king.

Source: Own interviews and observations in the concerned lineages.

Table 8.8: Principal occupations of Lissazounme men (lineages Lisanon, Kpleli, Segbeji, Tobada and Azatasu)

| Birth years | 1840-1905 | | 1906-1929 | | 1930-1956 | | 1957-1973 | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % |
| Farmer in Lissazounme | 35 | 60.3 | 22 | 48.5 | 25 | 19.5 | 34 | 29.8 |
| Farmer elsewhere | 3 | 5.2 | 4 | 8.0 | 14 | 10.9 | 6 | 5.3 |
| Agric wage labour Lissazounme | | | | | | | 1 | 0.9 |
| Agric wage labour elsewhere | | | | | | | | |
| Palm oil wage labour Lissazounme | | | | | 3 | 2.3 | 1 | 0.9 |
| Teacher elsewhere | | | | | 12 | 9.4 | | |
| Soldier elsewhere | | | 1 | 2.2 | 2 | 1.6 | | |
| (Para)state employee[1] | 2 | 3.5 | | | 5 | 3.9 | 2 | 1.8 |
| Colonial *chef*, major >1975 | 1 | 1.7 | | | 1 | 0.8 | | |
| Other wage labour elsewhere | 1 | 1.7 | | | 6 | 4.7 | 4 | 3.5 |
| Carpenter in Lissazounme | 2 | 3.5 | | | 5 | 3.9 | 3 | 2.6 |
| Carpenter elsewhere | 1 | 1.7 | | | 13 | 10.2 | 1 | 0.9 |
| Other crafts in Lissazounme[2] | 1 | 1.7 | 3 | 5.8 | 3 | 2.3 | 8 | 7.0 |
| Other crafts elsewhere | | | 1 | 2.2 | | | | |
| Apprentice elsewhere | | | | | | | 9 | 7.9 |
| Merchant in Lissazounme | | | 1 | 2.2 | 6 | 4.7 | | |
| Merchant elsewhere | 1 | 1.7 | 1 | 2.2 | | | 1 | 0.9 |
| *Vodun* priest in Lissazounme | 5 | 8.6 | 3 | 6.5 | | | 1 | 0.9 |
| Healer & diviner in Lissazounme | 2 | 3.5 | 5 | 10.1 | 1 | 0.8 | 25 | 21.9 |
| Healer & diviner elsewhere | 4 | 5.7 | 6 | 12.3 | 30 | 23.4 | | 7.9 |
| Schooling in Lissazounme | | | | | | | 3 | 2.6 |
| Schooling elsewhere | | | | | | | 15 | 13.2 |
| Other | | | | | | | | |
| Activity totals | 58 | | 46 | | 128 | | 114 | |
| Number of men | 29 | | 22 | | 51 | | 57 | |

1 All kinds of ranks within the railway service, post office Cotonou, police, SONAPRA, and a French farming systems research & development project.
2 Including *sodabi* production.
Source: Own interviews and observations in the concerned lineages.

Table 8.9: Principal occupations of Aoundome men (lineages as in Table 8.2)

| Birth years | 1840-1905 | | 1906-1929 | | 1930-1956 | | 1957-1973 | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % |
| Farmer in Aoundome | 9 | 90.0 | 32 | 80.8 | 32 | 72.7 | 55 | 58.5 |
| Farmer elsewhere | | | 2 | 5.0 | 1 | 2.3 | | |
| Agric wage labour Aoundome | | | | | | | | |
| Agric wage labour elsewhere | | | 1 | 2.5 | 1 | 2.3 | 10 | 10.6 |
| Other wage work Aoundome[1] | | | | | 2 | 4.6 | 1 | 1.1 |
| Teacher elsewhere | | | | | 1 | 2.3 | 2 | 2.1 |
| Soldier elsewhere | | | | | | | 2 | 2.1 |
| (Para)state employee | | | | | | | | |
| Colonial *chef* | | | | | | | | |
| Other wage labour elsewhere | | | | | | | | |
| Other crafts in Aoundome | | | 3 | 5.0 | 4 | 9.1 | 7 | 7.5 |
| Other crafts elsewhere | | | | | 2 | 4.6 | 5 | 5.3 |
| Apprentice elsewhere | | | | | | | 6 | 6.4 |
| Merchant in Aoundome | | | | | | | | |
| Merchant elsewhere | | | 1 | 1.8 | | | | |
| *Vodun* priest in Aoundome | 1 | 10.0 | | | 1 | 2.3 | | |
| Healer & diviner Aoundome | | | 1 | 2.5 | | | | |
| Healer & diviner elsewhere | | | | | | | | |
| Schooling in Aoundome | | | | | | | 6 | 6.4 |
| Schooling elsewhere | | | | | | | | |
| Other (sick) | | | | | | | 2 | 2.1 |
| Activity totals | 10 | | 40 | | 44 | | 96 | |
| Numbers of men | 50 | | 20 | | 22 | | 48 | |

1 Charcoal and *sodabi* production.
Source: Own interviews and observations in the concerned lineages.

Table 8.10: Principal occupations of Atindehouhoué men (lineages Sala and Klakla)

| Birth years | 1840-1905 | | 1906-1929 | | 1930-1956 | | 1957-1973 | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % |
| Farmer in Atindehouhoué | 45 | 78.9 | 47 | 65.3 | 75 | 65.8 | 50 | 52.1 |
| Farmer elsewhere | 9 | 17.3 | 7 | 9.0 | 8 | 6.0 | 1 | 1.0 |
| Agric wage labour Atindehouhoué | | | | | | | | |
| Agric wage labour elsewhere | | | 2 | 2.8 | 2 | 1.8 | | |
| Teacher elsewhere | | | | | 2 | 1.8 | | |
| Soldier elsewhere | | | 1 | 1.4 | 1 | 0.9 | 2 | 2.1 |
| (Para)state employee | | | | | 1 | 0.9 | | |
| Colonial *chef* | 2 | 3.6 | 1 | 0.7 | | | | |
| Other wage labour elsewhere | | | 4 | 5.6 | 6 | 5.3 | 4 | 4.2 |
| *Sodabi* prod. in Atindehouhoué | | | 2 | 2.8 | 4 | 3.2 | | |
| Other crafts in Atindehouhoué | | | 3 | 4.2 | 1 | 0.6 | | |
| Crafts elsewhere | | | | | 1 | 0.9 | 3 | 3.1 |
| Apprentice elsewhere | | | | | | | 12 | 12.5 |
| Merchant in Atindehouhoué | | | 5 | 6.3 | 4 | 3.2 | 1 | 1.0 |
| Merchant elsewhere | | | 1 | 1.4 | 8 | 7.0 | 6 | 6.3 |
| *Vodun* priest in Atindehouhoué | | | 1 | 0.7 | | | | |
| Healer & diviner Atindehouhoué | | | | | | | | |
| Healer & diviner elsewhere | | | | | | | | |
| Schooling in Atindehouhoué | | | | | | | 15 | 15.7 |
| Schooling elsewhere | | | | | 2 | 1.8 | 1 | 1.0 |
| Other (pastor north plateau) | | | | | | | 1 | 1.0 |
| Activity totals | 56 | | 72 | | 114 | | 96 | |
| Number of men | 28 | | 36 | | 57 | | 48 | |

Source: Own interviews and observations in the concerned lineages.

# Appendix 9

Table 9.22: Soil fertility indicators of cultivated red soils on the Adja plateau (sampling depth 0-10 cm)

| Field | C% | N% | Org. matter | CEC meq | PH-$H_2$0 | PH-KCL |
|---|---|---|---|---|---|---|
| 5 year old field Zaffi[1] | 1.24 | 0.105 | 2.14 | 6.80 | 6.8 | 6.1 |
| 5 year old field Zaffi[2] | 1.28 | 0.104 | 2.21 | | 7.3 | 6.3 |
| New field Zaffi[3] | 1.32 | 0.123 | 2.28 | | 7.4 | 6.4 |
| Home garden Lokogba[4] | 1.25 | 0.126 | 2.16 | 6.75 | 7.0 | 6.4 |
| 12-15 year old fields[5] | 0.64 | 0.056 | | 6.63 | 6.1 | |
| >30 year old fields[6] | 0.56 | 0.048 | | 5.88 | 5.6 | |

1 Village-near field *ahwegboboji* sampled in 1989. Cultivated every season 1985-1989 with maize, beans and tomatoes; 1980-1984 fallow; 1975-1979 every season maize, beans and tomatoes; 1970-1974 fallow, etc. Principal weeds in 1985 at the end of the last fallow (in their order of importance): *Mallotus oppositifolius, Albizia zygia, Securinega virosa, Combretum hispidum, Mezoneuron benthamiamum, Holarrhena floribunda, Antiaris africana*. Principal weeds after 5 years cultivation in 1989 in their order of importance: *Brachiaria deflexa, 'wojogbwi', Rottboellia cochinchinensis, Combretum hispidum, Mallotus oppositifolius, Securinega virosa, Commelina spp., Albizia zygia, Holarrhena floribunda, Antiaris africana*. 160 m above sea level, slope almost zero (0-2%). Sources: own interviews, Kerkdijk 1991 appendix O.

2 As field 1. Sources: own interviews, Kerkdijk 1991 appendix O.

3 Village-near field *ahwegboboji*, cultivated and sampled in 1989; fallow 1983-1988; cultivated with annual crops every season 1981-1982; oil palm 'fallow' ±1964-1980; cultivated with annual crops every season 1952-1963; bush with large trees (*zùn*) until 1952. Principal weeds at the end of oil palm 'fallow' early 1981: *Mallotus oppositifolius, Securinega virosa, Combretum hispidum, Albizia zygia, Zanthoxylum zanthoxyloides*. Principal weeds after 1 year cultivation in 1982: *Talium triangulare, Commelina spp., Panicum maximum, Combretum hispidum, Mallotus oppositifolius, Andropogon gayanus, Albizia zygia, Zanthoxylum zanthoxyloides*. Principal weeds after 6 years fallow in 1988: *Mallotus oppositifolius, Securinega virosa, Combretum hispidum, Albizia zygia, Zanthoxylum zanthoxyloides*. (Weeds in order of importance). 160 m above sea level, slope almost zero (0-2%). Sources: own interviews and Kerkdijk 1991 appendix O.

4 Field between the houses and the sacred forest of Lokogba, was permanently cultivated with maize and tobacco every season between 1970 and 1990, before 1970 it was a ceremonial place. It received ashes and manure. Principal weeds in 1990: *Commelina spp., Acanthospermum hispidum, Brachiaria deflexa, Indigofera tinctoria* (Herb cover 30%, gramineas 10%, bare soil 60%). 180 m above sea level, on top of a slope. Source: own interviews, soil sampling by Gayser, Wartena and Brouwers 29 November 1990. Laboratory analysis by Gayser.

5 Fields cultivated for 12-15 years in the Adja villages Kokohoué, Adidevo and/or Allada. Values for C%, pH H2O and CEC meq are based on analysis of 30 samples from two fields, the other values on analysis of 12 samples from the same fields. Source: Brouwers 1993:77.

6 Fields cultivated for more than 30 years in the Adja villages Kokohoué, Adidevo and/or Allada. Values for C%, pH H2O and CEC meq are based on analysis of 10 samples from two fields, the value for N% on 4 samples from these two fields, the other values on analysis of 5 samples from the same fields. Source: Brouwers 1993:77.

Table 9.23: Soil fertility indicators of fallows, oil palm fallows and forests on the Adja plateau (sampling depth 0-10 cm)

| Field | C% | N% | Org. matter | CEC meq | PH-$H_2$0 | PH-KCL |
|---|---|---|---|---|---|---|
| 7 year old fallow Zaffi[7] | 1.42 | 0.118 | 2.45 | | 7.1 | 6.2 |
| 1-2 year old palm fallows[8] | 0.71 | 0.059 | | 6.86 | 6.0 | |
| 6-8 year old palm fallows[9] | 0.63 | 0.052 | | 5.14 | 5.9 | |
| 18-20 year palm fallows[10] | 0.68 | 0.059 | | 5.04 | 6.0 | |
| 5 year palm fallow Zaffi[11] | 1.03 | 0.093 | 1.78 | | 6.7 | 5.6 |
| Sacred forest Lokogba[12] | 2.57 | 0.269 | 4.43 | 11.60 | 7.1 | 6.7 |
| Forest Zaffi[13] | 3.29 | 0.29 | 5.67 | 16.20 | 7.3 | 6.8 |

7 Fallow for 7 years (herbs + bush). 160 m above sea level, slope almost zero (0-2%). Source: Kerkdijk 1991 appendix O.
8 Oil palm 'fallow' of 1-2 years; analysis of 20 samples from 2 fields. Source: Brouwers 1993:77.
9 Oil palm 'fallow' of 6-8 years; analysis of 30 samples from 2 fields. Source: Brouwers 1993:77.
10 Oil palm 'fallow' of 18-20 years; analysis of 10 samples from 2 fields. Source: Brouwers 1993:77.
11 Oil palm 'fallow' of 5 years (age of palms 12 years), sampled in 1989. Intensive cultivation of tomatoes every first season, cowpea every short dry season and maize every second rainy season 1976-1984. Oil palm 'fallow' from somewhere in the (early?) 1960s to 1975. Principal weeds in 1975 at the end of the oil palm 'fallow': *Mallotus oppositifolius, Holarrhena floribunda, Combretum hispidum, 'gosan', Panicum maximum, Morinda lucida*. 160 m above sea level, slope almost zero (0-2%). Sources: own interview 25-7-90, Kerkdijk 1991 appendix O.
12 Sacred forest next to the home garden in Tables 9.22 and 9.29. In the forest, animals are sacrificed and cooked, women gather dead wood, and in the past people who had died of leprosy, dysentery or tuberculosis were buried there, but the forest is not used as toilet according to inhabitants of the houses adjacent the forest. Vegetation: *Ceiba pentandra, Diospyros tricolor, Lecaniodiscus cupanioides* (tree cover 70%, shrub cover 60%, herb cover 10%). 180 m above sea level, on top of a slope. Sources: own interviews, soil sampling by Brouwers, Gayser & Wartena 29 November 1990.
13 Burial forest on the roadside, has received some organic waste. Vegetation: *Adansonia digitata* (10%), shrubs (70%), bare soil 10%. 160 m above sea level, slope almost zero (0-2%). Sources: own research and Kerkdijk 1991 appendices M and O.

Table 9.24: Soil fertility indicators of cultivated red soils on the Fon plateau (sampling depth 0-15 cm)

| Field | C% | N% | Org. matter | CEC meq | PH-$H_2$0 | PH-KCL |
|---|---|---|---|---|---|---|
| ≤4 year old field Abomey[1] | | | 0.63 | 1.90 | | 5.5 |
| Old field Lissazounme[2] | 0.39 | 0.032 | 0.67 | 2.45 | 6.4 | 5.2 |
| New field Lissazounme[3] | 0.60 | 0.063 | 1.03 | | 6.7 | 5.8 |
| Home garden Lissazounme[4] | 0.91 | 0.088 | 1.57 | | 8.2 | 7.3 |

1 Trial field near Abomey installed in 1967. Soil sampled in (or shortly before) 1971; source: Raunet 1971:1063-1064.
2 Intensively cultivated field 1 km south of Lissazounme. Principal weeds *Imperata cylindrica* (70%), *Ipomoea involuncrata*. 170 m above sea level, slope almost zero (0-2%). Sources: own observations and interviews, Kerkdijk 1991 appendices M and O.
3 Field 1 km south of Lissazounme (near the previous field), first year of cultivation after 4 years fallow. 170 m above sea level, slope almost zero (0-2%). Sources: own interviews, Kerkdijk 1991 appendix O.
4 Field between the houses and the sacred forest (*kpawugle*), permanently cultivated with maize for more than 50 years and intensively manured. 170 m above sea level, slope almost zero (0-2%). Sources: own interviews, Kerkdijk 1991 appendix O.

Table 9.25: Soil fertility indicators of fallows, planted fallows and forests on red soils on the Fon plateau (sampling depth 0-10 cm)

| Field | C% | N% | Org. matter | CEC meq | PH-$H_2$0 | PH-KCL |
|---|---|---|---|---|---|---|
| 4 years fallow Lissazounme[5] | 0.64 | 0.067 | 1.10 | | 6.6 | 5.4 |
| 10 years fallow Lissazounme[6] | 1.01 | 0.095 | 1.74 | | 6.5 | 5.5 |
| 20 years fallow Lissazounme[7] | 1.14 | 0.095 | 1.97 | | 6.7 | 5.9 |
| 30 years fallow Lissazounme[8] | 1.24 | 0.102 | 2.14 | | 6.7 | 5.9 |
| 40 years neem 'fallow'[9] | 1.41 | 0.112 | 2.43 | | 6.5 | 5.8 |
| Sacred forest Lisazun[10] | 2.08 | 0.152 | 3.59 | 12.20 | 6.7 | 5.8 |

5 Soil after 4 years fallow, same plot as Fon field 3. Principal weeds *Andropogon gayanus, Imperata cylindrica*. 170 m above sea level, slope almost zero (0-2%). Sources: own observations and interviews and Kerkdijk 1991 appendix O.
6 Soil after 10 years fallow ±1 km from Lissazounme. 170 m above sea level, slope almost zero (0-2%). Source: Kerkdijk 1991 appendix O.
7 Soil after 20 years fallow near Lissazounme. 170 m above sea level, slope almost zero (0-2%). Source: Kerkdijk 1991 appendix O.
8 Soil after 30 years fallow near Lissazounme. 170 m above sea level, slope almost zero (0-2%). Source: Kerkdijk 1991 appendix O.
9 Neem (*Azadirachta indica*) plantation with bush of 40 years, near houses and near sacred forest. 170 m above sea level, slope almost zero (0-2%). Source: Kerkdijk 1991 appendix O.
10 Sacred forest. Vegetation: *Antiaris africana, Acacia spp., Cassia sp*. (Tree cover 10%, shrub cover 80%, bare soil 10%). 170 m above sea level, slope almost zero (0-2%). Animals are sacrificed but not cooked in the forest; bark from *Antiaris africana* is gathered there. The forest is not used as toilet according to inhabitants of the adjacent houses. Sources: own interviews and observations and Kerkdijk 1991 appendices M and O.

Table 9.26: Analysis of soil samples from the sacred forest in Lokogba[1], Ehwe-Adja plateau

| Texture: \ Depth (cm) | 0-15[2] | 15-50 | 50-80 | 80-110 | 110-150 |
|---|---|---|---|---|---|
| 0-2 u% (lutum) | 14.62 | 17.05 | 43.26 | 51.49 | 51.42 |
| 2-50 u% (silt) | 7.73 | 4.67 | 4.49 | 4.53 | 6.75 |
| 50-2000 u% (sand) | 77.02 | 78.09 | 52.11 | 33.25 | 31.92 |
| C% | 2.57 | 0.50 | 0.45 | 0.34 | 0.25 |
| N% | 0.269 | 0.053 | 0.048 | | 0.028 |
| C/N | 9.6 | 9.4 | 9.4 | | 8.9 |
| Organic matter % | 4.43 | 0.86 | 0.78 | | 0.43 |
| PH $H_2O$ | 7.1 | 6.8 | 6.0 | 5.4 | 5.4 |
| PH KCL | 6.7 | 6.2 | 4.8 | 4.8 | 5.0 |
| $Ca^{++}$ (meq/100gr) | 9.44 | 2.01 | 1.89 | 2.06 | 2.09 |
| $Mg^{+}$ (meq/100gr) | 1.34 | 0.71 | 1.38 | 1.38 | 1.39 |
| $K^{+}$ (meq/100gr) | 0.39 | 0.18 | 0.08 | 0.09 | 0.08 |
| $Na^{+}$ (meq/100gr) | 0.33 | 0.28 | 0.36 | 0.33 | 0.37 |
| Sum cations (meq/100gr) | 11.50 | 3.18 | 3.71 | 3.86 | 3.93 |
| CEC (meq/100gr) | 11.60 | 5.60 | 6.30 | 8.90 | 7.90 |
| Base saturation | 99 | 57 | 59 | 43 | 50 |
| P ass BRAY 1 ppm | 8 | 2 | 1 | 9 | trace |

1 Sacred forest next to the home garden in Tables 9.22 and 9.29 in Lokogba. In the forest, animals are sacrificed and cooked, women gather dead wood, and in the past people who had died of leprosy, dysentery or tuberculosis were buried there, but the forest is not used as toilet according to the Lokogba population. Vegetation: *Ceiba pentandra, Diospyros tricolor, Lecaniodiscus cupanioides* (tree cover 70%, shrub cover 60%, herb cover 10%). 180 m above sea level, on top of a slope.
2 The topsoils of the sacred forests in Avégame and Dogbo-Ahomè, equally on the Adja plateau, had similar values for N%, $K^{+}$, and P ass.
Sources: own interviews, soil sampling by Gayser, Wartena & Brouwers 29-11-1990. Laboratory analysis by Gayser.

Table 9.27: Analysis of soil samples from the sacred forest in Lissazounme, Fon plateau

| Texture: \ Depth (cm) | 0-15 | 15-55 | 55-110 | >110 |
|---|---|---|---|---|
| 0-2 u% (lutum) | 20.4 | 16.4 | 40.3 | 49.5 |
| 2-50 u% (silt) | 8.3 | 10.4 | 6.8 | 8.8 |
| 50-2000 u% (sand) | 69.0 | 72.5 | 50.7 | 40.1 |
| C% | 2.08 | 0.43 | | |
| N% | 0.152 | 0.039 | | |
| C/N | 13.7 | 11.0 | | |
| Organic matter % | 3.59 | 0.74 | | |
| PH $H_2O$ | 6.7 | 6.7 | 7.0 | 6.6 |
| PH KCL | 5.8 | 5.4 | 5.6 | 5.5 |
| $Ca^{++}$ (meq/100gr) | 8.52 | 2.63 | 2.91 | 2.73 |
| $Mg^{+}$ (meq/100gr) | 1.92 | 0.95 | 1.76 | 2.05 |
| $K^{+}$ (meq/100gr) | 0.30 | 0.14 | 0.13 | 0.13 |
| $Na^{+}$ (meq/100gr) | 0.31 | 0.29 | 0.29 | 0.31 |
| Sum cations (meq/100gr) | 11.05 | 4.01 | 5.09 | 5.22 |
| CEC (meq/100gr) | 12.20 | 6.35 | 8.45 | 11.40 |
| Base saturation | 91 | 63 | 60 | 46 |
| Bulk density (g/cm$^3$) | 1.16 | 1.35 | 1.44 | 1.52 |

Note: Sacred forest in the village. Vegetation: *Antiaris africana, Acacia spp*. (Tree cover 10%, shrub cover 80%, bare soil 10%). 170 m above sea level, slope almost zero (0-2%). Animals are sacrificed but not cooked in the forest. Bark from *Antiaris africana* is gathered there. The forest is not used as toilet according to the villagers.
Sources: own interviews and observations and Kerkdijk 1991 appendices M and O.

Table 9.28: Analysis of soil samples from a forest in Zaffi, Ehwe-Adja plateau

| Texture: \ Depth (cm) | 0-10 | 10-70 | 70-120 | >120 |
|---|---|---|---|---|
| 0-2 u% (lutum) | 16.6 | 18.9 | 32.2 | 48.4 |
| 2-50 u% (silt) | 13.4 | 9.7 | 12.4 | ? |
| 50-2000 u% (sand) | 69.2 | 81.7 | 55.9 | ? |
| C% | 3.29 | 0.46 | | |
| N% | 0.290 | 0.046 | | |
| C/N | 11.3 | 10.0 | | |
| Organic matter % | 5.67 | 0.79 | | |
| PH $H_2O$ | 7.3 | 6.4 | | |
| PH KCL | 6.8 | 5.4 | | |
| $Ca^{++}$ (meq/100gr) | 12.98 | 2.25 | 1.99 | 2.42 |
| $Mg^{+}$ (meq/100gr) | 3.23 | 0.73 | 1.30 | 1.39 |
| $K^{+}$ (meq/100gr) | 1.01 | 0.34 | 0.29 | 0.39 |
| $Na^{+}$ (meq/100gr) | 0.13 | 0.11 | 0.11 | 0.17 |
| Sum cations (meq/100gr) | 17.35 | 3.43 | 3.69 | 4.37 |
| CEC (meq/100gr) | 16.20 | 7.20 | 9.00 | 9.90 |
| Base saturation | >100 | 48 | 41 | 44 |
| P-BRAY ppm | 44 | 23 | 33 | 28 |

Note: Burial forest on roadside, has received some organic waste. Vegetation: *Adansonia digitata* (10%), shrubs (70%), bare soil 10%. 160 m above sea level, slope almost zero (0-2%). Sources: own research and Kerkdijk 1991 appendices M and O.

Table 9.29: Analysis of soil samples from a village field in Lokogba, Ehwe-Adja plateau

| Texture: \ Depth (cm) | 0-10 | 10-30 | 30-60 | 60-90 | 90-150 |
|---|---|---|---|---|---|
| 0-2 u% (lutum) | 11.97 | 15.64 | 27.49 | 45.93 | 49.02 |
| 2-50 u% (silt) | 4.75 | 4.20 | 2.95 | 3.76 | 4.0 |
| 50-2000 u% (sand) | 82.71 | 79.19 | 68.69 | 48.76 | 45.81 |
| C% | 1.25 | 0.53 | 0.38 | 0.41 | 0.26 |
| N% | 0.126 | 0.056 | 0.042 | 0.042 | 0.028 |
| C/N | 9.9 | 9.5 | 9.0 | 9.8 | 9.3 |
| Organic matter % | 2.16 | 0.91 | 0.66 | 0.71 | 0.45 |
| PH $H_2O$ | 7.0 | 6.8 | 6.9 | 6.0 | 5.4 |
| PH KCL | 6.4 | 6.1 | 6.0 | 5.2 | 4.9 |
| $Ca^{++}$ (meq/100gr) | 3.89 | 2.74 | 2.75 | 2.67 | 2.22 |
| $Mg^{+}$ (meq/100gr) | 1.05 | 0.50 | 0.64 | 0.84 | 0.82 |
| $K^{+}$ (meq/100gr) | 0.45 | 0.21 | 0.25 | 0.27 | 0.23 |
| $Na^{+}$ (meq/100gr) | 0.34 | 0.28 | 0.26 | 0.30 | 0.28 |
| Sum cations (meq/100gr) | 5.73 | 3.73 | 3.90 | 4.08 | 3.55 |
| CEC (meq/100gr) | 6.75 | 5.70 | 6.05 | 9.95 | 8.15 |
| Base saturation | 85 | 65 | 64 | 41 | 44 |
| P ass BRAY 1 ppm | 68 | 19 | 21 | 4 | trace |

Note: Field between the houses and the sacred forest of Lokogba, was permanently cultivated with maize and tobacco every season between 1970 and 1990, before 1970 it was a ceremonial place. It received ashes and manure, which explains why the field's $K^{+}$ value is higher than in the adjacent forest. Principal weeds in 1990: *Commelina spp., Acanthospermum hispidum, Brachiaria deflexa, Indigofera tinctoria* (Herb cover 30%, gramineas 10%, bare soil 60%). 180 m above sea level, on top of a slope.

Source: own interviews, soil sampling by Gayser, Wartena and Brouwers 29 November 1990. Laboratory analysis by Gayser.

Table 9.30: Analysis of soil samples from an intensively cultivated field in Lissazounme, Fon plateau

| Texture: \ Depth (cm) | 0-10 | 10-30 | 30-60 | 60-120 | >120 |
|---|---|---|---|---|---|
| 0-2 u% (lutum) | 4.0 | 11.6 | 29.2 | 44.4 | 50.0 |
| 2-50 u% (silt) | 7.1 | 7.4 | 6.7 | 7.8 | 7.0 |
| 50-2000 u% (sand) | 86.4 | 79.4 | 61.6 | 47.6 | 40.7 |
| C% | 0.39 | 0.37 | 0.37 | | |
| N% | 0.032 | 0.028 | 0.028 | | |
| C/N | 12.21 | 13.2 | 13.21 | | |
| Organic matter % | 0.67 | 0.64 | 0.64 | | |
| PH $H_2O$ | 6.4 | 5.8 | 5.3 | 5.6 | 5.7 |
| PH KCL | 5.2 | 4.4 | 4.4 | 4.7 | 4.8 |
| $Ca^{++}$ (meq/100gr) | 1.17 | 1.03 | 1.31 | 1.86 | 2.18 |
| $Mg^{+}$ (meq/100gr) | 0.36 | 0.17 | 0.38 | 0.44 | 0.24 |
| $K^{+}$ (meq/100gr) | 0.15 | 0.13 | 0.11 | 0.10 | 0.10 |
| $Na^{+}$ (meq/100gr) | 0.24 | 0.24 | 0.44 | 0.44 | 0.45 |
| Sum cations (meq/100gr) | 1.92 | 1.57 | 2.24 | 2.85 | 2.87 |
| CEC (meq/100gr) | 2.45 | 4.10 | 7.75 | 10.45 | 11.05 |
| Base saturation | 61.1 | 35.4 | 26.5 | 23.6 | 22.1 |
| Bulk density (g/cm$^3$) | 1.42 | 1.47 | 1.54 | 1.71 | 1.71 |

Source: Kerkdijk 1991 appendix N

Table 9.31: Analysis of soil samples from an intensively cultivated field at Zaffi, Ehwe-Adja plateau

| Depth (cm) / Texture: | 0-10 | 10-30 | 30-50 | >50 |
|---|---|---|---|---|
| 0-2 u% (lutum) | 8.7 | 12.8 | 12.8 | 48.8 |
| 2-50 u% (silt) | 9.2 | 9.8 | 9.4 | 5.5 |
| 50-2000 u% (sand) | 81.7 | 77.8 | 73.1 | 44.5 |
| C% | 1.24 | 0.63 | 0.46 | |
| N% | 0.105 | 0.053 | 0.044 | |
| C/N | 11.8 | 11.9 | 10.5 | |
| Organic matter % | 2.14 | 1.09 | 0.79 | |
| PH $H_2O$ | 6.8 | 6.4 | 6.3 | 6.1 |
| PH KCL | 6.1 | 5.6 | 5.6 | 5.1 |
| $Ca^{++}$ (meq/100gr) | 3.52 | 2.24 | 2.11 | 2.57 |
| $Mg^{+}$ (meq/100gr) | 0.91 | 0.58 | 0.72 | 1.30 |
| $K^{+}$ (meq/100gr) | 0.41 | 0.38 | 0.32 | 0.34 |
| $Na^{+}$ (meq/100gr) | 0.11 | 0.14 | 0.17 | 0.19 |
| Sum cations (meq/100gr) | 4.95 | 3.34 | 3.32 | 4.40 |
| CEC (meq/100gr) | 6.80 | 5.60 | 7.10 | 11.75 |
| Base saturation | 73 | 60 | 47 | 37 |
| P-BRAY ppm | 69 | 35 | 35 | 104 |

Note: Village-near field *ahwegboboji* sampled in 1989. Cultivated every rainy season between 1985 and 1989 with maize, beans and tomatoes. 1980-1984 fallow; 1975-1979 every season maize, beans and tomatoes; 1970-1974 fallow, etc. Principal weeds in 1985 at the end of the last fallow (in their order of importance): *Mallotus oppositifolius, Albizia zygia, Securinega virosa, Combretum hispidum, Mezoneuron benthamiamum, Holarrhena floribunda, Antiaris africana*. Principal weeds after 5 years cultivation in 1989 in their order of importance: *Brachiaria deflexa, 'wojogbwi', Rottboellia cochinchinensis, Combretum hispidum, Mallotus oppositifolius, Securinega virosa, Commelina spp., Albizia zygia, Holarrhena floribunda, Antiaris africana*. 160 m above sea level, slope almost zero (0-2%).
Sources: own interviews, Kerkdijk 1991 appendix O.

Table 9.32: Analysis of soil samples from a field near Abomey, Fon plateau

| Depth (cm) / Texture: | 0-15 | 15-48 | 48-60 |
|---|---|---|---|
| 0-2 u% (lutum) | 3.1 | 8.7 | 25.1 |
| 2-50 u% (silt) | 5.6 | 5.5 | 5.8 |
| 50-2000 u% (sand) | 90.9 | 85.8 | 69.1 |
| C% | | | |
| N% | | | |
| C/N | | | |
| Organic matter % | 0.63 | 0.48 | 0.41 |
| PH | 5.50 | 5.85 | 5.24 |
| $Ca^{++}$ (meq/100gr) | | | |
| $Mg^{+}$ (meq/100gr) | | | |
| $K^{+}$ (meq/100gr) | 0.05 | 0.03 | 0.03 |
| $Na^{+}$ (meq/100gr) | | | |
| Sum cations (meq/100gr) | | | |
| CEC (meq/100gr) | 1.9 | 1.68 | 2.91 |
| Base saturation | 60 | 34 | 34 |

Note: Trial field near Abomey installed in 1967. Soil sampled in (or shortly before) 1971; source: Raunet 1971:1063-1064.

Table 9.33: Tomato production and sales by the (former) *Cercle* d'Abomey and *Subdivision* d'Aplahoué 1957-1986, in kg of fresh tomatoes

| Year | *Cercle* d'Abomey | *Subdivision* Aplahoué |
|---|---|---|
| 1957[s] | – | 600,000 |
| 1963[s] | – | 597,000 |
| 1963[p] | – | 1,200,000 |
| 1965[p] | – | 4,370,000 |
| 1966[p] | – | 1,200,000 |
| 1967[p] | – | 2,600,000 |
| 1968[p] | 225,000 | 2,520,000 |
| 1969[p] | 251,000 | 2,090,000 |
| 1970[p] | 258,000 | 1,109,000 |
| 1971[p] | 765,000 | 414,000 |
| 1972[p] | 480,000 | 1,710,000 |
| 1973[p] | – | 5,237,000 |
| 1974[p a] | – | 903,990 |
| 1974[p a] | – | 6,658,000 |
| 1975[p a] | – | 2,860,000 |
| 1975[p a] | | 8,359,000 |
| 1976[p] | 135,000 | 6,260,000 |
| 1977[p a] | 468,000 | 11,581,000 |
| 1977[p a] | | 11,584,000 |
| 1978[p b] | ca. 650,000 | 9,517,000 |
| 1979[p b] | ca. 575,000 | – |
| 1980[p] | – | – |
| 1981[p] | – | 4,584,000 |
| 1982[p] | – | 8,321,000 |
| 1983[p] | – | 8,785,000 |
| 1984[p] | – | 7,256,000 |
| 1985[p] | – | 11,158,000 |
| 1986[p] | – | 18,374,000 |

a Different sources give different values for 1974, 1975 and 1977.
b Estimated on the base of hectares and the average yield 1968-1977 of 1200 kg/ha.
p Production. s Sales. – No data available.
Sources: Albersen 1985; Rapports annuels SATEC, CARDER Zou, CARDER Mono.

Table 9.34: Tomato areas of different Adja districts*, in ha per year

| | Aplahoué (incl. Djakotome) | Klouékanme (incl. Toviklin) | Dogbo (incl. Lalo) | Total |
|---|---|---|---|---|
| 1975 | 284 | 223 | 278 | 785 |
| 1976 | 196 | 650 | 201 | 1047 |
| 1977 | 179 | 1200 | 448 | 1827 |
| **Total** | **659** | **2073** | **927** | |

| | Aplahoué | Djakotome | Klouékanme | Toviklin | Dogbo | Lalo | |
|---|---|---|---|---|---|---|---|
| 1983 | 360 | 441 | 449 | 163 | 163 | 313 | 1889 |
| 1985 | 525 | 400 | 728 | 150 | 158 | 700 | 2661 |
| 1986 | 293 | 492 | 1473 | 338 | 344 | 998 | 3938 |
| **Total** | **1178** | **1333** | **2650** | **651** | **665** | **2011** | |

Note: In 1979 Djakotome was split off from the district Aplahoué, Toviklin from Klouékanme, and Lalo from Dogbo. Lalo and Dogbo formerly belonged to the subdivision d'Athiémé, the others to the subdivision d'Aplahoué.
Sources: Rapports annuels CARDER Mono campagne 1975-76; idem 1976-77; 1977-78; 1983-84; 1985-86; 1986-87.

Table 9.35: Tomato areas of different Fon districts*, in ha per year

| | Abomey (incl. Agbanizoun) | Djidja | Bohicon (incl. Za-Kpota and Zogbodome) | Total |
|---|---|---|---|---|
| 1968 | 86 | 381 | 28 | 495 |
| 1969 | 250 | 100 | 50 | 400 |
| | Abomey (incl. Agbanizoun and Djidja) | | | 0 |
| 1973 | 0 | | 0 | 0 |
| 1974 | 0 | | 0 | 0 |
| 1977 | 193 | | 20 | 213 |
| | | | Bohicon (incl. Za-Kpota) / Zogbodome | |
| 1978 | 16 | | 125 / 100 | 241 |
| **Total** | **1026** | | **323** | |

| | Abomey | Agbanizoun | Djidja | Bohicon | Za-Kpota | Zogbodome | 0 |
|---|---|---|---|---|---|---|---|
| 1979 | 14 | 95 | 259 | 16 | 28 | 46 | 458 |
| 1980 | 33 | 85 | 682 | 140 | 39 | 127 | 1106 |
| 1985 | 0 | 23 | 95 | 0 | 47 | 5 | 170 |
| **Total** | **47** | **203** | **1036** | **156** | **114** | **178** | **1734** |

* In 1968-69 'Abomey zone palmiers' (the later districts Abomey & Agbangnizoun), 'Abomey hors palmiers' (the later district Djidja, which is entirely in the savannah to the north of the plateau), and 'Bohicon' (the later districts Bohicon, Za-Kpota and Zogbodome). 1973-1978 Djidja was included in Abomey. In 1978 Zogbodome became a separate district. From 1979 the whole area was divided in the 6 districts that existed until 1991 (after that these 6 were called sous-préfectures).

Sources: SATEC 1968, 1969, 1970, 1971, 1972, 1973, 1974; CARDER Zou (1977-78); SONAGRI Zou Résultats campagne 1980-81; CARDER Zou (1983-84); CARDER Zou (1985-86).

Table 9.40: Fertiliser sales on credit[1] in some communities on the Fon plateau in 1988 (districts Abomey, Agbangnizoun and Zogbodome)

| Community[2] | Population March 1992 | Estimated population 1988[3] | Distance from Abomey / km | Fertiliser bought on credit / kg | Use per head in 1988 / g |
|---|---|---|---|---|---|
| Djègbe-Vidolé[4] | 37108 | 34552 | 0 | 2000 | 58 |
| Gbecon-Hounli[4] | 14218 | 13239 | 0 | 900 | 68 |
| Agbokpa-Sehoun | 6667 | 6208 | 4 | 2450 | 395 |
| Zounzonme | 5671 | 5280 | 4½ | 1500 | 284 |
| Tanvé | 7016 | 6532 | 6 | 1050 | 161 |
| Lissazounme | 4567 | 4252 | 7 | 1750 | 412 |
| Adignigon | 3753 | 3494 | 8 | 0 | 0 |
| Cana | 7879 | 7336 | 11 | 5650 | 770 |
| Agbangnizoun[4] | 7391 | 6881 | 11 | 14900 | 2165 |
| Kinta | 4714 | 4389 | 12 | 100 | 23 |
| Sahè[5] | 4354 | 4054 | 13 | 3550 | 876 |
| Lègo | 4889 | 4552 | 14 | 1850 | 406 |
| Sinhoué Kpota | 3146 | 2929 | 17 | 200 | 68 |
| Zogbodome[4] | 5870 | 5465 | 17 | 5000 | 915 |
| **Total** | **125710** | **117052** | | **40900** | **349** |
| Rural (excluding market places, marked with 4) | 61123 | 56913 | | 18100 | 318 |

For Notes: see Table 9.43

Table 9.41: Fertiliser sales on credit[1] in some Fon communities on the south-eastern slopes of the Fon plateau in 1988 (district Zogbodome)

| Community[2] | Population March 1992 | Estimated population 1988[3] | Distance from Abomey / km | Fertiliser bought on credit / kg | Use per head in 1988 / g |
|---|---|---|---|---|---|
| Tanwe Hessou | 6709 | 6247 | 20 | 1300 | 208 |
| Avlame | 5048 | 4700 | 22 | 21050 | 4479 |
| Zoukou | 5114 | 4762 | 24 | 2150 | 452 |
| Akiza | 7625 | 7100 | 30 | 1500 | 211 |
| Koussoukpa | 3429 | 3193 | 33 | 8100 | 2537 |
| Massi | 7767 | 7232 | 35 | 1050 | 145 |
| Dome[4] | 4695 | 4372 | 35 | 6050 | 1384 |
| Kpokissa | 4372 | 4071 | 48 | 0 | 0 |
| Total | 36292 | 33792 | | 41200 | 1219 |

For notes: see Table 9.43

Table 9.42: Fertiliser sales on credit[1] in some villages on the Ehwe-Adja plateau in 1990 (in districts Klouékanme and Toviklin)

| Village[5] | Population 1979 | Estimated population 1990[7] | Distance from Klouékanme / km | Fertiliser bought on credit / kg | Use per head in 1990 / g |
|---|---|---|---|---|---|
| Zouvou | 811 | 998 | 1 | 13800 | 13828 |
| Hondjin | 931 | 1145 | 3 | 3000 | 2620 |
| Gnigbogan | 797 | 980 | 3 | 12400 | 12653 |
| Ayahohoué | 526 | 647 | 3 | 2400 | 3709 |
| Kome | 259 | 319 | 4½ | 8250 | 25862 |
| Davihoué | 879 | 1081 | 5 | 6000 | 5550 |
| Akime | 1660 | 2042 | 5 | 15000 | 7346 |
| Tchikpè | 670 | 824 | 5 | 3000 | 3641 |
| Djotto | 961 | 1182 | 6 | 3000 | 2538 |
| Yenawa | 802 | 986 | 6 | 3850 | 3905 |
| Hohluime | 873 | 1074 | 6 | 6700 | 6238 |
| Kogbetohoué | 540 | 664 | 6 | 16000 | 24096 |
| Mademe[8] | 634 | 780 | 7½ | 4000 | 5128 |
| Fidegnonhoué | 252 | 310 | 7½ | 5000 | 16129 |
| Edahoué | 1008 | 1240 | 8 | 2850 | 2298 |
| Honsouhoué | 415 | 510 | 8 | 1500 | 2941 |
| Lagbakada | 966 | 1188 | 8 | 5000 | 4209 |
| Tokanme Kpodji | 667 | 820 | 8 | 12750 | 15549 |
| Tokanme Aliho | 710 | 873 | 9 | 9500 | 10882 |
| Aglali[8] | 473 | 582 | 9 | 10000 | 17182 |
| Adjahonme | 2344 | 2883 | 9 | 9000 | 3122 |
| Godohou | 222 | 273 | 9½ | 5450 | 19963 |
| Atindehouhoué | 925 | 1138 | 10 | 5000 | 4394 |
| Ahogbeya[8] | 348 | 428 | 10 | 5250 | 12266 |
| Avégame | 472 | 581 | 11 | 9500 | 16351 |
| Sawame-Hossou | 933 | 1148 | 11½ | 4000 | 3484 |
| Kpevidji | 340 | 418 | 11½ | 5250 | 12560 |
| Tohuime | 544 | 669 | 11½ | 6500 | 9716 |
| Gbohime | 568 | 699 | 13 | 4200 | 6009 |
| Dekandji | 535 | 658 | 14 | 4600 | 6991 |
| **Total** | **22065** | **27140** | | **202750** | **7471** |
| Adja villages | 20610 | 25350 | | 183500 | 7239 |
| Fon villages | 1455 | 1790 | | 19250 | 10756 |

For notes: see Table 9.43

Table 9.43: Fertiliser sales on credit[1] in the mixed Fon-Adja community Détohou on the north-western fringes of the Fon plateau in 1988

| Community[2] | Population February 1992 | Estimated population 1988[3] | Distance from Abomey / km | Fertiliser bought on credit / kg | Use per head in 1988 / g |
|---|---|---|---|---|---|
| Détohou[9] | 2931 | 2729 | 7 | 21850 | 8007 |

1 In 1988, sales on credit were 92% of total sales on the Fon plateau (Abomey, Agbangizoun and Zogbodome districts), and 77% of total sales on the Adja plateau (Klouékanme and Toviklin districts). In 1990, the figures were 88% for the Fon plateau and 78% for the Adja plateau (same districts). On the Adja plateau, Klouékanme district drives up the figure for cash purchases since Klouékanme specialises in tomato cultivation and buys a lot of fertiliser cash for this crop.
2 A community ('commune') is an administrative unit which consists of 3-7 villages.
3 Population growth 1979-1992 in Agbangnizoun and Zogbodome districts was 1.8% per year.
4 Regional market and distribution centre of the CARDER, probably some purchases for other areas.
5 Almost all Fon on the Adja plateau live in Klouékanme district, most of them in mixed Fon-Adja villages. All villages in table 9.42 are Adja or predominantly Adja except for the 3 villages indicated as Fon. The population of these 3 villages was predominantly Fon in 1990 according to the *intendante* of Klouékanme.
6 On river (vegetable cultivation).
7 Population growth 1979-1992 on the Adja plateau was 1.9% per year according to INSAE data.
8 Village mainly inhabited by Fon, situated on the Adja plateau.
9 Mixed Fon-Adja village north of Fon plateau, only the Adja use fertiliser.

Sources: Own interviews with the intendants of the CARDER-sectors Abomey, Agbangnizoun, Zogbodome and Klouékanme and with the extensionist of Atindehouhoué; INSAE (1987); INSAE/MPAE (1994).

Table 9.45: Fertiliser prices per bag of 50 kg

| Year | On credit | Cash | Source |
|---|---|---|---|
| 1968 | 1100 | 1500 | Raport SATEC |
| 1970 | 1100 | | Idem |
| 1973 | 1100 | | Idem |
| 1975 | 1250 | | Edou Gnagnimon |
| 1977 | 1250 | | Raport Satec |
| 1981 | 1250 | | Edou Gnagnimon |
| 1982 | 2250 | | Idem |
| 1983 | 3000 | | Idem |
| 1984 | 3000 | | Idem |
| 1985 | 4500 | | Own observation |
| 1986 | 5000 | 4500 | CARDER |
| 1987 | 5000 | 4500 | CARDER |
| 1988 | 5000 | 4500 | CARDER |
| 1989 | 5000 | 4500 | Own observation |
| 1990[1] | 4750 | 4250 | Idem + interviews |
| 1991-1993 | 4750 | | Dèdèhouanou (2003) |
| 1994-1996 | 9500 | | Dèdèhouanou (2003) |

1 According to the extensionist of Atindehouhoué (interview 31-5-1990), the CARDER lowered the price in 1990 in spite of the fact that they still purchased the fertiliser in bulk at 4500 FCFA per bag, because they made so much profits from sales on credit that they could afford to lower selling prices. According to my observations and interviews (when I heard them talking Fon during sales, or when farmers later declared the prices at which they purchased the fertiliser) the CARDER sometimes also adapted prices to individual customers (bargaining about prices was one of the first things I knew in Fon, but not all extensionists were aware of this).

# Summary

This study is a comparative analysis of the joint development of the Fon and Adja styles of making a living as well as the ecological changes between the two adjacent plateaux in South Bénin on which they live. The period of analysis is between ca. 1600 and 1990. The South Béninese plateaux are usually described as a homogeneous category. However, popular opinion also holds that the Fon plateau is ecologically more degraded than the other plateaux, and that the Fon are socially more organised, technologically more advanced, and socio-economically more successful than the Adja. This thesis challenges the popular images about the Fon and Adja, and analyses how and why ecological processes on their plateaux differed between ca. 1600 and 1990.

The two plateaux form part of a chain of plateaux in South Bénin and Togo. They have similar soils (Nitisols) with the same bimodal rainfall pattern and precipitation. The Nitisols are regarded as the best tropical soils for arable farming, but their fertility depends strongly on organic matter and clay content. This led in South Bénin, as in many other places, to high population densities on Nitisols. The Fon and Adja plateaux both had about 110 inhabitants per km$^2$ in 1960 and about 300 inhabitants per km$^2$ in 1990 respectively (the Fon plateau 20–30% less if the urban population is excluded). In 2002 the population density was 409 inhabitants per km$^2$ on the Adja plateau and 377 inhabitants per km$^2$ on the Fon plateau. Today, the Fon form the largest ethnic group, while the Adja are the second largest group in Bénin, accounting for 19.9 % and 8.6% of the total population, respectively. Ethno-linguistically they are closely related and their cultures have much in common. The two plateaux have the same distance to the coastal urban markets and since 1900, have been subject to fairly homogeneous government policies.-

Researchers and development interventionists alike tend to assume that any ecological, agronomic and socio-economic data from one plateau can be extrapolated to the rest. Popular belief, on the other hand, holds that the Fon and Adja differ. For example, since early colonial times the Adja are regarded as economically and technologically backward, socially disorganised because they lack higher-level family structures and chiefs, and lazy because they till their land only superficially and do not sell much to export companies. The Fon are internationally known for their pre-colonial Danhomɛ kingdom and their predominance in all spheres of public life in the colonial and post-colonial state. Fon houses and compound walls are often made from cement-bricks, while the Adja live primarily in clay houses, often having no compound wall at all. In addition to this, the Fon are generally believed to have a more coherent family organisation and to be technologically more advanced than the Adja. So much so, that agricultural extensionists recommend the Fon's ridge tillage, their oil palm planting densities, and their commercial palm oil production to all South Béninese farmers and to the Adja in particular, who practise flat minimum tillage, plant more oil palms per hectare, and harvest more palm wine than oil from their trees.

For several decades, degradation of the plateau soils has been a serious concern of policy-makers and agronomists. Many argue that the high population densities inevitably lead to soil degradation. In other words, they believe that the plateaux have an intrinsic carrying capacity and that ecological change depends in a neo-Malthusian way on demography. Popular knowledge, however, holds that the soils of the Fon plateau are much poorer than those of the Adja plateau. It is also easy to see that their semi-spontaneous vegetation differs. The Fon plateau consists mainly of tiny herbs and grasses (*Cyperus esculentus, Digitaria spp., Brachiaria deflexa, Ipomoea involuncrata* etc.) and grasses of 2 meter high (*Andropogon gayanus*), which tend to catch afire in the dry season. The Adja plateau has a greater variety

of herbs, trees and shrubs (*Albizia zygia, Antiaris africana, Combretum hispidum, Mallotus oppositifolius, Dialium guineense, Dracaena arborea, Dichrostachys glomerata, Securinega virosa, Zanthoxylum zanthoxyloides* etc.), and the principal grass is the medium-sized *Imperata cylindrica*. Bush fires do not occur on the Adja plateau.

This leaves all those who believe in a linear relationship between population density and agro-ecological change, both the (neo) Malthusians like Homer-Dixon (1999) who regard population growth as a threat, and the followers of Boserup (1965) who consider population growth to be an opportunity for agricultural growth, with the mystery of why Fon and Adja plateau soil fertility levels and vegetations differ in spite of similar demographic conditions. They raise various assumptions in order not to abandon their cherished beliefs in population density models. Many think that the Fon plateau is more densely populated than the Adja plateau, but demographic figures reveal that this is not the case. Others hypothesise that the Adja plateau was more fertile and more forested than the Fon plateau in its 'original' state.

My thesis argues that the Fon and Adja plateau ecologies were similar in the past but diverged under the impact of different human management practices. To 'test' the hypothesis that the two plateaux were ecologically dissimilar before their human occupation, I adopt two approaches, namely an oral history approach and a comparison of processes. In Chapter 4, I analyse local myths of origin of villages and local historical narratives about livelihood activities in their socio-political and technological context and compare these with palaeontological evidence from, amongst others, a lake 20 km from the eastern border of the Fon plateau. My compilation of local traditions, stripped of their likely socio-political intentions, portrays the vegetation of both plateaux as a forest-savannah mosaic when they were colonised. According to various myths on their origin, on both plateaux some villages were installed on grassland, others near isolated trees, and others in more forested areas. These local histories therefore do not require us to reject the opinion of ecologists and palaeontologists that all the South Béninese plateaux were covered, since the end of the last wet period, not later than 950 AD, with a savannah-forest mosaic of the type which is still the dominant spontaneous vegetation of the Adja plateau (and the other plateaux in the chain) today, and that only the Fon plateau is degraded.

The triangulation of migratory myths from many different sources and localities also indicates that the Fon and Adja plateaux became more densely populated from the 16th century onwards, the Adja plateau mainly by Adja from Tado who brought their own iron tools, and the Fon plateau by various Adja-related peoples (Wemenu, Za, Ayizo, Jinu, etc.) and a small Yoruba-related group (the Gedevi) that was socio-politically dominant over its Adja-related neighbours. This Yoruba-related group and visiting traders from the north-east introduced iron tools from the Yoruba and the Bariba to the Fon plateau, especially hoes which were suitable for ridging. The Adja hoes from Tado however, were only suitable for flat cultivation and for mounding. When more iron became available in the 16th century through the arrival of European traders on the coast, the Yoruba hoe and ridge tillage rapidly spread on the Fon plateau, while the Adja plateau was increasingly colonised by flat-cultivators using Adja hoes. Therefore, the different orientation of the Fon and Adja's socio-political and tool trade networks – their different socio-technical networks, encouraged the development of different tillage styles not later than the 16th century. The ecological impact of these tillage styles is discussed in Chapter 9 (see below).

Around 1610 another Adja-related group arrived on the Fon plateau, the Agasuvi, who became accepted by the resident population as their royal family. In Chapter 5 I show that the Fon, under their leadership, formed a kingdom called Danhomɛ, whose strength resided in the centralisation of weapon production and of military power around a few smithies, the centralisation of religion around a number of State cults, and in the promotion of a warrior ideology. From the latter part of the17th until the late 19th century, the Fon raided neighbouring groups, selling many of them to transatlantic slave traders, and retaining others for their own domestic and agricultural work. Trade in other local and imported commodities also flourished in Danhomɛ at that time, and every adult – including the more fortunate slaves – could participate in it. Contrary to what Polanyi (1968) wrote about Danhomɛ to support his substantivist theory, the king did not control trade except for that relating to the court's standing army. My findings also do not support attempts in the literature to characterise Danhomɛ's economy with a single label. And neither does Elwert's (1977) 'slave raiding mode of production articulated to a subsistence mode of production', nor Coquery-Vidrovitch's (1971) 'tributary feudal system', nor Manning's (1982) 'commodity exchange mode of production joined by a slave labor mode of production' describe it sufficiently. What I do show is that the elites' urbanised styles of making a living, including trade, warfare, forging, religious activities as well as weaving and wearing of prestigious cloth, rose in status in the Fon kingdom, while rural life and agriculture became stigmatised. *Nukanmɛ*, literally 'secondary bush', became a Fon synonym for backwardness and was a derogatory label for the countryside, in general. Inhabitants of rural areas who neither traded nor engaged in 'urban' crafts were called *nukanmɛnu* or 'backward people of the bush'. At the same time, for the Adja, bush and countryside were central to their wealth and safety. During the era of the slave raids, the Adja had no other defence than to hide in small villages surrounded by woody vegetation, to engage in agriculture, and to avoid long distance trade in areas scoured by slave raiders. The Adja acquired wealth and prestige by working hard in the fields in small domestic groups.

Around the mid-19th century, overseas demand gradually shifted from slaves to palm oil and their kernels, opening, in principle, the same commodity production opportunities for all Fon and Adja plateau farmers, because oil palms grew spontaneously on both plateaux. In Chapter 6, I show that Fon farmers responded by planting oil palms and trading in oil and kernels, first only on communal lineage land, and later in the 19th century, also on individually-owned land. It became a sacrilege to 'kill' a Fon oil palm by felling it. Contrary to what the literature asserts, there was no compulsory palm oil tax for all Fon farmers. Farmers were mainly motivated by trade opportunities. Because the fallow vegetation of the Fon plateau consisted by the 19th century primarily in the fire-prone grass *Andropogon gayanus* and because fire endangers but tillage benefits oil palms, Fon farmers developed various strategies to keep their palm groves free of weeds during the dry season – permanent cultivation being the preferred technique. This enhanced palm fruit yields in the short-run but depleted the soils in the long-run. Not later than 1850, the Fon plateau started importing food from the Adja, and between the mid-19th and the mid-20th century, some Fon settled on the north-eastern Adja plateau to produce food and palm oil, sometimes with the help of slaves. Now many central Fon plateau soils are too poor to produce staples, and only the oil palms yield fruit, which is then sold for food.

The Adja also had oil palm groves, but these were usually so densely grown with palms and semi-spontaneous bush that they produced little fruit. The Adja felled these palms at the

age of 20–25 years, tapped their trunk, and sold the obtained wine at the local markets. The new palm oil export opportunities did not motivate the Adja men to plant their palms less densely and to sell much more oil, though some Adja women independently gleaned windfall palm kernels and sold these on their own account. Rather, when a distilling technique was introduced around 1920, Adja men gradually increased their oil palm planting densities from 600–1000 palms per hectare in the earlier to 1000–1600 palms per hectare in the later 20th century, distilling more and more *sodabi* for sale. During the first 6–8 years, annual crops are grown between young oil palms; then oil palms and bush are allowed to cover the land during ca. 10–15 years. Grasses disappear during this 'oil palm fallow' period and the soil restores its fertility to some degree. This 'wine palm' management style allows the Adja to plant much more palms per hectare than the 200 which Zeven (1967) and Hartley (1988) regard to be the maximum. These two oil palm 'experts' also think that oil palm densities drop below 200 per hectare if the human population density increases beyond 250 inhabitants per hectare. However, this population density was reached on the Adja plateau around 1986, and aerial photographs indicate that the average palm density of the plateau was already around 500 palms per hectare (land without palms included) in the same year. Some Fon in the frontier zone experiment with intermediate oil-wine palm management styles (densities and ages which hold the middle between those of the Adja and the Fon plateau) but they do not introduce these to their native Fon plateau villages, where farmers remain reluctant to 'kill' the palms which enable them to eat.

In 1900, the French colonisers exiled the Fon king Agoli-Agbo and the Adja's chief of the land Kpoyizun and replaced them with several *chefs de canton*. Chapter 7 shows that from then onwards, the colonial and post-colonial governments applied fairly homogeneous policies on both plateaux. Most policies encouraged the production of the same agricultural commodities (i.e. cotton, coffee, tobacco, palm oil, and until the 1960s groundnuts and castor bean) by means of the same farming techniques in the whole plateau zone (ridge tillage, palm oil production from hybrid oil palms, and from the 1960s onwards fertilising cotton and ploughing). The commercial production of maize was discouraged in most years, and felling oil palms was first forbidden and then subjected to a fee. Contrary to the common assumption that Africans either cling to autarky or respond positively to commercialisation policies and programmes by producing the commodities which the government demands, the Fon and Adja developed diverse market oriented styles of making a living, but most of these diverged from those encouraged officially. Until the 1930s the Fon pleased the administrators by selling groundnuts, cotton and palm oil to export companies, by paying their taxes promptly, and by collaborating in a general sense with the colonial government. Then they dropped the cultivation of cotton on the plateau, and increasingly sold their palm oil and groundnuts through private traders to West African consumers, and abandoned plateau agriculture more and more. The Adja sold, besides castor and more recently cotton, large amounts of food to West African consumers – especially maize, *gari*, tomatoes, chilli peppers and *sodabi* – which went quite unnoticed by the official economic statistics.

Chapter 8 presents the livelihood activities of members of some Fon and Adja lineages since about 1900. These family histories illuminate how individual actors motivate and evaluate their own practices. They illustrate in general a persistent Adja esteem for agriculture and pride for working hard on the land, and a Fon preference for trade, crafts, white collar work, and spiritual income-generating activities – in the Fon lineage studied in more detail the trade in magic charms and 'medicine'. They show how most Fon hardly objected to

acquiring food on the market, and how the Adja's primary goal remained self-sufficiency in maize. They also describe how actors worked with or for each other within social networks. Adja school children and teenagers tended to work more on their parents' land without payment than most Fon children in the same categories; the Fon encouraged their children to develop non-agrarian skills. Members of the same kinship, village and religious networks often cooperated in crafts and trade, acquiring skills in this way; they migrated to the same destinations, or helped each other to find employment in the same company. This led in many cases to family and village specialisation in livelihood activities, illustrating how networks may encourage style formation.

Chapter 9 analyses the interaction between Fon and Adja tillage and manuring styles and the ecological environment. It shows that the Fon's ridge tillage eliminates vegetation, especially trees, shrubs and grasses with rhizomes, more effectively than the Adja's superficial flat tillage. Therefore the Adja have to weed their crops more frequently, and Adja fallows produce more rapidly a large and woody biomass than is the case among most Fon. The Fon's clean weeded ridges also encourage the erosion of clay from the cultivated layer. In response to the savannisation of their plateau, Fon blacksmiths around 1940 invented a scythe which is suitable for clearing savannah grasses. This new tool spread through local markets within one decade to all Fon farmers on the plateau, illustrating how technology may travel through indigenous trade or socio-technical networks. The Adja reacted amongst others by planting, on land infested by *Imperata cylindrica,* tomatoes and chilli peppers on mounds for urban markets, in rotation with dense plantations of oil palms, cassava, pigeon pea, or *Mucuna pruriens*, in order to uproot and out-shade this grass with rhizomes. Fon and Adja women increasingly manured fields near the village with household waste and crop residues. Since 1980, Adja men and women have also purchased fairly large amounts of mineral fertiliser for their tomatoes, cotton, maize and occasionally cowpeas, for which they pay cash unless they apply it to cotton. Their fertilisation of local food crops is exceptional for Africa.

Chapters 6 to 9 describe how under similar population densities, the Fon plateau degraded as expected by Homer-Dixon and other (neo)-Malthusians, and many of its inhabitants withdrew from farming there, while the Adja reacted rather as Boserup predicts, by indigenous agricultural innovation and by increased labour inputs per unit of land in order to obtain higher returns from it. Chapter 9 shows that the Adja devote between 1.5 and 5 times more labour to one hectare non-irrigated annual crops than the Fon, and that irrigated Adja tomato culture is about 8 to 12 times more labour intensive than Fon maize cultivation. The popular image of Adja laziness therefore clearly does not hold. These different labour needs are the result of their different tillage styles and crop choices.

My comparative historical analysis, based on a variety of research methods including ethnographic ones, provides insight into the roles played by local actors and their socio-technical networks, and explains why developments on the Fon and Adja plateaux diverged in spite of similar external and demographic conditions. This shows that none of the systems models of Malthus, Boserup, Homer-Dixon, Zeven and Hartley is intrinsically right; this cannot be because they all neglect the role of human agency. My diachronic comparative study reveals that neither population growth as assumed by Boserup, nor integration into large-scale political, financial, educational and research institutions as assumed by Homer-Dixon, are sufficient conditions for environmental ingenuity and sustainable agro-technological innovation. The thesis shows how clusters of similar practices emerged in the historical process and how, on several occasions, these clusters overlapped with regional vertical and

horizontal social relations, including kinship ties and trade networks, and that these practices had socio-cultural value and meaning for the Fon and Adja people. The concept of styles was used to designate both these clusters of meaningful practices and their description in sometimes ideal typical terms. The historical analysis shows that social actors sometimes aspired to the lifestyles of those members of society who already enjoyed the esteem of the population, as also observed by Bourdieu (1979) and Hofstee (1985). Other style elements travelled more horizontally along socio-technical networks. Kinship and neighbourhood ties were however no guarantee for style and knowledge dissemination. Fon and Adja knew of each others' styles, especially in the frontier region, and some individuals experimented with some elements of their neighbours styles, but there was no general trend of style diffusion. The combination of network and historical analysis in this study was therefore necessary to understand the emergence of styles, while the holistic comparison drew attention to crucial factors and points where processes diverged. Moreover, socio-cultural valuation of agrarian versus other types of labour appeared pivotal for explaining preferences for certain livelihood activities.

# Samenvatting

Dit boek vergelijkt de onderling samenhangende ontwikkeling van Fon en Adja stijlen van bestaan en ecologische veranderingen op twee plateaus in Zuid Bénin tussen ca. 1600 en 1990. De Zuid Béninese plateaus worden meestal als een homogene categorie beschreven. Aan de andere kant wordt het Fon plateau algemeen beschouwd als ecologisch meer gedegradeerd dan de andere plateaus, en de Fon zelf als sociaal meer georganiseerd, technologisch meer ontwikkeld, en sociaal-economisch succesvoller dan de Adja. Dit proefschrift betwist deze populaire beelden van de Fon en Adja, en analyseert hoe en waarom ecologische processen op de twee plateaus verschilden tussen ca. 1600 en 1990.

De Fon en Adja plateaus behoren tot een keten van plateaus in Zuid Bénin en Togo, wier bodems in dezelfde categorieën zijn ingedeeld en die hetzelfde bimodale regenval patroon hebben, met ongeveer dezelfde duur en hoeveelheid neerslag per jaar. Tussen 1900 en 1990 had het Adja plateau gemiddeld 1113 mm en het Fon plateau, zijn directe noordooster buur, 1051-1165 mm neerslag per jaar. De Nitisols van de plateaus worden beschouwd als de beste tropische landbouwgronden, maar hun vruchtbaarheid hangt sterk af van hun organische stof en kleigehalte. Dit leidde in Zuid Bénin en op vele andere plaatsen tot hoge bevolkingsconcentraties op Nitisols. In 1960 hadden de Fon en Adja plateaus beide ongeveer 110 inwoners per $km^2$ en in 1990 ongeveer 300 inwoners per $km^2$ (het Fon plateau 20-30% minder wanneer de stadsbevolking buiten beschouwing wordt gelaten). In 2002 had het Adja plateau 409 en het Fon plateau 377 inwoners per $km^2$. Tegenwoordig zijn de Fon de grootste en de Adja de op een na grootste bevolkingsgroep van Bénin met respectievelijk 19,9% en 8,6% van de totale bevolking. Etnisch en taalkundig zijn zij nauw verwant en de Fon en Adja hebben cultureel veel gemeen. Beide plateaus hebben dezelfde afstanden tot de grote markten in de kuststeden en zijn sinds 1900 onderworpen aan een vrij homogeen overheidsbeleid.

Onderzoekers en ontwikkelingswerkers veronderstellen vaak dat ecologische, landbouwkundige en sociaal-economische gegevens van één plateau kunnen worden geëxtrapoleerd naar de overige. Anderzijds, en in tegenspraak met dit beeld van homogeniteit, is algemeen bekend dat de Fon en Adja verschillen vertonen in hun sociale organisatie, economisch succes en landbouwtechnieken. De Fon zijn internationaal befaamd om hun voor-koloniaal koninkrijk Danhomɛ en hun overwicht in alle domeinen van het openbare leven van de koloniale en postkoloniale Staat. Fon huizen en de muren rond hun erven zijn vaker van cementen stenen dan die van de Adja, die meestal in lemen huizen wonen en wier erven zelden zijn ommuurd, waardoor het beeld van Fon rijkdom en Adja armoede wordt versterkt. Algemeen wordt verondersteld dat de familieorganisatie van de Fon hechter is en hun technologieën meer ontwikkeld zijn dan die van de Adja. Landbouwvoorlichters nemen dan ook de Fon praktijken – teelt op ruggen, dichtheden van ca. 80-300 oliepalmen per hectare (zoals ik heb gemeten in Fon palmboomgaarden in 1990) voor de commerciële palmolieproductie – als model in de voorlichting aan alle Zuid-Béninese boeren en vooral aan de Adja, die een minimale vlakke grondbewerking toepassen, 1000-1600 oliepalmen per hectare aanplanten en meer palmwijn dan olie van hun bomen oogsten. Sinds vroeg-koloniale tijden worden de Adja beschouwd als economisch en technologisch onderontwikkeld, sociaal ongeorganiseerd omdat zij geen chefs en familiestructuren op hoger niveau kennen en als lui omdat zij hun land slechts oppervlakkig bewerken en weinig verkopen aan exportmaatschappijen.

Sinds enkele tientallen jaren zijn beleidsmakers en landbouwkundigen ernstig bezorgd over bodemdegradatie op de plateaus. Zij redeneren meestal dat de bodems degraderen omdat de plateaus dicht bevolkt zijn. Anders gezegd, zij geloven dat de plateaus een intrinsieke

draagkracht hebben en dat ecologische verandering op neo-Malthusiaanse wijze afhangt van de bevolkingsdichtheid. Anderzijds staan de bodems van het Fon plateau in het algemeen bekend als veel armer dan die van het Adja plateau. Ook is gemakkelijk te zien dat de semi-spontane vegetatie op de twee plateaus sterk verschilt. Die van het Fon plateau bestaat voornamelijk uit lage kruiden en grassen (*Cyperus esculentus, Digitaria spp., Brachiaria deflexa, Ipomoea involuncrata* etc.) en uit grassen van 2 meter hoog (*Andropogon gayanus*) die snel vlam vatten in het doge seizoen. Het Adja plateau heeft een grotere diversiteit aan kruiden, bomen en struiken (*Albizia zygia, Antiaris africana, Combretum hispidum, Mallotus oppositifolius, Dialium guineense, Dracaena arborea, Dichrostachys glomerata, Securinega virosa, Zanthoxylum zanthoxyloides* enz.) en als belangrijkste gras het middelgrote *Imperata cylindrica*. Struikbranden komen niet voor op het Adja plateau.

Dit plaatst degenen die geloven in een lineair verband tussen bevolkingsdichtheid en agro-ecologische verandering voor een raadsel waarom de vruchtbaarheidsniveaus en vegetaties van de Fon en Adja plateaus verschillen ondanks gelijksoortige bevolkingscondities, zowel de (neo)-Malthusianen zoals Homer-Dixon (1999) die bevolkingsgroei als een bedreiging beschouwen, als ook de volgelingen van Boserup (1965) die bevolkingsgroei zien als een kans voor agrarische groei. Om hun dierbaar geloof in bevolkingsdichtheid modellen niet los te laten, brengen zij verschillende vooronderstellingen te berde. Velen denken dat het Fon plateau dichter bevolkt is dan het Adja plateau. Maar bevolkingscijfers tonen dat dit niet zo is. Anderen gissen dat het Adja plateau vruchtbaarder en meer bebost was dan het Fon plateau in zijn 'oorspronkelijke' staat.

Dit proefschrift betoogd dat de plateaus vroeger ecologisch overeen kwamen, en dat hun ecologieën zich in uiteenlopende richtingen ontwikkelden onder de invloed van hun beheer door de mens. Om de hypothese te testen dat de twee plateaus ecologisch verschilden voordat zij werden bevolkt, heb ik twee benaderingen gebruikt, namelijk een benadering gebaseerd op voornamelijk mondelinge geschiedenis en een die berust op de vergelijking van processen. In hoofdstuk 4 analyseer ik lokale oorsprongsmythen van dorpen en andere lokale historische vertellingen over bestaansactiviteiten in hun sociaal-politieke en technologische context en vergelijk deze met paleontologische getuigenissen van onder andere een binnenmeer 20 km ten oosten van het Fon plateau. Mijn verzameling van lokale tradities, ontdaan van hun vermoedelijke sociaal-politieke bedoelingen, beschrijft de vegetatie van de plateaus toen deze werden bevolkt als een mozaïek van bos en savanne. Volgens de oorsprongsmythen op beide plateaus zijn sommige dorpen gevestigd op grasland, andere naast vrijstaande bomen, en weer andere in meer beboste gebieden. Deze lokale histories nopen ons daarom niet om de mening van ecologen en paleontologen te verwerpen dat alle Zuid Béninese plateaux sinds het einde van de laatste natte periode niet later dan 950 na Christus, werden bedekt door een mozaïek van savanne en bos van het type dat nog steeds de overheersende spontane vegetatie is van het Adja plateau (en van de andere Zuid Béninese plateaus) en dat alleen het Fon plateau zou zijn gedegradeerd. Triangulatie van migratie verhalen uit vele verschillende plaatsen en bronnen laat ook zien dat de Fon en Adja plateaus dichter bevolkt werden vanaf de zestiende eeuw, het Adja plateau voornamelijk door Adja uit Tado die hun eigen ijzeren gereedschap meebrachten en het Fon plateau door verschillende aan de Adja verwante groepen (Wemenu, Za, Ayizo, Adja, Jinu etc.) en een kleine aan de Yoruba verwante groep (de Gedevi) die haar aan de Adja verwante buren sociaal en politiek overheerste. Deze aan de Yoruba verwante groep en bezoekende handelaars uit het noordoosten brachten ijzeren gereedschap van de Yoruba en de Bariba naar het Fon plateau, in het bijzonder hakken die

geschikt waren om ruggen op het veld te maken. De Adja hakken uit Tado waren alleen geschikt voor vlakke grondbewerking en voor het maken van heuvels. Toen in de zestiende eeuw meer ijzer beschikbaar werd door de komst van Europese handelaars aan de kust, verspreidden de Yoruba hak en de teelt op ruggen zich snel op het Fon plateau, terwijl het Adja plateau meer en meer werd bevolkt door boeren die met Adja hakken het land vlak bewerkten. De verschillende oriëntering van de sociaal-politieke en (gereedschap) handelsnetwerken van de Fon en Adja, in andere woorden hun verschillende sociaal-technische netwerken, stimuleerde dus de ontwikkeling van verschillende stijlen van grondbewerking sinds op zijn laatst de zestiende eeuw. De ecologische invloed van deze stijlen van grondbewerking wordt besproken in hoofdstuk 9.

Omstreeks 1610 arriveerde nog een aan Adja verwante groep op het Fon plateau, de Agasuvi, die door de inheemse bevolking werd geaccepteerd als haar koninklijke familie. In hoofdstuk 5 toon ik aan dat de Fon onder haar leiderschap een koninkrijk vormden, genaamd Danhomɛ, wiens kracht beruste op de centralisatie van de wapenproductie en van de militaire macht rond een klein aantal smidsen, de centralisatie van de religie rond een aantal nationale goden en rituelen en de bevordering van een oorlogsideologie. Vanaf het einde van de zeventiende eeuw roofden de Fon slaven van naburige groepen, hielden sommigen als huisslaven en voor landbouwwerk op het plateau en verkochten de meeste overigen aan transatlantische slavenhandelaars. In het kielzog van de slavenhandel bloeide ook de handel in andere goederen op in Danhomɛ en iedere volwassene kon eraan deelnemen, ook de meer fortuinlijke slaven. Maar in tegenstelling tot wat Polanyi (1968) over Danhomɛ schreef om zijn substantivistische theorie te staven werd de handel, behalve die van het staande koninklijke leger, niet door de koning gecontroleerd. Mijn onderzoek biedt ook geen steun aan pogingen in de literatuur om de economie van Danhomɛ met één etiket te kenschetsen: noch Elwert's (1973) 'op slavenroof gebaseerde productiewijze gekoppeld aan een zelfvoorziende productiewijze', noch Coquery-Vidrovitch's (1971) 'schatplichtig feodaal systeem', noch Manning's (1982) 'op warenruil productiewijze gekoppeld aan een productiewijze gebaseerd op slavenarbeid' beschrijven haar afdoende. Wat ik wel aantoon is dat de stadse stijlen van bestaan van de elite in het Fon koninkrijk in aanzien stegen, met inbegrip van handel, oorlogvoering, religieuze activiteiten en het weven en dragen van voorname stoffen en dat het plattelandsleven en de landbouw er een negatief stigma kregen. *Nukanmɛ*, letterlijk 'secundaire struikvegetatie', werd een Fon synoniem voor achterlijkheid en een denigrerend etiket voor het hele platteland. Plattelandsbewoners die niet handelden noch 'stadse' ambachten uitoefenden werden *nukanmɛnu* of 'achterlijke mensen van de rimboe' genoemd. Tegelijkertijd vormden het struikgewas en het platteland de rijkdom en zekerheid van de Adja. In de tijd van de slavenroof hadden de Adja geen ander verweer dan schuilen in kleine dorpen omgeven door bosachtige vegetatie, het land te bewerken en de lange-afstandhandel in gebieden die onveilig werden gemaakt door slavenrovers te vermijden. De Adja verwierven rijkdom door hard landbouwkundig werk in kleine huiselijke groepen.

Rond het midden van de negentiende eeuw verschoof de overzeese vraag geleidelijk van slaven naar palmolie en palmpitten. Dit gaf in principe de zelfde mogelijkheden voor warenproductie aan de boeren op de Fon en Adja plateaus, omdat oliepalmen op beide plateaus spontaan groeiden. In hoofdstuk 6 toon ik aan dat Fon boeren reageerden door oliepalmen te planten en palmolie en pitten te verkopen, eerst alleen op gemeenschappelijk land van de lineage, maar later in de negentiende eeuw ook op individuele grond. Zij veroordelen

het 'doden' door kap van de oliepalm. Maar in tegenstelling tot wat in de literatuur wordt beweerd, was er geen verplichte palmoliebelasting voor alle Fon boeren; boeren werden voornamelijk gemotiveerd tot productie van palmolie door de handelsmogelijkheden. Omdat de semi-spontane vegetatie van het Fon plateau tegen de negentiende eeuw in de eerste plaats het brandbare gras *Andropogon gayanus* bevatte en vuur schade kan toebrengen aan de oliepalmen maar grondbewerking hun groei bevordert, ontwikkelden Fon boeren verschillende strategieën om hun palmen in het droge seizoen onkruidvrij te houden; bij voorkeur door permanente bebouwing. Dit bevorderde de opbrengst aan palmvruchten op korte termijn maar verarmde de bodem op de lange termijn. Sinds op zijn minst 1850 importeert het Fon plateau voedsel van de Adja. Tussen het midden van de negentiende en het midden van de twintigste eeuw vestigden sommige Fon zich ook op het noordoostelijke Adja plateau, om zelf of met de hulp van slaven voedsel en palmolie te produceren. Nu zijn vele bodems in het centrum van het Fon plateau te arm om voedselgewassen te verbouwen; alleen de oliepalmen dragen nog vruchten die hun eigenaren verkopen om voedsel te verwerven.

De Adja hadden ook palmboomgaarden, maar deze waren meestal zo dicht begroeid met palmen en semi-spontaan struikgewas dat zij slechts weinig vrucht droegen. De Adja kapten deze palmen wanneer zij 20 tot 25 jaar oud waren, tapten wijn uit hun stam en verkochten deze op lokale markten. De nieuwe exportmogelijkheden voor palmolie lokten hen niet uit om hun palmen ruimer te planten en veel meer olie te verkopen, al raapten sommige Adja vrouwen vanzelf gevallen palmpitten en verkochten ze deze ten eigen bate. In tegendeel, toen rond 1920 een distillatietechniek werd geïntroduceerd, voerden Adja mannen hun oliepalm dichtheden geleidelijk op van 600-1000 palmen per hectare aan het begin tot 1000-1600 palmen per hectare later in de twintigste eeuw en distilleerden zij meer en meer *sodabi* voor de verkoop. Tijdens de eerste 6-8 jaren worden eenjarige gewassen tussen de jonge palmen geteeld. Dan mogen de palmen en het struikgewas het land gedurende ca. 10-15 jaren innemen. Grassen verdwijnen tijdens deze 'oliepalm braakperiode', en de bodem herwint zijn vruchtbaarheid tot zekere hoogte. Deze 'wijnpalm' beheerstijl staat de Adja toe om veel meer palmen per hectare aan te planten dan de 200 die Zeven (1967) en Hartley (1988) beschouwen als het maximum. Deze twee oliepalm 'experts' denken ook dat oliepalm dichtheden onder de 200 per hectare dalen wanneer de bevolkingsdichtheid uitstijgt boven de 250 inwoners per hectare. Deze bevolkingsdichtheid werd op het Adja plateau rond 1986 bereikt, maar luchtfoto's geven aan dat de gemiddelde palmdichtheid op het plateau toen al ongeveer 500 palmen per hectare was (inclusief land zonder palmen). Sommige Fon in het grensgebied experimenteren met tussenvormen van olie- en wijnpalm beheerstijlen (dichtheden en leeftijden die het midden houden tussen die van de Adja en die op het Fon plateau), maar introduceren deze niet in de Fon plateau dorpen waar zij vandaan komen en wier bewoners afkerig blijven van het 'doden' van de palmen die hen aan voedsel helpen.

In 1900 stuurden de Franse koloniale machthebbers de Fon koning Agoli Agbo en het Adja opperhoofd van het land Kpoyizun in ballingschap en vervingen hen door een aantal *chefs de canton*. Hoofdstuk 7 toont aan dat de koloniale en postkoloniale overheden beide plateaus sindsdien aan een vrij homogeen beleid onderwierpen. Dit beleid stimuleerde meestal de productie van dezelfde landbouwproducten en dezelfde technieken in het hele plateau gebied (de teelt op ruggen van katoen, koffie, tabak, palmolieproductie van hybride palmen, tot de jaren zestig ook de teelt van aardnoten en ricinus en sindsdien het ploegen en gebruik van kunstmest op katoen). Commerciële maïsproductie werd in de meeste jaren ontmoedigd,

terwijl de kap van oliepalmen eerst werd verboden en later belast met kaprechten. Maar in tegenstelling tot de algemene veronderstelling dat Afrikanen hetzij vasthouden aan zelfvoorziening dan wel gehoor geven aan een commercialiseringsbeleid door die waren te produceren waar de overheid om vraagt, ontwikkelden de Fon en Adja verscheidene stijlen van bestaan die weliswaar op de markt gericht waren, maar waarvan de meeste afweken van wat werd aangemoedigd door de overheidsprogramma's. Tot de jaren dertig plezierden de Fon de administrateurs door aardnoten, katoen en palmolie aan exportmaatschappijen te verkopen, hun belasting prompt te betalen, en in algemene zin met de koloniale overheid samen te werken. Maar toen lieten zij de katoenteelt op het plateau varen, verkochten hun palmolie en aardnoten meer en meer via privé handelaren aan Westafrikaanse consumenten en verlieten de landbouw op het plateau meer en meer. De Adja verkochten ook, naast ricinus en meer recent katoen, grote hoeveelheden voedsel aan Westafrikaanse consumenten, vooral maïs, *gari*, tomaten, chili pepers en *sodabi*, maar dit werd zelden opgenomen in de economische statistieken en bleef dus onopgemerkt.

Hoofdstuk 8 presenteert de bestaansactiviteiten van leden van enkele Fon en Adja lineages sinds ongeveer 1900. Deze familiegeschiedenissen belichten enerzijds hoe individuele actoren hun eigen praktijken motiveren en evalueren. Zij illustreren in het algemeen de aanhoudende waardering van de Adja voor landbouw en hun trots om hard op het land te werken, en de Fon voorkeur voor handel, ambachten, kantoorwerk, en spirituele inkomensgenererende activiteiten – bij voorbeeld in de door mij nader bestudeerde Fon lineage de handel in tovermiddelen en 'medicamenten'. Zij tonen hoe de meeste Fon weinig bezwaar maakten tegen de aankoop van voedsel en hoe zelfvoorziening in maïs het primaire doel van de Adja bleef. De familiegeschiedenissen beschrijven ook hoe actoren binnen sociale netwerken met en voor elkaar werkten. Adja schoolkinderen en tieners verrichten meer onbetaald werk op het land van hun ouders dan de meeste Fon kinderen in dezelfde categorieën, die door hun ouders meer werden aangemoedigd om niet-agrarische vaardigheden te verwerven. Leden van dezelfde verwantschaps, dorps en religieuze netwerken werkten vaak samen in ambachten en handel en verwierven daardoor vaardigheden, migreerden naar dezelfde bestemmingen, of hielpen elkaar om werk te vinden in hetzelfde bedrijf. Dit leidde in vele gevallen tot familie- en dorpsspecialisatie in bestaansactiviteiten en illustreert hoe netwerken stijlvorming kunnen bevorderen.

Hoofdstuk 9 analyseert de interacties tussen Fon en Adja stijlen van grondbewerking en bemesting en de ecologische omgeving. Het toont aan dat de teelt op ruggen van de Fon de vegetatie, vooral bomen, struiken en grassen met wortelstokken, effectiever verwijdert dan de oppervlakkige grondbewerking van de Adja. Daarom moeten de Adja hun gewassen vaker wieden en produceren de braakliggende gronden van de Adja sneller een grote en houtige biomassa dan de meeste braakliggende gronden van de Fon. De schoongewiede ruggen van de Fon bevorderen ook de uitspoeling van de klei uit de teeltlaag. Fon smeden reageerden omstreeks 1940 door een zeis uit te vinden die geschikt is om savannegrassen te rooien. Dit nieuwe gereedschap verspreidde zich binnen tien jaar onder alle Fon boeren op het plateau, hetgeen opnieuw illustreert hoe technologie zich kan verplaatsen langs inheemse handels- of sociaaltechnische netwerken. De Adja reageerde onder andere door op met *Imperata cylindrica* overwoekerd land tomaten en chili pepers op heuveltjes te telen voor stedelijke markten, in vruchtwisseling met een dichte aanplant van oliepalmen, cassave, duivenerwten of *Mucuna pruriens*, om het gras met wortelstokken uit te graven en te overschaduwen. Fon en Adja vrouwen bemestten de velden dichtbij huis meer en meer

met huishoudelijk afval en gewasresten. Sinds het begin van de jaren tachtig hebben Adja mannen en vrouwen ook vrij grote hoeveelheden kunstmest voor hun tomaten, katoen, maïs en soms koeiebonen aangekocht, die zij, behalve voor katoen, contant betalen. Hun bemesting van lokale voedselgewassen is uitzonderlijk voor Afrika.

Hoofdstukken 6 t/m 9 beschrijven hoe onder gelijksoortige bevolkingsconcentraties het Fon plateau degradeerde zoals verwacht door Homer-Dixon en andere (neo)-Malthusianen, terwijl de Adja meer reageerden zoals voorspeld door Boserup, door inheemse landbouwkundige innovatie en door toenemende arbeidsinvesteringen per eenheid land, om er een hogere opbrengst af te halen. Hoofdstuk 9 toont aan dat de Adja tussen de 1,5 en 5 keer zoveel arbeid besteden als de Fon aan een hectare niet bevloeide eenjarige gewassen en dat de geïrrigeerde Adja tomatenteelt ongeveer 8 tot 12 keer zo arbeidsintensief is als de Fon maïsteelt. Het populaire beeld van luie Adja gaat duidelijk niet op. Deze verschillende arbeidsbehoeften volgen uit de verschillende stijlen van grondbewerking en gewaskeuzen.

Mijn vergelijkende historische analyse, gebaseerd op verschillende onderzoeksmethoden waaronder etnografische, verschaft inzicht in de rollen die lokale actoren en hun sociaal-technische netwerken spelen en verklaar waarom de ontwikkelingen onder de Fon en Adja uiteen liepen ondanks gelijkvormige externe en demografische condities. Dit bewijst dat geen van de systeembenaderingen van Malthus, Boserup, Homer-Dixon, Zeven en Hartley op zichzelf juist is; zij kunnen dit ook niet zijn omdat zij allemaal de rol van het menselijk handelen veronachtzamen. Mijn diachroon-vergelijkende onderzoek laat zien dat noch bevolkingsgroei zoals verondersteld door Boserup, noch integratie in grootschalige politieke, financiële, onderwijs- en onderzoeksinstellingen zoals verondersteld door Homer-Dixon, voldoende zijn voor 'milieu-vindingrijkheid' en duurzame agrotechnologische vernieuwing. Dit proefschrift toont hoe clusters van gelijksoortige praktijken opkwamen in het historische proces, dat deze clusters herhaaldelijk overlappen met regionale horizontale en verticale sociale relaties met inbegrip van familiebanden en handelsnetwerken en dat deze praktijken sociaal-culturele waarde en betekenis hadden voor de Fon en Adja. Het stijlenbegrip is gebruikt voor zowel deze clusters van betekenisvolle praktijken als ook voor hun omschrijving in soms ideaaltypische termen. De historische analyse toont aan dat sociale actoren soms de leefstijlen van degenen die reeds het aanzien van de bevolking genoten nastreefden, zoals ook waargenomen door Bourdieu (1979) en Hofstee (1985). Andere stijlelementen verplaatsten zich horizontaler langs sociaal-technische netwerken. Verwantschappelijke en buurtnetwerken waren echter geen garantie voor de verspreiding van stijlen en kennis. De Fon en Adja wisten van elkanders stijlen, vooral in het grensgebied en sommige individuen experimenteerden met stijlelementen van hun buren, maar er was geen algemene trend tot stijldiffusie. De combinatie van netwerk en historische analyse in deze studie was daarom noodzakelijk om de opkomst van stijlen te begrijpen. Een dergelijke holistische vergelijking vestigt de aandacht op cruciale factoren en op punten waar de processen bij de Fon en de Adja uiteen liepen. De sociaal-culturele waardering van agrarische versus andere soorten van arbeid bleek van centraal belang om de voorkeuren voor bepaalde bestaansactiviteiten te kunnen verklaren.

# Résumé

Ce livre est une étude comparative du développement des modes de vie des Fons et Adjas et des changements écologiques sur deux plateaux voisins au Sud Bénin de 1600 à 1990. Les plateaux du Sud Bénin sont habituellement décrits comme une zone homogène. Pourtant, selon l'opinion publique le plateau Fon est écologiquement plus dégradé que les autres plateaux, et les Fons sont mieux organisés socialement, technologiquement plus avancés, et plus prospères sur le plan socio-économique que les Adjas.

Les plateaux Fon et Adja font parti d'une chaîne de plateaux situés au Sud du Bénin et du Togo, avec des caractéristiques de climat et pluviométrie similaires et dont les sols appartiennent aux mêmes catégories. Le plateau Adja avait en moyenne 1113 mm de pluviométrie par an, tandis que sur le plateau Fon, son voisin immédiat vers le Nord-Est, la pluviométrie était de 1051-1165 mm par an, entre 1900 et 1990. Les Nitisols des plateaux sont considérés comme les meilleurs sols pour l'agriculture tropicale, mais leur fertilité dépend fortement de leur teneur en matière organique et en argile. Ceci a conduit au Bénin comme dans bon nombre de localités, à des densités élevées de la population sur les Nitisols. Les plateaux Fon et Adja comptaient tous environ 110 habitants par km$^2$ en 1960, et environ 300 habitants par km$^2$ en 1990 (20-30% en moins pour le plateau Fon, si on exclut la population urbaine). En 2002, la densité humaine était de 409 habitants par km$^2$ sur le plateau Adja et de 377 sur le plateau Fon. Les Fons représentent aujourd'hui le plus grand groupe ethnique du Bénin, avec 19,9% de sa population totale. Les Adjas occupent la deuxième place avec 8,6% de la population totale. Les langues Fon et Adja ainsi que leurs cultures ont beaucoup en commun.

Ainsi les chercheurs aussi bien que des agents du développement ont tendance à croire que les données d'un plateau peuvent être extrapolées vers l'autre. Cependant, à l'opinion générale, les Fons et Adjas diffèrent dans leur organisation sociale, leur prospérité économique, et leurs techniques agraires. Les Fons sont connus au-delà même du Bénin, à cause de la richesse de leur histoire liée au royaume précolonial 'Danhomɛ' et pour leur prédominance dans toutes les sphères de la vie publique de l'État colonial et postcolonial. Les maisons et les clôtures des concessions des Fons sont plus souvent construites en briques de ciment que celles des Adjas. Ces derniers habitent d'habitude dans des maisons faites d'argile, souvent sans clôture. Ce qui atteste, pour l'opinion publique, d'une image de pauvreté des Adjas. Les Fons sont généralement perçus comme ayant une organisation sociale plus cohérente et des technologies plus développées que les Adjas. Les vulgarisateurs agricoles recommandent les pratiques agraires des Fons (le billonnage, les plantations éparses de palmiers à huile (qui était de 80-300 palmiers de tous âges par hectare en 1990), et la production et vente d'huile de palme) à tous les cultivateurs du Sud Bénin et particulièrement aux Adjas, qui pratiquent la culture à plat, avec 1000-1600 palmiers à huile par hectare, et récoltent plus de vin que d'huile de palme. Depuis le début du temps colonial, les Adjas sont considérés comme étant économiquement et technologiquement arriérés, et socialement inorganisés parce qu'ils ont seulement des chefs et des structures pour de petits groupes familiaux. Aussi, ils sont jugés paresseux parce que leur mode de labour est très superficiel et leur production agricole n'est pas destinée, en général, à l'exportation.

Depuis plusieurs décennies, des décideurs politiques et agronomes se soucient de la dégradation écologique des plateaux. Ils raisonnent le plus souvent que la forte densité de la population des plateaux conduit inévitablement à un appauvrissement des sols. Autrement dit, ils croient comme les (neo) Malthusiens que les plateaux ont une capacité intrinsèque et que leur changement écologique dépend de leur population. D'autre part, pour l'opinion

publique, les sols du plateau Fon sont beaucoup plus pauvres que ceux du plateau Adja. Il est également facile de voir que la végétation semi-spontanée des deux plateaux diffère considérablement. Celle du plateau Fon est faite de petites herbes et graminées (*Cyperus esculentus, Digitaria spp., Brachiaria deflexa, Ipomoea involuncrata* etc.) et de graminées de 2 mètres de hauteur (*Andropogon gayanus*) qui sont facilement inflammables en saison sèche. Le plateau Adja, quant à lui, présente une plus grande variété d'herbes, arbres et arbustes (*Albizia zygia, Antiaris africana, Combretum hispidum, Mallotus oppositifolius, Dialium guineense, Dracaena arborea, Dichrostachys glomerata, Securinega virosa, Zanthoxylum zanthoxyloides* etc.) et comme graminée principale *Imperata cylindrica* qui est de taille moyenne. Les feux de brousse n'existent pratiquement pas sur le plateau Adja.

Cet état de faits nous amène donc à remettre en cause la pensée selon laquelle il existerait une relation linéaire entre la croissance de la population et le changement agro écologique, soutenu d'une part par les (neo) Malthusiens comme Homer-Dixon (1999), pour qui la croissance démographique est une menace pour l'environnement, et d'autre part par Boserup (1965), pour qui la croissance démographique est plutôt source de croissance agricole. En effet, la fertilité des sols et la végétation des plateaux Fon et Adja diffèrent malgré la similitude de leurs densités démographiques. Les partisans de Malthus et Boserup avancent plusieurs assomptions pour ne pas abandonner leurs croyances chéries aux modèles basés sur la densité de la population. Un grand nombre pense que le plateau Fon est plus peuplé que le plateau Adja. Mais les chiffres démographiques montrent que cela n'est pas le cas. D'autres supposent que le plateau Adja était plus fertile et plus boisé que le plateau Fon dans leur état 'd'origine'.

Cette thèse défend que les écologies des plateaux Adja et Fon étaient similaires dans le passé, mais ont divergé sous l'influence de la gestion humaine. Au point de vue méthodologique, deux approches ont été adoptées pour 'tester' l'hypothèse selon laquelle les deux plateaux étaient écologiquement dissimilaires avant l'arrivée de l'homme. La première approche s'est surtout fondée sur l'histoire orale, pour la collecte de données, et la seconde approche sur la comparaison de processus. Dans le chapitre 4, l'analyse porte sur des mythes de fondation de villages et d'autres récits historiques locaux sur des modes de vie, dans leur contexte socioculturel et technologique. Par ailleurs, on a considéré l'analyse écologique et paléontologique d'un lac à 20 km de distance de la frontière orientale du plateau Fon, qui a montré que depuis au moins la fin de la dernière période humide (qui s'est terminée au plus tard en 950 AD) tous les plateaux du Bénin du Sud étaient couverts d'une mosaïque de forêt et de savane du type qui est encore aujourd'hui la végétation spontanée qui domine le plateau Adja (et les autres plateaux dans la chaîne); seul le plateau Fon serait dégradé. Les récits locaux, dénués de leurs intentions sociopolitiques probables, confortent cette thèse des écologistes et paléontologistes.

La triangulation des mythes de migration indique que les populations des plateaux Fon et Adja se sont accrues à partir du 16e siècle. Le plateau Adja a surtout été peuplé par des Adjas de Tado qui ont immigré avec leurs technologies. Le plateau Fon a été peuplé par différents groupes ethniques apparentés aux Adjas (Ouemenous, Zas, Ayizos, Adjas, Djinous etc.), et par un petit groupe apparenté aux Yoroubas qui dominait la vie sociopolitique (les Guedevis). Les Guedevis et les commerçants venant du Nord-Est introduisaient sur le plateau Fon des outils en fer des Yoroubas et Baribas, surtout des houes qui étaient aptes au billonnage. Les houes Adja de Tado par contre étaient seulement aptes à la culture à plat et à la confection de buttes. Lorsque le fer est devenu plus abondant avec l'arrivée de commerçants Européens

sur la côte, la houe Yorouba et le billonnage se sont répandus rapidement sur le plateau Fon, tandis que le plateau Adja était peuplé de plus en plus par ceux qui cultivaient à plat avec des houes Adja. Ainsi, les réseaux sociopolitiques et sociotechniques divergents des Fons et Adjas ont motivé le développement de différents modes de labour et de différents modes de vie depuis le 16e siècle. L'impact écologique de ces modes de labour est discuté dans le chapitre 9.

Vers 1610, un autre groupe ethnique apparenté aux Adjas arrivait sur le plateau Fon, et fut accepté par la population autochtone comme famille royale. La force du royaume Fon résidait dans la centralisation de la production d'armes et du pouvoir militaire autour d'un petit nombre de forges, dans la centralisation de la religion autour d'un nombre de cultes d'État, et la promotion d'une idéologie guerrière. De la fin du 17e jusqu'à la fin du 19e siècle, les Fons enlevaient des esclaves. Ces esclaves étaient destinés d'une part à des travaux domestiques et agricoles sur le plateau, et d'autre part à l'exportation à travers l'Atlantique. Encouragé par le trafic d'esclaves, le commerce d'autres marchandises locales et importées s'épanouit au Danhomɛ, et chaque adulte pouvait y participer, y compris les esclaves les plus fortunés. Contrairement à ce que Polanyi (1968) a écrit sur le Danhomɛ pour supporter sa théorie substantiviste, le roi ne contrôlait pas le commerce. Mes recherches contredisent également certaines littératures sur le royaume Danhomɛ, qui ont trouvé que l'économie avait une étiquette unique. Cette économie n'était ni un 'mode de production de razzias d'esclaves articulé à un mode de production de subsistance' tel que soutenu par Elwert (1973), ni un 'système tributaire féodal' comme le dit Coquery-Vidrovitch (1971), ni un 'mode de production d'échange de marchandises combiné avec un mode de production basé sur le travail d'esclaves' tel que défendu par Manning (1982). Dans ma thèse, je montre que les modes de vie urbanisés des élites, y compris le commerce, la guerre, la forgeage, les activités religieuses, le tissage et le port de tissus prestigieux, étaient plus appréciés dans le royaume Fon que la vie rurale et l'activité agricole. Le mot Fon *nukanmɛ*, qui signifie littéralement 'brousse secondaire', devenait synonyme d'arriération et un terme dévalorisant pour la campagne en général. Les ruraux qui ne pratiquaient ni le commerce ni des métiers 'urbains' étaient appelés *nukanmɛnu* ou 'gens retardés de la brousse'. A la même époque, la brousse et la campagne représentaient la richesse et la sécurité des Adjas. Pour éviter d'être capturés comme esclaves, les Adjas se cachaient dans de petits villages entourés d'une végétation boisée, s'adonnaient à l'agriculture et évitaient le commerce de longue distance dans des régions écumées par des chasseurs d'esclaves. Les Adjas gagnaient des biens et du prestige en travaillant énergiquement la terre, en petits groupes.

Vers le milieu du 19e siècle, la demande commerciale d'outre-mer s'est tournée des esclaves vers l'huile et les amandes de palme. Ceci présentait la même occasion de produire des marchandises à tous les paysans des plateaux Adja et Fon, car le palmier à huile y existait en état spontané, mais les Fons et Adjas répondirent de manière différente. Je montre dans le chapitre 6 que les paysans Fon plantaient des palmiers pour vendre de l'huile et des amandes, d'abord seulement sur la terre collective du lignage, mais plus tard dans le 19e siècle aussi sur les terres d'hommes individuels. Il devenait un sacrilège de 'tuer' un palmier Fon en l'abattant. Mais contrairement à ce que la littérature revendique, il n'y avait pas de taxe obligatoire en huile de palme pour tous les cultivateurs Fons; les planteurs étaient surtout motivés par les occasions de commerce. La végétation du plateau Fon au 19e siècle était surtout composée d'herbe inflammable appelée *Andropogon gayanus*. Le feu met en péril les palmiers a huile mais le labour leur fait du bien. Les planteurs Fon vont donc développer

plusieurs stratégies pour écarter les herbes et le feu de leurs palmiers en saison sèche. La stratégie préférée était la culture permanente. Ceci favorisait de bons rendements en régimes de palme, mais était cependant source de dégradation du sol, à long terme. Depuis au moins 1850, le plateau Fon importe des vivres du plateau Adja. Entre environ 1850 et 1950 quelques Fons se sont installés au nord-est du plateau Adja pour produire des vivres et de l'huile de palme, au début parfois avec l'aide d'esclaves. De nos jours, beaucoup des sols au centre du plateau Fon ne sont plus fertiles pour la production vivrière. Seule, la culture de palmiers à huile continue de nourrir ses propriétaires à travers la vente d'huile de palme.

Les palmiers des Adjas produisaient moins de régimes parce qu'ils étaient plantés de façon très dense et entourés de végétation semi-spontanée. Les Adjas abattaient ces palmiers à l'âge de 20-25 ans pour extraire du vin de leur tronc, qu'ils vendaient sur les marchés locaux. Les nouvelles possibilités d'exporter de l'huile de palme ne les poussaient pas à planter leurs palmiers de façon plus éparse ni à vendre beaucoup plus d'huile. Mais quelques femmes Adja glanaient des amandes de palme tombées d'elles-mêmes et les vendaient à leur propre compte. Avec l'introduction d'une technique de distillation vers 1920, les Adjas vont augmenter la densité de leurs palmeraies qui va passer de 600-1000 palmiers par hectare dans la première partie du 20e siècle à 1000-1600 palmiers par hectare vers la fin du siècle, et ils vont vendre de plus en plus de vin de palme distillé, appelé *sodabi*. Pendant les six à huit premières années de plantation, les Adjas entretiennent des cultures annuelles entre les jeunes palmiers. Puis on permet aux palmiers et à la brousse d'occuper la terre pendant environ 10-15 ans. Les graminées disparaissent pendant la période de 'jachère palmiers' et le sol regagne sa fertilité à un certain degré. Ce mode d'exploitation des palmeraies 'vinicoles' permet aux Adjas de planter beaucoup plus de palmiers par hectare que les 200 que Zeven (1967) et Hartley (1988) considèrent être le maximum. Ces deux 'experts' du palmier à huile pensent aussi que les densités de palmiers s'abaissent au-dessous de 200 par hectare si la densité de la population humaine s'accroît au-delà de 250 habitants par hectare. Cette densité démographique fut atteinte sur le plateau Adja vers 1986, mais des photos aériennes indiquent que la densité moyenne de palmiers à huile sur ce plateau était d'environ 500 palmiers par hectare (y compris les terres sans palmiers) dans la même année. Quelques Fons dans la zone frontalière expérimentent des modes intermédiaires de gestion de palmeraies pour l'exploitation de vin et d'huile (avec des densités et des âges intermédiaires entre ceux des Adjas et ceux du plateau Fon), mais ils n'introduisent pas ces styles intermédiaires dans leurs villages d'origine sur le plateau Fon, où les cultivateurs répugnent à 'tuer' les palmiers qui constituent leur gagne-pain.

En 1900 les colons Français ont exilé le roi Fon Agoli Agbo et le chef de terre Adja Kpoyizoun, en les remplaçant par plusieurs chefs de canton. Le chapitre 7 montre que depuis cette date, les gouvernements coloniaux et post-coloniaux ont soumis les deux plateaux à une politique assez homogène. Cette politique encourageait le plus souvent la production des mêmes marchandises agricoles avec les mêmes techniques de culture dans toute la zone des plateaux: le billonnage, la culture de coton, café, tabac, la production d'huile de palmiers hybrides, jusqu'aux années 1960 la culture d'arachides et de ricin, et depuis cette date aussi la culture attelée et l'application d'engrais minéraux au coton. La production de maïs à des fins commerciales était le plus souvent découragée, tandis que l'abattage de palmiers à huile était d'abord interdit et puis soumis au paiement de droits. Mais l'histoire des Fons et Adjas ne supporte pas la conviction commune que les Africains s'accrochent soit à l'autarcie, soit répondent aux politiques de commercialisation en produisant les marchandises que le

gouvernement demande. Ils développaient divers modes de vie qui étaient tous orientés vers le marché, mais divergeaient pour la plupart des modes encouragés par les politiques et programmes officiels. Jusqu'aux années 1930 les Fons plurent aux administrateurs en vendant arachides, coton et huile de palme aux sociétés d'exportation, en payant leur impôt promptement, et en collaborant en général avec le gouvernement colonial. Mais ensuite ils renoncèrent à la culture de coton sur le plateau, vendaient leurs arachides et huile de palme aux consommateurs Ouest Africains par l'intermédiaire de commerçants privés, et abandonnèrent les champs de leur plateau de plus en plus. Les Adjas vendaient, outre du ricin et plus récemment du coton, de grandes quantités de vivres aux consommateurs Ouest Africains – surtout maïs, *gari*, tomates, piments et *sodabi* – ce qui était rarement remarqué par les statistiques économiques.

Le chapitre 8 présente les modes de vie de membres de quelques lignages Fons et Adjas depuis environ 1900. Ces histoires de famille montrent d'une part comment les acteurs individuels motivent et apprécient leurs propres activités. Les données révèlent que les Adjas ont une fierté persistante pour l'agriculture et sont de gros travailleurs au champ, tandis que les Fons préfèrent le commerce, l'artisanat, le travail de bureau, et les services spirituels – dans le lignage Fon étudié en détail le commerce de charmes magiques et de 'médicaments'.

Ils montrent que peu des Fons voyaient d'inconvénient à l'acquisition de vivres au marché, et que le but primaire des Adjas restait l'autosuffisance en maïs. Les histoires de famille révèlent également comment les acteurs travaillent les uns pour et avec les autres au sein de réseaux sociaux. Les écoliers et adolescents Adjas travaillaient plus sur les champs de leurs parents sans être payés, contrairement aux enfants Fons dans les mêmes catégories, qui étaient plutôt encouragés par leurs parents à développer des compétences en dehors de l'agriculture. Les membres d'un même réseau de famille, village ou religion coopéraient souvent dans l'artisanat et le commerce et acquéraient ainsi des compétences, migraient vers les mêmes destinations, ou s'entraidaient à trouver des emplois dans les mêmes entreprises. Ceci entraînait souvent la spécialisation familiale ou villageoise dans les modes de gagne-pain, et montre comment les réseaux peuvent encourager la formation de styles.

Le chapitre 9 analyse les interactions entre les modes de travail du sol et de fumure des Fons et Adjas et l'environnement écologique. Il montre que le billonnage des Fons élimine la végétation, surtout les arbres, arbustes et les graminées avec rhizomes, plus effectivement que le labour à plat et superficiel des Adjas. Par conséquent les Adjas doivent sarcler plus fréquemment leurs cultures, et les jachères Adjas produisent plus rapidement une grande biomasse ligneuse que la majorité des jachères Fons. Les billons Fons favorisent aussi l'érosion de l'argile de l'horizon cultivé. Les forgerons Fons vers 1940 répondirent à la savanisation par l'invention d'une faux apte au défrichement des herbes de savane. Ce nouvel outil se répandit à travers les marchés locaux dans un délai de dix ans parmi tous les cultivateurs Fons sur le plateau. Ceci montre comment la technologie peut être transmise au sein de réseaux indigènes de commerce ou réseaux sociotechniques. Les Adjas réagirent à l'infestation de leurs terres par l'*Imperata cylindrica*, par la culture de tomates et de piments sur buttes pour les marchés urbains, en rotation avec des plantations denses de palmiers à huile, manioc, pois d'angol ou *Mucuna pruriens*, pour déraciner et étouffer cette herbe avec rhizomes. Les femmes Fons et Adjas fertilisaient les champs à côté du village progressivement avec des déchets de ménage et les restes des cultures. Depuis le début des années 1980 les hommes et femmes Adjas ont aussi acheté d'assez grandes quantités d'engrais minéral pour leurs tomates, coton, maïs et parfois niébé, qu'ils paient comptant sauf si appliquées au coton.

La fertilisation minérale des sols pour des cultures vivrières locales est exceptionnelle pour l'Afrique.

Les chapitres 6 à 9 décrivent comment le plateau Fon se dégrada comme supposé par Homer-Dixon et d'autres (neo) Malthusiens, et comment beaucoup de ses habitants y abandonnèrent leurs champs. Les Adjas, malgré leur densité démographique similaire à celle des Fons, réagirent plutôt comme prédit par Boserup. Les Adjas développèrent leurs techniques agraires indigènes et augmentèrent le nombre d'heures de travail par surface pour y obtenir de plus grands revenus. Le chapitre 9 montre que les Adjas consacrent entre 1,5 et 5 fois plus de travail à un hectare de cultures annuelles non irriguées que les Fons. La culture de tomate irriguée des Adjas exige environ 8 à 12 fois plus de travail par hectare que la culture de maïs des Fons. L'image populaire que les Adjas seraient paresseux est donc fausse. Ces différentes exigences de travail résultent des différents modes de travail du sol et des différents choix de cultures.

L'analyse historique comparative, basée sur une diversité de méthodes de recherche y compris des méthodes ethnographiques, donne un aperçu des rôles que jouent les acteurs locaux et les réseaux sociotechniques et explique pourquoi le développement sur les plateaux Fon et Adja divergeaient malgré leurs conditions externes et démographiques similaires. Ceci montre l'insuffisance des approches systémiques de Malthus, Boserup, Homer-Dixon, Zeven et Hartley. Ils ne suffisent pas car ils négligent tous le rôle de l'action humaine. Cette analyse démontre que ni la croissance démographique comme supposé par Boserup, ni l'intégration dans des institutions politiques, financières, d'instruction et de recherche de grande envergure comme supposé par Homer-Dixon, sont des conditions suffisantes pour l'ingéniosité environnementale et l'innovation agro-technologique durable. Ce livre montre comment des amas de pratiques similaires se dégagent dans le processus historique, comment ces amas se chevauchent à plusieurs occasions avec des relations sociales régionales verticales ou horizontales (y compris des relations de parenté et des réseaux de commerce), et aussi que ces pratiques sont très significatives et représentent des valeurs socioculturelles pour les Fons et les Adjas. J'ai utilisé le concept de style pour désigner à la fois les ensembles de pratiques significatives et leur description en termes types parfois idéaux. L'analyse historique montre que les acteurs sociaux aspiraient parfois aux styles de vie de ces membres de la société qui jouissaient déjà de l'estime de la population, comme Bourdieu (1979) et Hofstee (1985) l'ont aussi observé. D'autres éléments de styles circulaient plus horizontalement au sein de réseaux sociotechniques. L'existence de relations de parenté ou de voisinage n'était pourtant pas une condition suffisante pour la dissémination de styles et de connaissances. Les Fons et Adjas étaient au courant des styles des uns et des autres, particulièrement dans la région frontalière, et quelques individus mettaient en pratique des éléments des styles de leurs voisins. Mais il n'existait pas schéma général pour la diffusion des styles.

L'analyse historique des réseaux sociotechniques dans cette étude était donc nécessaire, pour comprendre l'émergence de styles. L'approche comparative holiste a dirigé mon attention sur les points de divergence des processus de styles de vie. L'appréciation socioculturelle du travail agraire vis-à-vis d'autres types de travaux, apparut comme point central à l'explication des préférences pour certaines modes de vie.

## Acronyms

| | |
|---|---|
| AD | Anno Domini |
| ANB | Archives Nationales du Bénin |
| AOF | Afrique Occidentale Française |
| AOM | Archives d'Outre-Mer (French colonial archives in Aix-en-Provence) |
| BC | Before Christ |
| BCB | Banque Commerciale du Bénin |
| BDPA | Bureau pour le Développement de la Production Agricole |
| BP | Before Present |
| CAFRA | Conseil d'Administration de la Famille Royale d'Abomey |
| CAITA | Compagnie Agricole et Industrielle des Tabacs Africains |
| CARDER | Centre d'Action Régionale pour le Développement Rural |
| CENAP | Centre National d'Agro-Pédologie |
| CFDT | Compagnie Française pour le Développement des fibres Textiles |
| CIF | Cost, Insurance, Freight (these are paid by the sender) |
| DFID | Department For International Development |
| EDIAIS | Enterprise Development Impact Assessment Information Service |
| FCFA | Franc des Colonies Françaises d'Afrique, later Franc de la Communauté Financière Africaine |
| FOB | Free On Board |
| IIED | International Institute for Environment and Development |
| IISD | International Institute for Sustainable Development |
| IITA | International Institute for Tropical Agriculture |
| INSAE | Institut National de la Statistique et de l'Analyse Economique |
| NGO | Non Governmental Organisation |
| OCAD | Office de Commercialisation des produits Agricoles du Dahomey |
| ODIZ | Opération de Développement Rural Intégré du Zou |
| O.N.C. | Office National des Céréales |
| PCD | Parti Communiste du Dahomey |
| SATEC | Société d'Aide Technique et de Coopération |
| SERHAU | Société d'Etudes et de Recherches sur l'Habitat et l'Aménagement Urbain |
| SNV | Stichting Nederlandse Vrijwilligers (Dutch development NGO) |
| SOMONI | Société Moyen-Niger |
| SONACO | Société Nationale pour le Coton |
| SO.NA.DER | Société Nationale pour le Développement Rural |
| SONAPRA | Société Nationale pour la Promotion Agricole |
| SONICOG | Societé Nationale des Industries de Corps Gras |
| SOPA | Société de Production d'Abomey |
| TATE | Technological and Administrative Task Environment |
| UNB | Université Nationale du Bénin (now Université d'Abomey-Calavi) |
| UNDP | United Nations Development Program |
| WAU | Wageningen Agricultural University (now Wageningen University) |

## Acronyms which designate kinship ties

| | |
|---|---|
| B | brother |
| D | daughter |
| F | father |
| H | husband |
| M | mother |
| S | son |
| W | wife |
| Z | sister |
| BD | brother's daughter |
| BS | brother's son |
| BSS | brother's son's son |
| BW | brother's wife |
| DD | daughter's daughter |
| DS | daughter's son |
| DH | daughter's husband |
| FB | father's brother |
| FBD | father's brother's daughter |
| FFBS | father's father's brother's son |
| HD | husband's daughter |

etc.

## A note on pronunciation of Fon and Adja words

Fon and Adja are tonal languages. Accents on vowels indicate the pitch.

| | |
|---|---|
| ´ | high pitch |
| ` | low pitch |
| ˜ | nasal tone |
| ɛ | 'open' e |
| đ | retroflex d (to be pronounced with your tongue against your teeth) |
| c | tch |
| j | dj |
| x | ch |

# Glossary of Fon and Adja words

| Fon | Adja | English |
|---|---|---|
| *abò* | *abò* | Sorghum |
| | *abo* | Measuring stick (2 m) |
| | *abowo* | Surface measure of 20 m x 20 m |
| *acɛ* | *acɛ* | Power, dominion, agency, creativity, ability to make things happen, knowledge, understanding |
| *afintin* | | A spice from *Parkia biglobosa* seeds |
| *Agasuvi* | | Members of the Fon royal family |
| *agbajigan* | | Chief of the spies of the Fon army |
| *agbajigbeto* | | Spy in the Fon army |
| *agban đaxó* | | Second, principal part of the bridewealth |
| *agban kpevi* | | First small part of the bridewealth |
| | *agblɛn* | Cultivating, soil tillage with the hoe |
| *agbogudonu* | | Lit. person behind Abomey's town wall, 'backward' inhabitant of the countryside |
| *ahanbiba* | | Libation, annual sacrifice to the ancestors |
| *ahinon* | | Chief-priest of a market |
| *ahwangan* | | Warlord in the Fon kingdom |
| | *ahwegboboji* | Field near the houses |
| *aïnon* | *nyigbafio* | Chief-priest of the land |
| *akò* | *akò* | Patriclan claiming descent from a mythical founder. Each *akò* consists of several *hɛnu* |
| *akowe* | | Literate person |
| *akpan* | | Thick porridge from fermented maize or pearl millet flour, sieved before fermentation |
| *akwe* | *hoyi* | Cowry, money |
| *amanblótó* | | Producer of *amansin* |
| *amansin* | | Medicine, remedy for all kinds of physical and spiritual problems and diseases |
| *amansinsató* | | Vendor of *amansin, bo* and/or *nuwanu* |
| *anato* | | Commoner in the Fon kingdom, distinct from the *kanumo* and the *àxóvi* |
| *asɛn* | | Altars to the lineage ancestors |
| *ata* | | Oil dumpling from cowpeas whose endocarp was removed before grinding them |
| *atanon* | | Vendor of *ata* |
| *àxó, àxósú* | *hweshino, xeshino* | Ruler, king |
| *àxósi* | | 'King's wife': Wives, female slaves and eunuchs in the royal palace |
| *àxósúkpò* | | Ruler's stick |
| *àxóvi* | | Prince, member of a royal lineage |
| *àzetó* | | Witch, wizard, person who uses spiritual powers to harm others |
| *àzo* | | Work |
| *bo* | *bo* | Magic charm |
| | *bogbudi* | Field with young oil palms |
| *bokonon* | *bokonon* | Diviner of *(a)fá* |
| | *bovime* | 'Small field', ca. 30-400 m from the village |
| *daa* | | Head of a lineage or a lineage branch |
| | *dekan* | Mature oil palms with secondary bush |
| *deto* | | Pit for pounding palm fruit, ca. 1 m by 2 m wide and 50 cm deep, plastered with clay or stones |
| *doko* | *gawu* | Oil dumpling from whole cowpea flour |
| *donkpɛ* | *dajɛ* | Young man, in Fon also work party |

Glossary (cont.)

| Fon | Adja | English |
|---|---|---|
| *donkpɛgan* | | 'Chief of the young men', person who has the authority to call his fellow villagers for work parties and to supervise funerals |
| | *donhun* | Cubic measure containing ca. 2.5 kg cereals |
| | *ede xo nyigban* | Oil palm 'fallow' |
| *Fá* | *Afá* | A divination system |
| *fenyen* | *kutu* | Cassava |
| *fenyenlibo* | | Powder from dried cassava roots |
| | *flefi* | A spice from *Prosopis africana* seeds |
| *gari* | *gari* | Grated and roasted cassava roots |
| *gawu* | | Chief of the Fon king's standing army |
| *gbadagle* | | 'Evening field', personal plot of unmarried sons, wives, and other dependents |
| *gbali, baril* | *gbali* | Barrel containing ca. 200 litres |
| *gbe* | *zogbe* | Grassland (prone to bush fires) |
| *gbođɛ* | | 'Goat's tongue', ancient Fon hoe model |
| *gbonugan* | | 'Minister' in the Fon kingdom |
| *Gedevi* | | 'Children of Gede', inhabitants of the Fon plateau before the establishment of the kingdom |
| *gii* | | Thick porridge from fermented maize, boiled once and enveloped in leaves |
| *gle* | *agble, boji* | Cultivated land, field |
| *gletanu* | | Farmer, cultivator, peasant, backward person |
| *gusi* | *gusi* | Seed of egusi melon |
| *hɛnu* | *hɛnu* | Patrilineage |
| *hɛnuaïkungban* | | Communal land of the lineage |
| *hɛnudeju* | | Communal lineage oil palm grove |
| *hɛnugan* | *hɛnugan* | Lineage head |
| *hɛnuvodun* | | Lineage god |
| *hlonhlon* | *hlonhlon* | Strength, energy, violence, vegetative faculty |
| *hu* | | To kill |
| *hu de* | | 'Killing' oil palms (felling) |
| *huèn* | | Ridge, scarification; fig. task, work |
| *Hunjrogbe, Mignonhigbe* | | Fon day of rest; day on which the markets of Abomey (Hunjro) and Kana (Mignonhi) are held |
| *hwedo* | | (Ward inhabited by) a lineage segment |
| *hwetanu* | | Annual sacrifice to the (royal) ancestors |
| *kan* | | Cord |
| *-kanmɛ* | | Land with perennials (plantation or fallow) |
| *kantin* | *abowive* | Surface measure of 24 m × 24 m (576 $m^2$) |
| *kanumõ* | *waci* | Slave |
| *kɛn* | *keji* | Soil with pebbles |
| | *Kisagbe* | Adja day of rest |
| *kpɛli* | | New Fon hoe model |
| *ko* | *ko, koji, komɛ* | Clay, vertisol |
| *kovovo* | *nyigbanjun* | Red soil |
| *kowiwi* | | 'Black' soil (in reality grey) |
| | *nyigbanfunfun* | Grey soil |
| | *kpamɛboji* | Enclosed field, mostly near the houses |
| *kpawugle* | | 'Fence-near field', field near the houses |
| *kpò* | | Hooked stick |
| *kpògɛ* | | Straight stick |
| *kpò* | *agasu* | Panther, leopard, title of the Fon king |

Glossary (cont.)

| Fon | Adja | English |
|---|---|---|
| *kpòsi* | | Wife of the Fon king |
| *kulekun* | *eklui* | Pigeon pea (*Cajanus cajan*) |
| *kulikuli* | *gangodi* | Snack from fried groundnut cake |
| *kúvító* | | Ghost, secret society for men |
| *lɛ gle* | | Cultivating, 'doing the field' |
| *lɛ huèn* | | Ridging, fig. working, drudgery |
| *lio* | *ɛgblɛn* | Porridge from fermented maize, first boiled in water, then enveloped in leaves, and steamed a second time. |
| *Lisakpamɛ* | | *Vodunkpamɛ* of Lisa |
| *Lisasi* | | *Vodunsi* of Lisa |
| *Mawukpamɛ* | | *Vodunkpamɛ* of Mawu |
| *mɛde* | | Labour service |
| *mɛxo* | *mɛgan* | (Lineage) elders, senior men |
| *nujo* | | 'Thing to render', tax in kind to the State |
| *nujoto* | | Tributary person |
| *nukanmɛ* | | Bush fallow, countryside |
| *nukanmɛnu* | *avemɛtowe* | 'Backward' inhabitant of the countryside |
| *nuwanu* | | Material ingredients for magic charms |
| | *nyonlũho* | Bridewealth |
| *só* | *efibobo, habobo* | Group of craftsmen or farmers working together |
| *sodabi* | *sodabi* | Palm wine distillate |
| *tanyinon* | *tashinon* | 'Female lineage head'; priestess of the lineage ancestors, old woman of the lineage who has authority over the younger women |
| | *tasinon* (Tado-Adja) | Male or female member of the ruling council at Tado's court |
| *telibo* | | Flour from dried yam |
| *tò* | *tò* | Village, town |
| | *toganvi* | Father's elder brother's son |
| *tohungolo* | *tohungolo* | Cubic measure containing ca. 1 kilo cereals |
| *tohwiyo* | | Deified mythical founder of a clan |
| *tòxosu* | | Chief of a town or region |
| *vigan* | | 'Chief of the children', second man in command of a *hɛnu* or a *hwedo* |
| *vodun* | *vodun* | Spirit, god |
| *vodunkpamɛ* | | 'Enclosure of the *vodun*'; fenced compound with temples, a courtyard where rituals are performed, huts for people undergoing initiation, etc. |
| *vodunon* | | Priest of a *vodun* |
| *vodununu, hununu* | | 'Spirit-drinking' or 'blood-drinking', vow consecrated by the drinking of blood |
| *vodunsi, hunsi* | *vodunshi, hunshi* | Person initiated to the cult of a *vodun* |
| *wo* | *amɛ* | Thick porridge from unfermented flour, called *pâte* in French. Mostly from maize; among the Fon sometimes from sorghum (*abokunwo*) |
| *xwe* | *xwe* | House |
| | *zohuji* | 'On the fire', land covered by fire-prone grass (at the arrival of the first cultivators) |
| *zùn* | *ave* | Forest (dense enough to resist bush fires) |
| *zùngbo* | | 'Big forest', dense forest |

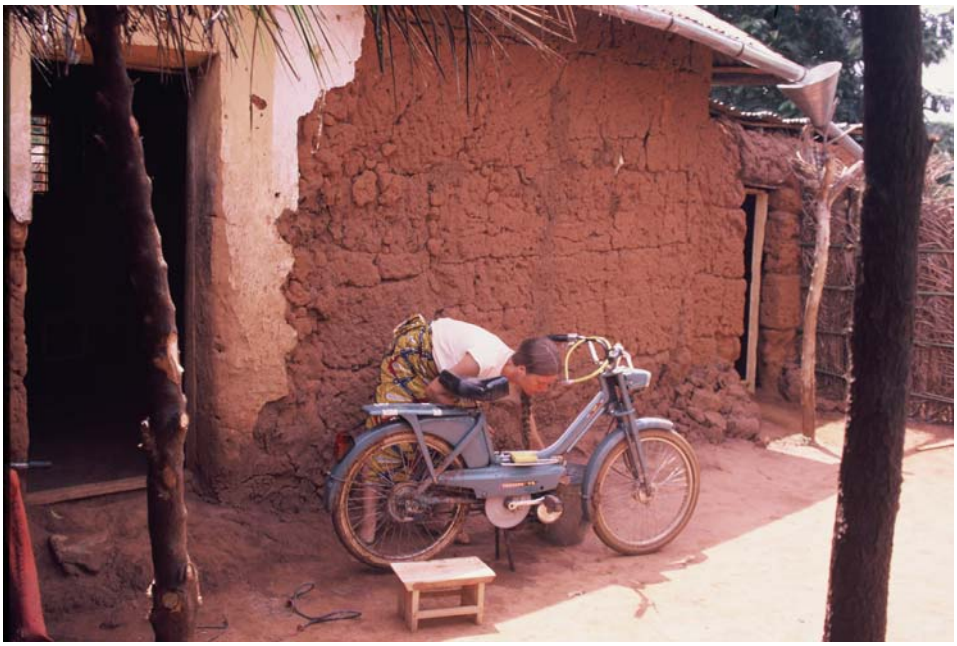
Sources and spelling of most Fon words: Segurola (1988); for most Adja words: own research.

# Curriculum Vitae

Dorothea Wartena was born on 10 December 1961 in Mainz, Germany. From 1964 to 1979 she lived in Mol, Belgium, where she attended the German section of the European school, and did the final examination in the specialisation 'natural sciences and modern languages'. From end 1979 to 1981, end 1982 to 1984, and end 1985 to early 1988 she studied at Wageningen Agricultural University and worked as an editor and discussion group leader for various development NGO's and Christian organisations. This was interrupted by studies and voluntary work in Belgium in 1982 and research in Bénin in 1985. In 1988 she obtained the engineers degree (now called MSc) from Wageningen University, with theses in rural development sociology and agrarian history. Since 1984 until today she also works as a freelance translator.

From 1988 to 1991 she did PhD research in Bénin, France and Togo, supervised the internships and MSc research of Dutch students, and taught anthropology at Wageningen University. In 1992 she was among the three founders of the International Christian Fellowship Wageningen, an association of international students and researchers. Since then, she worked as a board member, coach, Bible study coordinator, and trainer in intercultural communication for this organisation. From 1994 to 1995 she was also a board member of the national Platform for International Student Work of IFES-NL. The 1990s were further devoted to writing articles, book chapters and conference papers.

From 2002 to 2003 she was PhD representative in the Wageningen management team of the CERES research school, and in 2006 PhD representative of the management team of Working Programme 2 of the same research school. In 2004 she organised, with the NGO Otherwise, a conference on the internationalisation of education at Wageningen University. In 2005 she taught methods, techniques and data analysis for field research at the social sciences department of Wageningen University.

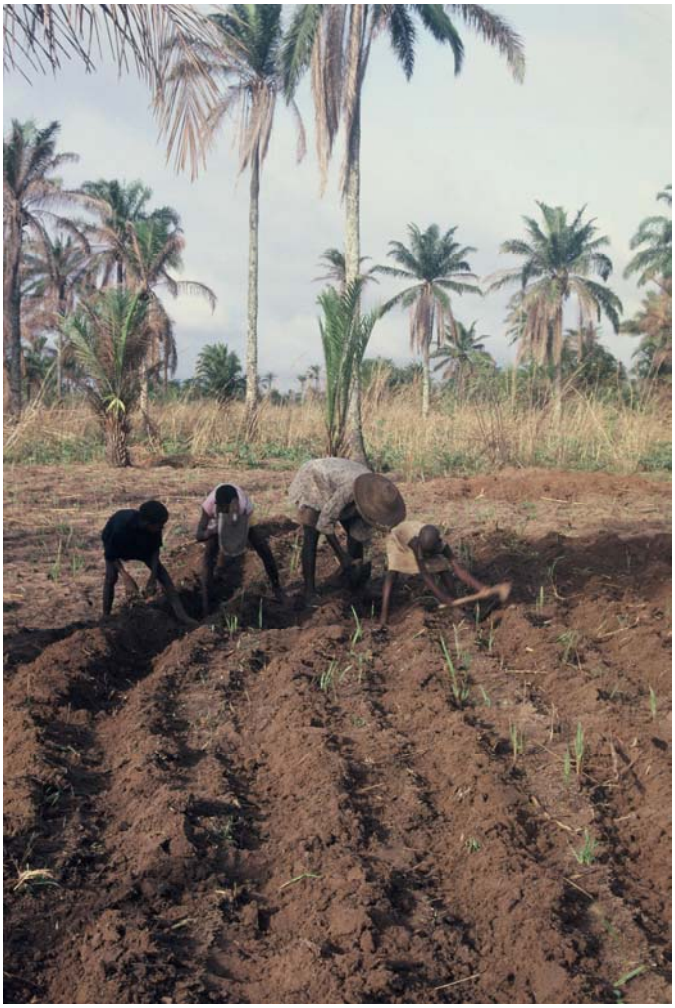


My house and in Honsouhoué

*Nyigbafio* Adjakanumabu, chief of the land of the Adja in Tado, November 1990

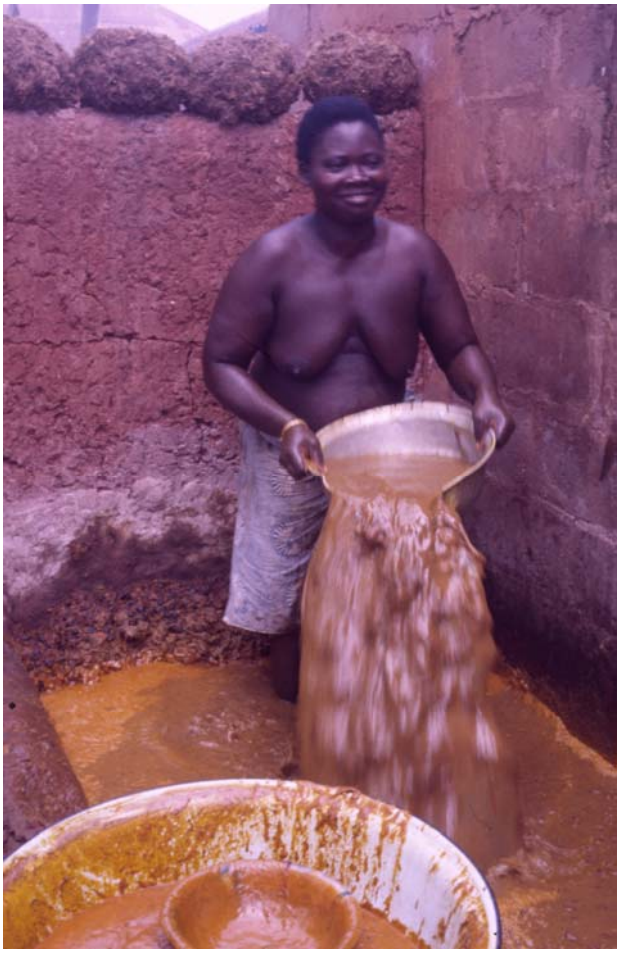
Fon land preparation techniques before the 1940s: incorporating *Andropogon gayanus* into the ridge

Slashing *Andropogon gayanus* with the scythe: the common Fon practice since the 1940s



Ridge tillage in a typical Fon plateau landscape: very old oil palms and *Andropogon gayanus* in the background. The field was cleared with the scythe before ridging

Soil erosion and crust formation on clean weeded ridges



A Fon woman prepares palm oil in the *deto*. She sieves out the fibres from the palm fruit, which was pounded and diluted in water, and piles them up on the wall.

Manuring a field near the houses with *awansin*, a residue from preparing *afintin* spice from *Parkia biglobosa* seeds

Distilling *sodabi* on the Adja plateau

Weeding an Adja maize and chilly pepper field. The girl's dreadlocks and cowry bracelets show that she is a *vodunshi* during her period of initiation

Rapid re-growth of shrubs in a flat tilled Adja field with young oil palms

Tackling the *Imperata cylindrica* problem on the Adja plateau: making mounds for tomato cultivation

Transplanting and irrigating tomatoes

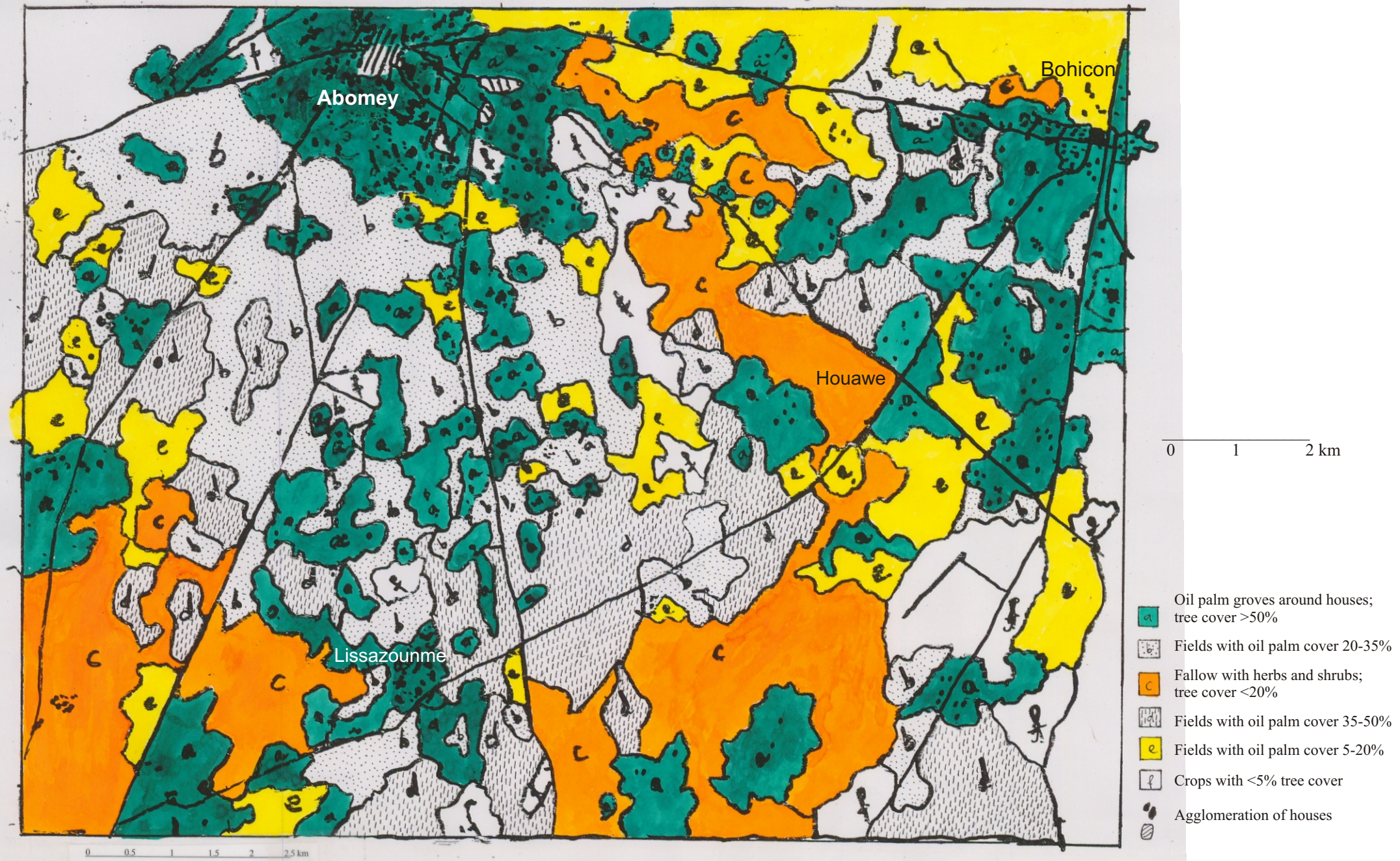
Adja men bring their tomatoes by bicycle to a Fon plateau market – an accident on the road

Priest Tofa in the sacred forest of Avegame, April 1990

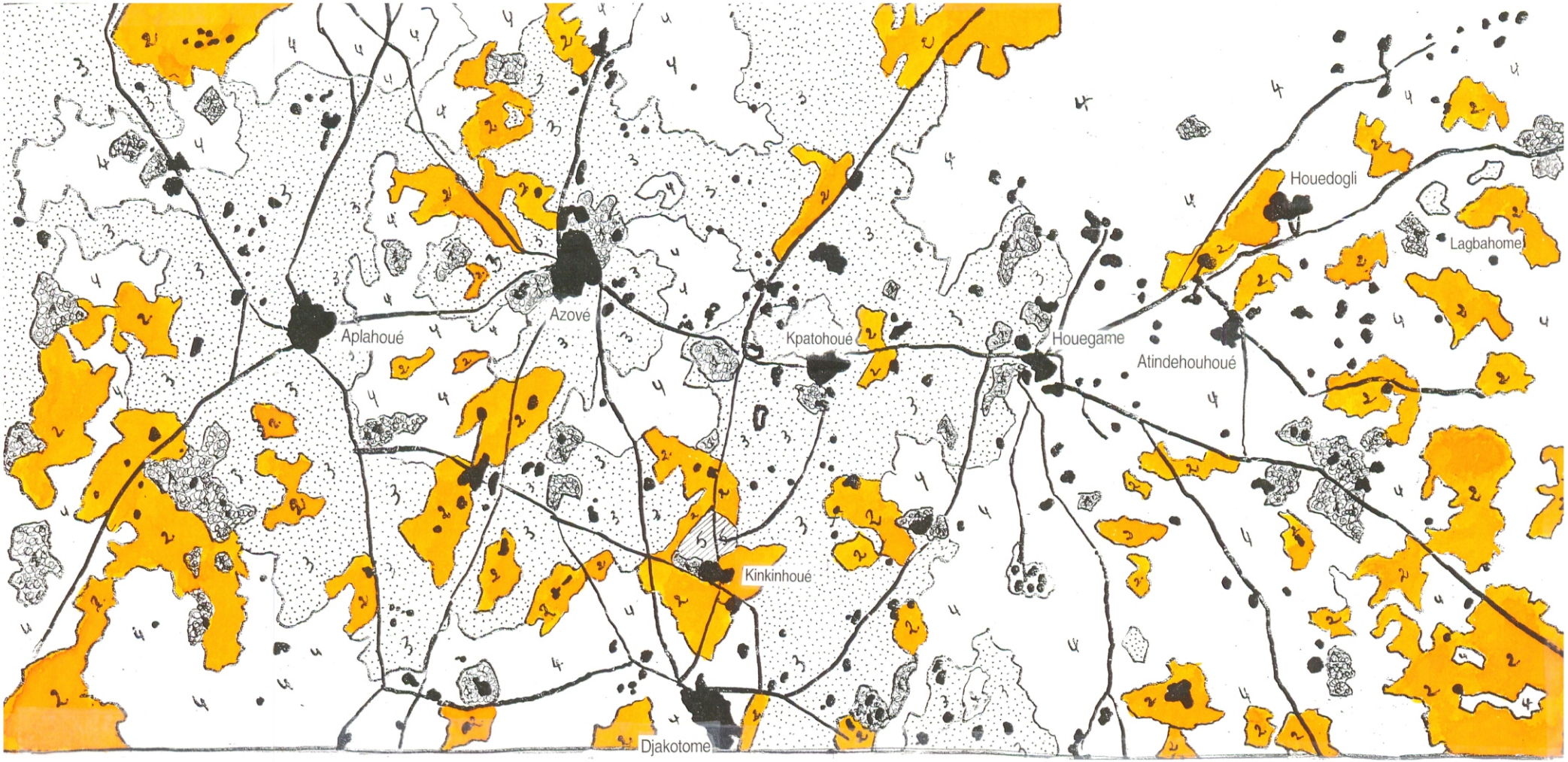
Workaholic Adja transfer their sin of tilling the fields on the day of rest onto a goat

The goat is sacrificed to the *vodun* Hwenhwe in the hope that he will give rain

Aerial photograph interpretation map 1a: **The Fon plateau in 1954, Kerkdijk's interpretation** of NB31-XX-XXI photos 70, 71, 106, 107, 108



Aerial photograph interpretation map 2a: **The Adja plateau in 1956/57,** Kerkdijk's interpretation of NB-311-XII-XV photos 777, 779, 780




Dense woody vegetation, height ca. 2 - 10 m (mostly around houses)

Fallow of herbs and shrubs lower than 2 m

Annual crops with trees

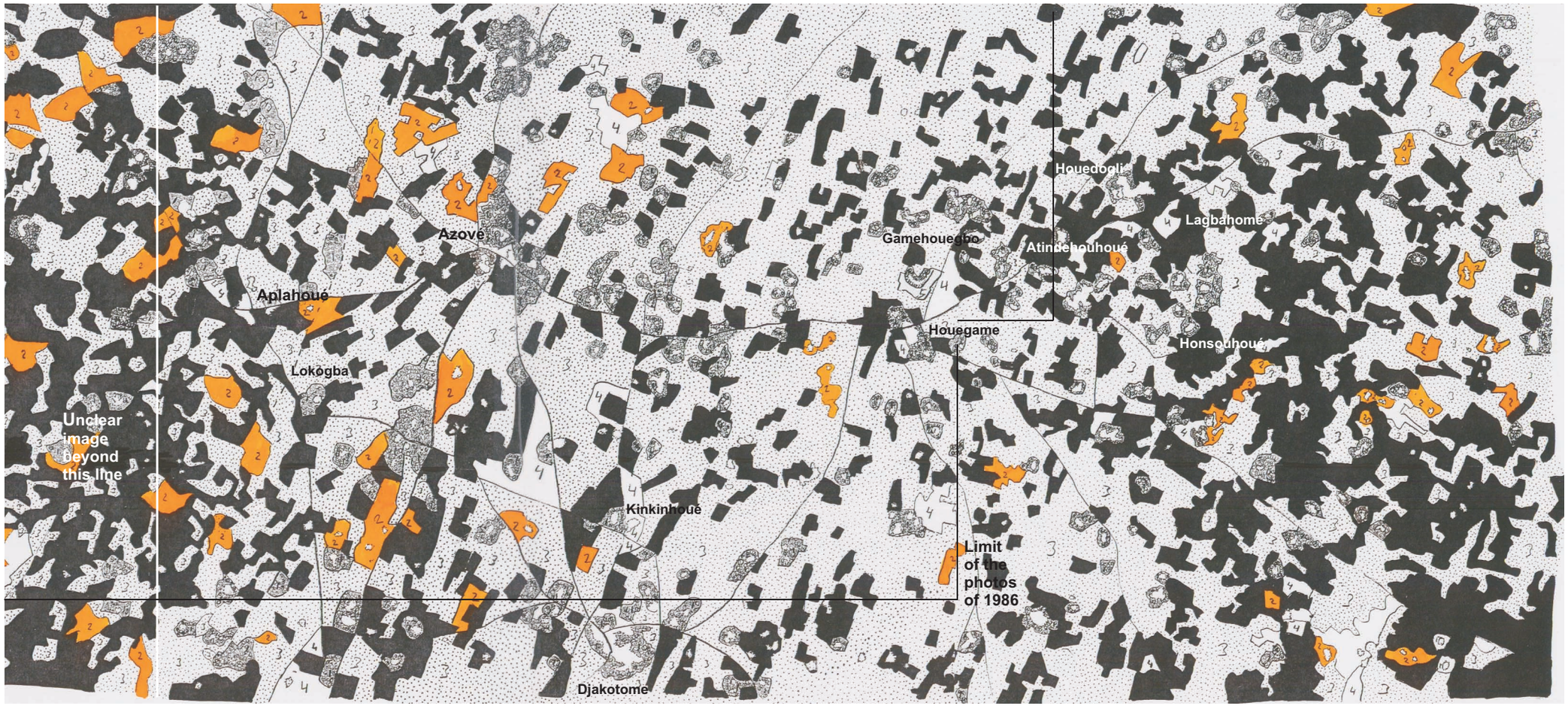
Annual crops without trees

Grove of hybrid oil palms of *chef de canton* Essou

Agglomeration of houses

0 0.5 1 0.2 2 2.5 km

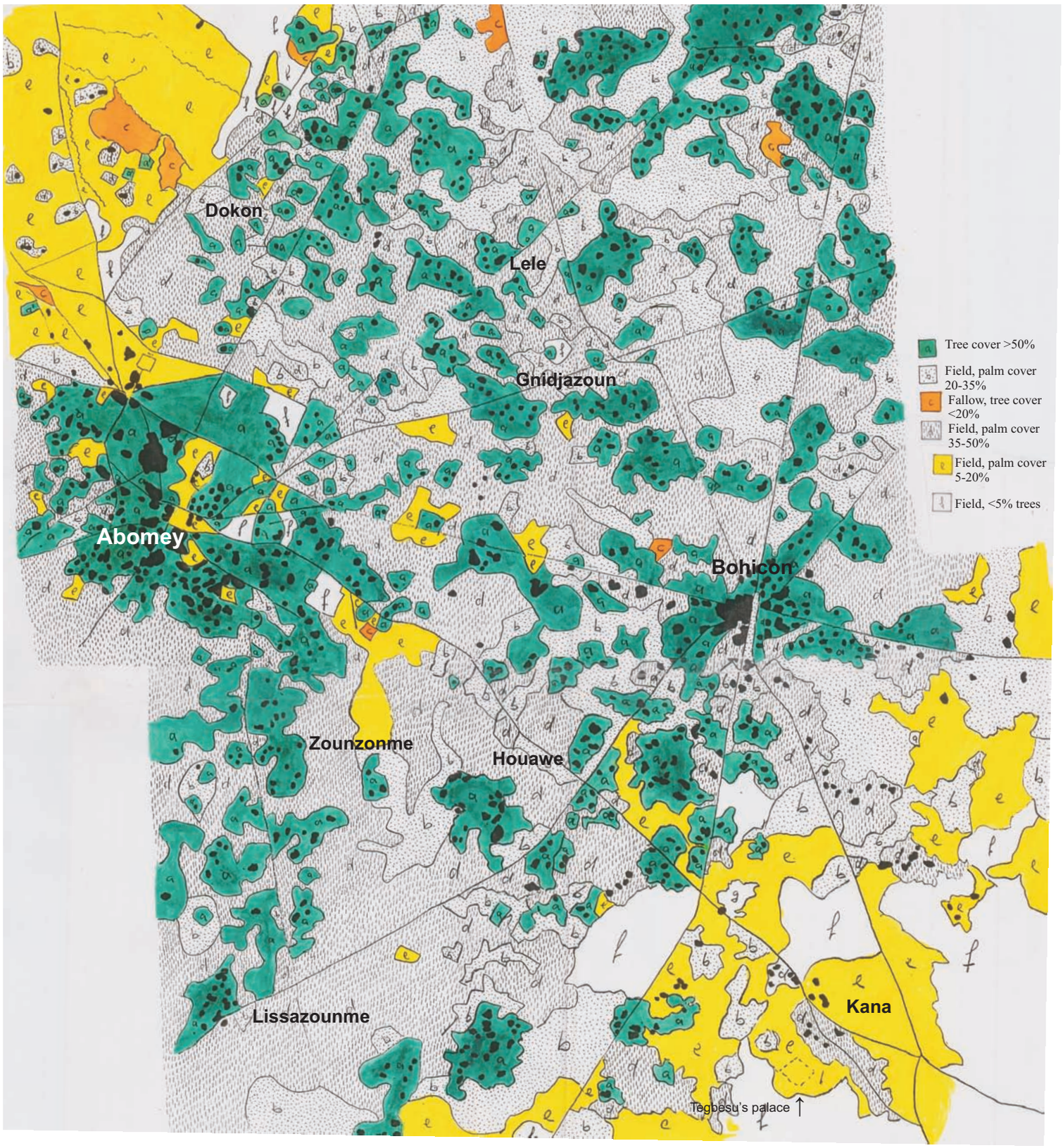
Aerial photograph interpretation map 2b: **The Adja plateau in 1956/57**, my interpretation of NB-311-XII-XV photos 777, 779, 780



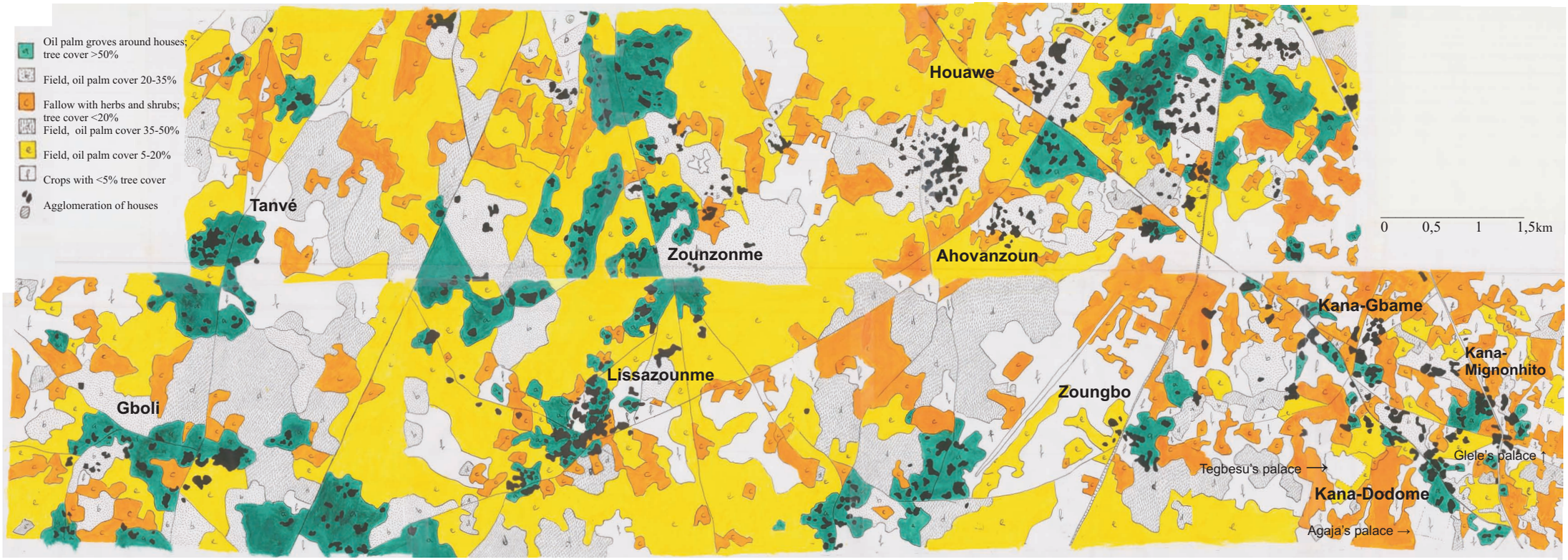

0 1 2 3 4 km

Legend: see Aerial photograph interpretation maps 2a and 4

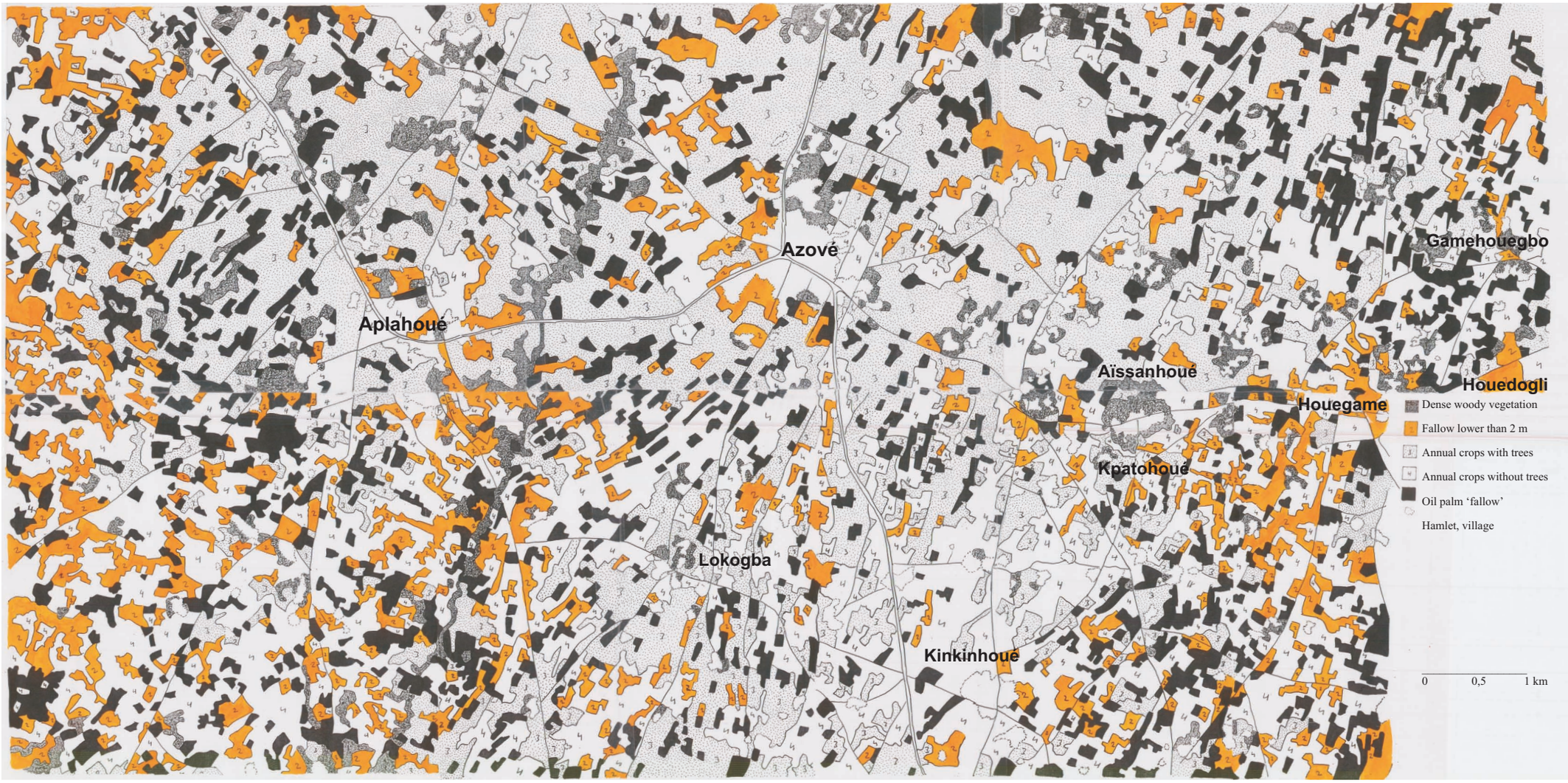
Aerial photograph interpretation map 1b: **The Fon plateau in 1954**, my interpretation of NB31-XX-XXI photos 70, 71, 106, 107 and 108



Aerial photograph interpretation map 3: **The Fon plateau on 19 January 1982**, my interpretation of photos 7 - 9 and 14 - 18, 82 BEN 15 150



Aerial photograph interpretation map 4: **The Adja plateau in 1986**, my interpretation of SERHAU's photos



# Map 7: **Research villages and places mentioned in the text**