

RE-HUMANIZING THE DEVELOPMENT PROCESS:

On participation, local organizations and social learning
as building blocks of an alternative development view in Algeria



Mustapha Malki

STELLINGEN

1. Social learning, in the form of a regular and permanent process of monitoring & evaluation, secures a great flexibility in the perspective of steering development actions towards sustainability (this thesis).
2. Although participation was a central issue in the official discourse embodying the agrarian revolution, it was manipulated by the ruling body in a such way that it reinforces its political power (this thesis).
3. A rentier state corrupts development and develops corruption instead (this thesis).
4. "Good manners have much to do with the emotions. To make them ring true, one must feel them, not merely exhibit them" (Amy Vanderbilt (1963) *New Complete Book of Etiquette*, pt. 2, Introduction).
5. "Bureaucracy is a giant mechanism operated by pygmies" (Honoré de Balzac *Epigrams*; quoted by Heywood, A. (1997) *Politics*. Hampshire: McMillan).
6. "When you steal from one author, it's plagiarism. When you steal from many, it's research" (Wilson Mizner, 1876-1933).

Re-Humanizing the Development Process:

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Proefschrift Mustapha Malki
Wageningen, May 18th, 1999

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*For having pushed me hard
To buy a university card
I offer it to no other
But to Mohamed, my brother*

*For standing me away
Without having a say
I offer it to Lylia
And to Amine and Nadia*

*For having kept'em home
In safety till I come
I offer it with art
To Fatiha from heart*

*For the support they send
From starting to the end
I offer if forever
To my brothers and sister*

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LIST OF USED ABBREVIATIONS

AARDES	Association Algérienne de Recherche en Développement Eco. et Social
AD	Algerian Dinar (Current official exchance rate US\$ 1 = 59 AD)
ADDA	Atelier Départemental de Développement Agricole
ADEP	Association de Développement de l'Elevage Pastoral
AFESD	Arab Fund for Economic and Social Development
ALN	Armée de Libération Nationale
AOAD	Arab Organization for Agricultural Development
APC (APCE)	Assemblée Populaire Communale (Elargie)
APN	Assemblée Populaire Nationale (1st Chamber of Parliament)
APW	Assemblée Populaire de Wilaya
AgGDP	Agricultural Gross Domestic Production
BADR	Banque Algérienne de Développement Rural
BNA	Banque Nationale d'Algérie
BNEDER	Bureau National d'Etudes en Développement Rural
CAPCS	Coopérative Agricole Polyvalente Communale de Services
CAPRA	Coopérative Agricole de Production de la Révolution Agraire
CCLS	Coopérative des Céréales et des Légumes Secs
CEPRA	Coopérative d'Elevage Pastoral de la Révolution Agraire
CFD	Caisse Française de Développement
CGIAR	Consultative Group for International Agricultural Research
CGSAP	Caisse Générale des Sociétés Agricoles de Prévoyance
CIHEAM	Centre International des Hautes Etudes Agricoles Méditerranée
CIMMYT	Centro Internacional de Mejoramiento de Maíz y Trigo
CNAC	Caisse Nationale d'Allocation Chômage
CNCC	Centre National de Contrôle et de Certification des semences et plants
CNMA	Caisse Nationale de Mutualité Agricole
CNRA	Conseil National de la Révolution Algérienne
COFEL	Coopérative de Commercialisation des Fruits et Légumes
CORA	Coopérative d'Organisation de la Réforme Agraire
CORE	Coopérative d'Orientation, de Régulation et d'Exportation
CR	Commissaire Régional
CR-HCDS	Commissariat Régional - Haut Commissariat du Dévelop. de la Steppe
DAS	Domaine Agricole Socialiste
DA	Domaine Autogéré
DC	Délégué Communal
DGEP	Direction Générale des Etudes et des Programmes
DSA	Direction des Services Agricoles
DUS	Distinctness, Uniformity, Stability
EAC	Entreprise Agricole Collective
EAI	Entreprise Agricole Individuelle
FAO	United Nations Food and Agriculture Organization
FF	French Franc
FGCCA	Fonds de Garantie contre les Calamités Agricoles
FIS	Front Islamique du Salut
FLN	Front de Libération Nationale
FNRA	Fonds National de la Révolution Agraire
FNTT	Fédération Nationale des Travailleurs de la Terre
GDP	Gross Domestic Production
GNIS	Groupement National Interprofessionnel des Semences
GPRA	Gouvernement Provisoire de la République Algérienne

HCDS	Haut Commissariat du Développement de la Steppe
HYV	High-yielding variety
IARC	International Agricultural Research Center
ICARDA	International Center for Agricultural Research in the Dry Areas
IDCI	Institut de Développement des Cultures Industrielles
IDCM	Institut de Développement des Cultures Maraîchères
IDEB	Institut de Développement de l'Élevage Bovin
IDGC	Institut de Développement des Grandes Cultures
IDOVI	Institut de Développement des Ovins
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
IMF	International Monetary Fund
INRAA	Institut National de la Recherche Agronomique d'Algérie
INVA	Institut National de la Vulgarisation Agricole
IRRI	International Rice Research Institute
ISNAR	International Service for National Agricultural Research
ITA	Institut de Technologie Agricole
ITCMI	Institut Technique des Cultures Maraîchères et Industrielles
ITEBO	Institut Technique des Elevages Bovin et Ovin
ITGC	Institut Technique des Grandes Cultures
ITMA	Institut de Technologie Moyen Agricole
JORA	Journal Officiel de la République Algérienne
LDC	Less Developed Country
LEISA	Low External Input Sustainable Agriculture
M&E	Monitoring and Evaluation
M&M	Mashrek-Maghreb
MAKS	Management of Agricultural Knowledge Systems
MoA	Ministry of Agriculture
NARS	National Agricultural Research System
OAIC	Office Algérien Interprofessionnel des Céréales
OET (TEP)	Oil-Equivalent Ton (Tonne Equivalent Pétrole)
OFLA	Office des Fruits et Légumes d'Algérie
ONAB	Office National des Aliments du Bétail
ONALAIT	Office National du Lait
ONAMA	Office National du Machinisme Agricole
ONRA	Office National de la Réforme Agraire
ONS	Office National des Statistiques
RRA	Rapid Rural Appraisal
SAP	Société Agricole de Prévoyance
SAR	Société d'Aménagement Rural
SIP	Société Indigène de Prévoyance
SMS	Subject Matter Specialist
ToT	Transfer of Technology
UGTA	Union Générale des Travailleurs Algériens
UNDP	United Nations Development Programme
UNPA	Union Nationale des Paysans Algériens
UPC	Union des Paysans Communale
WANA	West Asia and North Africa
WCED	World Commission on Environment and Development
ZDIP	Zone de Développement Intégré Pastoral

FOREWORD

SETTING THE SCENE OF AGRICULTURAL DEVELOPMENT PLANNING IN POST-INDEPENDENCE ALGERIA

Introduction

This book tells the story of the agricultural development process in post-independence Algeria, in general, and agricultural development planning and policy-making, in particular. These issues were taken for granted and went unquestioned for more than three decades following the independence of the country in 1962. In this respect, this study represents a great opportunity for a development practitioner and planner to look at them from the perspective of his own experience. Nevertheless, I do not nourish any pretension of labeling myself as a true sociologist, although some circumstances did lead me to work as such for the last five years.

The study looks at these issues from the point of view of social actors, albeit individual or collective, and their interlocking strategies and interests. More particularly, it looks at how these actors intervened in the process of agricultural development actions, depending on their power and resources, to influence it, adapt it to their preferences and needs, shape it, and make it top-down or participatory. Many authors have been writing about these issues and are, thus, not new. However, they bear some innovation in the pure Algerian context.

In this so-called developmental process, planning played a great role, given it is within the planning system that developmental objectives were decided upon and design of development actions took place. In the case of post-independence Algeria, planning followed a top-down approach which excluded the richness of knowledge held by what is commonly known in the planning jargon as the planning-object (the supposed beneficiaries of a given development action). However, the adoption of such a planning approach is not as neutral as it might seem to many of us. To believe in the neutrality of such a choice is a pure illusion. It was in fact influenced by different factors, among which the political one remains the most important.

Trying to understand the failure of many development actions planned during post-independence Algeria, the study initially based its assumptions on the shortcomings of the universal, rich jargon of development and planning and how it influenced the planning institution in Algeria in general. However, this seemed to explain only part of the development drama but it did not illuminate enough of the whole problem. Like in a dream, I found myself knocking many times on a big house called 'development' whose door opened every time on 'politics'. Hence, at the beginning of my work, an important question needed to be put into perspective: *Does a political dimension exist and/or interfere in planning and, thus, in a development process?*

After having spent some effort trying to understand facts and, consequently, seeking an answer to this question, I found myself caught up in a sort of philosophical debate where the answer of a given question turns out to be another question. Attempting to answer the previous question, I ended up asking: *Where, in a developmental debate, lies the boundary between planning (and thus development), and politics?*

Immediately, a second concern seemed to be the key answer to complete my understanding of the failure of development in post-independence Algeria. It resides in the intrinsic features that characterized the Algerian state since 1962, i.e. the state formation process that took place in 1962, the basic culture of the regime that developed since then, and how these influenced and oriented the development process and, consequently, shaped the development planning system.

General overview: Political influence over the development process

In brief, the development process in post-independence Algeria can be deconstructed into three distinctive periods in reference to the years 1979 and 1988, which can be considered as two important turning points in the state developmental philosophy.

However, it can be said that although many realizations were concretized during these first period (1962-1978) in Algeria, and planned development achieved some equity and fair distribution of national income during the 1970s. Development actions were undertaken under the aegis of the three revolutions¹ of the socialistic regime to benefit large masses of the populace under a very voluntaristic welfare policy, although unsustainable because it mainly depended on the revenues derived from oil exports for funding.

This trend was completely stopped in 1979 and reversed by the change in the state developmental policy. In fact, during the 'black decade' (1979-1988), as it is called in Algeria, the infiltration of the ruling body by some skilled practitioners of parasitism reversed the developmental process by slowing down the rate of investment and development. As a consequence, the majority of the population was excluded from the revenues of the oil rent, which exclusively profited the opportunistic individuals and lobbying groups represented by different factions in or located at the periphery of the power circle. During this period, the political leadership completely changed the orientation of the development policy. Instead of equitably distributing the national income among the population through mass-oriented development actions, the state decided to use the huge amounts of financial resources gained from oil exports to import consumption and luxury goods and allocate - once a year and for few years only - a tourist allowance to nationals wishing to travel abroad. It is said by many that during this period, while the minority (the *nomenklatura* or *privilegentsia*) was getting the lion's share of the cake, the majority (the populace) was

¹ The Agrarian Revolution, the Industrial Revolution and the Cultural Revolution were the three revolutions launched by the socialistic regime during the 1970s.

sharing only a small piece of it. Needless to say, planning played a major role in this so-called decade, as it was closely linked to the political process of decision-making and oriented the development process in a mere rent-seeking direction. In 1986, when oil prices met their heaviest blow since the 1970s, Algeria started moving ahead into a real multi-dimensional crisis with political, economic, social, and cultural dimensions at the same time.

In 1988, this multi-dimensional crisis became unbearable for the population and yielded the popular uprisings of October 5th, which announced the beginning of a decade of instability, violence and structural adjustment. These uprisings brought in return democracy and pluralism after some independent organizations of lawyers, students, journalists and physicians sprang up and spoke up with the help of human rights national organizations, their demand for social justice and change, as well as a guarantee of freedoms of expression, association, and meeting rights. In addition, the voice of the excluded populace demanded the stopping of the people's exclusion from the decision-making arena and decisions that affected their lives. However, the type of democracy decided upon by the regime, based on the Constitution adopted in 1989, was conceived in such a way that the power would remain entirely in the hands of the same actors that were already controlling the state. It is not necessary to recall what happened after that insofar that, as a consequence of this manipulation, Algeria ran into the worst and bloodiest period of its post-independence history.

Anyone may ask why this political power dimension has such importance in a book that is supposed to focus upon a development process. I must admit that this question is a pertinent one. Contrary to what many development practitioners and agronomists may believe in Algeria - and maybe everywhere else - I assert that development does not solely concern technocratic or technological issues. Development never was - and would be - an apolitical debate. To believe that development is an apolitical issue as many of my compatriots still do is just naiveté and nonsense. In fact, development, as it has always been conceptualized and perceived - especially by those in power in many less-developed countries (LDC) - needs a state to decide for it, a government to execute it, and a public bureaucracy to administer it. If so, none can disagree that all these different institutions conform to, or at least are influenced by, a strong political intervention intrinsic to the development decision-making arena. As Munck (1993: 113) put it:

Development in the Third World is the overarching referent of the political discourse

This is why, my opinion and according to many authors, understanding the development philosophy in any country requires a prior understanding of the country's politics and, consequently, the historical dimension that shaped it.

Moreover, dissenting with this vision of planned development, the study attempts to introduce elements of an alternative view. It thus looks at the issues of participation and social learning in relation to sustainable development. In the case of Algeria, the centralization of decision-making, the non-neutral adoption of a top-

down planning approach, and the development of a feeling of 'acquired assistedness' among some segments of the population put the issue of participation in development actions into a political perspective. As Dudley (1993: 160) suggests:

True participation is about power, and the exercise of power is politics.

A brief statement on the major problems in the Algerian scene of development

Setting the macro-level scene

As it is the case in many other Third World countries, even though Algeria has experienced a rapid and sustained economic growth during the 1970s thanks to high oil prices, it did enter a tremendous recession in the 1980s which was precipitated by several different causes at the national level as well as at the international one. It is not the subject of this chapter to examine these causes, but at least it can be mentioned that one of the evident facts of this situation is that a Structural Adjustment Programme (SAP), as a consequence of a bad governance, was designed and applied which made things worse for the under-privileged segments of the population.

In fact, since the Structural Adjustment Programme was implemented, the poorest segments of the population bear the consequences of its drastic measures, although they were already not happy with the unfair state policy of national income distribution of the 'black decade'. As a matter of evidence, after having been completely 'erased' during the 1970s, some 'social indicators' of development (or under-development), such as malnutrition and epidemic diseases are reappearing again. More importantly, poverty, unemployment and illiteracy are rapidly increasing.

In 1994, approximately 50% of the population has been officially categorized as 'poor', or living below the conventional poverty line. Today, if we look at the purchasing power of what was then known as the middle class (high-school graduates and high staff of public institutions), based on my own experience, it is not difficult to assume that this rate is much higher.

Issues such as the proportion of population living below the poverty line are very sensitive for the government. Having seemingly achieved good economic results at the macro-level due to the therapy of the "Lords of Poverty" (Hancock, 1992) - the IMF and the World Bank - the government has no will to reveal these very sensitive statistics and thus openly recognize the failure of its social policy. Given the on-going situation, the government fears that the worsening social situation would engender upheaval within the populace and worsen the already dramatic security situation in the country. This is even more sensitive that the on-going SAP was conceived without any contribution from nor consultation with representatives of civil society.

Many problems can be cited in this context to clarify the reasons why the state-adopted strategy of development failed. Most of these problems are found within the process of the state formation since 1962 and the adopted and implemented philosophy of development since then. The most important ones remain:

1. A very centralized authoritarian state composed of and/or influenced by diverse lobbying and interest groups that worked towards satisfying the interests of the different clans of this oligarchy rather than those of the whole population, especially during the 'black decade'.
2. The centralized development planning system excelled in designing top-down, blue-print development plans that are basic features of the development *problématique* in the country.
3. A lack of legitimate and legitimized organizations working towards the development and promotion of the disadvantaged. Mass organizations, created by and under the one-party system, and "whose emphasis on individualism and abstract affiliation tended to dissolve communities and to discourage genuine and authentic political engagement" (Esteva and Prakash, 1998: 288), were designed more to 'contain' the excluded's voice than to help them speak up.
4. Reduced and strongly-controlled access to public development resources by the disadvantaged pushed many individuals to reorient their strategies of building linkage with the state administrative apparatus, which reinforced the development of patron-client relationships. As a result, dependency on state willingness for one, and opportunism for the other became the rule rather than the exception, and an *economy of affection* became the basic feature of the development philosophy.
5. An extended marginalization of the population and its exclusion from partaking in decisions that affect their lives engendered a great lack of credit in the state and its bureaucratic apparatus among the population in general and the disadvantaged in particular. The latter, as vulnerable as they are, become a stock of potentially-destructive 'energy' than can serve the cause of upheavals, if manipulated by clans opposed to the ruling body. The actual situation in Algeria is a good example of this.

Now, establishing the scene for the proper process of agricultural development on which this study focuses, it is clear that the overall macro-context, as presented above, had many consequences for the agricultural sector. Major characteristics of these consequences are as hereafter follows.

The philosophy of agricultural development planning

As stated earlier, agricultural development was perceived in Algeria as solely technocratic (or technological) measures to be implemented to improve the productivity of major crops and/or farming systems. These measures ranged from diffusion of high-yielding varieties and improved breeds to intensive agricultural practices, to availability of credit, etc. Development exclusively concentrated on

indicators related to economic growth such as yield, without the slightest reference to other quantitative and/or qualitative indicators of human development. In some cases, agricultural development was perceived as being synonymous with unsustainable public subsidies and price policies, as was the case for the steppe rangelands (see Case No. 3 presented in chapter 5 of this book). Given the socio-political and cultural settings of opportunism and parasitism, it is easy to conclude who benefited most from these measures.

Moreover, agricultural development planning was staffed with technocrats, such as agronomists, water specialists, economists, livestock technicians, etc., and in love with their presumed unassailable scientific/technical knowledge which did not need, in their opinion, to be tested against 'falsification'. This led to a top-down planning vision that assumed that the *Domaines Autogérés* (DAs) - or the *Domaines Agricoles Socialistes* (DASs) later - which until 1987 constituted the bulk of the 'planning-object' for agricultural development planning and policy-making - were passive recipients of development actions, confusing of their agricultural labourers for farmers. In these DASs, all decisions were made by appointed managers from the Ministry of Agriculture or by the supposedly 'elected' bodies among the agricultural labourers.

Later, in the beginning of the 1980s when the private sector was integrated into the 'planning-object' of the agricultural development actions, the rural elites benefited most from the planning of these actions, either at the level of the conception or ever at the moment of implementation. This can again be understood by reference to the state formation process that took place in Algeria in 1962, the composition of the state apparatus, and the pattern of state-society relations that developed. Needless to say that rural elites, whose interests were well represented at the periphery of the state, took the lion's share of the benefits made available by some agricultural development efforts.

Kept into a voluntary amnesia from what was really going on in the field of development, planners and policy-makers repeated errors and mistakes in the design and implementation of development actions, becoming self-referent to the level of arrogance, and not in need to learn from past experiences.

The lack of legitimized farmers' organizations in agricultural development

As mentioned earlier, planning of agricultural development, as in the planning system in general, was build upon a centralized, top-down vision, which conformed to the mainstream political philosophy of the centralized state. As a self-proclaimed power and lacking popular legitimacy, the post-independence state had to maintain a close control over any organization that acted within the development field, especially agricultural development, given the history of peasantry in Algeria. It goes without saying that for such a state, a centralized and strongly-controlled power without competition from any decentralized, popular movement is a *sine qua none* condition for its duration and maintenance. The example of the state's seizure of

the spontaneous popular movement of the '*autogestion*' of the summer of 1962 is undeniable.

Looking to set strong mechanisms of peasantry control, the state, through the one-party system, settled upon the *Union Nationale des Paysans Algériens* (UNPA) which had to serve initially as a professional forum for farmers, in replacing of the *Fédération Nationale des Travailleurs de la Terre* (FNNT), a very virulent peasant union affiliated with the *Union Générale des Travailleurs Algériens* (UGTA), the main force behind the '*autogestion*' movement. After some time, it appeared that UNPA became more a political *tribune* in charge of disseminating the official political discourse rather than a professional movement. Among the great achievements of this union was the total demobilization of real professional farmers and its infiltration by opportunistic pseudo-farmers motivated by their interests based on rent-seeking. Moreover, as a political frame, this union served more the interests of its opportunistic leaders, albeit at the national or the regional levels, rather than the professional concerns of farmers. Many of its national leaders, although illiterate, were awarded higher positions in the hierarchy of the system (ministers, members of parliament, senators, etc.).

As a consequence, legitimized professional organizations in charge of genuine agricultural development were lacking until 1990 when, as a favour of the democratization process, truly professional farmers' organizations boomed and started to act to the detriment and extreme unwillingness of the UNPA which is still kept alive to this day, thanks to the 'kindness' of the regime and its exclusive recognition of UNPA as the peasants' sole official representative.

The lack of participation in agricultural development

The state formation process that took place at independence and the outcome it yielded, the philosophical orientation of the agricultural development planning and the lack of legitimate truly professional farmers' organizations in charge of agricultural development are important features that explain the lack of popular - or farmers', in this case - participation in the process of development. Moreover, some pseudo-farmers became accustomed to assistance rather than relying up on themselves for their own development. Self-depreciation, as defined by Freire (1972: 49), was used as a successful tool in positive discourse to create assistedness among farmers. Consequently, the majority felt a lack of self-confidence in their abilities to be self-reliant. Participation, as a political slogan, has been used in the official discourse but participation with the '*count-on-oneself*' slogan, has been always controlled through different measures.

The focus of this study

Following what I have said above, I consider that many entrance points of sociological research can be found in the agricultural development field, three of which will compose the focus of the present study. These are:

1. the opportunities offered by participation of the 'planning-object' in their self-development in steering development actions towards more sustainable outcomes;
2. the role of independent and grass-roots local organizations in sustainable development and participation enforcement;
3. the importance of knowledge and social learning in a sustainable development action.

It has to be said that the third point mentioned above stems from the necessity of participation as, among many other reasons, it can be used as an additional source of knowledge and resources for development. In such a context, social learning is particularly recommended for planners and policy-makers in order to improve their knowledge about the field of development.

What can participation offer to development?

In the context of the study, participation can redirect the course of a given development action within two important dimensions of development: The functional and the structural ones. Speaking of a functional dimension of a development action relates to the technocratic issues of preparation and implementation of development actions, while the structural dimension concerns the political issues surrounding the relationships between the 'planning-subject' (the planners) and the 'planning-object' (the so-called beneficiaries) and the distributional frame of the 'planning-subject'.

For the first dimension, active participation of the beneficiaries (or planning-object) and encouragement of this implication from the inception of a development action is seen to ensure beneficiaries' ownership of this action and facilitate its implementation in a more efficient way. This can be perceived through the mobilization of additional knowledge and resources for the realistic preparation of a development action. The planning-object may feel more concerned about such a development action, being the principal '*maître d'ouvrage*' of this action.

For the second dimension, participation of the planning-object is an important consequence of democratization and empowerment of the civil society. The issue is not put here as an appeal to the political will of the governing body or the powerful clans; it is just that now, as the political climate in many parts of the Third World has shifted to social democracy (Munck, *ibid.*: 114), development theory needs a new face in order to fit into the context. Participation becomes, in fact, the condition for a contextualized ('localized') development in the place of the decried top-down

approach. Whether participation will be manipulated as a political slogan to sustain the existing status-quo or used to truly empower civil society is another question to be dealt with later in this book. But one thing is evident: If there is no participation, exclusion is more likely to continue and expand with the potential dangers that it carries. As a matter of evidence, Algeria is now paying back with the years of exclusion by the years of bloody violence.

On the other hand, my advocacy of participation reflects a strong assumption that beneficiaries (or planning-object), as knowledgeable and capable social actors, have enough - but most of the time misused - potentials for their own development (or, as I would prefer, self-promotion), even without any external support.

The study investigates some development actions relating to this issue in a comparative form to illustrate what participation can really offer to development. It goes without saying that participation is seen both as an end as well as a means for development.

What is the role of local organizations in development?

For too long a time, agricultural development actions were planned and conceived from the capital (Algiers). For such a huge country like Algeria, it seems that planners, thanks to their divine mandate and knowledge, have achieved a great deal of standardization, i.e. all farmers cultivating the same crop are viewed as identical, or at least similar. For them, it is easier to plan for 'the' farmer that will be multiplied by 900,000 rather than to plan for 900,000 farmers. However, agriculture is an "*art de la localité*" (van der Ploeg's cite) and agricultural planning needs to be 'localized'.

In this context, legitimate (representative) and legitimized (acknowledged by the authorities) local organizations, as intermediaries for development, are acutely needed to both facilitate the genuine participation of the planning-object - which will become at the same time the planning-subject - in both development planning and implementation, and steer development actions towards the preferences of their constituencies.

On this issue, the study looks at the genesis of selected independent farmers' organizations within the field of development and what role they played in development.

How necessary is the social learning for development?

Rational planning methods have been used intensively in Algeria for agricultural development planning, even though with a great deviation and striking misuse, given the political interference that the planning system faces daily. However, they yielded very rigid blueprints for development actions which did not fit the reality of rural peoples and, as a consequence, did not achieve their set objectives. In some projects, trial-and-error methods have been injected to make development actions

more flexible and 'correctable' in their course of action. Achievements in this context were more significant.

Social learning, as supported by appropriate mechanisms for monitoring and evaluation of development actions, helps to sustain good development governance and to steer at least cost the course of a development action toward the achievement of the agreed-upon objectives.

On this issue, the study introduces some development actions which were based on social learning in their monitoring and evaluation and shows how the immediate objectives of a given development action can be monitored and even revisited, reframed, and adapted to achieve the desirable goal they are targeting. However, in my opinion, social learning goes hand in hand with another planning method based on multi-phasing and phase-shortening.

The objectives of this study

In accordance with the focus of the study mentioned in the previous section, the overall goal of this study is to re-frame the context of agricultural development process at both levels of planning and implementation, within which a strong political influence takes place. Connecting this to the present situation of Algeria, it aims to demonstrate that the conventional development philosophy adopted by the post-independence state can no longer work, especially in relation to issues such as sustainable development, poverty alleviation, natural resources management and conservation, etc. This development thinking has become obsolete, as Sachs (1992a: 1) suggests, for the hopes and desires that have made its idea fly for at least three decades are now exhausted.

In this framework, the study not only reinforces the view that this development thinking is obsolete but attempts to shed light on the needed foundations of an alternative *re-humanized* (and *re-humanizing*) development view. The basic concepts of these foundations are *participation*, *local organizations* and *social learning* which will be used to formulate recommendations that can be observed in the design of an appropriate method for development actions' preparation, implementation, and evaluation and monitoring.

The structure of this book

This book comprises 9 chapters that are structured into 4 parts. The first part concerns a comprehensive description of the research process. Chapter 1 presents the main causes of the problem background. Chapter 2 introduces the elements of both the analytical and the prescriptive theoretical frameworks. Chapter 3 introduces the basic features of the research path (hypotheses, research questions, method and techniques for field research, etc.).

The second part reviews the empirical path of the obsolete vision of the conventional development thinking adopted by the post-independence state in

Algeria. Chapter 4 sets the general background environment of agricultural development. Chapter 5 starts with the agrarian revolution policy (Case No. 1) that was launched in 1973 but used in this study as a macro-case that completes Chapter 4 in our understanding of how the state formation process that took place in 1962 influenced the vision of development in Algeria. Two other following cases are presented: (1) The cereal seed production improvement policy (Case No. 2) that was run for many years, swallowing huge amounts of public resources without achieving sustainable results; and, (2) The collective rangelands management policy (Case No. 3). Chapter 6 introduces the verification of the study's hypotheses in these cases and proposes a general discussion about the obsolescence of the conventional development thinking.

The third part concerns the proposed alternative development view that I would label as the *re-humanizing* development alternative. Chapter 7 presents the empirical material (Cases Nos. 4, 5 and 6) which introduces the effects of *participation*, *local organizations*, and *social learning* in making development sustainable and adequate to the beneficiaries' needs and preferences. Chapter 8 closes this part with the verification of the study's hypotheses in these cases.

The fourth and last part concerns a general discussion of the findings and the outreach dimension of this research. In this order, Chapter 9 covers the general discussion of the general research and sub-research questions. It also proposes some recommendations concerning methodological considerations intended to make development actions more participatory, more oriented to the needs of the beneficiaries and more flexible in their implementation. These would be, in essence, the advocated items for *re-humanizing* the development process.

CHAPTER 1

PROBING THE PROBLEM BACKGROUND: MAIN CHARACTERISTICS OF THE ACTUAL DEVELOPMENT THINKING

1.1 Introduction

This work studies the development process and its outcomes within the context of post-independence Algeria. In such a context, jargon such as policy, programme, and project are widely used in a very integrative and hierarchical way, as if there were a continuum between the three terms. However, the most known and perceived of the three terms in the field of development is project.

Projects are widely used as tools for development. As vehicles for finance-induced growth and change, development actions¹, and more particularly projects, have been for not less than three decades the most widespread models of purposive planned intervention aiming to accelerate development (Cernea, 1987: 3). Through their intensive use, projects became, in fact, the unique and necessary instruments planners have at hand to organize and implement development actions and allocate resources, trying to achieve the objectives of societal institutions. They are thus "the dominant arrangement for implementing high-priority development policies in developing countries" (Rondinelli, 1983: 307).

Despite this importance, development actions in general, and projects in particular, given the way they were conceived, prepared, and implemented, turned out to be total failures in many cases or, if not, demonstrated at least very serious shortcomings. For some failures, the low capacity to prepare and analyze projects was brought as an explanatory argument. For others, projects proved to be inadequately adapted to their purpose, particularly in people-centered development. In other cases, they are criticized because they created, wittingly or unwittingly, enclaves, siphoning resources from non-project activities, and did not generate much - if any - sustainable development beyond their time-frame (Cernea, 1987: 4).

We often face situations where development projects implemented in Third World countries do not take account (or rather, completely ignore) the complexities of the human condition and the integrity of local communities. In fact, this is more the rule than the exception. Yet, it is not uncommon that projects "generate gross inequities, blatant injustices and cultural stress" (Schwarzweiler, 1987: x-xi). Some development theorists argued, according to Rondinelli (*ibid.*: 308), that projects have not achieved their objectives and have inhibited social learning and institution-building in developing countries; others alleged they are primarily control mechanisms that have become part of the development problem rather than a solution; still others argue that projects are inherently ineffective in responding to the needs of the poor. As an illustration of these criticisms, many evaluation

¹ Given the relationship between projects, policies, and programmes, and in order to simplify things, I will make use within this study of a more encompassing term, that is 'development action', given that projects are important instruments for implementation of either policies and/or programmes.

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commissions called for extensive change in the way projects were formulated and implemented.

Unfortunately (or fortunately), instead of succumbing to this increasing flow of criticisms, projects continue to be here and will remain with us forever, as many authors argue (van Dusseldorp, 1990: 336; von Oppen, 1990: 353). This is true for no suitable and effective alternatives have yet been developed to compensate for projects' limitations. Moreover, they are likely to remain, as Rondinelli (*ibid.*: 308) argues:

The primary instruments of international assistance and policy implementation in developing countries because they provide advantages to international agencies and national government that other forms of administration appear to lack.

Returning to the statements mentioned above concerning the failure of projects, it seems that we are blaming the 'victim' rather than trying to understand why these actions, supposedly designed to bring about positive change to undesirable situations, ended up achieving the opposite results. Any development action is thought of, conceived of, implemented, and evaluated by people and, accordingly, our understanding of its output should be related to human-beings' rationality and behaviour in their attempt at either conceiving or implementing these actions.

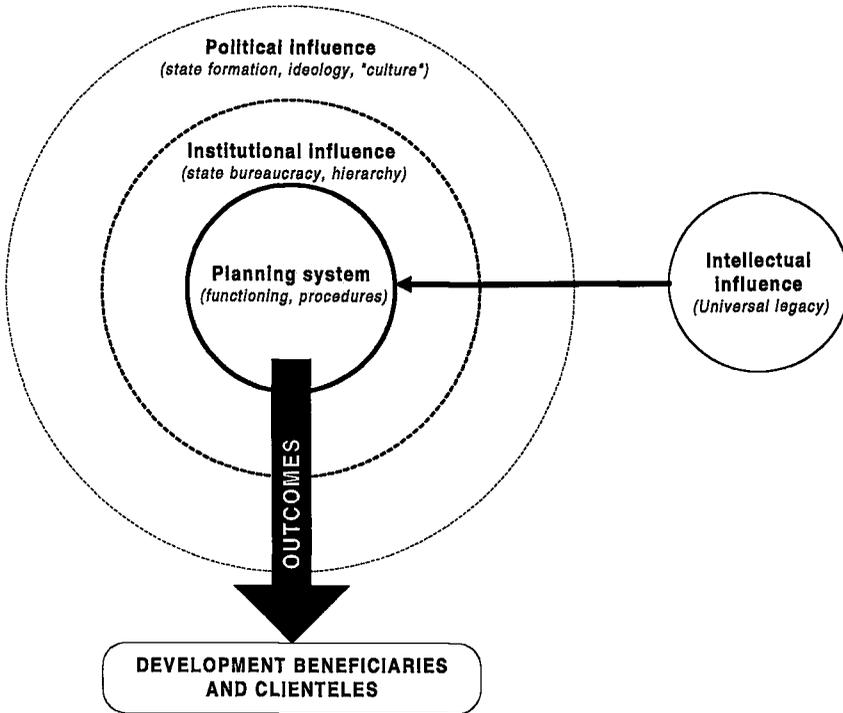
In this context, achieving a comprehensive understanding of the outcome of a given development action requires first its 'relocation' in its own human context, given that each development action is time- and location-specific, and knowing that both time and space do not possess a meaning *per se*, unless human-beings are present within. To achieve such an understanding it seems, in my opinion, wiser to figure out the different influences that impinge upon the functioning, organization and norms of the development planning system and how these influences shaped, either directly or indirectly, the outcomes of development actions. Figure 1.1(1) below tries to describe these different influences in the case of Algeria.

Having defined these influences, it is thus time to investigate the following three main issues of this so-called human context that governs the development planning system:

1. The politico-institutional aspects of the development planning system and its logic of functioning, which is related to state formation, its political logic, and its developmental philosophy, given that in countries like Algeria, development planning is an inherent function of the state bureaucratic apparatus.
2. The 'universal' intellectual legacy of development and how it influenced the development planning system, given that planning has been rooted in the field of development as applied science, and having a strong philosophical background. North-South transfer of technology has played quite a role at this level.

3. The procedures of the development planning function in terms of design of development actions and the relation of the design phase to the implementation and evaluation phases, on the one hand, and the relationships of development actions' design to their beneficiaries and clientele, on the other. This is intended to illustrate the structure of the action cycle in practical terms.

Figure 1.1(1) - Influences on the development planning system in Algeria



In the following sections I shall elaborate more upon these issues. I shall first 'go back' into the history of development and the concept 'project' and attempt to reconstruct the 'universal' intellectual legacy and its influence on the development planning system in Algeria. Following this will be a brief description of the development planning system and the political influence it has undergone since the formation of the post-independence state. However, in this chapter I will content myself with a sketch of the major 'emerging properties' of the Algerian political system, given that the state formation process will be presented at length in Chapter 4 as a background information. Finally, the outcomes of the development process as embedded in this context will be the subject of my empirical investigation, and thus are presented within the case-studies later in Chapter 5 of this book.

1.2 Exploring the history of 'project' and the universal legacy of 'development'

1.2.1 The Industrial Revolution and the philosophical heritage of development²

In the eighteenth century, after several moral reforms and a long intellectual maturation, a segment of humankind in Europe engaged, under the banner of the Industrial Revolution, in a new adventure of development in a rational and systematic manner. Land and animals, as essential pillars of traditional processes of production, were abandoned in favour of a new mode of goods and worth creation and accumulation: Industrialization.

This phenomenon led societies and countries that adopted it to a tremendous material and scientific development and has given them, at the same time, their actual power.

However, for its full achievement, this new civilization required a social organization founded on the concentration of populations in order to ensure availability of labour in time and space. This spawned a boom of grand urban centres. Additionally, it required an appropriate and adapted human profile and psychology, i.e. the worker. Thus, an adequate philosophy of education and training was thought of and implemented. In fact, industrial production is a mass production of a standardized product whose consumption must be 'democratized'. The grand urban concentrations provided an abundance of labourers and consumers and justified the formation of social infrastructures needed for the mental preparation of both the worker and the consumer, which are in reality the two sides of the same coin (person).

In this context, man did not fit the requirements as he was not originally programmed to be 'industrious'. It was thus necessary to condition him with training and culture to play his newly defined role of an industrious man. For that, the educational system was designed to take care of him from an early age. Hence, the school, resembling more and more a factory in its functioning, accustomed him to the behaviour for which he was to be destined. In fact, the authority of the teacher, compliance with disciplinary rules, civic education, temporal rhythms and schedules, collective work, task repetition, etc. became the new values that announced the future social automatisms necessary in an industrialized society.

By becoming rooted in the psychology of workers and consumers, and through continuous technical improvement, the industrial system permitted the use of human energy and natural resources to maximum efficiency, to transforming them into wealth and power to the benefit of the people who adopted it.

As its refinement advanced, the industrial order then secreted away the psychological, intellectual and technological elements that prepared its own overtaking, and engendered a universe that is not totally theorized yet.

² This section owes much to Boukrouh's programme for the Presidential Elections in 1995, translated into English and elaborated by the researcher (MM).

The heritage this era bequeathed upon the development thinking could be summarized by the four following fundamental statements:

1. The industrial era required massification, centralization, standardization and uniformization;
2. The industrial society was the effect of a deterministic vision based on order, synchronization, repetition, and the mechanization of processes and behaviours;
3. The industrial era required the encapsulation of populations in megalopolitical cities, fabric-schools, huge factories, mass organizations and political parties;
4. The industrial era was characterized by heavy (or hard) technologies such as mining, mechanics, chemical industries, etc., which needed a disciplined, docile, well-ordered and impecunious population.

1.2.2 The methodological setting: The concept 'project' and its initial influence

As the contemporary essential means of policy and programme implementation, projects are not new to man. According to Checkland (1989: 273), although projects have been carried out by men for several thousand years, it is only as recently as the 1950s and 1960s that certain methods of preparing, designing and implementing them appeared, and it is not surprising that engineers and architects played a strong role in this development. It is said that these methods were a strong influence under the 'reign' of the Marshall Plan, after World War II.

The project concept began to be widely known through the expansion of what is identified today as the 'blueprint approach'. According to Korten (1984: 181), this approach, with strong emphasis on careful pre-planning - the preparation phase - reflects how development programming was supposed to work. At this level, provision of data from investigations and studies, or even pilot projects, help project designers choose the most cost-effective designs to achieve prescribed outcomes.

After the project design has produced to a 'project document', the implementation phase starts and implementers are supposed to execute the project plan faithfully, much as a building contractor follows construction blueprints, specifications, and schedules. Once the project activities have been completed, an evaluator checks and measures the actual changes in the project target population and provides feed-back to the planners so that blueprints can be revised (Korten, 1984: 182).

Nonetheless, the stipulated revision of blueprints does not benefit the initial project as it is already over. It is only supposed to provide some insight for future planning. I must, however, recognize that this way of evaluating projects is very intriguing.

This approach, which emerged from epistemological models of the classical physical sciences (Korten and Klauss, 1984: 169), based mainly on systems engineering thinking, was applied for more than three decades to actions concerning rural development. It is largely recognized that its shortcomings have been frequently acknowledged by development planning specialists. In fact, the underlying philosophy of systems engineering that constituted the theory-base of projects

did not solve the factual problem that systems engineering, as impressive it can be in carrying out technological projects, failed when applied to the messy, changing, ill-defined problem situations which project managers had to cope with in their day-to-day professional lives (Checkland, 1989: 274).

Moreover, even though this approach can show some relative efficiency when dealing with defined problems in stable environments, it tended to be unresponsive to local diversity and variability of self-organized systems like social systems which operate in a more organic [or organismic] fashion (Korten and Klauss, 1984: 169). It is, in fact, a programming approach that can be seen as sometimes being appropriate for certain types of development projects, like physical infrastructure projects, where tasks and outcomes can be easily defined and predicted, environments are more or less stable, and costs predictable to a large extent (Korten, 1984: 182). In other words, I would say that this approach fits some specific types of development actions where human agency can be controlled to a large extent.

Unfortunately, in rural development, the situation is far from being similar to physical development. In fact, objectives are more often multiple, ill-defined (or not well-perceived), and subject to perpetual negotiated change; task requirements are unclear; environments are constantly being reformed; and costs are unpredictable (Korten, 1984: 182).

In this context, awareness of the inadequacy of the blueprint approach to rural development problems is increasing, though its assumptions and procedures are still dominating most rural development actions (Korten, 1984: 182).

1.2.3 The theoretical perspective of development: A denial of human agency

When dealing with issues related to development actions, one cannot avoid introducing current theories of development and see how they deal with the basic issues of development. Of course, it is not the aim of this study to discuss these diverse theories at length. I will content myself with briefly showing the underlying philosophy of mainstream development thinking and the shortcomings of its main theories.

Existing theories are seen to be depressing, as Long (1984: 168) puts it, for overlooking [or rather denying] the capacity of ordinary working men and women to improve their social conditions. In more detail, Long (1984: 168) writes:

The theories we have before us, whether they be regarded as 'liberal' or 'radical', are coloured by simple deterministic and centralistic thinking... Both versions, however, see social change as emanating from centres of power in the form of state or international intervention and as following some broadly determined development path. These external forces encapsulate the lives of Third World peoples, reducing their independence and undermining forms of solidarity, resulting in increased centralized control by powerful economic and political groups. In this respect, it does not seem to matter whether the country in question be considered 'capitalist' or 'socialist', the same general tendency towards incorporation and centralization takes place.

Moreover, he argues (Long, 1988: 117), that:

Although both approaches mention the important role played by the state agencies and other organizations, neither approach attempts to analyze the type of interactions and negotiations that occur between the representatives of the various organizations and the farmers themselves.

This vision sustains the presumed 'passivity' of the so-called 'beneficiaries' or 'target groups' that underlies the mainstream thinking of development practitioners, based on a rather 'mechanical' input-output model of the relationships between project and/or policy planning, implementation and outcomes. This highlights the tendency, as Long and van der Ploeg (1989: 227) argue, to conceptualize the planned intervention process as linear and implying a stepwise progression from formulation to outcome *via* implementation. Moreover, they contend (Long and van der Ploeg, 1989: 227) that:

Separation of 'policy', 'implementation' and 'outcomes' is a gross over-simplification of a much more complicated set of processes which involves the reinterpretation or transformation of policy during the implementation process, such that there is in fact no straight line from policy to outcomes.

As a consequence of such a vision of development, Long (1984: 170) argues that this way of thinking implies increased (remote) presence of government bureaucracy in the countryside and increased influence of urban styles of life on rural populations and areas, what Chambers (1983: 13) calls the 'urban bias' of rural development. Hence, the common feature of these various theories of rural change is the tendency that changes in the organization and activities of rural people are (exclusively) perceived as responses to a powerful set of external forces manipulating at their ease the process of social change (Long, 1984: 171). In this sense, I argue that such development theories, articulated with an 'induced assistedness', see beneficiaries as passive recipients of development which always need the state and its bureaucracy to be developed.

1.2.4 The social characterization of a project and the inconsistency of planners

One of the main issues that characterize a development action is the evidence of it being either an "arena for struggle" (Crehan and von Oppen, 1988) or an "arena of negotiation for strategic groups" (Bierschenk, 1988). Although I agree that such conceptualizations highlight a dynamic, competitive interaction over scarce resources between diverse actors with different interests involved in a project, I wonder whether the former conceptualization is the more likely to be adequate in such an environment. In my opinion, such a conceptualization connotes a *social darwinist* thinking which implies that actors are represented as "gladiators" fighting in the arena (von Oppen, 1990) for their survival. This presumption is sustained by a literal expression of the term 'struggle' as explained as "*a hard fight or a bodily effort*"

(Harraps Dictionary, my italics), while the description given by Crehan and von Oppen (1988) resembles a 'mental fight' more closely implying a hard use of one's strategizing capacity, and thus knowledge. In similar vein, I do not completely reject the evidence that a struggle can sometimes take the meaning of a bloody war, as it has happened in many parts of the world. Nevertheless, although I agree with such a conceptualization in its figurative sense, I would lean towards the second conceptualization which seems more appropriate for development arenas. In fact, 'negotiation' refers more to a "*process of bringing agreement through talks*" (Harraps Dictionary, my italics), given that *talks* is here used in both a literal and a figurative senses. Not only that, even when shut out of or excluded from a negotiation process, social actors sometimes have recourse to other 'weapons of the weak', such as passive resistance, to block a developmental process which is not in line with their preferences.

Accordingly, I suggest that the implementation of a development action - and sometimes even its design and evaluation - is perceived as a constant process of negotiation supported by strategic groups and their own respective projects (Bierschenk, 1988: 146), or their own basic linking loops (Dusseldorp, 1992: 39). In fact, a development action should rather be seen as a social event between different groups with different interests, playing their own role in shaping the final outcome of this event. As many cases show, a project might be funded by a foreign donor and involve foreign planners and 'experts' whose role, although maybe very influential, can be challenged by others, such as those of so-called 'target groups'. These latter actors are seen instead as self-motivating and capable of exerting their own influence (Crehan and von Oppen 1988: 113).

Notwithstanding this evident 'human diversity', planners have always perceived these 'target groups' as undifferentiated actors in the way they design development actions. Even when they acknowledge their erroneous vision, they still consider themselves as self-proclaimed *representatives* of the beneficiaries and continue to plan *for* them because of the uniqueness of their knowledge and experience, devising appropriate strategies for a better life for their 'clients' (Crehan and von Oppen 1988: 141; authors' italics).

In this sense, planners take their importance in the development field because of their self-referential orientation that society will walk into chaos without them, overlooking the fact that the most dramatic chaos in this world was planned, although hard to admit, by planners themselves. My empirical material about the common rangelands in Algeria (Case No. 3 in Chapter 5 of this book) verify this.

However, planners are not really independent actors in the development field. They are part of a politico-institutional environment that has its own norms, standards, values, etc., as we shall see in the following section.

1.3 The political-institutional environment of the development planning system

1.3.1 Algeria post-independence state and its development philosophy

After 132 years of French colonization, Algeria became independent in 1962. A civil war between the different factions of the revolutionary elite was nearly declared during the summer of 1962 because of a lack of consensus how the country should be governed. This was hardly prevented at the last minute by ordinary Algerians who poured into the streets crying "*seven years, enough*" (Quandt, 1998: 22).

The state hurriedly developed through the imposition of a self-proclaimed regime led by a populist leader who declared a one-party system with strong backing of the military. However, the regime of this populist leader did not stay long. In June 1965, the military ousted the first president of the Algerian Republic and took the strings of the country in their hands. Since then, the political system consisted of a troika composed of the party (the *Front National de Libération*, or FLN), the military, and the bureaucracy, with the outlines of a familiar authoritarian regime (Quandt, *ibid.*: 26).

With the nationalization programme that the regime implemented in the early 1970s, most of the economy was placed under state ownership, setting the stage for a form of 'state capitalism' (Quandt, *ibid.*: 27; Pfeifer, 1985). The greatest nationalization was the one of oil and gas in February 1971. With the revenues from these two natural resources, the regime became a recipient of a vast inflow of capital that spawned "an avaricious, predatory elite that clings to power as the sole path to well-being" (Quandt, *ibid.*: 7). Although nationalization of oil and gas occurred in 1971, it was only during the 'black decade' that Algeria started developing some features of a predator, rentier state, as Quandt (*ibid.*: 32) mentions implicitly:

The authoritarian state has typically seized control of most of the economy and thus has enormous resources for dispensing forms of patronage.... Jobs in the bureaucracy may be available to loyalists and relatives of those in power; fortunes can be made as the regime allows a share of the 'rents' to go into the pockets of supporters and collaborators.

Many authors (Quandt, 1998; Boone, 1990; Bellin, 1994) depict a "rentier state" paradigm as an economic system based on rent-seeking rather than on economically productive activities, i.e. activities which add something to the common wealth. Distribution of the vast revenues of oil and gas was conducted "in ways that provide widespread corruption and discourage efficient investment in productive sectors" (Quandt, *ibid.*: 5). In such a system, "rentier activities are defined as *politically mediated* opportunities for obtaining wealth through non productive economic activity" (Boone, 1990: 427; my italics).

Very pervasive in much of the Third World, including Algeria, the "rentier syndrome" engenders troubling implications for economy, polity, and society, such as slowed economic growth, emasculated social forces and incoherent state policies. It is a determined consequence of the prevalence of parasitic cronyism in business-

state relations that undermine both economic development and state capacity (Bellin, 1994: 427).

In more detail, Bellin (*ibid.*: 43; her italics) describes three hazards that emerge within this kind of system, i.e. when profits become politically mediated:

1. Society suffers welfare loss because the state bureaucratic elites have discretionary power over the distribution of resources, although the Weberian image of bureaucracy is built upon rules that minimize personal discretion (Heywood, 1997, 340). Public resources are thus distributed according to criteria that are economically irrational. This may be possible for two primary reasons: Either for the *personal gain* of the bureaucrats to get offered the biggest kickback, or for the *political survival* of the regime, either through buying acquiescence from potential opponents or through building a political clientele.
2. The entrepreneurial class will lose its political autonomy and become either "eunuch capitalists" or "emasculated bourgeoisie", i.e. they cannot challenge the state or act as a countervailing force of state elites in the definition of public policy.
3. The state will be enjailed in clientelistic relations which can ultimately cannibalize it and undermines its capacity to conduct coherent developmental economic policy.

On the same track, Bellin (*ibid.*) argues that the occurrence of these hazards "turns on number of intervening political variables, specifically the nature of state structure and the logic of the regime's sustaining political coalition". The description fits, to a large extent, the Algerian case and it is in this context that the development planning system had to prove its abilities to change positively the miserable situation of Algeria's major part of the population.

1.3.2 The role of the inherent bureaucratic obstacle in rural development³

Bureaucracy is commonly known as the executive 'hand' of government, as it refers to the administrative machinery of the state. Although the Weberian image depicts its as an 'ideal type' of a rational administration system, many of us see it as suggesting inefficiency, pointless and time- and efforts-consuming procedures. In politics, it can be seen, according to Heywood (1997: 340), as either:

- A closed system, for it lacks openness and accountability; or,
- An instrument of class subordination; or,
- A system of self-serving and inherently inefficient bureaucrats.

To understand the partial failure of development actions whose shortcomings can be attributed to organizational aspects of development administration, Wiggins (1985) argues it is wise to compare the task requirements of rural development and the

³ I partly owe this title to Wiggins, S. (1985).

distinctive competence of the [bureaucratic] organization involved in the implementation of a development action. He describes the situation of rural development as follows:

1. The goals are often not specific, single, and unchanging;
2. The project environment, both physical and human/institutional, changes unpredictably;
3. There would be a need, in some projects, to create a demand for the services being established;
4. There is a need to mobilize local resources (labour, funds, knowledge, and organizational capacity) for the achievement of project objectives;
5. The rural populations are scattered over large areas where communications are poor;
6. The project may confront a plethora of decision-makers in dealing with local populations;
7. The project may promote technologies which are either not proven or have been proven in some similar but not identical environment. In fact, this occurs frequently.

Moreover, he states that such task requirements bear managerial implications that Third World bureaucracies cannot deal with, given the following four main tendencies that characterizes the structural, institutional and cultural nature of these organizations:

1. Ad hocism: Project planning, preparation and selection in Third World countries does not follow any systematic identification and formulation which can explain to a large extent the 'failure' on the development front. The whole process is marked by a high degree of *ad hocism*.
2. Role culture: Many DCs inherited, upon independence, a replica of the bureaucracy of the their former colonizing country. This mainly aimed to infuse institutions with a '*role culture*', where functional specialization exists, where the orientation is towards control, standardization and efficiency, and where decisions are cautiously - and in a very mechanistic way - made by precedent. Moreover, these organizations adequately fit into an environment of work tasks that are reasonably stable and predictable, but not in people-centered development situations. In this context, maintenance of a strict hierarchy and a high degree of centralization of decision-making are common features.
3. Power culture: Upon their independence, an organizational and managerial model that is power-culture based, called 'hub-and-wheel', was largely perpetuated in most of DCs. All decisions are taken at the centre of the wheel, and all problems are resolved there. This model can be highly personalistic and does little to promote motivation or learning amongst subordinates. When the magnitude of tasks and the number of supervised staff overwhelm the capacity of the central manager, as in this scenario, the organization runs into chaos.

4. **Informalism:** This is the most important trait determining the functioning of DC's bureaucracies, by means of which institutions' staff remain subject to pervasive pressure from 'outside' to ignore organizational norms and to pursue alternative goals. This '*economy of affection*', largely established in Africa, pushes most civil servants to direct public resources to benefit their kinsfolk, clan, and tribe through direct or indirect linkage, resulting in favouritism, graft, nepotism, and corruption.

Consequently, Wiggins (ibid.) argues that the distinctive competence of typical DC's bureaucracies and the task requirements of rural development represent a perfect mismatch which particularly explains why project implementation is so bad too frequently. I must add that the above-described ad-hocism of LDCs bureaucracies also explains why the design very often leaves much to be desired.

Moreover, one of the main functions of bureaucracy that needs to be mentioned here, according to Heywood (ibid.: 347), is the stability and continuity within political systems. "While ministers come and go, the bureaucracy is always there". However, what may seem as an advantage can be also a problem as continuity can have some disadvantages. In the absence of effective public scrutiny and accountability, as was the case for Algeria, it can lead to corruption, arrogance, and insularity, or even to a bias in favour of conservatism, as top bureaucrats may see themselves as the "custodians of state's interest" Heywood (ibid.).

1.4 As a matter of summary...

These different points mentioned in the previous sections explain to a large extent the failure of the current development thinking, especially when linked to the actual project paradigm. Accordingly, *stereotyping*, or the denial of human agency and diversity, rigidity in planning, unequal access to public resources, inefficient monitoring and evaluation, and lack of participation are consequences of this a thinking that hampered in one way or another the real development of Third World populations. Léger (1984, cited by Burkey, 1993: xvii) indicates seven main reasons for disappointing results in rural development actions:

1. Target groups are not homogenous;
2. Technological options do not always correspond to the motivation of target groups and to the constraints of the environment;
3. Equitable distribution of revenues and benefits may be a myth;
4. Government and NGO strategies for project conception and implementation do not necessarily represent the aspirations and interests of target groups;
5. The human and social factors are too often neglected;
6. Projects are planned in a rigid manner, based on an overly idealized economic, political and institution environment;
7. The already existing or newly created organizational entities do not foster efficient/effective project management.

However, Honadle and Rosengard (1983: 304) warn to not "throw out the baby with the bathwater" by assuming that these criticisms are less directed to the project approach itself than to the poor use of it. Given the different points I mentioned earlier, I disagree with this assumption, although I agree that we should keep the baby but, being sick, he needs some special care.

To my knowledge, the major problem of the project approach, that is the blueprint approach, resides in its excessive 'rationalization' and 'idealization' in terms of advanced, rigid and comprehensive planning. It is, in fact, closely related to the scientific thinking that impinges upon the approach itself and its philosophical origins, i.e. 'rationalism' and 'deductionism', which engendered the excessive disregard of human agency in development planning. So, if it is acknowledged that 'rational' planning has deeply influenced, for instance, the 'blueprint' project model which I intended to present the major weaknesses of in this chapter, then a great amount of criticisms formulated by development scholars hold also for the approach itself. This is a fundamental causality linking the use of a concept to its philosophical and socio-cultural origin, which asserts that any user of a given concept is systematically enveloped in the philosophical and socio-cultural values of this concept.

However, the intellectual and philosophical load carried by the concept 'project' was not the sole factor of the development failure. In fact, the misuse of the tool 'project', as mentioned by Honadle and Rosengard (*ibid.*), given the political-institutional environment described earlier, exacerbated the sickness of the already sick baby.

1.5 Looking for change: Which alternative?

I have directed my arguments in the preceding paragraph towards the criticisms and shortcomings of the current project approach and its underlying philosophy. I stressed that these criticisms are not only formulated towards the use of the approach but towards the approach itself as well. Searching for a better way to improve the use of the project model, I first have to assume that rural development projects operate within human activity systems that can be conceptualized as self-organizing, but not 'autopoietic' systems. For this reason, the need to search for a more 'humanistic' approach which, according to Korten and Klauss (1984: 169), "favours the organizational models of self-organizing systems", is highly underscored. In such a model, structures and information flows are oriented and steered towards goal-setting and problem-solving processes of their various subsystems or actors of the so-called systems. More than that, such flows should be guided so that "innovative and adaptive action - that is, learning - occurs continuously throughout the total system" (Korten and Klauss, 1984: 169), by using the creative abilities of all actors, thus reinforcing the centrality of the actors and their learning ability.

Accordingly, I suggest that the alternative approach of development model should strengthen the centrality of people in their development and self-promotion, and the necessity of a social learning process in order to achieve sustainable developmental outcomes. Of course, a learning process in a given development action should not be perceived exclusively as a mere educational process but mainly as a forum where design, implementation, and evaluation processes are melted in an iterative cycle which paves the way for the mutual learning of all actors involved.

1.6 Why is the approach shift necessary?

The first attempt to answer this question, which might be seen as a personal concern, can be understood by the fact that "although many people in the development community are seriously considering project weaknesses" (Honadle and Rosengard, 1983: 299), very few are really exploring either alternatives or how to improve the current model of 'projectized' development.

Inspired by the results of the current development thinking and sustained by the post-independence politics and its 'bloody' outcomes that Algeria is facing these last years, this is thus an attempt from a development practitioner, with no excess of pretension, to propose an alternative development vision which avoids making the socio-economic conditions of the disadvantaged groups or segments of the population worse.

The second attempt to answer this question is related to the new conceptual and theoretical developments that occurred these last years among development thinkers all over the world, such as *Farmer First*, *Beyond Farmer First*, *Development From Below*, *Development From Within*, etc. This tendency is clearly continued by Honadle and Rosengard (1983: 304) who urge that:

To better equip projects in their encounters with local institutional environments, a new approach is needed.... In such an approach, the issue of sustainability - and its recurrent costs and organizational learning components - has a better chance of obtaining the dominance it needs.

Moreover, in the preface of his edited volume, Booth (1994a) is very sincere and convincing, and puts a huge pressure on both policy-makers and social scientists to quickly react to the challenge of the development failure. Booth's main concern (1994a: xi) is that:

The challenge of world poverty, like that of global environmental change and the construction of a minimally viable order in the international system of states, is both a political challenge and a scientific one.

In this respect, it seems quite propitious to look for another perspective of development that can bring a modicum of equity and ethic to the development of

Third World populations, where the continuing and growing problems of human misery and environmental catastrophe are mostly localized (Booth, 1994a: xi).

1.7 Conclusion: What can really be done?

Being both a planner and a social scientist at the same time, I would recognize that the dilemma I face these days is not easy to handle; a dilemma related to an object (the project) that is filled with continuous criticisms, which I fully admit as a social scientist, but which I still need to use as a planner or a development practitioner, as no other alternative is available to me. Although strongly criticized, I must admit that the 'project' method presents some indubitable advantages that, according to Rondinelli (1983: 308-316), are as follows:

1. Projects are identifiable, bounded and organized sets of development activities;
2. Projects can be effective means of translating development plans and policies into specific courses of action;
3. Projects are vehicles for mobilizing and allocating resources to development activities;
4. Projects can be analyzed and appraised before funds are committed;
5. Projects are temporary activities that can lead incrementally to accomplishing larger development goals;
6. Projects can be used to undertake unique, innovative and non-routine development activities;
7. Projects can be used to channel development resources to specific groups of beneficiaries and to particular locations;
8. Projects can be formulated as manageable units of activity guided by well-defined planning and administrative procedures;
9. Projects can be organized in a variety of ways and undertaken by a wide range of organizations;
10. Projects can be externally supervised and controlled and used to exert influence over broader development policies.

In an attempt to reflect on how can we make the 'baby' safe and adapt it to the new needs of development after we have thrown away the 'bathwater', a very famous commercial slogan came to my mind that says: *If you cannot beat them, join them.*

This tempted me to phrase this slogan in a way that is applicable to my own dilemma, which is also the case of many development practitioners, saying: *If you cannot avoid them, improve them* - I mean projects and development actions in general.

Thus, my modest contribution in this research seeks to improve the way development actions are actually designed and implemented by shifting them from a 'planner-centered' approach to a mere 'beneficiary-centered' one. This was inspired by the new organizational developments in Algeria at the grass-roots level, such as the institution of new farmers' organizations into professional associations of common interest which employ such highly qualified technicians as agronomists,

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extensionists, and socio-economists. Thus, I thought that this educated - as well as the Algerian planners - should be offered tools that can be used in designing and implementing participatory development actions that fit the needs of their 'employers'.

CHAPTER 2

EXPLORING CONCEPTS AND THEORIES: TOWARDS A THEORETICAL FRAMEWORK FOR THE STUDY

2.1 Introduction

In this chapter I establish the conceptual framework for the study by presenting two basic concepts derived from the problem background described in the previous chapter that will pave my theoretical way. These concepts of 'planned development' and 'sustainability' of development. Both concepts represent different meanings of the facets of current development thinking underlying the project model of rural development in Third World countries. The former represents the model of introducing change through interventions, especially state ones, attempting to lead traditional societies into modernity, or to bring modernity into traditional societies. The latter represents the unachieved promises of many aspects of development (economic, social and ecological).

Both concepts appeal to some understanding of the processes to be manipulated within the frame of a development action and thus require prior knowledge as a prerequisite to devise adequate strategies of action. However, planned development, long confined in a self-referent planning approach, negated some human processes that are undeniably the basis of sustainability in people-centered development. Understanding and maintaining resilience mechanisms of an eco-system or the underlying processes of gathering knowledge about this eco-system are among these human processes. Meanwhile, sustainability could not be concretized and achieve a 'non-return' point of development without these human processes which represent the most fundamental of the three basic elements of the "critical triangle of sustainability": (1) Economic sustainability, that is sustainable economic growth; (2) Social sustainability, that is a fair distribution of the economic growth and equitable resource access for poverty alleviation; and, (3) Environmental sustainability, that is the conservation of the environment through sound natural resources management (Oram *et al.*, 1998: 1).

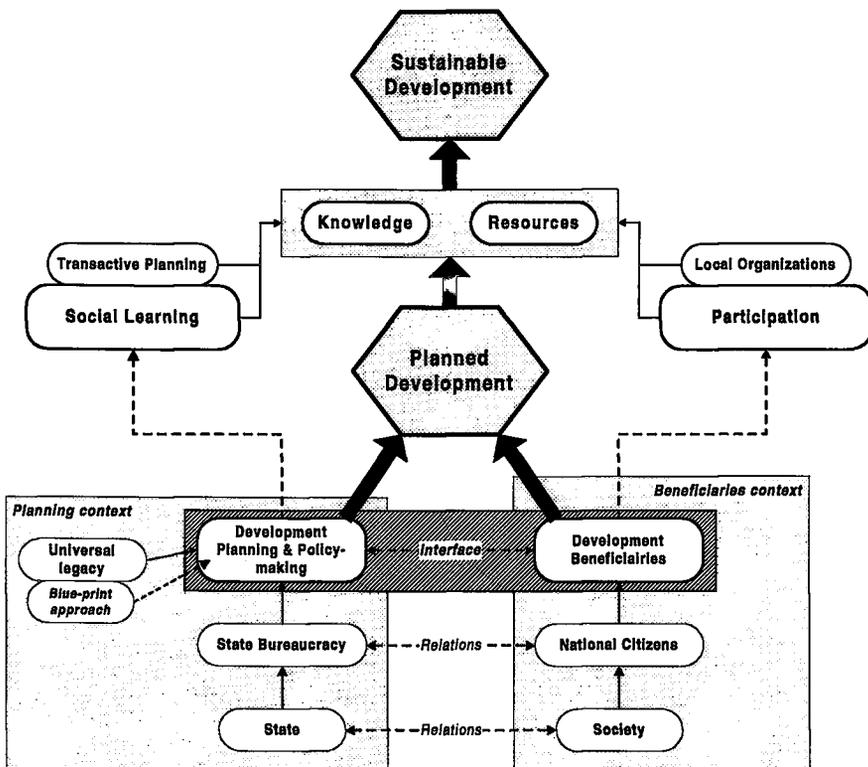
Both concepts are linked to the involvement of people as far as knowledge is concerned. Given that knowledge can never be complete or emanate from a single source, opportunities for other actors, in addition to planners and policy-makers, should then be offered within the frame of development actions. The former, confined to a blue-print, top-down planning approach, did not create many opportunities in this sense and failed to move development ahead. Sustainability was not achieved because of the rationality of planned development and the rigidity of its design, given the way the blue-print approach looked at development as taking place within a controlled environment. Sustainability was assumed as given in the methodological characteristics of this planning approach.

In my endeavour to elaborate on these issues, I shall 'delineate' the main theories and concepts that will be used in analyzing the actual situation of these two concepts in the context of the Algerian development field (that is, knowledge for

understanding) and to reflect later on some needed institutional adjustments required for a 're-humanized' approach of development (that is, knowledge for action).

Given the above criticisms, as well as parts of the problems stated in the previous chapter, I shall attempt to design a conceptual framework which first aims to analyze the present situation of 'planned development' and 'sustainability'; this will be my analytical framework. I will next make use of the empirical material I am presenting in this book, combined with conceptual and theoretical elements, to proceed towards methodological propositions and practical recommendations for an alternative view which looks toward *re-humanizing* development; this will be my prescriptive framework. Figure 2.1(1) describes the linkages between the retained elements of the proposed conceptual framework and the underlying assumptions of the researcher. However, several concepts and ideas developed in this chapter are not new. They are mentioned in a great amount of literature of the last decade but have been only partially applied in the planned development process. For most Algerian planners, these are either relatively new or are often not taken into consideration, as Cases Nos. 1, 2, and 3 will show later.

Figure 2.1(1) - Visualizing the study conceptual framework



To compare between the current development thinking and its results, and my proposed alternative view and its advantages, I shall make use of a constructivist metaphor of the 'development theatre' as an attempted conceptualization of the context of a given development action. Being my own suggested part of the conceptual framework, the basic theoretical elements of this metaphor, compatible with concepts and theories reviewed in the following sections, are thus mentioned in the final section of this chapter.

2.2 Concepts of planned development and sustainability

2.2.1 What is development and planned development?

Referring to the tremendous amount of literature on development, I have found it a difficult task to propose a general working definition for this concept. The question of *what is development and what is not?* surfaced many times in the literature. These concepts are presented as 'buzz words' or 'pet words'.

In addition to the fact that it was synonymous - and used exclusively - with economic growth, development was measured by indicators such as rates of national and per capita income growth. Such an indicator, derived from a simple division of the national income by the number of inhabitants, bears a fallacious assumption that the national income was equally distributed among all inhabitants. Quite an idealistic view of a fictitious egalitarian society!

Moreover, development in Third World countries was seen, according to Brohman (1996: 55), as:

A transformative process from traditional, agricultural, and rural economy toward a modern, industrial, and urban one.

Development was originally based on a false - and sometimes arrogant - ethnocentric assumption that change in a given traditional, 'primitive' society can only be achieved through outside deterministic intervention, given a presumed inert structure of this type of society and the passivity of its constituents.

Notwithstanding this, dissatisfaction with this vision of conceptualizing development inspired a corresponding search for alternatives or other indicators that may better reflect the state of development in Third World countries, such as life expectancy, standards of health and literacy, access to various social and public services, freedom of speech, the degree of popular participation in government or decision-making, and environmental conservation (Conyers and Hills, 1984: 29).

In line with this statement, I shall introduce another vision on the concept 'development' which will be one of the building blocks of this book. Derived from the concept of integrated human development, the concept 'development', in the sense of this study, refers to the Cocoyoc paradigm which concerns the development of people and not things (Conyers and Hills, *ibid.*: 27-28). Aiming to give the every

person the right to free himself/herself from every form of domination or oppression and develop as a whole person in relation to others, it relies on an inextricable integration with and a high degree of overlap between the basic perspectives of a sustainable development. These, according to Conyers and Hills (*ibid.*: 28, authors' italics), are:

1. The *economic* perspective which concerns production of goods and services, and their related activities, particularly their commercial and monetary aspects;
2. The *social* perspective which concerns the more general well-being of individuals or groups of people;
3. The *political* perspective which concerns the distribution of power between different groups and individuals, particularly the power to control, or make decisions about, the use of resources;
4. The natural or environmental perspective which concerns the maintenance of the environment where development occurs.

According to Schmale (1993: 7), this vision of development refers to any change in thought by concerned people (development 'beneficiaries' or 'target groups') so that specific problems they face may be solved and/or improvements made in their lives beyond material and economic improvements. In this order, development takes on a more universal definition, including the change of political structures into more democratic, participatory ones as well. This is extremely important in the sense of sustainable development, although this cannot be measured by quantitative economic indicators in the same way as economic growth. This type of development, which has a more human face, was clearly illustrated by Jan Pronk, a former Dutch minister for international co-operation, who said: "Freedom comes first, then food" (cited by Schmale, *ibid.*).

This vision of development reverses the long-standing ignorance of the 'human factor' and the 'non-economics variables' in the conventional vision of development and its inherent procedural theories of planning based on the exclusiveness of scientific rationality, and the blue-print approach, which created very rigid and mechanistically operated projects.

As a matter of convention, I refer to planned development in this study as a process by which development actions are identified, designed, implemented, and evaluated under a given voluntarily time- and space-restricted framework placed upon adopted theories *of, in* and *for* planning, in order to achieve a deemed desirable situation in accordance with the needs and preferences of the beneficiaries of these actions. Issues related to planning organization, theories, and styles will be elaborated upon more in Section 2.5 in this chapter. Before I return to planning, I will first introduce sustainability and link it to planned development.

2.2.2 Sustainability and sustainable development

In terms of meaning, sustainability is a ship that sails under different flags, if I dare to rephrase Adams (1993: 208). As a consequence, this creates confusion about the concept of sustainable development, which can be better understood if one talks of the "sustainable patterns and processes of development" (Elliott, 1994: 1).

The concept stems from the merging of two other basic concepts, bodies of knowledge, and literature. These are 'sustainability' and 'development', with a great emphasis, however, on the 'environment'. It shows the extreme interdependency between 'development' and 'environment' (Elliott, *ibid.*: 14).

All of these concepts have been broadly used in literature, discourses, slogans, etc. to show that they sometimes mean different things to different people, depending on which side one is holding the stick or who is setting the agenda.

Many authors have proposed a set of key words in order to attempt a working definition of sustainable development. Some looked at it from the human-being welfare point of view, arguing that it is a kind of development, according to Allen (1980, quoted by Elliott, *ibid.*: 3), that,

[It] is likely to achieve lasting satisfaction of human needs and improvement of the quality of human life.

Many others looked at it from the economic point of view, arguing, according to Turner (1988, quoted by Elliott, *ibid.*), that,

[It] would seek to maintain an 'acceptable' rate of growth in per-capita real incomes without depleting the national capital asset stock or the natural environment asset stock.

Others finally looked at it from the environmental point of view saying, according to Redclift (1987, quoted by Elliott, *ibid.*), that,

[The term] suggests that the lessons of ecology can, and should be applied to economic processes.

In this respect, it is suggested that human activities should use resources efficiently and that by-products or side-effects of these activities should not harm the environment.

However, the most frequently used definition of sustainability is the one proposed by the World Commission on Environment and Development (WCED, 1987: 43) - known as the Brundtland Commission - suggesting that sustainable development is:

A development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

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According to Adams (1993: 211), sustainable development in this respect relies on two concepts: The first is the concept of basic needs and its corollary of the primacy of development action for the poor; the second involves the environmental limits. It prioritizes political and economic changes to achieve sustainable development (Elliott, *ibid.*: 11).

This broad conceptualization of sustainable development is corroborated by Tolba (1987 quoted by Elliott, *ibid.*: 3), who suggests that

The concept sustainable development encompasses:

1. Help for the very poor because they were left with no option other than destroy their environment;
2. The idea of self-reliant development, within natural resources constraints;
3. The idea of cost-effective development using different economic criteria to the traditional approach; that is to say that development should not degrade environmental quality, nor should it reduce productivity in the long run;
4. The great issues of health control, appropriate technologies, food self-reliance, clean water and shelter for all;
5. The notion that people-oriented initiatives are needed; human-beings, in other words, are the resources in the concept.

Summing up all these different conceptualizations, I suggest that sustainable development concerns the realization at a lower cost and a lasting maintenance of the best-ever trade-off between economic growth, equity, and environmental sustainability - the "3E's" - on which our future depends (Oram *et al.*, 1998: 5).

2.2.3 Linking development planning to sustainability

Having delineated the meaning of planned development and sustainability in the context of this study, I will now link both concepts to define the prerequisites of a successful development action seeking to achieve sustainable outcomes. According to van Dusseldorp (1992: 12), for any development activity to be achieved and sustain its goals, four **prerequisites** need to be fulfilled, which are very seldom fully achieved. These prerequisites are as follows (author's emphasis):

1. The **possibility of formulating** a consistent, realistic and durable set of **objectives**, which is acceptable, for all, or at least for a large majority of the people who will be involved and affected by the planned development. This prerequisite sets in fact the debate about *development for whom?* and *whose objectives count more?*.
2. The **availability of knowledge** of all **relevant processes** and their interrelationships, which have to be influenced, in order to change the present situation in such a way that the adopted objectives will be realized. This prerequisite sets the debate around the appropriate planning theories in development and their foundation on available knowledge.
3. The **availability of means and power** to influence these processes, i.e. all needed material resources that are required to realize development according to the adopted objectives.

4. The **political will** to use the available means and power, to influence the relevant processes, in order to realize the desired objectives. In other words, this prerequisite sets the entire philosophy of development.

It is thus clear that knowledge from whatever source is essential in attempting a successful manipulation of the processes a development action is intended to influence in order to achieve the deemed desirable situation. This is what I shall introduce in the following section.

2.3 Knowledge: A critical input for making development sustainable

The design of development actions requires a prior knowledge about processes to be manipulated or influenced in order to transform an undesirable situation into one deemed desirable. In general, a development action takes place in "an evolving environment of values, understandings and problem resolutions" (Camhis, 1979: 115, quoting Bolan 1974: 32), and any planning theory which "ignores these relationships necessarily engenders resistance, hostilities and blocking behaviour" (Camhis, *ibid.*).

This introductory statement highlights the critical character of knowledge and information as inputs in planning and - as a consequence - in planned development and sustainability. Determining, in the following order, how knowledge is generated, exchanged, gathered, transferred, transformed and used by different social actors within the context of a development action becomes necessary in such a study.

Within the context of a developmental action, knowledge products are exchanged between social actors. This leads to conceptualize, first of all, knowledge, according to Arce and Long (1992: 211), as:

Constituted by the ways in which individual members of society or social groups categorize, code, process and impute meaning to their experience.

Knowledge is thus not a simple set of facts that many dictionaries can attribute to the concept, argues Box (1989a: 2, quoting Knorr-Cetina 1981), because facts are social constructs which do not exist on their own but are made by people within specific contexts. Thus, knowledge is the ideas and values which govern the imputation of meaning to these facts (in order to socially construct 'reality'). It is then obvious to say that knowledge dynamics and processes can be best understood by relating them to the context in which the construction and reconstruction of meaning take place (Box, 1989a: 2).

According to the foregoing discussion, the locus of change as regards agricultural development, as Box (1989a: 4) puts it, lies within the production conditions of the farmer, who deals with a continuous process of adaptation to these conditions by testing out alternatives and choosing the ones that adequately fit these so-called production conditions, be they agronomic, ecological, economic, social, cultural, and

even ergonomic. Of course, it cannot be denied that some alternatives are provided by researchers and scientists via extension workers. Even though it is so, the activities of scientists and extensionists are neither a necessary nor a sufficient condition for agro-technological change (Box, *ibid.*). This evidence is epitomized by the fact that farmers still refuse improved and high-yielding varieties and continue growing their 'traditional' landraces. This leads to the notion that adoption of a given technology or innovation by farmers can best be understood by reference to their conditions. As an evident fact, farming must not be exclusively seen as a technical practice; it is in fact a location-specific, multi-dimensional interaction between man and the biosphere. This what makes Box (1989a: 3) say that agricultural knowledge as a unique substance does not exist. What exist instead are bodies of knowledge relevant to particular, specific contexts which may vary widely for different categories of professionals involved in agricultural development. To say so, all actors involved in a given developmental action process, generate, gather, maintain, exchange and use a body of knowledge that is relevant for their livelihood conditions. Moreover, all actors are at the same time both sources and users of knowledge and its subsequent products. This is why it is crucial that planners, researchers and development staff should integrate their mutual knowledge and, more importantly, should make room for farmers' or peasant communities' knowledge during the designing, implementation and evaluation of development actions. Later in this chapter, concepts such as participation and social learning that facilitate this process will be presented.

Knowledge, however, is processed, exchanged, and used by social actors in their ways to deal with daily real-life events. I shall thus take this opportunity to introduce the centrality of social actors within social settings and examine how they process their experiences and develop wisdom and knowledge. This is my aim in the following section.

2.4 Centrality of people in development: An actor-oriented perspective

2.4.1 A brief introduction to the actor-oriented approach

I have just argued that knowledge and its organizational and social arrangements to support its different processes are extremely important for planned development and sustainability. Ackoff (1984: 195) reinforces this statement and links it to the centrality of people in development. He argues that development is a product of one's knowledge and thus one's learning about one's environment in order to meet one's needs. It is thus illusive to think that one person, be it the planner or the policy-maker, can develop another person, as he/she can just not learn in his/her place.

Notwithstanding this statement, large segments of elite intellectuals, be they in Third World or in developed countries, still think that a rural society, or one that is mainly constituted of peasants and farmers, is a 'traditional society', supposedly

based on an inert structure which is only put in motion by outside intervention (Elwert and Bierschenk, 1988: 99); an intervention that can take, in development terminology, the form of a policy, a programme or even an individual project. However, contrary evidence exists that shows how thousands of African farmers and their communities - and surely elsewhere in the Third World - elaborate strategies to cope, for instance, with long-term drought, sometimes without any help from outsiders. Anyone of us facing this evidence would conclude these communities are quite dynamic systems and that the presumed 'traditional society' exists only in the minds of these so-called intellectuals. Accordingly, Box (1989a: 4) argues:

We have no evidence that to show that 'traditional farmers' exist, who just repeat what their fathers did. Traditional subsistence agriculture exist only in one place: In the heads of so-called modern agricultural technicians.

This thinking is in fact sustained by a Western ethnocentrism which posits that Third World countries should follow a similar development path as Western countries. But a great difference needs to be mentioned here. As Long (1977: 186) contends:

Whereas the Western experience was of an industrial revolution from within, the Third World experiences a 'revolution' from outside brought by the impact of Western technology and by the transfer of social and cultural skills.

Moreover, all theories of development and planning 'tested' in the Third World were designed on a high standardization pattern, and based on *utilitarianism* and *methodological individualism*. Besides of viewing human beings as identical *objects* represented by a uniform prototype, these theories perfectly 'materialize' this centrism, and enhance and consolidate the already inherent characteristics of linearity and externality of the process of social change. Unfortunately, none of these theories give attention to the ways in which local actors contribute in shaping the outcomes or even modifying "the patterns of regional and national development" (Long, 1977: 187).

Emphasizing the increasing *stereotyping* revealed by these theories of development, Long and van der Ploeg (1994: 64; my italics) argue that:

A more dynamic approach to the understanding of social change is therefore needed which stresses the interplay and mutual determination of internal and external factors and relationships, and which recognizes the *central role* played by *human action* and *consciousness*.

In this context, the actor-oriented perspective, which emanated from anthropological work on socio-economic change, focuses upon the variations in response to broadly similar external circumstances shown by different social groups and categories (Long, 1977: 187; Long and van der Ploeg, 1994: 64). Furthermore, it highlights the differentiated and multi-structured nature of rural societies and does not regard

peasants, farmers, and/or their communities as a homogenous population, as Long (1977: 187) argues.

From this perspective, actors are not seen simply as "disembodied social categories (based on class or some other classificatory criteria)" or "passive recipients of intervention". According Long (1992: 21) and Long and van der Ploeg (1994: 64),

[They are] *active participants* who process information and strategies in their dealings with various local actors as well as with outside institutions and personnel (my italics).

On another level, Long's (1977: 188) arguments take us far from the *methodological individualism* beliefs of most planners (see Faludi, 1973) by arguing that

[This perspective] entails an understanding of the structural and ideological frameworks that limit [or may constrain] peasant action, whilst also focusing on the process by which particular individual and groups evolve in their ways of dealing with their changing environment.

Further, Long (1977: 188) argues further that:

An actor-oriented perspective emphasizes the need to appreciate the significance of development and change from the actors' or recipients' perspectives.

However, being aware of the weaknesses of this perspective, Long (1977: 189) acknowledges that, if combined with a systematic wider historical and structural phenomenon, different economic and political strategies and perspectives on change can be isolated to reflect the actors' point of view (and not from the planner's or the policy-maker's point of view) since many of the choices and strategies pursued by individuals and groups have been shaped by processes outside the immediate arena of interaction (Long, 1988: 126), or what Brown (1983: 20) identifies as the interface's context. It can also document the ways in which existing forms of organization have been creatively adapted to meet the demands of new circumstances. In this respect, such an approach can combine both micro and macro levels of analysis and gives equal attention to horizontal and vertical patterns of co-operation and control.

On the other hand, concerning state intervention, the actor-oriented approach, as Long argues (1977: 190), attaches a great interest to the three following main issues:

1. How state policies are intimately related to the development of the national economy and to the interests of the social groups or classes who control the governmental machinery and who, therefore, formulate (directly and/or indirectly) these policies.
2. How types of organization and development agencies set up to implement specific programmes and what the nature of their relationships to central or local government bodies is.
3. How objectives and feasibility of specific policies are determined and how their intended and unintended consequences are documented.

As Long (ibid.: 191) further mentions:

This involves giving careful attention to how particular groups interpret the aims of government and its programmes; how they participate in them and how they may utilize the newly-available resources in pursuit of their own goals.

The actor-oriented perspective begins with the simple idea that different responses among social actors can develop under the same or similar circumstances. Such differences reflect variations on how actors attempt to cope, cognitively or organizationally, with the situations they face in their daily life (Long, 1988; 1990). Thus, one can even assume that the differential patterns of response to similar circumstances are partly the creation of the actors themselves (Long and van der Ploeg 1994: 64). Thus, according to Long (1989b: 247), this perspective reconsiders the essential nature and importance of 'human agency' and consequently develops useful analytical concepts such as 'social actor' and 'social interface' as salient features that comprise its basis. In the following section, I shall introduce these as well as other concepts that can be derived from this perspective.

2.4.2 Human agency and the concept of 'social actor'

According to Long (1989b, 1992), the actor-oriented perspective is strongly related to the concept of 'human agency'. Citing Giddens (1984: 1-16), Long (1992: 22) and Long and van der Ploeg (1994: 66) write:

The notion of agency attributes to the individual actor the capacity to process social experience and to devise ways of coping with life, even under the most extreme forms of coercion. Within the limits of information, uncertainty and other constraints (e.g. physical, normative or politico-economic) that exist, social actors are 'knowledgeable' and 'capable'. They attempt to solve problems, learn how to intervene in the flow of social events around them, and monitor continuously their own actions, observing how others react to their behaviour and taking note of the various contingent circumstances.

Moreover, Long and van der Ploeg (1994: 66) admit that "agency is not simply an attribute of the individual actor", but "entails social relations and can become effective only through them". 'Collective' agency, on the other hand, depends on the emergence and strategic manipulation of a network of social actors and the channelling of special items at certain interfaces. To accomplish this, it is essential for the actors to gain the struggles in arenas where the attribution of specific meanings to certain events, actions and ideas take place (Long and van der Ploeg, 1994: 67). This is why "particular intervention models (or ideologies) become strategic weapons in the hands of the institutions and personnel charged with promoting development", as Long and van der Ploeg caution us.

Furthermore, argue Long and van der Ploeg (ibid.), to reach decisions *discursive means* must be explicitly or implicitly used. These can vary and "form part of the

differentiated stock of knowledge and resources available to actors of different types".

Finally, Long and van der Ploeg introduce how the individual and the social actor may be differentiated by stating that the "social actor is socially constructed rather than simply a synonym for the individual or a member of *Homo Sapiens*". Having that said, they hammer out that (Long and van der Ploeg, 1994: 66):

The social construction of actors is underpinned meta-theoretically by the notion of agency.

2.4.3 Social actor and the concept of 'linking loop'

If in real life, planning and implementation of development actions are very often particular functions of different entities and institutions. However, this is not the case for human-beings. According to van Dusseldorp (1992: 39), social actors have in their minds goals and objectives they want to achieve at the lower cost possible. For this purpose, they have always recourse to a rational decision model which helps them make decisions "based on a system of logical thought". This refers to the concept of 'linking loop' which can be differentiated into three forms:

1. The 'basic linking loop' which represents the interrelated decisions and activities social actors want to make and perform in order to realize some set objectives. In this situation, they **conceptually** and **actually link** their objectives, their perception of their present situation and their (scarce) resources.
2. When social actors realize that it is individually impossible for them to achieve their objectives, unless they combine their efforts and resources altogether. In this situation, the 'basic linking loops' of different social actors need to be combined into and take the form of a 'communal linking loop'.
3. The 'formalized linking loop' represents the way decisions are made within organizations and are represented by the project cycle. It represents a systematized, institutionalized, fragmented and inflexible process including a set of complex 'communal linking loops'.

2.4.4 Social interface at the development encounter

In their daily life, collective and/or individual actors are continuously trying to control their surrounding environment in order to achieve their objectives. At the same time, wittingly or unwittingly, there may be 'friction' amongst themselves and even come to create points of encounter or *interfaces*. According to Long (1984: 10; 1989a: 2), the concept of interface suggests:

Some kind of face-to-face encounter between individuals or units representing different interests and backed by different resources. The interacting parties will often be differentiated in terms of power.

Long (1984: 10; 1989a: 2) argues that studying this interface aims to:

Bring the dynamic and emergent character of the interactions that take place and show how the goals, perceptions, interests, and relationships of the various parties may be reshaped as a result of being brought into interaction.

One of the most important 'locations' of this study is to 're-construct' the main development encounters within the context of development actions that are investigated. These encounters will put different types of social actors into close interaction, and are called *social* (and/or organizational) *interfaces*. *Social interfaces*, characterizing a sort of face-to-face 'meeting' of two different types of social actors involved in a given development action, are defined by Long (1988: 127; 1989a: 2) as:

The critical points of intersection or linkage between different social systems or levels of social order, where structural discontinuities, based upon differences of normative values and social interest, are most likely to be found.

The analysis of organizational interfaces is one of the several key aspects of interface analysis that will be used in this study for the following properties, as defined by Long (1988: 127):

1. It focuses upon the linkages that develop between the interacting individuals or parties rather than on the individuals themselves. It is assumed that continued interaction encourages the development of *boundaries* and *shared expectations* that regulate the interaction of the participants in such a way that the interface itself becomes an organized entity.
2. It draws attention to the forces creating conflict or incompatibility between the parties concerned. Although interface interactions presuppose some degree of common interest, they are also likely to generate conflicts arising from contradictory interests or objectives. (It goes without saying that "the dynamic and potentially conflicting nature of social interfaces" (Long, 1989a: 1) is highly stressed).
3. It highlights differences in world-views or cultural interpretations between the interacting parties or individuals. Such differences are not merely idiosyncratic but reflect differences in patterns of socialization and professionalization. The result is often miscommunication or a clash of rationalities.

Another author, Brown (1983), studied the interfaces that take place within or between organizations and how they influence the overall performance of these organizations. He argues that the importance of the so-called *organizational interfaces* resides in both the importance of the conflicts they may induce and the increasing importance of managing these eventual conflicts at these *social junctions*. Given that development interfaces are far from being *restful* encounters, "if you don't manage interface conflicts, interface conflicts will manage you" (Brown, *ibid.*: 15). In this way, *conflict* might be defined both as "a process which begins when one party perceives

that the other has frustrated, or is about to frustrate, some concern of his" (Thomas, 1976, cited by Huczynski and Buchanan, 1991: 556), as well as "an incompatible behaviour between parties whose interests differ" (Brown, 1983: 4). According to him, an *incompatible behaviour* refers to particular actions conducted by one party in order to oppose or frustrate the other party, and *interests* are represented by recognized and unrecognized stakes that might be affected by the interaction of the two parties. Moreover, he states that the four following basic trends, observed along the evolution of organizations, describe with great emphasis the obviousness of conflict occurrence:

- The more numerous and diverse the levels and specialized divisions within an organization, the more opportunities for conflict at their interfaces.
- The more interdependence between parties, the higher the cost of poorly managed conflict at their interfaces.
- Social and technological change processes produce conflict at old and new organizational interfaces.
- Interfaces are inherently susceptible to conflict because of their position between social units.

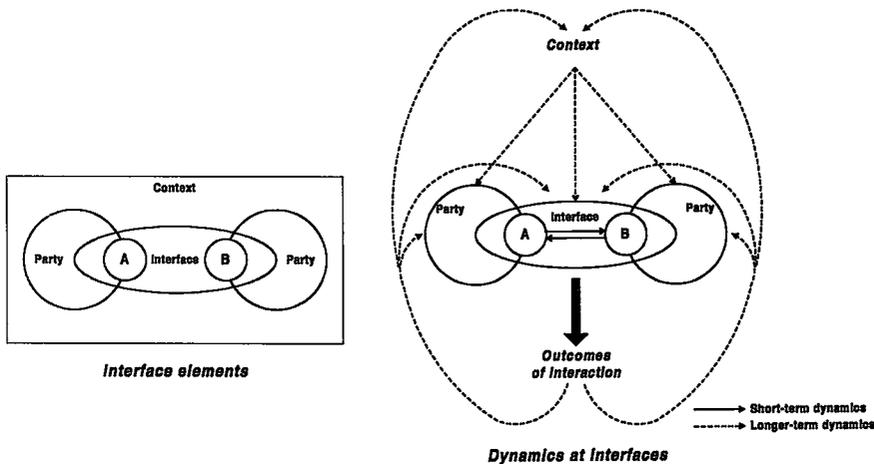
In general, the interface is defined by *shared tasks*, i.e. both actors need each other to accomplish their activities, and by an *acceptance of a common authority*, i.e. both actors obey to common standards, norms and values (Brown, 1983: 22).

But, in order to be 'fruitful' and 'productive', the interface analysis must not be confined to an investigation restricted to the face-to-face encounter of the two social actors who are present. Long (1989a: 2) and Arce and Long (1992: 214) recommend that it should take place within broader institutional and power contexts, given that an actors' interaction can be affected by the actors themselves as well as the broader institutional and cultural frameworks and resources which might not be physically or directly present at the interface. This is very close to Brown's (1983: 20) interface context.

For the same purpose, Brown (1983: 20) proposes an analytical framework based on four elements that constitute the interface: (1) The interface itself; (2) The parties to that interface; (3) The party representatives; and (4) The larger context [see Figure 2.4.4(1)]. Consequently, he assumes that the representatives are individuals, the parties are social units or organizations, the larger context may include organizations, societies (or even subjective matters such as laws, policies, etc.), and the interfaces are intermediaries between the parties and the larger context. This supports the case that the causes and effects of conflict itself occur at multiple levels. Furthermore, he (Brown, 1983: 20, his emphasis) argues that:

Events at the interface are the result of the interplay of the four elements over time. Some interplays are relatively visible and quick; others move slowly and invisibly [see Figure 2.4.4(1)]. *Interface events involve two dynamics: (1) The long-term interplay of parties, interface context, and interaction outcomes that alter interface definition and organization; and (2) The short-term interaction of representatives perceptions', communications, and actions within the interface.*

Figure 2.4.4(1) - Interface elements and dynamics
 (Source: Brown, 1983: 20)



In the preceding sections, I have introduced the concepts of planned development and sustainability; demonstrated the crucial role of knowledge in development; shown how social actors intervene within social settings and abstract knowledge and wisdom from their own experiences. It is now time to undertake a brief but detailed journey into the planning system in charge to devise not only plans but also processes in order to achieve development.

2.5 On planning theory and planned inconsistency

2.5.1 Introduction to planning history

Planning - or the capability to plan - is an essential characteristic of human beings which is as old as human history (van de Putte, 1991: 22). In development, planning has become a very important part of the process itself. Planning became useful when human beings began to intervene in specific processes to influence their own (self-) development (van Dusseldorp, 1992: 4). It is argued that the origin of planning coincided with "the moment when ambiguity entered society's code of behaviour" (Camhis, 1979: 3). After an intensive application in Europe immediately after World War II, planning, as related to development, became a widely accepted function of Third World governments in their development endeavours (van de Putte, 1991: 22; Conyers and Hills, 1984: 42).

In an attempt to define planning, Conyers and Hills (1984: 3), describe it as:

A continuous process which involves making decisions (or choices) about alternatives ways of using available resources with the aim of achieving particular goals at some time in the future.

After their independence, most Third World countries embraced planning because it was seen as being the most fitting approach for resources allocation for the purpose of accelerating the pace of development (van de Putte, *ibid.*). Due to the tremendous developmental problems inherited by newly-independent states in Third World countries, planning became very important and began to dominate development administration (van de Putte, *ibid.*).

In most Third World countries, planning is centralized and remains the 'hinterland' of highly trained professionals with a unique knowledge that gives them the exclusive right to plan for others. As a rule, planners do not participate in the execution of their plans (van de Putte, 1991: 23).

Considering the importance and high expectations placed on it, and given the heavy routinization that took place within the planning process which excluded the beneficiaries of a given development action from participating in the first stage of the process, planning instead seemed to be a "giant with feet of clay". According to van de Putte (*ibid.*):

The result of the focus on planning for the administration of development processes was, and still is, a profusion of plans that bear little attention to the reality of development.

As a consequence of this, especially in the context of people-centered development, van de Putte argues that:

Objectives and targets are set at too ambitious levels and prove to be difficult to achieve during implementation.

2.5.2 Theories *in, of, and for* planning

In planning and planned development, as we have seen, the centrality of knowledge as a crucial input in planning development needs not to be demonstrated. It is cited as the second prerequisite for sustainable development [see Section 2.2.3], just as it is important for all theories used in the planning process. These different theories are in fact, the warrant of the availability of knowledge about the processes a given development action is targeting.

In planning, theories can explain and predict phenomena and provide insight into how actions should be undertaken. They can also indicate certain causalities - although frequently assumed - and predict if these causalities are likely to take place in the future. It is on the basis of these causalities - be they real or assumed - that endeavours and actions will be developed (van Dusseldorp, 1992: 13).

McConnell (1981: 14), distinguishes three interrelated types of theories that are important for planning:

1. *Substantive theories in planning* which derive knowledge from the disciplines to be used in the planning of a given activity. For instance, the minimum factor law that

explains the base in plant nutrition is a substantive theory for a crop production project.

2. *Procedural theories of planning* which regulate the planning process and determine which style of planning should be used. For instance, a blue-print style of planning is a good example of a procedural theory that fits hardware projects.
3. *Social theories for planning* which explain the relations between society development and planning orientation. For instance, in Marxist theories of development, the state is the only entity that plans for the whole society. It highlights the orientation of planned development in the light of state-society relations.

Many authors (Faludi, 1973; Camhis, 1979) insist on the distinction to be made between theories *in* planning and theories *of* planning. For Faludi (1973: 3), the latter concerns the form of the planning process while the former represents the content of the planned activity. As Camhis (1979: 5) puts it,

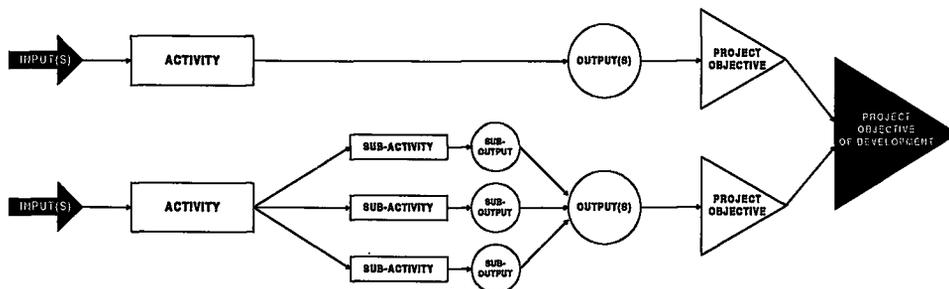
We are thus led to believe that the right form of the planning process will inevitably determine the right content or what the real problem is.

Another distinction needs to be observed in the substantive theories in planning. In this order, Chen (1990: 40) distinguishes two types of theories:

1. *Descriptive theories* are somehow analytical tools that depict a present situation (what it is now). In project document, this type of theory can be found in the analysis of the present situation (or in the project justification). For instance, in the case of the present study, this applies to the understanding of the present situation of planned development process.
2. *Prescriptive theories* are 'idealistic' or 'normative' methodologies prescribing how and with what the present situation can be changed (what and how it should be). In project documents, this type of theory is mentioned (very often implicitly and rarely explicitly) in the planned activities part (or in the project strategy). In the case of this study, for instance, this will represent the recommendations I shall outline for improving the planned development process.

It is these two types of theories, argues van Dusseldorp (1992: 14), that constitute the policy, programme or project theory. The latter indicates the processes as they are functioning now and the propositions of a 'futurist' functioning, having in mind that it is sustained by a 'black box' thinking of an input-activity-output model [see Figure 2.5.2(1)].

Figure 2.5.2(1) - The logic of project planning
(Source: unknown)



2.5.3 Styles of planning

Planning can be performed through different styles. Van Dusseldorp (1992: 17) introduces many authors and their specific styles of planning, noting that styles of planning are based on different social theories *for* planning. Consequently, some authors (van Houten, 1974 cited by van Dusseldorp, *ibid.*) indicates a *centralized planning style* versus a *decentralized planning style*. Based on the way objectives are formulated, differentiation of indicative planning from imperative planning and task-oriented prognoses is made (van Dusseldorp, *ibid.*; his emphasis).

Moreover, Friedmann (1973: 51, also cited by van Dusseldorp, *ibid.*) distinguishes between *allocative planning*, i.e. concerned with the distribution of scarce resources among competing users and maintaining the present societal status quo, and *innovative planning*, i.e. destined to induce structural change in a given configuration of societal relations, and reform the present societal status quo.

Further, van Dusseldorp (*ibid.*) distinguishes between the direction of the vertical flow of aggregation/disaggregation a *top-down style* of planning and a *bottom-up style*. The former starts at the national level, first disaggregated into sectoral plans and then into projects at the local level. The latter - also called participatory planning - starts with project identification at the local level, aggregated into regional and/or sectoral plans at the regional level, and then provides material for building national strategies and formulating national plans.

Finally, another classification is utilized by van Dusseldorp (1992: 21), based on the way a plan is drawn, and the flexibility it may offer during its implementation. The *blue-print style* is a logical and rational style of planning, which is known for its rigidity in design and implementation. Evidently, many cases showed that the use of this instrument is far from being successful in people-centered development projects. The other model of *process/programmatic style* emphasizes flexibility based on a learning process and where participation, bottom-up flow and integration are key features. Moreover, regular mechanisms of *internal-interim evaluation* should be built into the implementation process and freedom must be given to the project

management to make changes in the project design, when approved by the internal-interim evaluation panel.

2.5.4 Major approaches and schools of thought in planning theory

In this work, Camhis (1979) performs a very interesting comparison between these four approaches and demonstrates how they have been influenced by the different philosophical currents, showing that planning theory was highly inspired in its evolution and made a rational use of philosophical and scientific concepts. Basing his classification on the procedural theories of planning, Camhis (1979) differentiates between four major approaches to planning theory:

- Rational comprehensive planning;
- Disjointed incrementalism planning;
- Mixed scanning planning; and,
- Transactive planning, developed by Friedmann (1973; 1984). This will be elaborated upon in Section 2.7.2.

A classification of the different schools of thought in planning theory is proposed by Friedmann (1996: 10), suggesting that planning theory developed within a continuum whose extremes are clustered with:

- Authors of a conservative pole of 'ideology' that look to the confirmation and reproduction of existing relationships of power in society, on the one hand; and,
- Authors of a radical pole of 'utopia', that look to the transformation and transcendence of existing relationships of power within civil society, on the other hand.

In the centre of this continuum, institutionalism, sociology, pragmatism and historical materialism are the other intellectual influences that contributed to the shaping of planning theory. According to Friedmann (*ibid*: 20), four major schools of thought (or traditions) for planning theory have developed out of this web of intellectual influences: *Social Reform* and *Social Mobilization* (as the two older schools that reach back to the first half of the XIXth century), and *Policy Analysis* and *Social Learning* (as two recent currents which have their origins from the period between the Great Depression and World War II).

1. *Social Reform* focuses on the state and its role in societal guidance, and whose authors affirm liberal democracy, human rights, and social justice, with a great tolerance of positive social change. For them, planning is the application of scientific knowledge to public affairs and consider it as a professional responsibility and an executive function. Planning is thus turned into a territory fenced-off from intruders, be they politicians or ordinary citizens.
2. *Policy analysis* has no distinctive philosophical position, whose practitioners have always recourse to a conventional thinking based on a 7-steps ideal-typical decision model. Many analysts are versed in neo-classical economics, statistics,

and mathematics, and consider themselves as 'technocrats' serving the existing centers of power. Major values in this current are individualism, supremacy of market in resources allocation, and inherent conservatism of the equilibrium paradigm.

3. *Social Learning* focuses on overcoming the contradictions between theory and practice (or knowing and acting). It can be regarded as a major departure from the planning paradigms of Saint-Simon and Comte (the fathers of sociology), and is derived from two streams: The *pragmatism* of John Dewey, and the *historical materialism* of Karl Marx. Theorists claim that knowledge is derived from experience and validated in practice, and is thus an integral part of action. For them, knowledge emerges from an ongoing dialectical process whose main emphasis is on practical undertakings. They assert that social behaviour can change through social experimentation, careful observations of the results, and willingness to admit to error and to learn from it.
4. *Social Mobilization* departs from all other traditions and asserts the primacy of direct collective action 'from below'. Planning is seen as a form of politics, to be conducted without the mediation of 'science'. However, scientific analysis, mainly in the form of social learning, plays an important role in the transformative processes sought by social mobilization.

2.5.5 Planners and social simplifications: The planners' cherished politics of labelling

In the development world, the different actors involved interact and negotiate the outcomes of planned developmental actions. To understand how this negotiation process takes place, it is suggested that development action formulation and implementation be analyzed through what Arce *et al.* (1994: 152) call the "social life of rural development". Consequently, part of this process in a development study or analysis deals with actors' practices to understand their strategies and how they 'internalize' planned development interventions. However, although being a necessary condition for the understanding process itself, it remains insufficient. It is thus recommended that the specific configurations of administrative practices and how discourses of development are elaborated within the planning and policy-making system be investigated.

Given that different actors are involved in development actions, each of them develops, when interacting and negotiating with other actors, a different style of discursive action. These utterances cognitively illustrate their perception towards a given issue, let's say 'participation', for instance, and show how they reflect actors' *position* within the context of a given development action. Aphorpe (1986: 377) argues that:

Discursive actions can be taken as an example of the capture and exercise of power by some sorts of people, arguments and organizations against others through specific happenings, in particular arenas, over various periods of time.

Some kinds of discourse, such as development discourse, are said to be professional and scientific and on that account are perceived to be unproblematic and thus unquestionable, both socially and politically (Apthorpe, 1986: 378). Notwithstanding, one must recognize that it contains elements of both social and political aspects as well as it can be developed and disseminated by bodies having either political constituencies or social and economic ideologies. If the concept of the "social construction of rural development" is acknowledged, we should hence recognize that the context of a development action encompasses more than one rationality and, consequently, more than one rationale of development. One of these rationales, which impinges upon planned development thinking and policy-making is the planners' and policy-makers' cherished *labelling*. According to Wood (1985a: 343, my italics), labelling is:

A way of referring to the process by which policy agendas are established and more particularly the way in which people, conceived as *objects* of policy, are defined in convenient images.

In other words, labelling refers to a process of planned development actions in general, where development beneficiaries are labelled as the planning-object, in a very standardized manner. Hence because of labelling, it happens that instead of "policy capturing a developmental initiative or intervention, policy is made captive of a discursive intervention" (Apthorpe, 1986: 380). Thus, 'target groups', 'resources-poor farmers', and so on, become captured elements of labelling themselves, which is "part of an authoritative donative discourse in development policy" (Wood, 1985a: 344). And, because labelling "shelters behind an ideology of rationality and avoids being perceived as prejudice, it appears as natural and objectively true" (Wood, 1985a: 345). As Schaffer, cited by Wood (*ibid.*) suggests:

Labels are, after all a shadow across reality which can be useful disguises.

In this respect, labelling becomes a "generic process in human society" as well as a "relationship expressing power at various levels of interpersonal and institutional interaction" (Wood, *ibid.*).

Furthermore, a self-proclaimed, authoritarian state, like the post-independence Algeria, lacking popular foundations of legitimacy, needed instead a language of rationality that could be seen as a source of legitimacy and power through allocative planning. Hence, the needed rationality was made possible by the co-optation of science for policy, and then "taxonomies" were borrowed from "subservient" social scientists "to present the political as non-political" (Wood, *ibid.*).

This is how, through co-opted planners and policy-makers, authoritative labelling became an inherent part of the state development discourse, facilitated by the "social simplifications", as "basic givens of modern statecraft" or "abridged maps" (Scott, 1998: 3) elaborated upon by these planners and policy-makers.

2.5.6 The role of the state and its bureaucracy in development planning

I have mentioned earlier in Section 2.5.4 that planning is seen as a form of politics, and now add that "politics was first the art of preventing people to mind their own business and concerns" (Amnay, 1998: 3, quoting Paul Valéry). This statement introduces the inter-relationships between planning, policy-making and implementation, on the one side, and between politicians, planners and administrators, on the other. As Conyers and Hills (1984: 17) argue,

Planning cannot be considered in isolation from the social, administrative and, in particular, political environment I which it has to operate. It is especially important to take into consideration the political system in the country concerned (for example, the way in which political leaders come to power, whether it is a one-party or multi-party system and the degree of centralization or decentralization), the political ideology of the government in power and the social structure of the society.

It is then propitious to understand how and why the planning system achieved its actual outcomes in Third World countries, although it meant to achieve the opposite ones. This was already mentioned in Chapter 1 when I outlined the different facets of the problem. In line with Scott (1998: 2), I suggest that planning was part of a global, perpetual undertaking of

A state's attempt to make a society, to arrange the population in ways that simplified the classic state functions of taxation, conscription, and prevention of rebellion.

For this purpose, the state had recourse, according to Scott (*ibid.*: 4), to "a pernicious combination of four elements", all "necessary for a full-fledged disaster". These are:

1. The "administrative ordering of nature and society" yielding the "transformative state simplifications" mentioned earlier.
2. The "high-modernist ideology" of scientific and technical progress embedded in the self-confidence of planners, which is the mastery of nature and the rational design of social order based on the understanding of natural laws.
3. An authoritarian state that is willing and able to use the full weight of its coercive power to bring these high-modernist designs into being".
4. A "prostrate civil society" that lacks the capacity to resist these plans and designs.

Nobody can deny that these high-modernist schemes, plans, and designs went unquestioned and undisputed, given the rationality and scientificity of their foundations. However, they required, as argues Scott (*ibid.*, 349):

A less skilled, less innovative, less resourceful population. This population, once created, would ironically have been exactly the kind of human material that would in fact have needed close supervision from above [from the state].

Though they succeeded in effectively hiding their potentially destructive consequences, such as the undermining of individuals' capacities for autonomous self-governance, these schemes, plans, and designs brought to light the capacity of ordinary human actors to modify them or to bring them down (Scott, *ibid.*: 352) either through overt opposition or silent, pacifist resistance. In this respect, some planners can be mentioned for their silent, pacifist resistance inasmuch as they felt frequently frustrated, argue Conyers and Hills (1984: 18), by "political interference" and by their inability to achieve meaningful results due to the nature and distribution of socio-economic and political power.

2.5.7 Major theoretical criticisms towards rational planning

Many criticisms have been directed towards 'rational' approaches of planning for being too inspired by scientific thinking based mainly on 'rationalism' and 'logic', and their striking oversight of human aspects in social life. I shall present some of these criticisms in the following section.

Planning theory was strongly inspired by *utilitarianism* and *methodological individualism* as its main philosophical foundations. These perspectives look at human beings as mere individual objects that can be manipulated as any other object. As Bailey (1975: 2) puts it:

The propriety of the treatment of people as objects is a theme which runs through planning itself.

Given that knowledge is valued according to its use, science and its exaltation as knowledge *par excellence* became, through its visibly practical contribution to specialized problems and its promotion through planning, the "only standard for reason" (Bailey, 1975: 3), excluding social (indigenous) knowledge for a lack of scientificity. On the other side, Bailey argues that if social problems are problems of particular groups of people in particular situations, the available social (indigenous) knowledge that can be used to help solve these problems is similarly partial and situationally relative. Considering the incompleteness of both types of knowledge, one can say that "practicality and use of social knowledge is not an absolute quality" (Bailey, *ibid.*), considering that knowledge is socially constructed and situationally relative.

Then to be practical as required by development planning agencies - and given that to be "practical in our society is a term of praise", as Bailey says (*ibid.*: 2) - planned development - and consequently planning - can *only* be location-specific. It is this characteristic that was somehow lacking in the conventional, rational approaches of planning.

Further, the same author writes that planning is a process of manipulating the physical environment (and people are just parts of this physical environment in the mind of planners, given the influence of *utilitarianism*), and that "physical conditions

have social co-ordinates and meanings which are important" (Bailey, *ibid.*: 5). However, planning approaches and methods, which were always dominated by architects and engineers, consider that the relevant pieces of the physical world and the nature of social relationships which use, and are constrained by, that world as "out-of-bounds" and "treated just as physical phenomena" (Bailey, *ibid.*: 6). Until then, planning was organized around the physical and the spatial, and had no place for abstract social knowledge, given that science can only be 'materialistic'. Hence, any claim to integrate something that can be called 'social' "suggests a fear of opening Pandora's box" (Bailey, *ibid.*: 7). Even when planners decided to integrate some sociological knowledge, they thought of a mere crude behaviourist approach (because of its materialistic orientation) which "views people as variants of the rats and pigeons studied by many behaviourist psychologists", seemingly forgetting that what "differentiates man from other mammals is his consciousness" (Bailey, *ibid.*: 8).

Conceiving the social basis of life under the three interrelated concepts of 'structure', 'behaviour' and 'consciousness', Bailey (*ibid.*: 8) urges that

Behaviour is only as significant as consciousness and intention dictate, and social structure exists only as far consciousness creates and recognizes it.

He concludes (Bailey, *ibid.*: 9) therefore that

Consciousness is a crucial part of the sociological model of the world and is the cornerstone of any discussion of meaning and subjective satisfactions and discontents.

Thus, the centrality of people and their knowledge become salient issues and must gain their place in planning schemes as far as "social beliefs and action are essentially relative", as Bailey argues. However, the problem within planning was always how to make room for this so-called centrality of people and their knowledge. In my opinion, participation and social learning, the subjects of the following sections, are seen as conceptual tools to improve the planning process in its attempt to achieve a *re-humanized* development.

2.6 Participation in development: A necessity or a political luxury?

2.6.1 Why participation?

In a very structured but nevertheless iterative process, van Dusseldorp (1992) describes the details of the main steps a project cycle have to follow. But more interestingly, he develops a concept of **no man's land** when the project arrives at the hand-over stage where the project may fail to sustain the outputs of the implementation phase. If no sufficient preparation is made, it is likely that the hand-over and integration stage might be seen as a propitious opportunity for others than the intended beneficiaries to reap the benefits of a given project (van Dusseldorp,

1992: 217; his emphasis). Moreover, other dangers could be identified in such a situation, like the fact that the existence of the project is rapidly 'erased' at its termination stage and no sustainable outcome of this project remains.

Among other reasons, I suggest that a lack of beneficiaries' **participation** during the preparation and implementation phases of a development action can - sometimes partially but surely - explain the aforementioned situation. Sometimes, the project has been identified by another body that has very little knowledge about the wishes of the beneficiaries; in other cases, the government does not possess the required resources to handle the 'after-project' period, but this could have been circumvented with an *a-priori* participation; or in few cases, officials try to intentionally avoid a real participation of beneficiaries in identifying and implementing development actions given the assumed risk of empowerment of the latter.

Beneficiaries' participation in making decisions that can affect their lives is essential, at least in providing equitable opportunities for people to defend their interests and mind their concerns. In development actions, participation has even greater importance given that at the hand-over stage, as described earlier, it is already too late to correct the situation. People should have been prepared to 'take care' of the 'baby' after its delivery.

However, participation must not be seen as a temporary or casual involvement of people. Bhaduri and Anisur-Rahman (1982: 1) suggest that:

Participation is a social experience shared by individuals and groups who live in definite economic and social relations to each other in a society.

In this sense, participation must be seen as a permanent, continuous and dynamic process rather than a sporadic, on-the-spot event that takes place within some contexts and not others to keep it in agreement with the preferences of the powerful actors.

In general, participation has primarily been used as a political slogan rather than an expression of a real concern for the beneficiaries. In many cases, 'farmer participation', 'empowerment', or 'incorporating farmers' view' have continued to be seen as parts of new-fashion movement, supported by a proliferation of references, books and articles which lacked concrete evidence of how to apply these ideas other than in a manipulative way, or even to be replicated in similar settings when successful concrete evidence existed.

In the development context, participation gives people, especially the 'hitherto excluded', the opportunity to manage their own affairs, influence public decisions, and participate in activities that affect their lives (Esman and Uphoff, 1984: 15). In a similar vein, participation requires more social learning, risk taking, commitment, co-ordination skills, and patience from the beneficiaries. In fact, it requires a political and institutional will not only to apply it in some cases, but to settle on it as a permanent pattern of consultation.

Having said this, I acknowledge that the participation debate in this study will not be oriented towards the necessity or importance of participation in and for development. This issue has been frequently stressed by a large number of authors. In my opinion, discussion on the issue of participation should go beyond this. For the sake of this study, participation must be assimilated as a personal responsibility and a collective and individual right in one's (self-)development because development combines in a single stroke the *act of knowing* and the *will to change* some currently undesirable conditions. Given that both of these aspects are acknowledged to be intrinsic characteristics of individuals, development actions should thus only be exclusively **participatory**. This is not a simple appeal for humanitarian charity from the powerful actors in a given social setting. Rather, it is more of an appeal to the national authorities to gather and secure the required conditions for a regular 'democratic' participation of people in all decisions that affect, directly or indirectly, the quality of their lives. Otherwise, the menace of exclusion and its potential dangers will fill the void. As a case in point, the years of a minor *privilegentsia's* exclusion of the majority during Algeria's 'black decade' are being paid back through the bloody years of violence the country has experienced since 1992.

However, it is strongly recommended that enough knowledge is gathered on how the different ways participation can be adequately implemented and, of course, what the inherent costs and benefits of each approach might be. Unless this is done, participation can yield highly dramatic situations, not to mention potentially catastrophic dilemmas.

In this respect, van Dusseldorp (1981: 28) recommends that the following pre-requisites need to be fulfilled to settle on the best way for beneficiaries to participate:

1. Beneficiaries must be *aware* that any given current situation is not in concurrence with their objectives; that it is not an unchangeable destiny (or fatality); that it is possible to change it, and; that they should mobilize themselves and their available resources to change it.
2. Beneficiaries must be indubitably *convinced* that the benefits of their participation in the planned development process are greater than the costs.
3. Beneficiaries should be given a *chance* to become involved in the stages of the planned development process. This means that the social and political context should be prepared for the beneficiaries' participation to adequately take place.

Moreover, in order to differentiate between the types of participation, van Dusseldorp (1981: 36-55; my italics) presents a useful typology based on different criteria, such as *degree of voluntariness*, *depth* and *way of involvement*, *range of activities*, *level of effectiveness*, *eligibility for participation*, and *style of participation*. Later, I shall describe the most relevant participation form(s) that, according to Van Dusseldorp's typology, fit my suggested alternative development view. Before I do this, I want to emphasize that my vision of participation slightly differs from van Dusseldorp's in some areas.

In van Dusseldorp's very careful conceptualization of participation I detect an implicit vision where participation looks more like a *contribution* or a *collaboration* in the sense defined by Dudley (1993: 160). It is somehow seen as a 'political luxury' that planners cannot afford unless its introduction is well prepared (without precisely mentioning who must prepare this introduction); otherwise, it may hamper the planning process. This conceptualization of participation falls under what planners like to refer to as 'good participation'. Or, in other words, one which serves the maintenance of an actual status quo in favour of the planners (Wood 1985b: 368). However, Dudley (*ibid.*) argues that:

True participation is about power, and the exercise of power is politics.

To make sure that he made himself well understood, Dudley continues, saying that this type or form of participation inevitably becomes simply a concrete manifestation of a broader political process, which is used, in my opinion, as a protective action to prevent a real democratic process directed toward implementing genuine participation. If we are to encourage this kind of participation, we must know that "it cannot be divorced from its political context and consequences" (Dudley, *ibid.*). Again, the example of Algeria of the 1970s comes to my mind, where participation was applied exactly according to this view.

I will now contrast van Dusseldorp's conceptualization of participation with the 'other' vision, which emphasizes that participation is more than a necessity for development. Participation, in my opinion, is a *human right* someone's to decide - or at least participate in decisions - about one's destiny within the limits of societal order and organization. It should not be regarded, as Cernea (1987: 4) puts it, as an appeal to the humanitarian feelings of planners and politicians. In support of this view, the FAO Peasants' Charter (quoted by Burkey, 1993: 56; *my italics*) suggests that:

Participation by the people in the institutions and systems which govern their lives is a basic *human right* and also essential for realignment of political power in favour of disadvantaged groups and for social and economic development.

No one can deny that these previous statements put an end, in very clear terms, to the debate around the necessity of participation in and for development. It sets in fact the Terms of Reference of applying the concept in the development field, in relation to the political and institutional aspects of implementation. This vision, which, I assume, puts planned development - and, consequently, planning - into a "political perspective" (Low, 1991: 3), is totally shared by Goulet (1989). In his paper, he begins with a very clear introduction describing the social situation that makes people's participation, in general, indispensable, saying that (*ibid.*: 165),

The political re-democratization now under way in numerous countries... radically challenges the development strategies pursued during periods of dictatorial rule. The cry for greater political freedom is paralleled by demands for more equitable development policies. This linkage needs no explanation, since dictatorships employ high degrees of coercion to impose development policies conceived at the summit, and distribute the fruits of those policies to only a small circle of privileged clients and allies. On both counts, the majority of nation's populace is excluded. Not surprisingly, therefore, that majority, actively or passively, seeks to change both its political rulers and their development strategies.

The political 'transmogrification' (or metamorphosis) process in Algeria that began in the early 1990s provides a good example of the veracity of this statement, although change is taking shape under the shadow of violence.

For Goulet, participation is a "de-professionalization in all domains. . . . in order to make 'ordinary people' responsible for their own well-being" (Goulet, *ibid.*: 165). Citing Freire, the famous Brazilian pedagogue, he writes that (*ibid.*; my italics):

The supreme touchstone of development is whether people who were previously treated as mere objects, known and acted upon, can now actively know and act upon, thereby becoming subjects of their own social destiny. When people are oppressed or reduced to the culture of silence, they do not participate in their own *humanization*. Conversely, when they participate, thereby becoming *active subjects* of knowledge and action, they begin to construct their properly human history and engage in processes of *authentic development*.

I cannot resist to underline that Goulet defines participation as the process of *authentic development* once *humanization* of the so-called 'planning-object' turns them into *active subjects*.

This vision of participation looks, in fact, towards breaching the hegemonic tendencies of labelling in the policy field and, consequently, in the planning process, by bringing some new anti-labels or at least counter-labels to life. As Wood (1985b: 369) puts it:

This would be firmer evidence of the re-location of power and initiative, of de-professionalization, of a breakdown of monopolies of knowledge, pseudo-skills and information, of a genuine participation (on the ground floor) through the negotiation of agendas and rules.

As a consequence of this breaching, Wood argues that development, while viewed as a political process, needs to be de-bureaucratized, saying that:

The relationships involved in such negotiations would be de-bureaucratized and political, not de-politicized and bureaucratic.

I would define participation, quoting Stiefel and Wolfe (1994: 2; my emphasis), as

The **organized efforts to increase control over resources and regulative institutions** in given social situations, on the part of groups and movements hitherto excluded from such control.

This definition highlights some issues required for genuine participation that I believe worth considering, and which are:

1. The organized nature of the participating entities as bodies having structure and procedures (**HOW** to participate?);
2. The set objective of participation is an increasing control by the structured and organized participating entities (**WHY** to participate?);
3. The target of participation, in terms of control, is over resources and regulative institutions (**WHAT** is the target of participation);
4. The participating entities are primarily comprised of the 'hitherto excluded' groups or movements (**WHO** participate?).

Of course, the concept of **WHEN** to participate? is still missing from the framework. This concept relates to which stage of the planned development process participation can best take place. According to Goulet (1989: 167),

A 'people-centered' development, which assigns priority to the satisfaction of basic human needs of the poor masses, to job creation, self-reliance, and the active preservation of cultural diversity, obviously requires a form of participation in which non-elites play an active role in the diagnosis of their own problems.

Yet, the very moment at which participation begins is an important indicator that gives a clear idea about the motives of resorting to participation as a mechanism to involve people, as Goulet (*ibid.*) suggests:

To judge whether participation is authentic empowerment of the masses or merely a manipulation of them.

Accordingly, when the populace has a voice in defining or diagnosing its problems, development has a solid chance of centering the real needs of this populace (Goulet, 1989: 175).

Getting back to van Dusseldorp's (1981: 36-55) typology of participation, I make the point that the best form of beneficiaries' participation in planned development process is the one that is **free, spontaneous and not induced** (especially by the state), both **direct and indirect, complete, organized, intensive, and unlimited**, particularly involving the **disadvantaged** members of a community and preferably targeting **social action**.

I acknowledge that such a vision of participation is idealistic, although planning and, as a consequence, planned development bear an idealistic vocation (van Dusseldorp, 1997: pers. comm.). I am tempted here to state that idealism offers incentives to make people work towards their objectives (and dreams). If Nelson Mandela was not idealistic, he would have never become the president of South Africa.

However, I think that this vision in fact represents the most difficult form of participation, but one which is more fit for sustainable development, given the

'critical triangle of sustainability' I mentioned earlier in Section 2.2.2. This is not as idealistic as it seems given that, as Goulet (1989: 168) contends:

The most difficult form of participation to elicit and sustain is also the most indispensable to genuine development. This is the type of participation which starts at the bottom and reaches progressively upward into ever widening arenas of decision-making. It is that form of participation which is initiated, or at least ratified, by the interested non-elite populace at an early point in the sequence of decisions. It matures into a social force wielding a critical mass of participating communities now enabled to enter into spheres of decision or action beyond their immediate problem-solving.

Without denying that I myself am a bit of an idealist, I point out that this form of participation, as represented in Table 2.6.1.(1), represents the ultimate stage people can attain. So to not lose the pace with the concern of sustainable development, it is strongly recommended that the participation process itself should follow a stepwise learning process combined with the institution-building of local organizations, as demonstrated in the following section.

Table 2.6.1(1) - Making the concept participation operationalized

My suggestions	van Dussedorp (1981)	Stiefel and Wolfe (1994) completed by Goulet (1989)
HOW to participate?	Free, spontaneous, not induced, direct and indirect, organized	Organized efforts
WHY to participate?	Social action	Increased control
WHAT is the target of participation?		Resources and regulative institutions
WHO participate?	Disadvantaged people	Hitherto excluded groups
WHEN to participate?	Complete, unlimited	Since the diagnosis of problems

2.6.2 Local organizations as instruments for participation

In the previous section, I mentioned the characteristics that a genuine participation should be based on. The major ones among these are organization, intensiveness and both direct and indirect representation. In my own opinion, these three issues are strongly related to each other, on the one hand, and are both related to the social action targeted by participation, on the other hand. If the 'hitherto excluded' wish to achieve increased control over resources and regulative institutions is to be realized, they must be aware that this would require intensive work for their interests' representativeness, both **directly** - through regular meetings of all members of the excluded population - and **indirectly** - through democratically elected bodies of the

excluded population. This consequently means a prior organization of the forces of the excluded through setting their own organizations.

In this context of the issue of local organizations and its direct relation to participation, this seems like an opportune time to reinforce my opinion by mentioning the two following quotations cited by Esman and Uphoff (1984: 23), quoted from India's VIth Five Year Plan and the FAO Peasants' Charter:

Critical for the success of all redistributive laws, policies and programmes [proclaimed in this plan] is that the poor be organized and made conscious of the benefits intended to them. Organized tenants have to see that the tenancy laws are implemented. Organizations of the landless have to see that surplus lands are identified and distributed to them in accordance with the law within five years. . . . The general lesson of the experience so far is that because of leakages in delivery systems and ineffective administration, rural programmes fail to improve the distribution of income. The Planning Commission is proposing a massive shift of resources in favour of rural areas with an in-built redistributive character in almost every programme. But whether these [programmes]. . . . will have the desired equalizing effect will depend on the extent to which the organized pressure of the beneficiaries counteracts the weaknesses of the administration and the opposition of vested interests (Government of India, 1978: I.98).

Rural development strategies can realize their full potential only through the motivation, active involvement and organization at the grass-roots level of rural people, with special emphasis on the least advantaged, in conceptualising and designing policies and programmes and in creating administrative, social and economic institutions, including co-operatives and other voluntary forms of organization for implementing and evaluating them (FAO, 1979: 8).

These quotations bring to light the importance of local organizations as a means (to an end) of participation in rural development. It is not said that local organizations are sufficient in themselves to eliminate the burdens of poverty or the deprivations of status and opportunity, but these affirmations vividly illustrate existing possibilities (and, I would add, the necessity) for development from below or from within, which can be facilitated by government, donor, or private agencies (Esman and Uphoff, *ibid.*: 10). According to Esman and Uphoff (*ibid.*: 18), local organizations are not all what rural development needs, of course, but still, as Cernea argues (1984: 192):

High yielding social organizations are not less important for development than high yielding varieties.

In fact, rural development requires four basic components. These are: (1) Public investments and expenditures; (2) Government policies; (3) Appropriate technologies; and, (4) Effective institutions (be they government agencies, private enterprises, private voluntary agencies, or local organizations).

In this order, it might be worth saying that, where the required resources to achieve a given benefit are likely to need the combined efforts or skills of a number of people, some form of organization might be essential (Curtis, 1991: 10). This vision of an organization corroborates the required economic and institutional

improvements that Esman and Uphoff (1984: 16) think are still possible in developing countries, even without revolutionary change claimed by many radical authors who think that lesser measures than radical structural changes are only palliative and doomed to failure. These improvements are able to contribute to higher productivity and a better quality of life for rural people, with a capacity to enhance their ability to influence their future. Esman and Uphoff are apparently advocating a step-by-step process of organization-building similar to the one I proposed above for genuine participation.

The local organizations I want to define in my study are organizations involved in development actions, which act on behalf of and are accountable to their membership, in order to distinguish them from state agencies and from pure social and/or cultural associations (Esman and Uphoff, 1984: 18). Some of them are supposed to be professional associations of farmers based on different farming specializations, such as cereals producers, seed growers, horticulturists, etc. They represent a *third* sector which can be distinguished from both public and private sectors, and can, according to Esman and Uphoff (*ibid.*) act as intermediaries between rural residents and government agencies and private commercial firms.

In a similar vein, Schmale (1993: 6) defines local organizations as:

Indigenous, non-governmental as well as non-profit organizations among whose principal functions is to promote development activities for the benefit of poor and disadvantaged people within the society.

In the matter of LOs' contribution towards development, Esman and Uphoff (1984: 24) argue that this can be evaluated through *efficiency*, *equity* and *empowerment*, although some LOs may perform none of these roles. We must recall here that organizations are viewed as social configurations for a common benefit and, if LOs produce few or no positive benefits, they are quite unlikely to last very long or to be more than nominal entities.

Rural people are scattered over huge areas, with very poor communication means, and suffer from a great lack of funds, personnel, and administrative capacity for the provision of the required services. Sometimes, although the services are provided, they proved to be irrelevant and even detrimental to the circumstances of these people. This indicates either a communication gap between governments and their rural constituencies, and/or an inability of the latter - possibly because of poor organization - to define the required needs and claim effective assistance. In such a context of deteriorating services and decaying infrastructure, a local organization can be, given a legitimate representativeness of its constituencies, a means to increase the *efficiency* of resources use and distribution by ensuring: (1) The provision of accurate and representative information; (2) An adequate frame of programmes adaptation; (3) An opportunity for group communication; (4) An additional possibility for resource mobilization; (5) A source of technical knowledge; (6) A responsibility over rational utilization and maintenance of facilities and services; and, (7) A good partner for co-operation.

Being accountable to their membership, LOs can be adequate means to promote *equity* over opportunities and benefits, and contribute consequently to a political stability within the area of intervention. While I agree that this issue is not widely agreed upon, it is not an impossible achievement, given that it is highly conditioned by the leadership and the current procedures of decision-making within the organization. I still believe that dedication and accountability of the leaders towards their constituencies and transparency in decision-making are essential for achieving this objective.

Empowerment is the most controversial issue among the three objectives of a local organization. It is, in fact, not looked upon favourably by local notables and rural elites, as far as it gives additional voice and capacity to rural populations in influencing public policies and, even more, in trying to change an actual status quo and a present power structuration in the rural society.

These three outcomes represent the steps of a local development continuum, given that the three are interrelated. In fact, without advances in *efficiency*, *equity* can never be promoted. Similarly, advances in *equity* support and sustain *empowerment* (Esman and Uphoff, 1984: 28; my italics). As an external consequence, the development of vigorous LOs will yield important implications for extending public administration outreach and for improving government agencies and personnel performance (Esman and Uphoff, *ibid.*: 22).

A viable local organization is identified by Esman and Uphoff as having *more than one level of organization*, that is, one lower level which performs functions at the small-group level, while the higher level undertakes more complex business and governance activities; it must be seen among a *system* of institutions performing various functions in rural development, showing *complementarities*, even though not important, and having effective *linkages* between and among them; and linked to the higher-level decision centers through *multiple channels* (authors' italics). For the latter issue, multiple channels can refer to an indirect representation vis-à-vis the Ministry of Agriculture, in the Parliament, or in other specific bodies.

However, genuine participation and the building up of viable local organizations are sustained and conditioned by the introduction of some structural changes within the public administration system in charge of planning and implementing development. Decentralization is among these required changes.

2.6.3 Decentralization: A needed reform of development administration

After their independence, Algeria, just as many Third World countries did, adopted a centralized economic planning system for many reasons that were understandable at that time. With both top-down, dirigist intervention and strong state control through a huge bureaucratic apparatus and parastatals, centralization was viewed by national authorities as the correct path to follow, despite the increasing negative effects it engendered.

Due to the way post-independence nations came into being after colonization, with constructed boundaries, centralization was seen as the only solution, and decentralization could, in their eyes, be seen as threatening the national unity (van Dusseldorp, 1997: 323). The market, as an immoral and anarchic mechanism of decentralization, was another cause advanced by the advocates of centralization for it "rewards the few at the expense of the many".

Meanwhile, some critics of this view saw some "powerful political reasons for maintaining central control and intervention", as centralization sustains political stability (Rondinelli *et al*, 1984: 1), and thus maintains the regime. Others argue that a centrally-planned economy "provides for pay-offs as a way to allocate scarce goods and services" which empowers "kleptocrats" and opens up opportunities for corruption as "a commonplace of authoritarian regimes" to develop (Rose-Ackermann, 1996: 373).

In fact, centralization of development planning has been adopted more in the self-interest - both political and economic - of the elites who controlled the post-independence state. Centralized administration and control may be justified by scarcity of resources and lack of national unity, but such a justification cannot mask the elite behaviour aimed at self-enrichment and perpetuation of their position of power. Partially because of centralizing policies, the political system in such countries as Algeria contains few strong judicial, administrative, or political mechanisms able to constrain the self-seeking actions of the powerful actors within it. Thus, as Nellis (1983: 138) would suggest, "control over allocation of societal resources has frequently meant unjustified personal use of these resources".

In another respect, centralization also served to mute competition for leadership posts, or at least channel it in a certain way that do not threaten the status of upper echelons - who are only 'accountable' to the all-directing, all-powerful head of state, which in return allows for "rich, unjustified, and often illegal rewards for those in ruling group" (Nellis, *ibid.*: 138).

Nonetheless, the increasing interest in decentralization, especially in terms of development planning and administration, arose from three main converging forces that, according to Rondinelli and Shabbir Cheema (1983: 10), are:

1. The disillusionment with the results of central planning and control of development planning during the 1950s and 1960s;
2. The implicit requirement for new ways of managing development actions based on the growth-with-equity strategies that emerged during in the 1970s;
3. The growing realization that societies became more complex, government responsibilities began to expand, and difficulties to plan and administer all development actions from the center were increasing.

As far as sustainable development is concerned, decentralization allows "a greater representation and participation of the local population" (van Dusseldorp, 1997: 323). However, decentralization may be seen as dangerous for central bureaucrats as it may mean the death of the central bureaucracy, and is thus opposed by them by any

means. In fact, bureaucrats of Third World countries just cannot imagine their existence without centralization, which is the 'oxygen' of their social status.

Decentralization would also mean that they have to look after citizens' needs, devoluting and deconcentrating development administration to local level. In this case, they could no longer control the resources and look after their own interests and their allies.

2.7 Social learning and its inherent approach of planning development

2.7.1 Social learning theory and its expansion into development

In the preceding sections, I have been showing the strong interconnection between participation, organization building, and social learning. It is now time to introduce the basics of **social learning theory**, which deals with the unique ability of humans and human groups to function as learning organisms (Korten, 1984: 169) in order to adapt to their ever-changing environment. According to Goldstein (1981: 231; my italics):

Whether change is aimed at achieving more autonomous forms of personal, interpersonal, or societal adaptation, the process itself must account for the committed and knowledgeable participation of those who will be affected by change. In its generic sense, change, whether it is pursued individually or collectively, is an educative and *learning* process.

Hence, it is argued that behaviour change itself is a learning experience which is similar to any other educational enterprise. According to Goldstein (*ibid.*: 232), this means that:

Learning occurs in any interpersonal and interactional experience that is directed toward planned change.

According to Dunn (1984: 171), the long evolution of humankind has been embedded in an environment where emerged a process of social evolution, distinct from biological evolution, which is supported by a social learning process distinct from a purely stochastic learning process. It is the latter that inspired engineers to develop a stochastic learning theory used in the field of automation to design learning robots. Furthermore, in reference to both group and individual level learning processes, Dunn states that individual learning and behaviour are shaped by the nature of the group activities in which the individual participates and through which he is moulded, and which in turn, are frequently moulded by him. At a community level, social learning results not in the transformation of individual behaviour but rather in the transformation of group behaviour which must be monitored in relation to group goals. In this context, learning became largely socialized among human beings as the presence of, and the sharing with, other

learning organisms was the dominant aspect of any individual organism's learning environment.

It is because of the complete misunderstanding of this social learning process that the instruments and goals for social change, such as policies and projects, have been poorly defined. In fact, social change has frequently been dominated by an attempt to implement change by processes which are incompatible with the reality of social evolution. Acting on a basis of a sort of social engineering, imposed by the physical sciences, in general, and the blue-print approach, in particular, policy-makers presupposed that change agents can act as external to the social learning process and have the knowledge and power to design a terminal state that will bring consistent goals and controls in a deterministic fashion (Dunn, 1984: 174). According to Ackoff (1984: 195; his italics):

Development is not a condition or a state defined by what people have. *It is a capacity defined by what they can do with whatever they have to improve their quality of life and that of others.* Therefore, development is assimilated to the possession of a desire for improvement and the ability to bring it about. It is more a matter of motivation and knowledge than it is of wealth.

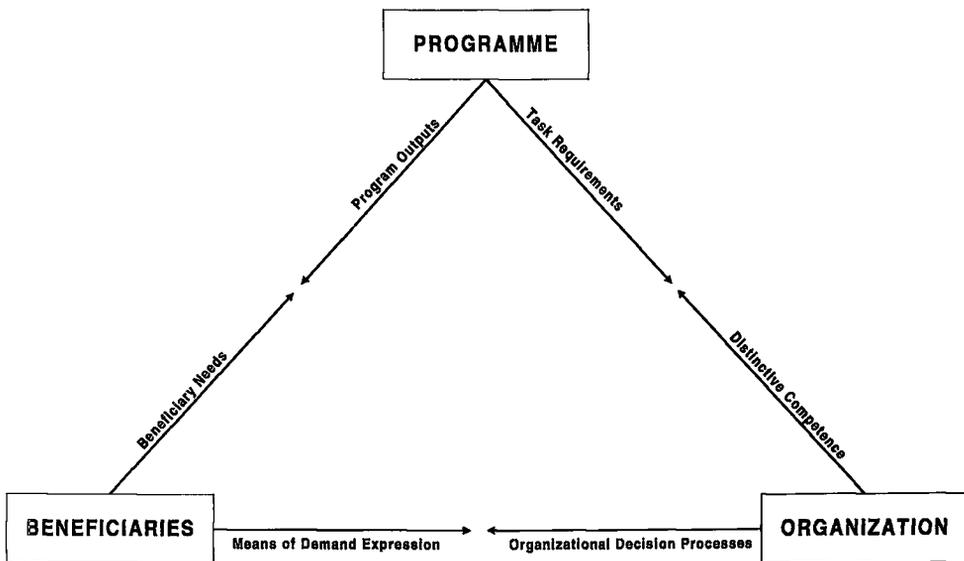
It is clear that development, as a capacity of people to improve their quality of life, depends first of all on their motivation and knowledge, rather than on the instruments and resources available to them, in the sense that development is a product of learning, not of production. This does not mean that these instruments and resources are unnecessary for development. Their efficient use, however, when they are available, requires adequate knowledge and a consequent motivation. In this context, Ackoff argues that development is a product of oneself learning to better meet his/her needs, and because it is essentially a learning process, one person cannot develop another because he/she cannot learn for another, given that he can only help another learn for himself. Therefore, *"a government cannot develop a country; it can only help its country develop itself"* (Ackoff, *ibid.*; author's italics).

In the same context, Korten (1984) introduces a learning approach to development. He presents few cases among a number of successful experiences that provide exceptions to the more typical outcomes. He states that examination of these cases suggests that the blue-print approach never played more than an incidental role in their development. Without being designed and implemented, each of them emerged through a long-term learning process in which villages and programme staff shared their knowledge and resources to create the necessary fit between needs, actions, and the capacities of the assisting organization. Each of them had a leader who spent time in the villages with an idea, tried it, accepted and corrected his errors, and built a larger organization around what he had learned. For him, one key point in these cases that deserves a special note is the fact that there was no aim to simply test a programme model in a pilot context and leave it to others to implement and expand. On the contrary, each of them was distinguished by a *substantial continuity of personnel*. The people who had the experience of 'designing' the original

programme were the same people who built the organization around that model adapted to its requirements (Korten, *ibid.*; author's italics).

The challenge presented by this perspective was to integrate action-taking, knowledge-creation, and institution-building into a coherent learning process, based on the natural organismic evolution of social systems. Accordingly, social learning becomes central in any development activity as far as some empirical evidence shows that, in many cases where learning process was applied, projects were successful because a programme model responsive to the beneficiary needs at a particular time and place was worked out, and each had built a strong organization capable of making the programme work. In fact, this was achieved with a high degree of *fit* between programme design, beneficiary needs, and the capacities of the assisting organization, as shown by Figure 2.7.1(1), following (Korten, 1984: 180; his italics).

Figure 2.7.1(1) - Schematic representation of fit requirements
(Source: Korten, 1984: 184)



2.7.2 Friedmann's humanist transactive planning approach

The transactive planning approach is the one that stems from the *social learning* planning school of thought, previously mentioned in Section 2.5.4. According to Friedmann (1973: 171), the main postulate for transactive planning resides in bridging the huge gap in communication between planners and their "clients"¹,

¹ Notice that he uses *clients* instead of another objectifying metaphor.

aiming to change knowledge into action through an "unbroken sequence of interpersonal relations".

Put in other words, transactive planning helps to overcome the difficulties planners and clients experience in communicating valid meaning to each other. This can in fact be an adequate way of removing the barriers to effective communication between those who have access primarily to "processed knowledge", mostly known in planning as rational, scientific knowledge, and those whose "knowledge rests chiefly on personal experience", mostly known as indigenous knowledge. Consequently, this improves the linkage of knowledge with action.

In this way, it is not only the centrality of knowledge, especially indigenous knowledge, that gains attention in transactive planning, but the relationship between planners and their clients as well. In fact, transactive planning advocacy believes that the real solution involves a restructuring of this basic relationship, given that each party has a different method of knowing. For instance, the planner works mainly with processed (rational, scientific) knowledge that is abstracted from the world and manipulated through postulates of theory and scientific method. Meanwhile, the client works basically from the personal (indigenous) knowledge he/she draws from his/her life-experience, which is considered to be much richer in content and in reference to aspects of daily life, although it is not as systematized as "processed knowledge" (Friedmann, 1973: 172).

It is worth noting here that the indigenous knowledge of the client is acknowledged and given a central place in this planning theory, to the contrary of the other theories *in* and *of* planning based on a hegemony of rational, scientific (or processed) knowledge. In itself, this statement bears an overwhelming originality in planning theory that needs to be stressed.

Of course, it goes without saying that putting these two types of knowledge into a perfect exchange situation remains much easier to say than to realize. The difficulties reside not only in their different foci of attention and degrees of practical relevance, but in their current language also. The language of planners is conceptual and mathematical, with a strong scientific objectivity which is sometimes unfamiliar to, and beyond the comprehension of, the clients. On the other side, the client's language lacks the formal restrictions that impinge upon planning documents. The latter employs a *dynamic*, experience-related *jargon* that aims to speed communication, but is, however, less precise if compared to that of the planners. Moreover, in updating their respective knowledge, planners may turn to other members of their profession or to universities while clients essentially rely on organizations of their own kind (Friedmann, *ibid.*: 172).

It is likely that this difficulty can be overcome through *dialogue* and *mutual learning*, given that the underlying planning style of this approach is based on "planning *with* people" instead of "planning *for* people". It has a *transactive* meaning - based on interpersonal sequence - and an underlying model of *social learning* (Friedmann, 1984: 190). In this context, social learning is not used as a vague metaphor suggesting a cybernetic process which organizations might use to adapt

themselves to rapidly changing, 'turbulent' environments, but as a process which connects scientific and technical knowledge to organized action. The outcome of such an alternative is, as Friedmann (1984: 192) argues, that:

The characters of actor, inquirer, and planner-theorist are intermixed, and the process of 'planning' comes to be embedded in the undifferentiated process of the action itself.

It must be noted that this alternative thinking in planning theory does not exclusively fit with allocative procedures of planning as these are solely concerned with the distribution of scarce resources. Thus, the use of this model can be of great significance, especially in the context of an innovative practice which characteristically takes the form of a political (counter-labelling) struggle to overcome the *status quo* (Friedmann, *ibid.*; author's italics).

In this respect, this planning model can be introduced in a new vision of development thinking on the design path in order to reinforce the interpersonal relationships between planners, implementers, and the so-called 'target-groups'. Of course, it must be said that, given that it is based on the recognition of the client's knowledge (in the dialogue) and a mutual understanding, this planning theory is strongly connected to participation, the other central postulate of my suggested framework for the alternative development view. Moreover, like participation, such a planning model based on social learning is also sustained and conditioned by an effective decentralization process of the public administration system in charge of planning and implementing development.

2.8 Conceptualizing a development action: The development theater

After having reviewed the major theories and concepts relevant to the subject of the present study, it is now time for me to define the contours of my own proposed aspect of the analytical framework to be used in the comparison between the conventional development thinking, adopted by the state in post-independence Algeria, and the alternative view I am proposing. This will help complete our understanding of the different interactions between a development action and its global context during the entire cycle of this action.

According to Grindle (1980: 6), a development action intends to affect a change within the context in which it is applied. Because the actual development vision in Third World countries presupposes that the nation-state is the "unit of development" (Buttel and McMichael, 1994: 48), the majority of development actions, designed and implemented in Third World countries, are related to the objectives of public policies that are embedded, as (Grindle, *ibid.*: 6) puts it, in:

An on-going process of decision-making by a variety of actors, the ultimate outcome of which is determined by the content of the programme being pursued and by the interaction of the decision-makers within a given politico-administrative context.

The task of implementation is to establish a link between the goals of public policies and the outcomes of governmental activity. Therefore, it involves the creation of a 'policy delivery system' in which public policies are translated into action programmes or even individual projects that aim to achieve the ends stated in public policies. Consequently, policy implementation remains conditioned by programme - or even project - implementation. Thus, the study of the process of policy implementation imposes investigation upon and analysis of concrete development actions. In my opinion, such an investigation would concern the following topics:

- The content of the development action, that is the outcome of the design stage;
- The implementation of the development action and its context;
- The implementing institution and its accountability towards beneficiaries;
- The level and the form of the beneficiaries' participation.

For the sake of this study, I will assume that the cycle of a developmental action takes place within a context that I conceptualize as the 'development theater'. In my own perception, a development theater does not designate a physical or spatial location, although development actions take place within a voluntarily-defined territory. It is a mental construct that encompasses several social actors linked by the specific roles they have to play within the context of the development action.

Each of these social actors has to play a given definite role. Of course, the roles played in this 'theater' are not only less 'histrionic' compared to the ones played in an artistic performance; they are mere 'real-life' roles, and can be of different types and take place at the design stage, the implementation stage or even at the evaluation stage. Some of the actors can be seen on the stage while others are behind the 'curtains' backstage. The importance of the actors is not conditioned by the position of the actors in the theater but by the importance of the roles they play. In most development actions, designed and implemented along the lines of conventional development thinking, the most important roles are very often the ones whose actors are behind the 'curtains'.

Located in the center of the development theater is an 'arena of decision-making'. Given that developmental success is measured in realms of action, and that all development actions are themselves traceable to prior decisions, Goulet (1986: 301; author's italics) suggests that:

An *arena* of decision-making. . . is an intellectual locus of field where choices are made... The domain of assumptions, procedures, modes of reasoning, processes of classification and standards of judgement leading to prefer one among many possible courses of action.

This arena does not possess a meaning by itself. Its meaning stems from the space it gives to different actors and rationalities to act and/or interact in making the required decisions within the development theater. According to Goulet (*ibid.*; authors' italics):

A *rationality*. . . is a mode of thinking, universe of cognitive assumptions and methodological procedures, or body of criteria for establishing truth or validity.

It is in fact the dominant rationality that will settle the sense of any developmental action and decide which actor and subsequently which role is the most important.

According to Goulet (ibid: 301), development decisions are made by three different categories of actors:

1. Politicians (or their bureaucratic agents);
2. Technical specialists (economists, agronomists, engineers, financial experts, industrial planners, etc.); and,
3. Persons pressing some special or general concern which range from private financial interests to the advocacy of ethical values that could benefit the entire humankind.

Goulet (ibid: 302; my italics) suggests that the first categories of actors apply to distinct rationality systems, the *political* and the *technological*. However, the third category is less homogeneous and among which people that champion morale, ethical and humane values (such as freedom, social justice or participation in making decisions that affect their lives) can be found. These people bring to the decision-making arena the third brand of rationality: The *ethical* (or *humane*). This relies "on moral judgements about what is good and bad, right and wrong, just and unjust" (Goulet, ibid: 303). It is among this latter people that farmers, through their representatives or organizations, can be ranged.

Being part of the analytical framework, the development theater will be conceptualized as a forum where different *social actors* (albeit individual or collective) interact and negotiate meanings and outcomes of a given development action as well. In this respect, it will show how different rationalities - political, technological and ethical - are interacting in the decision-making arena to shape the final decision and outcome of development actions. Given the presence of these different actors in our development theater, the *actor-oriented perspective* which acknowledges the existence of human diversity, the capacity of human beings to learn from their experiences in order to survive even in harsh environments is likely to explain the different responses of similar actors towards a similar stimulus. Methodological tools like *interface analysis* and *development discourse analysis* are considered adequate means to see how these actors react, devise strategies of coping, and how their rationalities shape their actions. In this order, *development discourse analysis* will permit to penetrate the rationality of planners and policy-makers and understand how and why scientific concepts are deviated from their ontological sense in order to serve both the implicit and explicit goals of a *stereotyping* planned development perspective. This means that development - and consequently planning - might need to be put into a political perspective.

By adopting these concepts, farmers, researchers, extensionists, and others involved in a given development theater will be conceptualized as *social actors* using

their 'mental faculties' and strategizing capacity to direct their struggles towards 'making space' for 'their' change.

Furthermore, given that a development action puts different (scientific, technocratic, and indigenous) types of knowledge into close interaction, and that knowledge is a critical input in development, the 'development theater' is a useful 'tool' that reveals which place is 'reserved' for indigenous knowledge by politicians, planners, and even scientists within the development theater. This having been said, the attention that these latter actors accord to this type of knowledge brings up the issues of *participation* and how participating beneficiaries are *organized*.

The aim is to show how actors participate in knowledge processes according to their need for information, especially the planners, and to point out any discontinuity at the interface encounters that exist within the development theater. In fact, it will help in 'drawing a picture' of the three main different loci or components based on the three rationalities suggested by Goulet (1986) as mentioned above. These are the *political* component, the *technocratic* component, and the *farmers* component on the one hand, and, on the other hand, it will serve as an investigative tool to describe the interaction of the three components (or their representatives) at the interfaces that are likely to be found between them in the development theater. I assume that such an endeavour, combined with a *discourse analysis*, is likely to reveal interesting contradictions in how different parties conceptualize and give meanings to issues such as development, project, policy and participation. In such an endeavour, a special focus should be placed on how the scientific community perceives *the farmer* and his/her farming practices from a development (or modernization) perspective.

In order to reinforce the interaction between these above-mentioned different types of knowledge and rationalities, the use of Friedmann's *transactive planning theory*, as a derived form of the *social learning theory* to be applied in planning, and some concepts such as *participation*, and *local organizations* that consequently become embedded in this theory will serve as a prescriptive framework to improve the level of sustainability of the development theater. The final aim of the prescriptive part of the framework is to highlight the main features of a new methodology for development actions design, implementation, and evaluation.

In this respect, the introduction of a 'humanistic' social theory for planning has a strong appeal, given that it is only 'humanism' that recognizes and "concentrates on those characteristics which mark us off from physical objects - imagination, meaning and creativeness" (Bailey, 1975: 10). Either as a consequence of (or as a prerequisite for) this prescriptive perspective, *our* (I still consider myself as a planner yet) vision of the development beneficiaries (human-beings in planning) needs to be adjusted. According to Bailey (1975: 12):

[These] should not be treated as passive receptacles of their environment but as potentially creative actors. Their status as victims of their situation and their powerlessness is only a result of the unequal distribution of power and thus the wherewithal to realize this potential creativity.

In fact, *our* belief, as planners, in the opposite meaning of this statement stems from *our* own (and exclusively *ours*) fiction developed and sustained by the different currents of philosophy that impinged upon planning theory.

In such an alternative conception of development model, planning is embedded in a sort of process of grafting personal (social or indigenous) knowledge on processed (theoretical, rational or scientific) knowledge through *mutual learning*. This can only be based on a trusting relationship between human beings where *dialogue* takes its central place (Friedmann, 1984: 190; his italics). In this context, according to Friedmann:

Planners appear as facilitators and mediators of group-based activities; they use their special skills in the service of the common task. In a way, then, they must not only share the abstract purposes of client groups but align themselves in ways that will abolish (or at least minimize) status differences arising from command of different kinds of knowledge.

In the case of the development theatre, the planner, according to Dunn (1984: 172), seen as a social system experimenter, cannot be exogenous to the system he is attempting to understand and transform. He is not dealing with the analysis and transformation of a fully deterministic system, as is the case with the classical physical sciences experimenter. In fact, the planner/social experimenter is immersed in the act of social system self-analysis and self-transformation. He is even the agent of social learning and social change. He is not interested in establishing universal scientific standards as the social system he is trying to understand is phenomenologically unique, and both its structure and function are temporary in character.

Moreover, Dunn (1984: 173) believes that the developmental hypothesis the social experimenter can formulate and test is a presupposition that, if the organization and behaviour of the social system is modified in a certain way, the goals of the system will be more adequately realized. Given the unicity of the social system under study, these hypotheses are not tested repeatedly under nearly identical or controlled conditions, as is the case in the physical sciences. In this order, the goal-setting and problem-solving processes become an iterative, sequential series of adaptations of an adaptable, goal-seeking, self-activating system.

So far, developmental hypotheses arise out of anomalies of social organization when the social system functions do not adequately serve the social system goals. They are then tested through a social system reorganization designed to bring the system goals and functions into consonance. But sometimes the developmental hypotheses and associated system and/or subsystems reorganizations fail to be enough to bring about consonance of total system goals and functions. Then the intervention of the planner/social experimenter has to deal not with the reorganization of the system's functions, but with the reformulation of total system goals as well.

In this order, a viable mechanism of regular monitoring and learning needs to be built in any development action. This can be achieved through the adaptation of a

programming style of planned development action and a reinforcing role of the evaluation in its large sense. In this respect, I suggest that shortening the duration of a development action, or building it into many short phases, and its embeddedness in a more long-lasting overall 'development theater where a learning evaluation is held at the end of each action or phase of action, can be the basis of this so-called mechanism.

Attempting an analogy with a real theater, a theatrical performance consists of many acts. Between every two acts, spectators take a break to 'digest' the performance, review the dialogue, and discuss the quality of the actors' performance. Just as in a theatrical play, as the actors perform the play again and again, their performance becomes better and better.

CHAPTER 3

DESCRIBING THE RESEARCH PROCESS: *ON HYPOTHESES, RESEARCH QUESTIONS, METHODS AND TECHNIQUES*

3.1 Introduction

In the previous chapters I introduced the major types of constraints that constitute, in my opinion, the problem background of development in general and development actions as they are currently conceived, implemented, evaluated, and corrected. Following that, I attempted to delineate an appropriate descriptive and prescriptive conceptual framework for the study.

In the present chapter, I shall describe the main features of the research process. I shall first describe the main hypotheses and sub-hypotheses this study aims to test, using a prescriptive/normative style for their formulation. Thus, hypotheses and sub-hypotheses are written in accordance to my vision of how development actions should be designed, implemented, and evaluated.

In the remainder of this chapter, I shall present the research strategy and design, as well as the methods and techniques used during the research process. A special section is reserved to explain the position of the researcher in the research context and the identification of the researcher's eventual bias in order to try to control it.

3.2 Formulating hypotheses: The fulfillment of the required prerequisites

As mentioned in section 2.2.3 of the previous chapter, it is acknowledged that one primary condition to guarantee substantial and sustainable success in a development action resides in the fulfillment of the four following prerequisites formulated by van Dusseldorp (1992: 12):

1. The possibility of **formulating** a consistent, realistic and durable **set of objectives**, which is **acceptable** to all, or at least to a **large majority of the people** who will be involved in and/or affected by the planned development;
2. The **availability of knowledge** of all the relevant **processes** and their interrelationships which have to be influenced to change the present situation in such a way that the objectives will be realized;
3. The **availability of the means and power** to influence these processes;
4. The **political will to use the available means and power**, to influence the relevant processes in order to realize the desired objectives.

In most development actions designed for and implemented in Third World countries, these prerequisites were never completely fulfilled, especially in people-centered development actions. More clearly stated, in some development actions, some prerequisites might have been fulfilled to some extent, but others have never been fulfilled, even to a very small extent. In fact, objectives were generally ill-defined and subject to a top-down decision-making process; knowledge was

mobilized in a very reductionist way - most of the time supposedly a rational/scientific approach - with a complete denial of people's knowledge; means and power were never sufficiently made available, and when available were not equitably distributed among the needy; and finally, the political will was never concretized unless the development action in concern aimed to incorporate, encapsulate, and increase control over rural populations or at sustaining an actual status quo which benefits the powerful actors.

In this context, I suggest that the integration of certain features such as participation - either direct or indirect - and its underlying philosophy (i.e. democratization), and social learning - either as flexibility in the project design and implementation or as a monitoring and evaluation mechanism - can increase the probability that these four prerequisites may be fulfilled to a higher extent than they have been in the past.

The above mentioned statement, written in the prescriptive/normative way of a successful and sustainable development action, sets the formulation of the general hypothesis (Hg) of this study as Box 3.2(1) shows below:

Box 3.2(1) - The general hypothesis (Hg) of the study

Participation and social learning increase the probability of the fulfillment of the four prerequisites required for a sustainable development action.

However, this general hypothesis is strongly dependent upon the effects of other factors, given van Dusseldorp's four prerequisites mentioned earlier. For achieving a better understanding of whether this general hypothesis is fulfilled or not, I suggest, for the purpose of this study, to 'fragment' it into four hypotheses which can be formulated in such a way that the points of focus of this study can be clearly and easily located. These are delineated in Box 3.2(2) below:

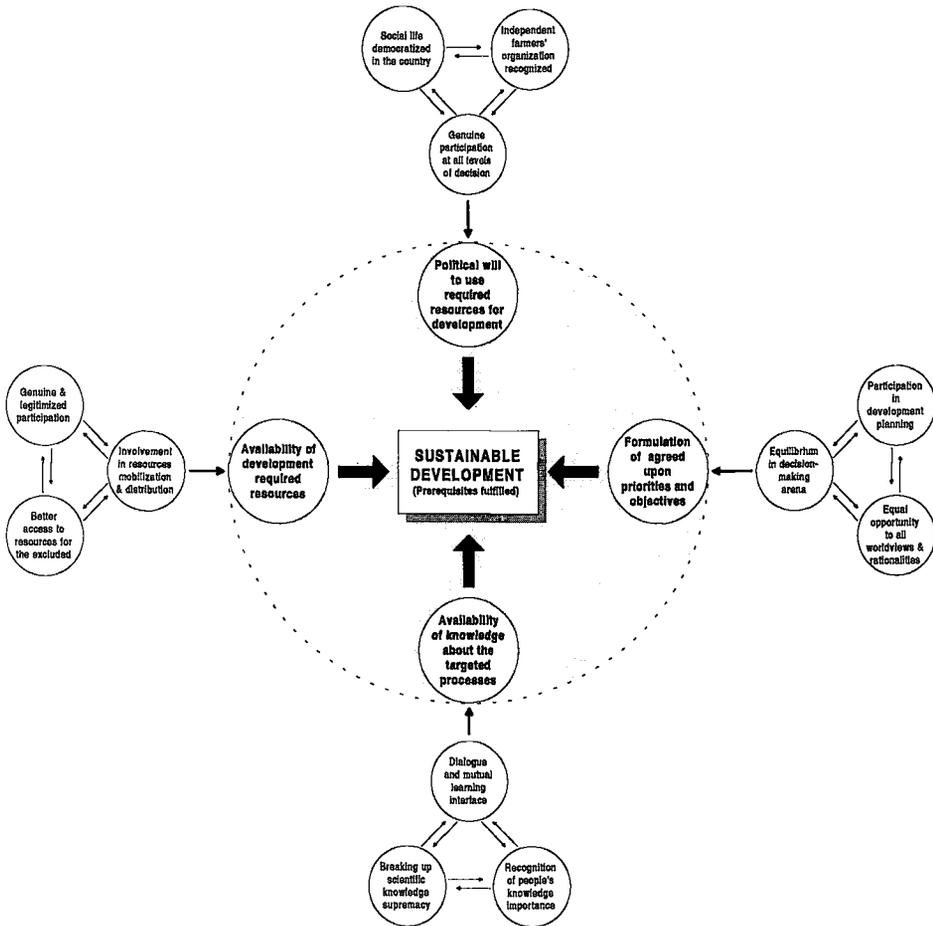
Box 3.2(2) - The four hypotheses (H1 - H4) of the study

- H1 - Development objectives are not determined by planners in an exclusively top-down way and are always in accordance with beneficiaries' needs.*
- H2 - Major needs of required knowledge about processes to be influenced by a development action are covered by different sources of knowledge.*
- H3 - All needed resources for the achievement of a development action objectives are available and fairly distributed among the actors.*
- H4 - The political will to use the required resources for a given development action is concretized in order to achieve the formulated objectives.*

Relating these four hypotheses to the main concepts of the conceptual framework, as described in the previous chapter, and seeking to achieve a better understanding of the causes that influence the fulfillment (be it partial or total) or unfulfillment of

these hypotheses, I decided to de-construct each of the four hypotheses into three sub-hypotheses, as shown by Figure 3.2(1) below.

Figure 3.2(1) - A multi-loop hypotheses thought



H1 - Development objectives are not determined by planners in an exclusively top-down way and are always in accordance with beneficiaries' needs.

The conventional thinking of development, which is a top-down, outside- and planner-centered model, resulted, in most cases, in wrong diagnoses and ill-defined objectives, leading to the total (or partial) failure of development actions. This situation can be improved through the creation of opportunities for beneficiaries to define their problems and take part in the diagnostic phase and objectives formulation. Thus, the formulation of development objectives should emphasize an

increased participation of beneficiaries themselves and their knowledge. This highly-recommended participation, resulting in a balanced dialogue, should bring about the required equilibrium between the different worldviews and their underlying rationalities that are present in the development decision-making arena and create opportunities for the so-called 'target groups' or 'beneficiaries' to partake in a process where decisions that concern their lives are made. This will undoubtedly yield a formulation of developmental objectives and priorities that are agreed upon by all parties whose interests are at stake in a given development action. Thus:

- H11 - Genuine active participation of beneficiaries at earlier stages in the process of planned development improves problems identification and objectives formulation.*
- H12 - Genuine active participation of beneficiaries in the process of planned development secures a required equilibrium of different worldviews (and their underlying rationalities) in the development decision-making arena.*
- H13 - Objectives are formulated for increasing people's genuine active participation in their (self-) development.*

H2 - Major needs of required knowledge about processes to be influenced are covered by different sources of knowledge

The hegemonic supremacy of the so-called rational/scientific knowledge in the development theater for a long time denied the capacity of indigenous knowledge to overcome some of the uncertainty that exists within a human context, especially when the agro-ecological and socio-economic conditions are the worst. Consequently, it overlooked the evident necessity of building a dialogue interface between these two types of knowledge. This led to a situation where development actions were always designed using a narrow-focus and strictly reductionist vision supported by the technical paradigm. For instance, the development of cereal crop production projects were exclusively designed according to breeders' or agronomists' vision of development based on the philosophy of intensification. This situation can be improved by acknowledging the increasing importance of people's knowledge in their (self-)development and the building of a development interface between scientific and indigenous types of knowledge where dialogue and mutual learning can take place. As a consequence, the recognition of beneficiaries' knowledge within the development theater by other actors, scientists particularly, not only sustains the learning process but increases its efficiency as well. Thus:

- H21 - Recognition of the importance of beneficiaries' knowledge in their (self-)development provides additional knowledge that is essential in the development theater.*
- H22 - Building a development interface based on dialogue (between local/indigenous and scientific types of knowledge) and mutual learning produces the adapted knowledge required for processes (especially social processes) to be influenced in the development theater.*
- H23 - Recognition of local/indigenous knowledge by other actors involved in the development theater increases the efficiency and effectiveness of the learning process.*

H3 - All resources needed for the achievement of the objectives of the development action are available and fairly distributed among the actors

The lack of availability of resources required for development has always been referred to as a problem of scarcity and inadequacy due to the tremendous constraints faced by Third World countries in terms of resources mobilization. This evidence, which I partially agree with, obscures the real fact that the problem is related rather to an unfair distribution of these resources, and Algeria is one of the best examples of this in the Third World. Genuine, active, and legitimized participation of beneficiaries, in that order, creates more opportunities for the 'excluded' to access the required resources for their (self-)development. Moreover, their participation in this context can readjust the power structure within the community and, if empowered, they can not only work toward a more equitable distribution of resources, but mobilize some additional resources from their own endowments as well. Consequently, if this is achieved, availability of required resources for development will increase to a fair extent. Thus:

- H31 - Genuine active participation of beneficiaries opens better opportunities for the 'excluded' to benefit from the resources made available via development actions.*
- H32 - Genuine active participation of beneficiaries secures a better involvement of the latter in local resource mobilization and their fair distribution.*
- H33 - Availability of resources and their fair distribution sustains the genuine active participation of the beneficiaries in their (self-)development.*

H4 - The political will to use the required resources for a given development action is concretized in order to achieve the formulated objectives

This is the most sensitive prerequisite to fulfill, because it basically depends on the political leadership and other top policy-makers and their readiness to accept power 'bargaining talks' with the excluded. On the other hand, more sensitive is the factual evidence that political leadership in Third World countries can no longer govern their societies in the 1990s as they did during the last two or three decades. Two examples that need to be mentioned here are South Africa and the era of apartheid and Algeria with its decade of violence. It is, then, a choice for politicians to make, whether they open their highly-bureaucratized system of development administration to a 'democratic' participation of their population to take over and decide for their (self-)development or they get swept out by the increasing unrest of their constituencies. In this sense, I assume that unless a real democratization process is settled upon, participation becomes an illusive issue, given that participation can be only sustained through the involvement of strong and independent voluntary organizations. Such organizations, however, cannot exist without a democratization of social life. Moreover, democratization of social life means very little without a real decentralization of decision-making (both as deconcentration and devolution). Consequently, it is only through the democratization of social life and genuine

participation of the population at all levels of the decision-making process that a political will can be secured to use the resources required for development fairly. Thus:

- H41 - Genuine active participation of beneficiaries requires their increased involvement at all levels of the development decision-making arena.*
- H42 - Democratization of social life sustains a genuine active participation of beneficiaries in their (self-)development.*
- H43 - Political will to use the required resources for people's development is secured through decentralization of the decision-making.*

Of course, these hypotheses/objectives will require some adjustments in the institutional settings in order to be achieved. One of these adjustments that must be mentioned here is the cultural change that must take place in the way Third World elites think of peasantry and rural constituencies in agricultural and rural development undertakings. In my opinion, the institutional responsibility of the required cultural change is the new charge of the civil society, the educational system as well as the communication and information systems in the Third World countries. Two basic issues need to be given more attention in this cultural change process: (1) The political/administrative elites must be educated to appreciate their people's knowledge and experience (i.e. rural people are highly strategizing, knowledgeable, and capable actors); (2) The scientific elites must be educated in the importance of local/indigenous knowledge and a more inter- and/or multi-disciplinary concept of development (i.e. development problems are so complex that a single discipline cannot handle alone whatever its strength).

Having said this, it is worth mentioning that the test of hypotheses against the empirical material will be intentionally differentiated. In Chapter 6, I shall test only the hypotheses H1, H2, H3, and H4, given that the failure of post-independence Algerian conventional development thinking is not new for many readers who have experience with similar situations in Third World countries. In Chapter 8, however, I move a level down by testing the three underlying sub-hypotheses for each hypothesis to show the idiosyncrasies of the alternative development view I am advocating.

3.3 On the general research question and sub-questions

After having formulated the main hypotheses of the present study, I now proceed to the formulation of the general research questions and sub-questions. Insofar as I mentioned earlier, the main condition of making a development action as successful as possible is the fulfillment the four pre-requisites and their related conditions. How these pre-requisites and conditions might be fulfilled is the main interest of this study. Hence, I propose the general research question to be as follows:

How can major actors whose interests are at stake in the development theater steer planned interventions towards a sustainable development ?

Looking back to this formulated question, I face a dilemma with the concept 'sustainable development'. To which actor or group of actors should development be sustainable in the sense of this question and this study? As the implicit and explicit assumptions of this study may suggest, sustainability of the outcomes of a given development action is posited here to be in line with the interests of the "hitherto excluded" (Stiefel and Wolfe, 1994), the disadvantaged segments of the population.

Hence, as Figure 3.2(1) earlier showed, the pre-requisites and conditions of sustainability rely to a large extent on the centrality of the beneficiaries' knowledge and the importance of these beneficiaries' participation in their (self-)development. Given that development actions throughout the last three decades up to the present (especially in the Algerian case) have been designed without consultation with their supposed beneficiaries, resulting in a huge gap between the *privilegentsia* and the disadvantaged, it is thus highly propitious to focus more on the impact of beneficiaries' participation and knowledge in steering a given development action towards their (self-)development. Thus, I propose to reformulate this primary research question suggested above as follows:

How can beneficiaries' participation and knowledge improve their steering of a development action toward the target of yielding sustainable outcomes?

However, although I consider beneficiaries' participation and knowledge to be a necessary condition for a sustainable (self-)development, it is not a sufficient condition *per se*, provided that the so-called beneficiaries are not completely independent vis-à-vis other potential actors acting in the development theater. They are still, in fact, strongly dependent upon actors that are extremely self-referent for being self-impressed by the rationality and 'scientificity' of their knowledge, such as planners, researchers, development staff, etc. And the availability of beneficiaries' knowledge means very little if its importance is not truly acknowledged by these latter actors. In other words, without learning from past failures they planned, implemented, and evaluated, and/or from on-going development actions, debate with these actors upon issues such as beneficiaries' participation and knowledge becomes an exercise in ambiguity and deceit. In this context, beneficiaries' participation and knowledge, as essential features of the development theater, cannot improve the present situation of development actions much if not sustained by a real social learning process, the necessity of which is acknowledged and supported by all actors whose interests are at stake in the development theater. Consequently, I suggest that the final formulation of the general research as Box 3.3(1) shows:

Box 3.3(1) - The general research question of the study

How can the (direct and indirect) participation of the beneficiaries and the social learning ability of diverse actors acting in the development theater secure sustainable achievements of a people-centered planned development action?

Having said that, I see that in order to answer this 'whole' research question, different sub-research questions must also be examined [see Box 3.3(2) below]:

Box 3.3(2) - The sub-research questions of the study

- Q1. *To what extent and when is participation of the beneficiaries required in order to steer development actions towards their (self-)development?*
- Q2. *Which role(s) can local organizations play in the beneficiaries' steering of development actions?*
- Q3. *Which mechanisms are required to make monitoring and evaluation play the role of a learning process in steering development actions?*
- Q4. *Can the design of a practical methodology be proposed according to the issues advocated in this study, such as participation, local organizations, and social learning?*
- Q5. *What might be the shortcomings of this methodology and what political, institutional, and socio-cultural pre-requisites are needed for such a methodology to work?*

3.4 Embracing constructivism: The revenge of the human spirit in development

The context of the advocated issues of participation, social learning, and transactive planning defines the humanistic orientation of the study, which represents the naturalistic and qualitative approach of inquiry I adopted in the present study. Even though the connotation of qualitative research might be subjective, verbal, and descriptive, the use of more than one method of inquiry becomes necessary as a means of triangulation in order to secure a required level of data validity, reducing the effect of the above-mentioned subjectivity as much as possible. As Denzin and Lincoln (1994a: 2) put it:

Qualitative research is multimethod in focus, involving an interpretive, naturalistic approach to its subject matter. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of meanings people bring to them... Qualitative research, as a set of interpretive practices, privileges no single methodology over any other... Nor does qualitative research have a distinct set of methods that are entirely its own. Qualitative researchers use semiotics, narrative, content, descriptive, archival, and phonemic analysis, even statistics.

In this context, the qualitative researcher is seen as a *bricoleur* - "a Jack of all trades or a kind of professional do-it-yourself person" - dealing with the multiple methodologies of qualitative research as a bricolage, that is a pieced-together, close-knit set of practices that provides solutions to a problem in a concrete situation; each

solution (bricolage) which is the result of the *bricoleur's* method being an emergent construction (Denzin and Lincoln, *ibid.*; authors' italics).

Moreover, the researcher-as-*bricoleur*, such as I am, state that his underlying paradigm - a basic set of beliefs that guide action, according to Denzin and Lincoln (1994b: 99) - is *constructivism* in the sense defined by Guba and Lincoln (1994) that articulates an ontology based on relativism, an epistemology that is transactional and subjectivist, and a methodology that is dialogical (hermeneutical) and dialectical, given that "human behaviour, unlike that of physical objects, cannot be understood without reference to the meanings and purposes attached by human actors to their activities" (Guba and Lincoln, 1994: 106). In a similar vein, paradigms are human constructs which cannot be open to proof in a given conventional sense; they represent beliefs that are basic in the sense that they must be accepted simply on faith, given that there is no way to establish their ultimate truthfulness. Allegorically illustrated, the adoption of this way of thinking aims at the construction of the development theater in whose centre lies a decision-making arena where an inter-rationalities equilibrium is suggested for development to be sustainable.

3.5 Position of the researcher in the research context and bias identification

Plainly stated, this research draws a parallel between the subject of development planning in Algeria and my own multi-specialized experience. In order to help uncover the potential personal bias that this study might include, and for the purpose of informing the reader about the way I tried to tackle this problem, I shall provide my own educational and professional background.

In 1980, I graduated as a BSc Agronomist from an Algerian agricultural high school after a four-year period of studies. At that moment, the Ministry of Agriculture was implementing a new recruitment policy to staff the *Domaines Agricoles Socialistes* (DASs) with new BSc holders. This led me - against my will, of course - to take a position as DASs Manager for six years. During that period, I witnessed how these farms were subject to many interventions based on an administrative, top-down, standardized development model.

In 1986, I joined the *Institut Technique des Grandes Cultures* (ITGC) as Head of Breeding and Improvement Service in the Research Department. In this service, 'we' had to develop and promote high-yielding varieties (HYVs) as a fundamental tool for agricultural intensification. Later, in 1988, I took the position of Head of Planning Department within the same institution. At that time I found myself within a system I used to criticize some years before when I was a 'farmer' but, more paradoxically, doing the same things in the same way I was myself criticizing.

In late 1992, with the start of my MSc study in Management of Agricultural Knowledge Systems (MAKS) at Wageningen Agricultural University, I began my new career-dimension of a social scientist. This led me to start looking very critically at my present job as planner, especially when weighing it against my previous

experience as a 'farmer'.

In other words, the description of my multi-specialized career as mentioned above accurately describes me as being at a cross-roads. It is this diversified experience which made me believe that, as a planner, the job 'we' were doing was wrong in the sense that 'we' assigned 'ourselves' the exclusive and extreme authority to design policies and projects for people without their consent or even consulting them.

It has to be recognized that this study frequently draws on my personal experience and the risk of an egocentric bias is acknowledged. But for the sake of minimizing this bias as much as possible, I tried to design the research methodology in a way that would use different research techniques as a means of triangulation. Moreover, during the rounding-up learning cycle in section 3.6.2, I organized a feedback 'exercise' with some potential actors about the provisional results of the research. This was to bring greater adhesion to the research findings instead of considering them a personal achievement, and attempt to control my own intrinsic bias as much as possible. However, the interpretation of the results remains entirely my responsibility.

In a final word, this research process finds me at a crossroads, where I sometimes have difficulty choosing which 'persona' should speak in a given setting. Of course, the social researcher 'persona' is the more dominant in this study, but sometimes he was relayed by the 'farmer' (DASs Manager) 'persona' to criticize the work of the planner and/or the agronomist - technocratic development agent.

3.6 On the research strategy and design

3.6.1 On the research strategy: The case-study

As Denzin and Lincoln (1994: 2) mention, qualitative research involves the studied use and collection of a variety of empirical materials - such as case-study, among others - which describe routine and problematic moments and meanings in individuals' lives. A case study (or a case history), as defined by Black (1993: 62), is "a biographical or autobiographical study and report of an individual, group or phenomenon". According to Yin (1984: 13), any case study is an empirical inquiry that looks at a contemporary phenomenon within its real-life context, and in which multiple sources of evidence (methods of data collection in this case) are used; it allows the researcher to understand and retain the holistic and meaningful characteristics of the real-life events. It can, in fact, "provide a richly detailed 'portrait' of a particular phenomena" (Hakim, 1987: 61).

Based on this thinking, realities are captured, according to Guba and Lincoln (1994: 110), in:

A form of multiple, intangible mental constructions, socially and experientially based, local and specific in nature, but also alterable as are their associated 'realities'.

To achieve this, according to Bulmer (1983: 9), a case-study involves the in-depth study of a particular milieu (village, association, organization, institution) rather than a widely drawn random sampling of individuals. Consequently, the researcher thus relies on a repertoire of methods to gather data such as informal interviews, the use of knowledgeable informants in the locality, and participation in and observation of events in the setting as and when they occur.

In this way, I made use of case-studies to describe the real events of some development actions that took place in the Algerian context after the first decade of the country's independence in 1962. In some case-studies, the historical dimension coincided with the birth of ITGC in 1974, which from its inception has had the national mandate to develop food crops in Algeria. But, most importantly, some case-studies shed light on the structural and socio-political changes that Algeria has undergone since the beginning of the 1990s.

3.6.2 On the research design: Three learning cycles

Due to its complexity, the study has followed three main learning cycles or steps. These are as follows:

- **1st cycle (the primary cycle):** I first began with an archive study on some development actions undertaken from the 1970s onwards in order to define three main points: (1) The way of thinking of policy-makers and planners when designing development actions; (2) The understanding of the role assigned to evaluation in these development actions; (3) The choice of other development actions based on an alternative philosophy of development - in complete differentiation - to be compared to the development actions comprising the archive study.
- **2nd cycle (the formalization cycle):** I conducted in-depth investigations into the development actions chosen during the first step, based upon the issues and insights gathered up to that point. During this step I utilized the techniques of interviews, personal experiences, and life-histories for the investigation. This step, in addition to the first, allowed me to gather enough data for a primary analysis that was undertaken directly at the end of this phase. This gave birth to some grey areas that needed to be cleared up through another learning cycle.
- **3rd cycle (the rounding-up cycle):** I focused in this cycle more on the essential points that appeared to lack consistency during the primary analysis undertaken at the end of the second cycle. Moreover, it was used as a means of triangulating doubtful results obtained during the first and second cycles. At the same time, this step rounded off the fieldwork period by making a secondary analysis in the field and getting feed back from some potential actors, giving them the opportunity to comment on some research findings.

3.7 Methods and techniques of field investigation

In this section, one important thing is worth to reveal. *Methodolatry*, as a combination of method and idolatry to describe a preoccupation with selecting and defending methods to the exclusion of the actual substance of the story to tell, and as a slavish attachment and devotion of method (Janesick, 1994: 215), has been avoided as much as possible. In fact, the methodology I developed follows one objective: To keep both experience and the act of knowing as close as possible. More in line with Janesick (*ibid.*), this study aims to present solid descriptive data to help the reader understand the meaning of the experience being examined. It has to be clearly said that this investigation followed an appropriate strategy that influenced the choice of an adequate method and techniques.

As stated above, many methods and techniques of investigation and data gathering were identified in order to achieve the proposed research strategy to provide enough evidence through case-studies. This explains my recourse to utilizing multiple sources of evidence both by the methodological aspects of the research strategy (the case-study), as well as the obligation to secure a required level of triangulation for trustworthiness and authenticity.

As Denzin and Lincoln (1994b: 353) argue, the constructivist paradigm tells us that it is through his/her interaction with key informants and respondents that the socially situated researcher creates the realities that describe the places where empirical materials are collected and analyzed, and where interpretive practices of qualitative research are implemented. These practices represent the multiple methods and techniques the researcher-as-*bricoleur* must employ and have "a working familiarity" with (Denzin and Lincoln, 1994b: 359).

Among the very renowned methods and techniques of social research among the researchers-as-*bricoleur*, I have mostly used the following ones.

3.7.1 Archival study and documents analysis

This is what Denzin and Lincoln (1994b: 355) call the "mute evidence", that is, written texts and cultural artifacts, which leaves its traces on the past of a social phenomenon or on a given community. These materials cannot be interviewed; they can only be interpreted.

Since the early 1970s, the Ministry of Agriculture in Algeria undertook many development actions, especially in the field of cereal crops. A tremendous number of papers have been written by national and international experts about these actions. A quick archival study of some of these papers helped to understand the way policy-makers think when designing such actions. It must be said that this material was first evaluated according to the 6-questions matrix developed by Steward (1984: 23, in van Dusseldorp and Southwold, 1994: 32-35).

As a matter of contrast, this way of thinking has been compared with the one that was observed during the implementation of other development actions conducted

according to my prescriptive, theoretical foundations of participation, local organizations, and social learning.

In this context, the archive study (I started with at the generative learning cycle) was important insofar as it oriented the in-depth investigation toward issues of potential interest, and the research design, methods, and techniques that should be used, which are described in this chapter.

3.7.2 Personal experience

As mentioned earlier (cf. Section 3.5), this research draws heavily from my personal experience. In this context, "personal experience", argue Denzin and Lincoln (1994b: 356) "reflects the flow of thoughts and meaning persons bring to the immediate situations". Experiences can represent routines or be problematic. They occur within our lives. Researchers who relate experiences usually bring them in the form of a story or a narrative. As an important source for this research, as argue Strauss and Colbin (1990: 35),

Professional experience frequently leads to the judgement that some feature of the profession or its practice is less than effective, efficient, human or equitable. So, it is believed perhaps a good research study might help to correct this situation. Some professionals return to study for their degrees because they are motivated by that reform ambition. The research problems that they choose are grounded in their motivation.

In the context of this study, I made use of my personal experience and the ones of my colleagues who worked and/or were still working in the Planning System of the Ministry of Agriculture and Fisheries.

Concerning farmers, I tried to bring contrasting views of experience between development actions based either on current development thinking or my suggested alternative development thinking, based on participation, local organizations, and social learning. In the latter case, two groups of farmers were selected, using two criteria: (1) Their involvement in these actions; (2) Their experience with other previous development actions based on the current development thinking. The first group had to satisfy both criteria, while the second needed to satisfy only the second criterion. In other selected areas (concerned with other development actions), farmers were selected based on their experience with previous and/or on-going actions.

The chosen views of experience are presented through life-histories (see Section 3.6.5 below) and contained in indicated boxes in the case-study of the development action they were involved in.

3.7.3 Participant observation

It is acknowledged that naturalistic observation, being "into" a social situation and looking, is a valuable, additional way of gathering material about our social world. Many social researchers have been playing this role. Hidden and disguised voyeur has been one of the many identities social researchers have been utilizing for their investigations (Denzin and Lincoln, 1994b: 354). It involves establishing rapport in a new community so as the researcher can learn how people go about their business without feeling "being spied" and can thus intellectualize what he has observed. Moreover, it gives an intuitive understanding on what is going on by reducing the reactivity of informants when they know they are studied (Bernard, 1988: 148).

During this study, participant observation has been mainly used during the field visits I undertook and farmers' meetings I attended, in the cases of development actions' areas where I started my investigation some years ago. This endeavour helped in fact to evaluate the impact of the project on the farmers' organizations, some years after these development actions were terminated.

3.7.4 Informal interviews

According to Denzin and Lincoln (1994b: 353), "the interview is the favourite methodological tool of the qualitative researcher". It not only constitutes a conversation but the art of asking questions and listening as well. It produces, in this situation where answers are given, situated understandings grounded in specific interactional episodes. Even though the spoken or written word always contains a residue of ambiguity, interviewing is seen by Fontana and Frey (1994: 361) as "a paramount part of sociology, because interviewing is interaction and sociology is the study of interaction". It can be easily combined with other techniques such as participant observation; it even goes hand in hand with the latter. In the new directions imprinted by post-modernist ethnographers to interviewing, increased attention to the voices and feelings of the respondents and the interviewer-respondent relation must be observed (Fontana and Frey, 1994: 363).

As a matter of focus, interviewing can take different forms (structured, semi-structured, unstructured, open-ended...) and concerns individuals as well as groups. In the present study, both individual unstructured and semi-structured interviews and group interviews were used.

In this respect, group interviews were used as a complementary source of data, but more importantly, they were used as a means of triangulation (Fontana and Frey, 1994: 365). They concerned mainly selected planners and development staff, and groups of farmers.

The different interviewed individuals and groups for each case are presented in Table 3.7.4(2) below. It goes without saying that some were interviewed individually, others collectively, and a few were interviewed in both individual and collective manners.

Table 3.7.4(2) - Individuals and groups interviewed during the field work

Type of individual	Chapter 5 cases			Chapter 7 cases		
	No. 1	No. 2*	No. 3**	No. 4	No. 5	No. 6
Planners at MoA	02		03			03
ITGC HQ staff				04		
ITGC Sétif Station				06		
ITMA teachers				04		
DSAs directors					02	
DSAs staff				04	10	
Private farmers	01			10	10	06
EACs-EAIs members				10		
French collaborators				03		
CR-HCDS staff					08	04
Heads of association				02	04	
Commune officials						
Reg. Edu. Acad. members						02
Education teachers						04

* For Case No. 2, I relied on my previous MSc research (Malki, 1994).

** For Case No. 3, I used the data from discussions I had in the frame of Cases No. 5 and 6.

Besides this, I participated in three meetings with pastoralists which allowed me to hold group discussions with 20 to 30 pastoralists (Cases Nos. 5 and 6, and consequently Case No. 3).

3.7.5 Life histories

It is obviously acknowledged that the life-history method is an adequate means of penetrating the life-world of actors and understand their worldview. According to Francis (1992: 93),

A 'life-story' is an intellectual construct whose structure and content reflect the priorities of the researcher and the images the informant projects back into the past, as much as tangible realities.

Discovering the past helps to understand the present. The usefulness of the life-history technique critically depends upon several factors. First, the researcher must have a thorough understanding of the macro-developments that provide the contextual settings of constraints and opportunities within which people act or have acted.

Making use of semi-structured interviews, I have collected elements of life histories and written selections of these life histories in the form of a continuous text in small boxes that are presented with the appropriate case-study.

CHAPTER 4

SETTING THE GENERAL CONTEXT OF THE STUDY INTRODUCTION OF THE ALGERIAN CASE

4.1 Introduction

This chapter introduces in brief the general background of Algeria and, consequently, the current situation of its agricultural sector and its related development planning and policy-making system. It aims to give an overview of the agricultural sector evolution under the different governments that have led Algeria since national independence in 1962.

However, neither the agricultural sector nor its planning system evolved in a vacuum. They are both part of the general political and institutional framework that influenced and continues to influence both entities. Hence, the goal of this chapter is a comprehensive understanding of the features of the different agricultural development policies designed and implemented in the name of agricultural development, and their consequences for domestic production, 'booming' food imports, and increased food dependency, and so on.

In other words, it aims at understanding how an 'agricultural-by-excellence' country became one of the first net food importers in the world because of the inefficiency of its development actions as results of its development planning and policy-making system, and its inherent sectoral delivery system.

4.2 What is Algeria?¹

4.2.1 General background

Algeria is the largest of the five countries (including Morocco, Mauritania, Tunisia and Libya) which form the region of western North Africa known traditionally as *Al Maghrib* (The West). With its 2,381,740 millions km² of land, Algeria is considered to be the second largest country in Africa after Sudan, and the tenth largest country in the world.

The name 'Algeria' is derived from the Arabic name *El-Djazaïr*, that represents the plural of *Jazira*, whose meaning in Arabic is 'island' or 'peninsula'.

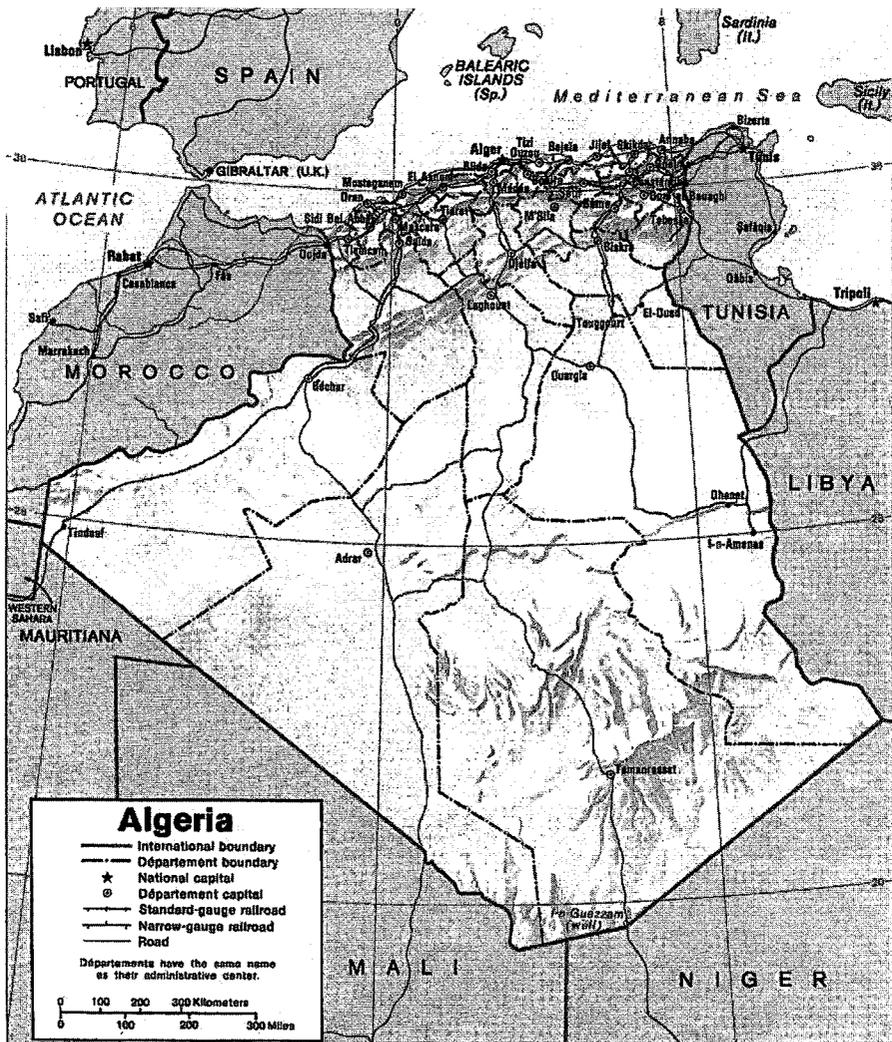
To the north, it is 'sandwiched' between the Kingdom of Morocco on the west, and the Republic of Tunisia and the Jamahiriya of Libya on the east. On the northern part, it has approximately 1,200 km of coastline on the Mediterranean Sea. It is bordered on the south, from east to west, by Niger, Mali, Mauritania and Western Sahara [see Figure 4.2.1(1)]. Land boundaries total 6,343 km.

¹ This section is written upon information got from different publications of the *Office National des Statistiques* (ONS) as well as from different publications of the Ministry-Delegation of Planning.

In terms of geographical position, Algeria is located between 9° W longitude and 12° E longitude, and between 18° and 38° N latitude. The International Meridian (0° Greenwich) passes near Mostaganem, a city on the western part of the coastal band, located at 300 km from the capital Algiers.

Topographically, a sharp contrast exists between the relatively fertile, mountainous, fragmented north and the vast Sahara in the south. The northern part of Algeria is dominated by parallel ranges of the Saharan-Atlas mountain system, where there are no navigable rivers. In this respect, four main physiographic, geographical regions/units can be found, running from north to south:

Figure 4.2.1(1) - Map of Algeria



1. **The Tell region:** Consisting of the northern band extending along the coast, between 80 and 190 km wide. The majority of the population lives in this region. It is composed of hills and valleys where the major part of Algeria's arable land is located. The southern frontier of this region is the *Tellian Atlas*, a mountainous chain which ranges from the Moroccan border, in the west, to Cap Carbon near Béjaïa, in the east. The highest point is *Ouarsenis* mountain (1,985 m). Algeria's main river, the *Chélif*, flows from the *Tellian Atlas* 725 km down to the Mediterranean Sea.
2. **The High Plateau:** Consisting of a tableland interspersed with large shallow basins or depressions where water is collected during the rainy season, which become, in the hot season, dry lake beds or salty flats called *chotts*. The lowest point in the country, the *Chott Melghir* (40 meters below the sea level), is located in this region.
3. **The Saharan Atlas:** Consisting of an west-to-east expanding mountainous chain formed of three components, the *Amour* mountains in the south-west, the *Ouled Naïl* mountains in the centre, and the *M'zab* mountains in north-east.
4. **The Sahara Desert:** The largest region of the country (90% of the total land), mostly consists of a desolate flatland covered with gravel but where wide expanses of sand dunes are frequently encountered, mainly composed of two dune chains called the *Great Western Erg* and the *Great Eastern Erg*. In the center of the region lies the *Hoggar* (or the *Ahaggar*) massif, a volcanic highland of 800-meter width and a 3,000-meters height (above the sea level). The highest point in the country, that is *Tahat* mountain (3,003 meters above the sea level), is located in this region. The region is well-known for its scattered oasis settlements where dates are cultivated and small-scale farming is practiced, mostly for vegetables and food crops. The most essential ingredients for the Algerian economy come from this region, i.e. oil and natural gas.

4.2.2 Climatic conditions and main agro-ecological zones

Climatic conditions in Algeria are decisive elements in the bio-physical environment as it directly influences agricultural and pastoral activities. Given its extended latitude, Algeria 'touches' on different climatic zones where the climate ranges from humid on the coastal band, to semi-arid, arid, and finally desertic, as we proceed from north to south [see Figure 4.2.2(1) below]. Starting from the north, the temperate zone is characterized by the Mediterranean climate with rare summer rainfall. Along the coast, winters are mild and wet while summers are hot and dry. On the *High-Plateaus*, winters are cold and dry while summers are hot. Sirocco - a hot, dust- or sand-laden wind is especially common in summer. In the south, winters are not too wet but cold, while summers are very hot and dry, except in the *Hoggar* (or the *Ahaggar*) hills where some summer rainfall of tropical type has been reported.

The annual rainfall is generally insufficient, and is furthermore irregularly distributed in both time and space.

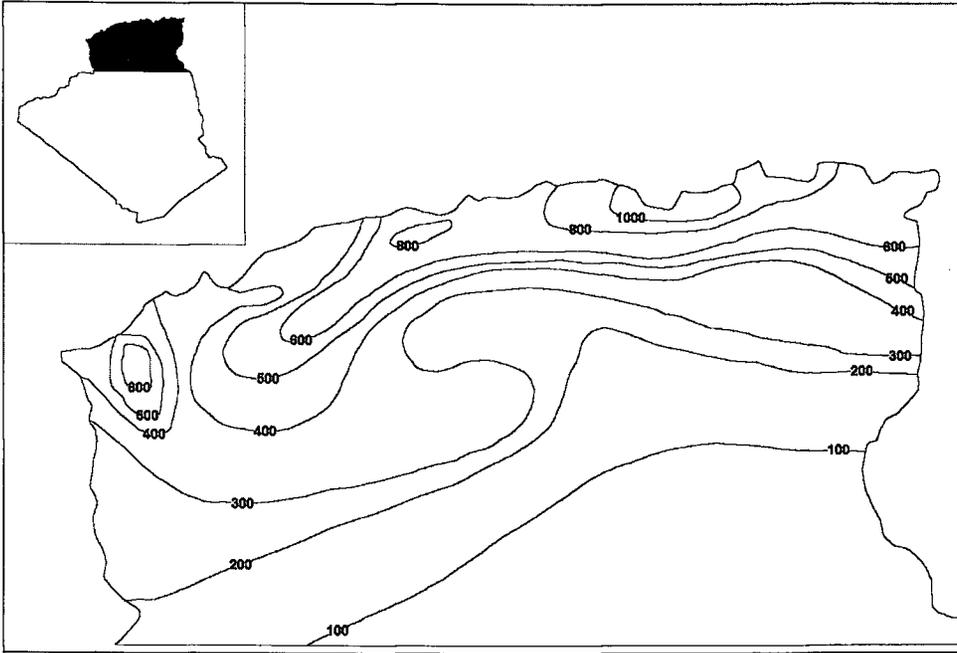
Being of a mild climate and taking advantage of the marine influence of the Mediterranean Sea, the coastal band of the country gets more rainfall than the rest of the country. Annual average of rainfall ranges from 1,000 mm in the *Collo* region (north-east of the country) to 700-800 mm at Algiers (in the center of the country), while it is less than 400 mm in the western part of the country. On the *High-Plateaus*, rainfall ranges between 200 to 400 mm, while the steppe receives less than 300 mm a year. Saharan regions, apart from the *Hoggar* hills, have an absolute drought almost throughout the year, receiving a bit more than 100 mm per year.

Considering rainfall, elevation and water availability for irrigation, 6 main agro-ecological zones can be distinguished:

1. The **Mediterranean coastal zone**, with an annual rainfall range in most parts from 600 mm and above 1,000 mm. Intensive (greenhouse) and semi-intensive (open fields) vegetable crops are the major farming systems that are found here. Sometimes, an intensive dairy cattle farming system, and fruit orchards - mainly *citrus* species - can also be found.
2. The **plateaus and hills zone**, with a slope of less than 12%, and of limited area (3-4% of the country). This zone is characterized by deep soils and an annual rainfall ranging between 350 to 600 mm. On the plateaus, food crops such as cereals, pulses and forage, and sheep represent the main agricultural activities, while fruit orchards and vineyards are the major crops on the hills.
3. The **mountainous zone**, having a great potential for agriculture, where significant amounts of snow are frequently reported. The main characteristic of this region is the pronounced erosion observed in certain parts and the large acreage of forests (2,7 million ha). Low-rainfall adapted species of fruits trees are cultivated and traditional breeds of cattle are reared. Family gardens to grow vegetable for the household needs - and sometimes for surplus sale - can frequently be found.
4. The **steppe zone**, very expanded, with shallow soils, a degraded vegetal cover, frequent frosts in winter and significant heat in summer. The major activity in this zone continues to be the extensive model of sheep rearing. However, overstocking, vegetal cover degradation, and water deficiency are the main constraints.
5. The **Saharan zone**, the largest, desertic area with a rough climate, characterized with very low annual rainfall. The oases, representing the only possibility for agricultural activities, count for not more than 50,000 ha, more or less totally-irrigated. However, the recent experience of land reclamation with the use of the pivot is pushing farmers and investors to occupy an expanded domain for agricultural practice outside the oases.
6. The **irrigated land**, which is distributed between the different agro-ecological zones, where water is available for irrigation, counts for less than 300,000 ha². It is in fact reserved for intensive and semi-intensive vegetable crops, fruits tree orchards and irrigated forages.

² FAO (1998) estimates this zone to cover 555,000 hectares in 1995.

Figure 4.2.2(1) - Rainfall distribution in Algeria (in mm)



4.2.3 Population parameters

The population was estimated to be 25 million inhabitants on January 1990, by the National Office of Statistics (ONS). Currently, it is around 29.8 million inhabitants, according to the ONS estimation of July 1997. For many years, the annual rate of demographic growth hovered around 3% or more, but recent information from the same ONS revealed that this rate has dropped below 2.80% [see Table 4.2.3(1) below].

Table 4.2.3(1) - Evolution of the population in Algeria

	Years	1966	1977	1987	1997
Number of inhabitants (in millions)		11.9	16.9	23.1	29.8
Average growth of the decade (in %)		3.40	3.2	3.10	2.80
Average growth between two consecutive periods (in %)*		-	3.50	3.34	2.64
Growth between 1966 and 1997 (in %)*		-	-	-	3.06

(Source: ONS, 1990; Chapan-Metz, 1993; ONS, 1997)

* The figures presented in these rows are my own calculations.

For 1997, the growth rate was estimated at 2.19%, according to the ONS 1997 estimate. If this rhythm continues at the same pace, the population might number a bit more than 31 millions of inhabitants by the year 2000, according to the World Bank (1994a) [see Table 4.2.3(2) below].

Table 4.2.3(2) - Evolution perspectives of the population in Algeria

Item	Evolution through the years				
	1990	1995	2000	2005	2010
Total population (in 10 ⁶)	25.010	28.144	31.399	34.969	38.397
Population growth rate (in %)	-	2.36	2.19	2.15	1.87
Fertility rate (in children/woman)	-	4.30	3.55	3.05	2.63
Life expectancy (in years)	-	67.30	69.40	71.50	73.30
Infant mortality (per 1,000 live births)	-	55	45	37	30

Source: World Bank, 1994a

Life expectancy has significantly improved. According to Chapan-Metz (1993), this was 42 years for males and 44 years for females between 1950 and 1955. It moved up to 49 years for males and 51 years for females in 1965 and ended up at 65 years to males and 66 years to females in 1990. According to World Bank projections [see Table 4.1.3(2) above], it is expected to improve and reach more than 73 years between 2005 and 2010. Another demographic indicator that is worth mentioning here is the **fertility rate**, that is the number of children born per woman. After it reached the mark of 7-8 was reached between the mid-1960s to the mid-1970s, this indicator declined to 5.1 children per woman and it was only 3.48 in 1997, according to the ONS estimate of July 1997. According to World Bank projections [see Table 4.2.3(2) above], it will decline to less than 3 children per woman between 2005 and 2010. This marked improvement reflects the major transformations in the health sector and the consequences of the 'voluntaristic' welfare policies undertaken since independence, more particularly during the 1970s and the 1980s.

The Algerian population is characterized by a very high proportion of youth. Almost two-fifths of the population are below 15 years old [see Table 4.2.3(3) below].

According to Chapan-Metz (*ibid.*), this class was more important in the past, as it is related to the fertility rate mentioned above. In fact, 48.2% of Algerians were below the age of 15 years in the 1966 census, while this figure slightly decreased to 47.9% in the 1977 census. According to the World Bank (1994a), it was only 43.66% in 1990 and decreased to 40.12% in 1995 [see Table 4.2.3(3) below].

Seemingly, the proportion of the population under the age 19 years has showed signs of decline. It was 57% in the mid-1980s and dropped to 55.13% in 1990 and 51.67% in 1995, according to the World Bank (*ibid.*) [see Table 4.2.3(3) below].

But all in all, the Algerian population is **very young**. It is reported that more than **two-thirds** of Algerians are below the age of 30 years (World Bank, 1994a; Yacoubian, 1997). These figures represent the trickiest problem that the country has to face in the coming years as far as housing, employment, and social protection are concerned.

Table 4.2.3(3) - Structure of the population in Algeria

Age class	1990			1995		
	Class total	Class ratio	Cumulated ratio	Class total	Class ratio	Cumulated ratio
00 - 04 years	3,828	15.31%	15.31%	3,722	13.23%	13.23%
05 - 09 years	3,825	15.29%	30.60%	3,767	13.39%	26.61%
10 - 14 years	3,266	13.06%	43.66%	3,803	13.51%	40.12%
15 - 19 years	2,868	11.47%	55.13%	3,250	11.55%	51.67%
20 - 24 years	2,428	9.71%	64.83%	2,851	10.13%	61.80%
25 - 29 years	1,890	7.56%	72.39%	2,413	8.57%	70.38%
30 - 34 years	1,576	6.30%	78.69%	1,878	6.67%	77.05%
35 - 39 years	1,183	4.73%	83.42%	1,562	5.55%	82.60%
40 - 44 years	791	3.16%	86.59%	1,168	4.15%	86.75%
45 - 49 years	777	3.11%	89.69%	777	2.76%	89.51%
50 - 54 years	721	2.88%	92.57%	755	2.68%	92.19%
55 - 59 years	524	2.10%	94.67%	690	2.45%	94.65%
60 - 64 years	438	1.75%	96.42%	489	1.74%	96.38%
65 - 69 years	357	1.43%	97.85%	392	1.39%	97.78%
70 - 74 years	236	0.94%	98.79%	298	1.06%	98.83%
+ 75 years	303	1.21%	100%	328	1.17%	100%
TOTAL	25,010	100%	-	28,143	100%	-

Source: World Bank, 1994a, with my own calculations

4.2.4 Economic parameters

The Algerian economic model adopted at the time of independence - or, more precisely, since the 1971 nationalization of the hydrocarbon sector - is a perfect example of the rent-driven economy in which "income is not earned, but derived from a gift of nature" and where "revenues are not a gauge of productivity and efficiency, but instead flow from the exploitation of a limited natural resource [oil and natural gas]" (Yacoubian, 1997).

Before the on-going reforms started in the early 1990s, the economy was a state-directed system, where the central government retained ownership of 450 state-owned enterprises, dominated by the industrial sector - more precisely the hydrocarbons (Chapan-Metz, 1993). The distribution of the national GDP among sectors is as follows [see Table 4.2.4(1) below].

Table 4.2.4(1) - Importance of the different sectors in the national GDP

Sector	Unit: % of GDP			
	1975	1985	1994	1995
Agriculture	10.5	9.0	10.5	11.3
Industry	52.5	53.6	49.6	50.7
<i>Manufacturing</i>	9.1	12.2	10.8	11.5
Services	37.0	37.4	40.0	38.0

Source: ONS, compiled by the author

The hydrocarbons sector represents the backbone of the Algerian economy, accounting, respectively, for around 60-65% of the government annual revenues, 25% of the national GDP, and more than 95% of annual export earnings, whose annual average is between US\$ 10 to US\$ 12 billion. Tables 4.2.4(2) and 4.2.4(3) hereafter show the output evolution of the hydrocarbons sector, oil exports through the years, and how it influenced the country's wealth. Although the overall influence of the hydrocarbon industry was positive, especially in sectors related to population welfare, it was negative in some economic sectors, especially agriculture.

Table 4.2.4(2) - Evolution of the hydrocarbons sector production

	<i>Unit: million OET³</i>							
Year	1965	1969	1979	1980	1981	1982	1983	1984
Oil production	31.4	52.4	82.7	71.0	67.4	72.0	79.0	83.5

Source: Hireche, 1989

Table 4.2.4(3) - Evolution of the foreign earnings from oil exports in Algeria

	<i>Unit: US\$ billion</i>				
Year	1980	1985	1988	1990	1991
Total exports	14.965	14.108	9.042	15.002	13.850
Oil exports *	12.971	9.668	5.725	9.588	8.464
Year	1992	1993	1994	1995	1996
Total exports	12.924	11.626	10.774	11.863	NA
Oil exports *	7.885	6.902	6.335	7.008	8.420

Source: United Nations, 1997b; World Bank, 1997a

* Not including natural gas exports.

Without trying to answer the question: *Is the hydrocarbon wealth in Algeria a blessing or a curse?*, paraphrasing Yacoubian (1997), it is opportune to mention that this country owns the fifth largest reserve of natural gas in the world and is the second largest exporter. For oil reserves, it ranks fourteenth in the world.

After having sustained a fair average annual GDP growth in the 1970s (6.5%) and the beginning of the 1980s (4.5%), according to Chapan-Metz (ibid.), Algeria has experienced a striking, severe period of economic recession due to the 1986 collapse of world oil prices. Oil prices fell 70% and hydrocarbons export earnings were halved to 32% of the total revenues. Per capita GDP declined from US\$ 2,790 in 1987 to US\$ 1,531 in 1995 (United Nations, 1997a: Table 22). This situation indicated the danger of promoting a single-resource economy, and "after serving as an icon of Third World development during the oil boom years, Algeria abruptly became the foster child of disastrous central planning" (Yacoubian, ibid.).

This dramatic situation illuminated "the deeply-embedded inefficiencies and mismanagement of Algeria's state-controlled economy" (Yacoubian, ibid.). Recourse to short-term loans was taken to cover the imported basic needs of the population and foreign debt increased dramatically [see Table 4.2.4(4) below].

³ The conventional unit in the oil industry is the *Oil-Equivalent Ton* (OET) which I translate it from the French *Tonne Equivalent Pétrole* (TEP).

Table 4.2.4(4) - Evolution of the external debt in Algeria (1970-1995)

		<i>Unit: US\$ billion</i>								
Year	1970	1971	1972	1973	1974	1975	1976	1977	1978	
Foreign debt	0.937	1.233	1.488	2.932	3.305	4.477	5.934	10.318	15.401	
Year	1979	1980	1981	1982	1983	1984	1985	1986	1987	
Foreign debt	17.962	19.365	17.614	16.63	14.902	13.865	15.330	22.651	24.410	
Year	1988	1989	1990	1991	1992	1993	1994	1995		
Foreign debt	26.041	27.087	27.896	28.216	27.062	26.033	30.167	32.610		

Source: World Bank, 1988, 1989, 1997

However, what changed more dramatically other than the debt is the **debt service/exports ratio**⁴, which abruptly rose from 32.47% in 1985 to 69.33% in 1988. It thus reached an unsustainable level in 1993, hitting 77.36% [see Table 4.2.4(5) below].

Table 4.2.4(5) - Debt service and its debt service/exports ratio in Algeria (1970-1995)

		<i>Units: US\$ billion (% for Ratio)</i>								
Year	1970	1971	1972	1973	1974	1975	1976	1977	1978	
Debt Service	0.044	0.069	0.189	0.300	0.709	0.456	0.773	1.044	1.488	
Exports	1.340	1.173	1.621	2.467	5.621	5.270	5.971	6.733	7.127	
Ratio DS/E	3.28	5.88	11.66	12.16	12.61	8.65	12.95	15.51	20.88	
Year	1979	1980	1981	1982	1983	1984	1985	1986	1987	
Debt Service	2.791	3.854	3.838	4.269	4.462	4.566	4.581	4.681	4.920	
Exports	10.525	14.965	15.581	14.900	14.023	13.919	14.108	9.179	10.511	
Ratio DS/E	26.52	25.75	24.63	28.65	31.82	32.80	32.47	51.00	46.81	
Year	1988	1989	1990	1991	1992	1993	1994	1995		
Debt Service	6.269	6.876	8.626	9.071	9.121	8.994	5.149	4.352		
Exports	9.042	10.913	15.002	13.850	12.924	11.626	10.774	11.863		
Ratio DS/E	69.33	63.01	57.50	65.49	70.57	77.36	47.79	36.69		

Source: World Bank, 1988, 1989, 1997

As a consequence of this, the government reacted in 1989 by launching a comprehensive Structural Adjustment Programme, sponsored by the IMF and the World Bank, in order to achieve economic stabilization and introduce market mechanisms into the economy. Although it started showing substantial progress towards economic adjustment, the reform drive slowed down as a result of the political turmoil that started in 1992.

Given the unsustainable situation of 1993 described earlier, the government concluded a one-year standby agreement with the IMF in April 1994, followed one year later (May 1995) by a three-year agreement encompassing structural adjustment measures.

These agreements opened the opportunity for the government to negotiate with both the Paris Club and the London Club about the external debt rescheduling,

⁴ The debt service/exports ratio is an economic indicator to determine the level of indebtedness of the country. It shows the proportion of the annual earnings that covers the debt service (debt principal reimbursement and interests payment).

which helped lower the debt service/exports ratio to 47.70% in 1994 and to 36.69% in 1995 [see Table 4.2.4(5) above].

This was not as easy as it seems, however. For their part of the negotiations, the government obligated itself to fulfill its commitment to the agreements concluded with the IMF. Some reforms in the economy had to be undertaken.

One particular item of these reforms was the adoption of a more realistic exchange rate. This meant entering a cycle of currency devaluations with all its consequences in terms of prices liberalization and, consequently, their effect on the purchasing power of the population. Table 4.2.4(6) below shows the evolution of the exchange rate in Algeria during the last six years. The effects of this policy can be easily understood if we add to the package the imposed ceiling on government wages and the tightened money supply to contain inflation and reduce domestic consumption and imports. It is then useless to spend time describing the consequences that this exchange rate policy yielded at the social level, given that the basic needs of large segments of the population are mostly imported.

Table 4.2.4(6) - Exchange rate of the US dollar in Algeria (1987-1996)

	<i>Unit: AD per US\$</i>										
Year	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	
Exchange rate	4.94	6.73	8.03	12.19	21.39	22.78	24.12	42.89	52.18	56.19	
Index (1990=100)	41	55	66	100	175	187	198	352	428	461	

Source: United Nations, 1997b: Table 84

Another particular item of these reforms is the industrial sector restructuring and the privatization of the state-owned enterprises. In fact, these enterprises are inefficient and created less than half the jobs per dollar invested compared to the private firms (World Bank, 1995: 26). According to the IMF agreement, far-reaching reforms affected these enterprises but the government was very reluctant "to implement the privatization measures that IMF deems critical for a sustained economic recovery", given that at least 250,000 jobs were estimated to disappear due to these measures (Yacoubian, *ibid.*). However, the government had no choice and started applying these measures in 1996 by setting, as part of its safety net, the *Caisse Nationale pour l'Allocation de Chômage* (CNAC), that is, the National Office for Unemployment.

Although sketchily presented, these reforms did achieve, according to the IMF, quite satisfying results at the macro-economic level: (1) The budget deficit was brought to 4.4% in 1994, down from 8.7% in 1993; (2) The growth of money supply was tightened from 21% in 1993 to 15% in 1994, contributing to the containment of inflation despite price liberalization and devaluation; (3) A financial sector reform was initiated to apply market discipline to state enterprises; and (4) The rate of GDP growth lined up at 4.4% in 1995 [see Table 4.2.4(7) below].

It was, in fact, a positive growth rate after almost a decade of economic recession. However, many critics observed that it was an external growth (higher oil prices and high exchange rate for the US dollar), while prices at the consumer level continued

to increase, the purchasing power of large segments of the population deteriorated. It is then noted that the macro-economic successes have not trickled down to the general population (Yacoubian, *ibid.*).

Table 4.2.4(7) - GDP growth rate in Algeria (1987-1995)

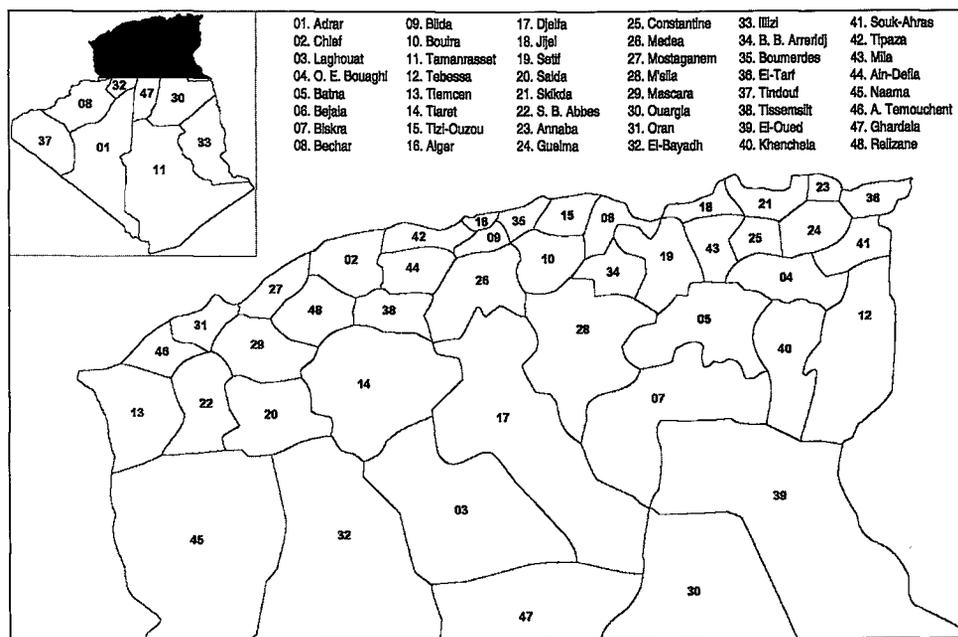
Year	1987	1988	1989	1990	1991	1992	1993	1994	1995
GDP growth rate (in %)	- 0.1	- 1.6	+ 5.0	- 1.5	- 1.4	+ 1.8	- 1.9	- 1.0	+ 4.4

Source: World Bank, 1997a

4.2.5 Administrative and political structure

For administrative purposes, Algeria is divided into 48 provinces (*wilaya* in singular and *wilayate* in plural) [see Figure 4.2.5(1) below]. Each *wilaya* is divided into districts (*daïra* in singular and *daïrate* in plural), and each district is constituted in its turn by municipalities or communes (*baladia* in singular and *baladiate* in plural). These are also the levels of hierarchical stratification in terms of development. In fact, each line ministry must have at least an official office at the province level, but many, such as the Ministry of Agriculture and Fisheries, goes down to the municipality level.

Figure 4.2.5(1) - Map of the 48 provinces of Algeria



The maintenance of law and order is the responsibility of the *wali* at the province level, and of the Daïra Chief at the district level. At the municipality level, this used to be the charge of the mayor or president of the *Assemblée Populaire Communale* (APC), elected for 5 years through democratic ballot, but for the last few years, this task went to the president of the *Délégation Exécutive Communale*, a special body co-opted by the administration after all assemblies elected in the first multiparty election of 1990 were dissolved, after the famous *Front Islamique du Salut* (FIS) movement in the country.

For the purpose of agricultural development, the *Direction des Services Agricoles* (DSA) is the representative, decentralized unit of the Ministry of Agriculture and Fisheries at the province level. Organized into at least 5 services, it is structured downwards into District Sections (*Subdivisions*), depending on the importance of the size of the *wilaya*. Each *subdivision* covers a group of *baladiate* [see Table 4.2.5(1) below].

However, since the early 1990s, farmer organizations have started to appear and Provincial Chambers of Agriculture were settled, one for each *wilaya*, culminating all with the National Chamber of Agriculture.

As far as agricultural development is concerned, these new bodies, serving as farmers' claims channels, are of a great importance, even though the problem of representativeness is put into debate.

Table 4.2.5(1) - Administration and agricultural sector's structures in Algeria

Level of territoriality	Administration structure	Agricultural sector structures	
		Administration	Farmers' organizations
National	Government	Ministry of Agriculture and Fisheries	National Chamber of Agriculture
Province	Wilaya	Direction des Services Agricoles	Provincial Chamber of Agriculture
District	Daïra	Subdivision de l'Agriculture	Farmers' associations
Commune	Baladia	Délégué Communal	Farmers' associations

Source: field notes

On February 23, 1989, a new constitution was voted by the people and the one-party system was replaced by a multiparty 'democracy'. The same constitution was in November 28, 1996 in order to 'consolidate' democracy and the multiparty system. Since the introduction of the multipartism in 1989, the political structure consists of these following complementary layers:

- the Communal Popular Assembly, as the executive body, at the *baladia* level,
- the Wilaya Popular Assembly as the decision-making body, and the *Wilaya* as the executive body, at the provincial level;
- the bi-cameral (two chambers) Parliament as the legislative body, and the Council of Government as the executive body, at the national level; and,
- the president of the Republic.

All the assemblies and the president of the Republic are elected by democratic ballot for 5 years. The first multipartist and 'democratic' presidential election took place on November 16, 1995 and the new multipartist and democratic National Popular Assembly (1st Chamber of the Parliament) was 'democratically' elected on June 5, 1997.

The last, but not least, event to mention here concerns the new multipartist, democratic *Assemblées Populaires Communales* (APCs) and *Assemblées Populaires de Wilaya* (APWs) that were 'democratically' elected on October 23, 1997, giving birth to the Council of the Nation (2nd Chamber of the Parliament), two-thirds of which are members elected from elected persons at APCs and APWs, and the remaining one-third is nominated by the president of the Republic.

4.2.6 On-going political, socio-economic and cultural settings

Despite the good results achieved by the reforms, as described above, some striking political, socio-economic, and cultural problems remain there and constitute the agenda for the coming governing bodies. These are briefly presented hereafter:

- The economy is still oil-centered, which heightens the country's vulnerability to external shocks and fails to address the major structural flaws that plague Algeria, such as reducing unemployment through creating enough job opportunities. Instead of showing some creativity in an efficient economic policy in order to diversify foreign earnings, the regime is still relying on the hydrocarbon sector as shown by the multi-billion dollar contracts that foreign companies continuously sign with Sonatrach, the state-owned oil company, since 1995 (Yacoubian, *ibid.*).
- The economy is plagued by inefficient, state-owned enterprises, especially in the industrial sector where output failed by 12% in 1996 while the national GDP continued to rise. Meanwhile, these state industries that employed 1.7 million workers routinely operated at 35 to 50% of their capacity (Yacoubian, *ibid.*).
- Unemployment is very high (estimated in 1996 at 28% by ONS). Jobless people count for 2.1 million, among whom 80% are less than 30 years old, while the economy created 144,000 jobs in 1995. These figures, susceptible to increase through the applications of the IMF-recommended privatization measures, frighten the regime that is wary of the potentially explosive response to public sector lay-offs (Yacoubian, *ibid.*).
- Housing is characterized by a severe shortage as the 1996 housing deficit was estimated at 2 million units (World Bank, 1996). As Yacoubian (*ibid.*) puts it, "with a population growing by at least 500,000 each year, the strain of housing is unlikely to lessen anytime soon".
- Although demographic growth has slowed to 2% per year [see Table 4.2.3(1) above], the effects of previous higher growth rates are still present in Algerians' daily life. In fact, the number of young men between the ages of 15-30 has more

than tripled between 1965 and 1990, according to Ruedy (1994b: 82). The '*hittistes*'⁵ are now facing social problems including truancy, drug abuse and lack of hope in the future because of unavailability of job opportunities and shortage of housing.

- Algeria's rent-based economy always represented a magnet for corruption, as the rentier state and its corrupt bureaucracy controls - and continues controlling under the umbrella of democracy - the distribution of hydrocarbon wealth. As a consequence, many actors in the Algerian economy, instead of focusing on real, productive economic ventures, devote their efforts to chasing hydrocarbon rents, and compromise non-oil based productivity (Yacoubian, *ibid.*).
- Some environmental problems are currently reported in the country. These are the following:
 - * Soil erosion from overgrazing and poor farming practices;
 - * Dumping of raw sewage, petroleum refining wastes, and other industrial effluents, leading to pollution of rivers and coastal waters;
 - * Mediterranean Sea, in particular, becoming polluted from oil wastes, soil erosion and fertilizer run-off;
 - * Inadequate supplies of potable water.

Therefore, as Yacoubian (*ibid.*) says:

A burgeoning population, massive unemployment, overcrowded cities, and a dilapidated infrastructure have combined with a vastly inefficient economy to create a socio-economic catastrophe in Algeria. The past five years of violence only aggravated these deep-rooted problems. As most Algerians struggle to meet daily needs, the 'social explosion' scenario of rioters taking the streets looms ominously on the horizon.

It is true that this situation is very worrisome for the evident fact that the Algerian underprivileged class, especially the '*hittistes*', disgusted by rampant public corruption, alienated from the regime to which they "harbour a deep hatred", and losing hope in their future, can provide a bottomless pool of recruits for any riots or upheavals, according to Yacoubian (*ibid.*).

4.3 Algeria post-independence state formation and its development philosophy

4.3.1 Historical sketch of the post-independence state formation

In 1962, after seven-and-a-half years of a bloody war against the French colonization, which started in 1830 and lasted for 132 years, Algeria recovered its sovereignty and a post-independence state apparatus had to take over the colonial governorate. How this state was formed in the past and settled in office is considered to be of utmost importance in understanding the present life of the country.

⁵ The word *hittistes* represents a French- syntax Arabic word used to describe the disaffected young men that "prop up the walls", according to Yacoubian (1997).

This is why I decided to consider the period of the French colonization as a starting point in this section in order to describe the historical process of the Algerian state formation and gather enough knowledge about two important issues for this study: (1) The philosophy of development in post-independence Algeria, under the one-party system that took place in 1962, and; (2) The consequences of this philosophy on the agricultural development arena, and its related planning and policy-making system.

Contemporary history of Algeria is very tightly linked to the *Front de Libération Nationale* (FLN) evolution. In 1954, this party engaged in a difficult endeavour to unify all the Algerian forces, founded upon different ideologies, in the struggle against the French colonization. Given the success of this action, the FLN became the main opponent to the French colonial state during the *Guerre de Libération*, which started November 1, 1954.

However, this organization was far from being a monolith. Already in 1956, it was described as a constellation of political and social forces representing contradictory and clashing interests. While the mission of the FLN was to free Algeria from French colonialism and recover its independence, a bureaucracy emerged from this organization and developed at the periphery of the first Algerian *Gouvernement Provisoire de la République Algérienne* (GPRA), a provisional in-exile government, that was formed in 1958 in neighbouring Tunisia. As Bennoune (1976: 5) reports:

While the burden of the war was still being carried by the peasantry, these disparate social classes [that encompassed the FLN party] were engaged in only silent, internal, factional strife and maintained on the surface a working 'holy alliance' of all political tendencies.

Moreover, Jackson (1977: xv) acknowledges that "the fundamental obstacle to the movement's political development was divisiveness among the FLN leaders themselves". This was mainly due to the way leaders were 'elected' within the organization. According to Bennoune (*ibid.*: 6), at the top, leaders were co-opted for their political importance, at the bottom, it rested on local notables rather than on real militants. Jackson (*ibid.*) affirms that:

Of necessity, the leaders contained their political and personal differences in the confrontation against the French. Yet, the latent conflicts were never resolved in wartime and persisted even after independence was won. From its inception, FLN adapted the principle of collegial leadership. . . . Collective authority was instrumental in regulating the leadership conflicts during the struggle. But just before independence, the party movement itself divided into opposing camps as different leaders enlisted supporters to compete in a factional struggle for power. Consequently, the principle of collective leadership succumbed to factionalism at the very time it would have been most useful in promoting the rise of cohesive and representative party.

When Algeria became independent in 1962, the FLN emerged from the war as a highly fragmented entity. At the same time, FLN leaders decided that the party should be the national guide and authority of the new political system (Jackson,

ibid.: xvi). In other words, the FLN became the only 'engine' of economic and social development in the country, although, as Bennoune (ibid.: 5) states well:

Until the Tripoli Program was adopted in 1962 by the National Council of the Algerian Revolution (CNRA), the various platforms and the declarations of the FLN contained no detailed socio-economic analysis outlining the future political system of the country.

This decision taken by some leaders without consulting of the rest of the militants ended up in "the outbreak of an open struggle in the summer of 1962 between various factions of the FLN representing conflicting ideological and economic interests" (Bennoune, ibid.).

In summary, after having achieved the very difficult task of unifying all Algerians in the struggle against the French to recover the independence of the country, the FLN started developing a culture of factionalism, within which certain factions started to build up many '*contre-nature*' ties with the national bourgeoisie.

After the departure of the French settlers in 1962, the post-colonial class struggle began properly. As Bennoune (ibid., 8) puts it, the national bourgeoisie, which was in a chronic state of 'under-capitalization', started buying, at low prices, all industrial, commercial, and other valued mobile property from the fleeing settlers. Within the same context, the landlords and rich peasants desired the possibility of purchasing farms from the leaving 'colons', but they did not do so as the agricultural labourers barred their way by settling self-management committees (see Box 4.5.2.2(1) in this chapter). Meanwhile, as Bennoune (ibid.) recalls,

The professionals, educated elements, former colonial civil servants (mostly trained and promoted during the war within the framework of the counterinsurgency strategy), FLN bureaucrats from the provisional government in Tunisia and Morocco, and some educated guerrilla officers occupied the administrative structure of the former colonial state apparatus.

The territorial organization left by the French was not changed much at independence and all communes were administered by appointed 'special delegations' (Bennoune, ibid.).

Inside the administration, the upper echelons went exclusively to people from a bourgeois background, either from 'metropolitan' France or among the 'natives' of Algeria. The number of civil servants operating in the new state turned around 55,000-60,000 persons. An official census conducted in 1963 revealed that two-fifths were Algerians that graduated from the schools of colonial administration and the rest were 'chosen' FLN and ALN (National Freedom Army) cadres and/or persons recruited after March 19, 1962 (cease-fire day). As a result, according to Bennoune (ibid.: 8):

This bureaucracy inherited not only these colonial structures but also attitudes and values characteristic of the civil service, which was indifferent and disdainful to the plight of the administered population.

The decision taken by the FLN leaders to adopt a one-party system engendered an internal political crisis within the FLN. According to Bennoune (ibid.: 9):

This crisis was provoked by class realignment which began in the summer of 1962, both within the FLN and the Algerian society at large. Class and ideologies distinctions grew into grave contradictions, notably into differences of opinion both between the right and left of the FLN, and between different sections of the left.

However, although the post-independence state had to start under a given political leadership, the different political groups did not reach a consensus. By fall, 1962, a coalition of disparate factions, coming from heterogeneous social backgrounds, allied with the *Armée des Frontières* and gained power under the leadership of the populist Ben Bella. Thanks to some wise personalities in the country and to the people that demonstrated in the streets, shouting "*sebaa snine barakat*"⁶, a civil war was avoided and the new state started functioning according to the Tripoli Charter.

Until 1965, taking the time to construct their politics and policies around a supposedly revolutionary, socialist rhetoric, the political leadership developed an extremely populist discourse and was always delaying the required decisions on emergent aspects. This did not please the high staff of the army and, after having been patients for 3 years, the army generals decided to intervene.

On June 19, 1965, as Bennoune (ibid.: 9) mentions, a 'coup d'etat' took place and allowed the army to take control over the power. This 'coup d'etat' resulted in a 'worked alliance' between the new techno-bureaucratic bourgeoisie and the army which lasted until 1971, when the charter for the agrarian revolution was adopted by the political revolutionary leadership.

At this paradoxical juncture, both political and economic power was the domain of the Revolution Council, the main body of the state, while the executive administrative power felt upon the new administrative bourgeoisie which re-established close ties with the old mercantile and rural agrarian bourgeoisie. Having at its top a man (late Houari Boumediene) with a great dedication for the construction of the country and for the welfare of the people, the state took important decisions related to the nationalization of natural resources and the major means of production, as well as welfare policies aimed at a fair distribution of the national income and resources. This was called 'the decade of real development'. However, this could not hide the great paradox of the iron-law that Algeria had to suffer under: The clanism at the highest sphere of the state apparatus.

In fact, the regime (or *le pouvoir*, as it is called in Algeria) that took place at that time relied "on two primary sources: The military and a complex bureaucracy/security apparatus", meaning that the "real power in Algeria has always resided with the military" (Yacoubian, 1997).

⁶ The slogan meant that seven years of a bloody war against the French was enough, and there was no need to fight for power. This was mentioned earlier in section 1.3.1, according to Quandt (1998:22).

But this regime that implicitly inherited the unsolved problems of the ante-independence era was far from being monolithic as well. Thus, the '*lutte des clans*' "served as a constant backdrop to the army's role in Algeria politics" (Yacoubian, *ibid.*). As Yacoubian (*ibid.*) mentions:

Lacking indigenous institutions to ground their authority, Algeria's new leaders simply grafted their war-time, clan-based network onto the remnants of the French colonial system. . . . To this day, Algeria's leadership is driven by narrow, clan-based interests, and ultimately by a desire to stay in power.

After the death of Houari Boumediene, things started changing at a very high speed. The consequences of the iron-law of clans mentioned above became more apparent. The pro-capitalist (or better, the rentier) clan consolidated their strength within the state apparatus and the FLN party, under the blessing of the powerful generals of the army who never sought to govern the country openly. They were thus able to get one of theirs - Chadli Bendjedid - into the presidency of the Republic in 1979, and started a purge against Marxist-Leninist planners and pro-Boumediénists in order to "shift the balance of political forces in their favour" (Pfeifer, 1985: 238). This announced the start of the 'black decade'.

Preferring as always to stay in the background, ruling from 'behind the curtains', the military developed an elaborate state apparatus to execute the military decisions. "This vast network [the state apparatus] of security personnel, bureaucrats, and public entrepreneurs maintains a symbiotic relationship with the regime, carrying out its dictates in return for personal profit" (Yacoubian, *ibid.*). In this system, the president in fact cannot decide alone and has to only be the public expression of the fragile equilibrium of the decision-makers. Some who wanted to rule without consultation of the military were pushed out of power. Chadli Bendjedid in January, 1992, and Liamine Zeroual in September, 1998 are two examples over whom this rule was applied.

In the state bureaucracies, civil servants come from a variety of background factions within their countries, although in the Algerian case, they have a bourgeois (or even a petty bourgeois) profile, especially among those staffing the higher positions. This sets a culture of recruitment and promotion conditioned by the affiliation to a given faction. In such a context, faction rivalries became basic elements of conflicts within and/or between different administrative units. Thus, transfers, promotions and other forms of personnel change take place as the outcome of internal political processes which are of an informal or 'behind the stage' kind. People do not benefit from these personnel changes because of their competence, qualification, experience, and skills, given that family relationships, ideologies affiliation and other factors count for a great deal in such a context (Wallis, 1989). To sum up the features of this system, Yacoubian (*ibid.*) suggests that:

Elaborate patron-client networks have developed in which well-connected bureaucrats exploit their access to state goods and perks to secure favours from clients. Government bureaucrats serve as intermediaries, directing the distribution of goods, state contracts, and (notably) oil rents.

In other words, the state in post-independence Algeria, after being a relatively correct form of a developmental and welfare state during the mid-1960s and 1970s, became in the early 1980s a true case of what Wiggins (1985) calls the "*economy of affection*". Worse still, Algeria entered the 'decade of political instability' in 1988, within which not less than four presidents and seven governments have been in office, and many 'models' of consultative bodies were experienced.

4.3.2 Algerian post-independence state and development philosophy

After independence, the political and economic orientation in Algeria was basically based - at least at the level of official rhetoric and discourse - upon a socialist ideology, with a one-party political system as the unique 'source of inspiration' for the social and economic development of the country. However, notwithstanding what was said by political leaders - that is, Algeria was following a non-capitalist (or better, a socialist) model of development - independent Algeria as it evolved since the 1960s fit neither the pure 'capitalist' nor the pure 'socialist' model. Yet the pattern it manifested, according to Pfeifer (1985: 6), seems to be representative of a particular trend easily recognizable among Third World countries at certain periods in their histories, that is state capitalism. According to Pfeifer (*ibid.*: 8),

Seeking to catch up with the industrial capitalist countries, Algeria followed a development path which entails a crucial role for the state and public ownership. Yet which fosters institutions such as pursuit of profit and hierarchical social that are typical of other, more obviously capitalist societies.

The model followed by the Algerian political leaders assigned total authority in development work to the state through a centralized unit of planning and a large state bureaucracy.

Under this orientation, the state took an active role in directing the economy through central planning, investment in infrastructure (transportation, communications, and utilities), and even direct investment in manufacturing. It used its control over the resources and credit to influence the decisions of private enterprises in those arenas which public enterprises did not (or could not) invest in, such as light industry, services, and agricultural production. It promoted social, educational and welfare policies that aimed at modernizing the labour force. It affected income distribution as well, through wage policies and through public subsidies for certain consumer goods. It also promoted structural change in the agricultural sector through the agrarian revolution.

4.3.3 Consequences of state development philosophy on agricultural development

Though the political leaders were claiming that the model of development was socialistic, the real vision of the bureaucratic state was rather more capitalistic as high civil servants dealt with the country's wealth as if it was their own. In such a 'capitalist-oriented' context, as Long (1988: 109) puts it:

Agricultural development entails increasing capital penetration, although it may not lead immediately to the formation of a capitalist farming class... It is also frequently marked by the bi-polarization of rich and poor farmers implying the marginalization of some producers, depeasantization and proletarianization.

However, one typical characteristic of this mode, according to Long (*ibid.*: 110), remains its periodic crises which lead to increased unemployment and reduced wages. And it is the responsibility of the sole state to design strategic actions to bring back profit at its initial level and contain the mass social troubles. On a rural level, these crises engender the agrarian crisis which is often characterized by very low-rate local development, generalized rural poverty, stagnation (or in the worst cases, reduction) in crop production and increasing political and social conflicts. Furthermore, Long (*ibid.*: 112) mentions:

Dominant class interests, represented either directly or indirectly in state power, were critical in determining the types of policies adopted and their effectiveness. Stated policies goals often concealed other implicit objectives that were logically derived from the dominant characteristics and contradiction in the socio-economic system.

In this sense, development actions were always designed in such a way that, according to Long (*ibid.*), "the capitalist landed elite and the rural bourgeoisie (often in alliance with members of the urban bourgeoisie) received the lion's share of the benefits". Moreover, the state has always played a major role in eliminating the "remnants of pre-capitalist social relations, which block[ed] the development of the forces of production", as it tried to do with the promulgation of the agrarian revolution charter. Thus, in such a context, instead of being at the service of the people (the majority), the state becomes a more direct instrument of domination of the class alliance in power.

4.4 The agricultural sector in Algeria⁷

4.4.1 General background of the agricultural sector since the independence

Prior to independence in 1962, Algeria's economy was mainly dominated by agriculture for not less than a millennium. It once provided 93% of its agricultural requirements. However, with rising oil revenues, especially since 1973, when the first oil crash happened, the government embarked on a very ambitious industrial programme which transformed the economy to the detriment of agriculture.

When the agrarian revolution was launched, agriculture was still an important sector. However, for many reasons, its output could not live up to the national demand. Major factors of this situation were as follows.

Although some intensification was introduced in the *Domaines Agricoles Socialistes* (DASs), i.e. the state-owned and worker-managed farms, the rate of production growth for some basic crops did not equal the demographic growth, which was extremely high (more than 3% in the 1960s and 1970s).

Moreover, a fierce - although introverted - 'resistance' to the agrarian revolution emerged after 1973 from powerful segments in the country, having strong linkages with the regime (or its periphery), which hampered the implementation of the policy and negatively influenced agricultural output. At the same time, Algerian agriculture is mostly rainfed (irrigated land does not count for more than 3% of the total arable land), and rainfall is rather unstable and irregular. Table 4.4.1(1) shows perfectly the fluctuations of agricultural production within a given period.

Table 4.4.1(1) - Changes in total agricultural production (1984-1989)

	<i>Unit: million ton</i>					
Year	1984	1985	1986	1987	1988	1989
Total production	3.474	5.543	4.185	3.070	3.964	5.246

Source: Ministry of Agriculture and Fisheries

Given the tremendous development of the industrial sector and the stagnation of agricultural output, the importance of the agricultural sector started declining. Table 4.4.1(2) shows the decline of the agricultural proportion in the national GDP since the nationalization of the hydrocarbons (1971), more precisely since the 1973 oil boom.

Table 4.4.1(2) - Agricultural proportion in the national GDP (1969-1978)

	<i>Unit: %</i>									
Year	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
AgGDP	12.4	10.9	9.5	10.0	7.9	6.7	7.8	8.0	7.0	6.7

Source: Hireche, 1989

⁷ This section is written upon information from different publications of the ministry of Agriculture and Fisheries as well as from different publications of the Ministry-Delegation of Planning.

However, in order to secure the basic needs of the population, and thanks to the 1973 oil boom that secured considerable amounts of foreign currency for the country, the government was forced to resort to food imports, especially for cereal grains, in order to fill in the gap. Additionally, after having been a net exporter of high quality agricultural products, Algeria became a net importer of agricultural products, mainly because of the inefficiency of the implemented development actions and the low input from the state.

4.4.2 Present real assets of the agricultural sector in Algeria

4.4.2.1 Land resources and major crops

Despite the large size of the country (238 million hectares), only 42 million of hectares (18% of the total area) are classified as agricultural land resources. Among these, Algeria does not use more than 7.5 million of hectares for agricultural activities, which represent only 3% of the total area [see Table 4.4.2.1(1) below]. The ratio of arable land per inhabitant has decreased from 1.10 in 1901 to 0.60 in 1955 to 0.32 in 1995 (INVA, 1997: 8).

Table 4.4.2.1(1) - Land resources, land use and evolution through the years (1965-1995)

Item	Evolution through the years							Average rate (%)
	1965	1970	1975	1980	1985	1990	1995	
1. Total land	238,174	238,174	238,174	238,174	238,174	238,174	238,174	100.00
2. Agricultural land	44,167	44,216	43,753	43,830	39,051	38,676	NA	17.75
3. Annual & permanent crops	6,784	6,800	7,495	7,509	7,511	7,635	8,029	3.06
4. Annual crops	6,203	6,248	6,845	6,875	6,910	7,081	7,519	2.81
5. Permanent crops	581	552	650	634	601	554	510	0.25
6. Permanent pastures	37,383	37,416	36,258	36,321	31,540	31,041	NA	14.69
7. Forest & wood	3,200	3,700	4,122	4,384	4,586	4,061	NA	1.68
8. All other lands	190,807	190,258	190,299	189,960	194,537	195,437	NA	80.56
9. Non-annual & permanent crops **	231,390	231,374	230,679	230,665	230,663	230,539	230,145	96.94
Irrigated land	233	238	244	253	338	384	555	0.13

Source: FAO, 1998

* 1995 is not included in the mean calculations due to the non-availability (NA) of some data.

** Row 9 (Non-annual & permanent crops) includes the sum of rows 6, 7 and 8.

Table 4.4.2.1(1) shows the land resources in Algeria and their evolution through the years. Irrigated land represents an average 0.13% of the total area, 0.76% of the agricultural land, and 4.40% of the annually cropped land.

A confidential report of the World Bank, based on a survey conducted by the Algerian organization, the *Bureau National des Etudes en Développement Rural* (BNEDER), revealed that the semi-arid zone (annual rainfall between 450 and 600

mm) counts for more than 66% of the agricultural area, while the arid zone (annual rainfall between 350 and 450 mm) takes 14% of the same area.

Within this agricultural area, cereal crops annually comprise nearly 50% of the area, while the cereals-based farming systems (including cereals, pulses, forage, pastures and fallow) account for more than 90% of this area. Table 4.4.2.1(2) shows these figures.

Table 4.4.2.1(2) - Supremacy of cereal crops in Algerian agriculture (1975-1995)

Items	Variation over the years					Average
	1975	1980	1985	1990	1995	1975-95
Agricultural land (1)	7,495	7,509	7,530	8,098	8,026	7,732
Cereal crops (2)	3,506	3,717	4,166	3,428	3,174	3,598
Fallow (3)	3,212	2,981	2,500	3,838	4,038	3,314
% cereal crops (2/1)	47	50	55	42	40	47
% cereal systems ((2+3)/1)	90	89	89	90	90	90

Source: World Bank, 1997b

It should be noted that cereals provide 80% of the average nutritional diet in Algeria, 60% of the energy and 70% of the proteins. But despite its large 'supremacy' within the agricultural sector and in consumption, the domestic overall production of cereal crops remains insufficient [see Table 4.4.2.1(3) below] and does not cover more than 25-30% of the population needs.

Equitable access to this strategic food has been maintained for all due to the massive imports of cereal grains by the government from the world market.

Given the amount of foreign currency it annually requires and which the government is increasingly unable to mobilize, this dependency became less and less easy to sustain.

Table 4.4.2.1(3) - Cereal production during the 1986-95 decade

Year	Unit: 1,000 T										
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	Average
Production	2,381	2,062	1,034	1,972	1,624	3,808	3,225	1,451	962	2,139	2,066

Source: World Bank, 1997b

4.4.2.2 Pasture and rangelands and current carrying capacity

Pasture and rangelands, the most important part of which is known as the *steppe*, are located between the isohyete 200 mm, as a lower limit and the isohyete 400 mm, as higher limit. The importance of these zones is not in their tremendous acreage *per se*, even though they count for more than 30 million hectares (1961-97 average), but in the volume of livestock that is living in these zones (35% of all animal resources and almost three-quarters of the total sheep flocks). Despite their importance, these areas are severely exposed to over-exploitation, resources depletion, and thus, to degradation and desert encroachment [see Table 4.4.2.1(1) above, row 6].

The rangelands are the main feeding source - which is their primary function - for animal resources, mostly sheep, that graze in these regions. In terms of capacity, over 12 million sheep graze in the steppe rangelands. A recent study has estimated the carrying capacity at 525 millions FU per year in 1993, while it was 1.6 billions FU in 1978. Meanwhile, sheep flocks increased from 8 million head in 1978 to more than 12 million head in 1993 (Redjel, 1993; Boukheloua, 1995). At the same time, the maintenance requirements for the actual livestock present in these areas was estimated at 5.5 billion FU per year, which implies that a huge disequilibrium between demand and supply exists (Boukheloua, *ibid.*).

At present, it is estimated that an average of 45 FU⁸/ha/year is available, which represents 43% of the total diet of the sheep living in the rangelands area (71% of the total sheep). The rest of the diet is covered by either feed imports or feeding resources coming from other areas, such as barley, hay, stubble grazing, etc. made available mainly in the *High-Plateaus* region. These issues will be presented in more details in Chapter 5 section 5.3.

4.4.2.3 *Livestock, cattle, and other animal resources*

Animal resources represent a very important sub-sector in agricultural activity, especially for the sheep, whose name 'El-Mel' among Algerian shepherders, middlemen, and specialists means *the capital* in the Algerian dialectal language. Among all other animal resources, sheep take a place of utmost importance in the risk management strategies of the farmers. Table 4.4.2.3(1) shows the evolution of the animal resources as an important sub-sector of agriculture.

It is clear that all types of animal resources grew at a constant rate since independence, with the exception of camels because of a lack of government support towards this sub-sector. However, since the beginning of the 1990s, the sub-sector gained some attention from the government due to the creation of a specific association that could 'speak up' about the role of these animals in the national economy (main transportation means for the far remote Saharan areas). The most noticeable rate of annual growth concerns the chicken sub-sector which was due to the voluntaristic policies to develop this activity in order to provide alternative animal proteins for the population at the cheapest price. The other sub-sectors received slight support from the state in terms of feed resources, breed imports, specific equipment, and technical and health assistance.

⁸ FU stands for the Feed Unit which is a conventional measure used in cattle and sheep nutrition. One FU is equivalent to the amount of energy given by one kilogram of barley grains.

Table 4.4.2.3(1) - Evolution of the animal resources in Algeria (1965-1995)

Item	Evolution through the years						Unit: thousands head		
	1965	1970	1975	1980	1985	1990	1995	Mean (1961-97)	Growth (1965-95)
Cattle	602	885	1,002	1,363	1,416	1,392	1,267	1,106	2.94%
Sheep	5,726	7,788	9,773	13,370	15,660	17,697	17,302	11,860	3.93%
Goats	1,762	2,581	2,269	2,723	2,688	2,472	2,780	2,445	1.34%
Camels	176	184	155	149	133	122	126	147	-0.51%
Chickens	10,600	13,800	16,061	25,000	63,000	74,000	102,000	41,443	10.34%
Beehives	120	150	180	192	215	245	270	190	2.11%

Source: FAO, 1998

According to INVA (*ibid.*: 11), agricultural animal products count for more than 50% of the agricultural GDP during the last decade. They are composed of:

- red meat, with a production of 290,000 tons, at an average annual growth of 6.1%;
- poultry meat, with a production of 300,000 tons, at an average annual growth of 11.1%;
- dairy milk production, estimated at 1.05 billion liters (to which must be added 4.1 million tons of imported skimmed milk powder) with an average annual growth of 4.8%;
- eggs, with a production of 165,000 tons, at an average annual growth of 30%.

Concerning red meat production, even though the annual growth remains acceptable for the last decade (4.6% in average), as Table 4.4.2.3(2) shows, the production did not cover the deficit accumulated since the time of independence. However, it is worth mentioning that the objective of 228,000 tons of the IInd Quinquennial Plan (1985-1989) was almost achieved in 1990.

Table 4.4.2.3(2) - Evolution of red meat production in Algeria (1987-1996)

Year	Unit: thousand metric Ton										
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	
Beef and veal	74	81	85	89	89	108	98	101	101	104	
Mutton and lamb	107	111	129	134	144	155	169	169	170	175	
TOTAL	180	193	214	223	233	263	267	270	271	279	
Annual growth (%)	-	7.2	10.9	4.2	4.5	12.9	1.5	1.1	0.4	3.0	
Average growth (%)	-	-	-	-	-	-	-	-	-	4.6	

Source: UN, 1997a: Table 44

To these resources, we must add the fisheries sub-sector. With 1,200 km of coast on the Mediterranean Sea, Algeria could make significant use of potential of fisheries to increase its food security. According to INVA (*ibid.*: 14), the 'fishable' stock on the coastal band is estimated at 160,000 tons per year, without including other fishable stocks. Meanwhile, the best level of production ever achieved was 135,402 tons in 1994, known that the average of the 1990-95 period was 101,330 tons⁹.

⁹ My own calculations based upon Table 4.4.2.3(3) give a figure of 103,700 metric tons.

In terms of fish consumption, the average is estimated at 3.4 kg/inhabitant/year which is extremely low compared to the Mediterranean average that totals 12 kg/inhabitant/year. The main reason for this that can be attributed to the expensive price of all different kinds of fish, with a slight exception with sardines. But other reasons exist which indicate that the fisheries sub-sector did not develop much in Algeria and is still traditionally-oriented. The existence of a powerful lobbying group that controls the fish market at consumer expense is a major factor in this situation.

4.4.2.4 Forest and other similar resources

Notwithstanding their ecological and even economic importance, forests count for only 4 million hectares with a forestation rate of 11% of the total northern region of the country and only 1.5% of the whole country.

The main species that can be found in these forests are *Pinus alepensis*, *Pinus maritima*, *Quercus sp.*, *Eucalyptus*. *Pinus alepensis* is the most expanded species as it counts for more than 20% (881,000 ha) of the Algerian forests. 82% of these forests are considered public domain.

Alfa is another pastoral resource that has an extreme ecological importance but it is also important economically for the paper industry. The total area covered by this resource represents 2,6 million hectares, but only 450,000 ha are actually exploitable for intensive production. 65% of this resource is located in the western part of the country (INVA, *ibid.*: 13).

4.4.2.5 Water resources

In Algeria, water resources are of three kinds: Surface water, groundwater, and deepwater. Annually, 12 billion m³ of surface water are provided through annual rainfall, most of which flows to the Mediterranean Sea or to the *chotts* in the Saharan desert. Water catchment accounts for only 2 billion m³ annually through a hundred small and medium dams, all located in the northern part of the country.

1.6 billion m³ of groundwater are exploited annually over a potential stock estimated at 1.8 billion m³ for the northern part of the country. Alternatively, the Saharan desert contains a huge potential of deepwater. The potential stock that can be exploited annually is estimated at 5 billion m³. However, its exploitation over this norm may reduce the artesian pressure of traditional irrigation schemes such as the *foggaras*. The actual level of exploitation is around 1.5 billion m³ per year to cover the irrigation needs of 100,000 ha that are cultivated in these regions out of a potential of 300,000 ha (INVA, *ibid.*: 9).

However, some information indicates that Algeria will face a tremendous shortage of water at the turn of this millennium.

4.5 Agricultural planning and policy-making in post-independence Algeria

4.5.1 Introduction

Agriculture in Algeria presently faces an intriguing dilemma. On the one hand, it must keep pace with an increasing domestic demand while, on the other hand, it suffers from low performance in terms of productivity. As a consequence, the Algerian food situation is characterized by a strong dependency upon the foreign market, which puts the country in a very fragile position, as Table 4.5.1(1) shows. The government has to yearly allocate US\$ 2.5 billion annually to cover its annual food imports, which represents not less than 25% of both Algerian total annual imports and foreign earnings. For instance, Algeria is the first importer of durum wheat in the world, purchasing 50% of the total world trade of this product annually (INVA, 1997).

This dependency on the world market may worsen, especially if we have to assume that prices of major agricultural products in the world market, and competition over the quantity of food available, are expected to increase considerably in the near future.

Table 4.5.1(1) - Level of food dependency in Algeria in 1996

Product	Unit	Figures per year		Imports rate
		Consumption	Imports part	
Cereals and derivatives	kg/inh.	185	150	81%
Pulses and food legumes	kg/inh.	8	7	87%
Milk and derivatives	l/inh.	87	55	63%
Sugar and derivatives	kg/inh.	32	32	100%
Oils	l/inh.	14	14	100%

Source: INVA, 1997: 7

In fact, in comparison to the voluntaristic policies implemented in the industrial sector, Algerian agriculture has suffered from a lack of effective government support. The favour shown toward the industrial sector increased throughout all of the development plans [see Table 4.5.1(2) below] until 1985, when the decline of the agricultural output became a critical issue.

Looking at Table 4.5.1(2) below, one can easily remark that it is only in the IInd Quinquennial Plan (1985-1989) that agriculture received more than 30% of the share of the total investments allocated for both agricultural and industrial sectors, even though this proportion includes all investments planned for the water sector which do not benefit exclusively the agricultural sector.

However, knowing the situation of oil prices in 1986, these funds could never be allocated to the agricultural sector and all investments were redirected, mainly towards the hydrocarbons, in order to increase exports and thus foreign earnings.

Table 4.5.1(2) - Planned public investments in agricultural and industrial sectors

Unit: billion AD

Development Plans	Sectoral investments				Total of plan	
	Agriculture		Industry		Value	%
	Value	%	Value	%		
1st Triennial Plan (1967-69)	1.22	17.9	4.05	59.6	6.8	100
1st Quadrennial Plan (1970-73)	4.91	17.8	12.34	44.7	27.6	100
2nd Quadrennial Plan (1974-77)	16.72	15.2	47.85	43.5	110	100
1st Quinquennial Plan (1980-84)	* 65.58	11.7	215.79	38.5	560.5	100
2nd Quinquennial Plan (1985-89)	* 79.20	14.4	173.80	31.6	550	100

Source: Ministry-Delegation of Planning

* Including agriculture, forestry, land reclamation, fisheries and the entire water sector.

However, because of the lack of coherence and clarity, aiming at immediate results rather than long-term achievements, and having achieved a very low rate of inter-sectoral integration between agriculture and industry, agricultural development policies played a great role in bringing about this dramatic situation. In the following sections, I describe the role of agricultural planning and policy-making in this situation.

4.5.2 A sketchy overview of the agricultural planning and policy-making

4.5.2.1 Introduction

Between the late 1950s and the early 1960s, most African countries acquired their political independence. Governments of these newly-independent countries launched policies of economic development focusing to some extent on stimulating the agricultural sector. In this order, the post-colonial era of these countries was characterized by intensified intervention and control by governments and their newly-born para-statal institutions over the agricultural sector (Hinderbrink and Sterkenburg, 1985: 73). Algeria is one case among these countries.

When Algeria became independent in 1962, the state basically relied - at least at the level of official rhetoric and discourse - on the agricultural sector to support the social and economic development of the country. This is what Mesli (1996: 3), a former Algerian Minister of Agriculture, calls "when the word 'agriculture' takes a block letter at the beginning" (my translation from French). The great attention paid to agricultural commercialization and cash crop cultivation for export was the stable, common pattern of agricultural policy in almost all African countries. Instead, agricultural policies in Algeria changed considerably over the years and yielded an unstable environment for agricultural production. As a result, Algeria became the first net importer of durum wheat in the World and the tenth net importer in all cereals.

For the last three decades, four major periods of agricultural planning and policy-making can be distinguished: (1) The period between 1962 and 1971; (2) The period between 1971 and 1981; (3) The period between 1981 and 1987, and; (4) The period from 1987 up to now. A brief presentation of these four periods will be given hereafter.

4.5.2.2 Between 1962 and 1971

Before independence, the land tenure system of arable land was characterized by a dichotomy between the European sector, built upon expropriated land and supporting modernized, intensified agriculture using machinery and improved seeds and cultural practices, on the one hand, and the indigenous sector, on the other, with traditional, extensive, mainly subsistence agriculture. The importance of both sectors is shown by Table 4.5.2.2(1) below.

Table 4.5.2.2(1) - Typology of farms at independence (1962)

Farmers' nationality		Size and importance of the landholdings								Total typology	
		< 10 ha		10 - 50 ha		50 - 100 ha		> 100 ha			
		Farm	Area	Farm	Area	Farm	Area	Farm	Area	Farm	Area
Algerians	U	437	1,378	158	3,185	17	1,100	9	1,600	620	7,263
	%	70	19	25	44	3	15	1	22	100	100
Europeans	U	8	22	6	135	3	190	6	2,040	23	2,387
	%	36	1	25	6	11	8	28	85	100	100
Total	U	445	1,400	164	3,320	20	1,290	15	3,640	643	9,650
	%	69	15	25	34	3	13	2	38	100	100

Source: Mesli (1996: 166)

After independence, Algeria saw the departure of the foreign settlers who had established large estates on the expropriated land, leaving the farms vacant. Spontaneously, the agricultural workers that were employed on the colonial estates created 'self-management committees' to protect the land, took control over the basic means of production, and insured the continuity of the farms' functioning [see Box 4.5.2.2(1) below]. This movement put political leaders and the government in front of a '*fait accompli*' and were almost 'forced' to acknowledge '*autogestion*' as the model for agricultural management and development on the vacant farms, called since then the *Domaines Autogérés* (DAs). But a few months later, the government, likewise aiming to contain and control this popular movement, created a National Office of Agrarian Reform (ONRA), which appointed technical directors who were supposed to "advise the self-managed farms" (Nellis, 1983: 148).

During this decade, the state was almost the only actor in directing the economy through central planning, especially after the coup of June 19th, 1965. Among other economic sectors, agriculture was still the main sector of the economy and received great attention from the government because Algeria relied mainly upon exports of

agricultural products for the implementation of its Ist Triennial Development Plan (1967-69), which mainly concerned the industrial and tertiary sectors.

Box 4.5.2.2(1) - How *autogestion* became Algerian?

*In this context, "the bourgeoisie and the landlords realized that the acquisition of the agricultural estates, industrial enterprises and commercial establishments abandoned by the settlers, was an excellent opportunity for their quick and easy enrichment and the consolidation of their economic and political power" (Bennoune, 1976: 9). Alternatively, feeling the danger of these 'tractations', "the agricultural workers took advantage of the vacuum left by the civil war and the departure of the European bourgeoisie to bar the way of the native bourgeoisie. They moved simultaneously, and without waiting for any directive from above, to take control of the basic means of production and land. As early as the summer 1962, the agricultural labourers employed on the colonial estates and plantations began taking over control of production, by forming 'self-management committees' to protect the land, and to continue production. . . . Thus the big landlords and rich peasants were thwarted in their attempt to purchase these lands. . . . These spontaneously-taken actions by agricultural labourers forced the government to promulgate the decrees of March 1963 that were to consecrate 'autogestion' as the basis for the economic organization of the country" (Bennoune, *ibid.*: 10).*

In this context, agricultural policies exclusively focused on 'self-managed' farms. Credit was made available through the *Caisse Générale des SAPs* (CGSAP) and inputs were distributed by the *Société Agricoles de Prévoyance* (SAPs). The *Office Algérien Interprofessionnel des Céréales* (OAIC) and the *Coopératives des Céréales et des Légumes Secs* (CCLs) were in charge of collecting and marketing cereal grains and pulses, and the *Office des Fruits et Légumes Algérien* (OFLA), with the help of the *Coopératives de la Réforme Agraire* (COREs and CORAs), had to take over the collecting, marketing and exporting of fruits and vegetables. To sustain agricultural development through promoting new technologies, the government created the *Institut National de la Recherche Agronomique d'Algérie* (INRAA) in 1966.

As a result, it can be said that during this first period, although the focus was exclusively on the ex-colonial estates (which counted for around two-and-a-half million hectares and constituted the 'self-managed' sector), Algeria was still self-sufficient and even an exporter of its agricultural surpluses. Meanwhile, the private agricultural sector, mostly located in harsh environments and marginal lands, observed a manifest decline due to lack of attention by the government.

4.5.2.3 *Between 1971 and 1981*

The year 1971 represents a very important symbol - and even a turning point - in the Algerian post-colonial era. The nationalization in February of the remaining foreign petroleum interests - which were mostly French - and the launching of the agrarian revolution in November closely linked, as we will see later, the agricultural development in Algeria to the hydrocarbons context.

Launched with great propaganda, the agrarian revolution aimed, according to the political discourse, to render justice to the deprived rural populations that were expropriated under French colonization. Claimed under the motto of "*land belongs to whoever cultivates it*", the objective of radical transformation of the rural living conditions that was assigned to the agrarian revolution was a central symbol of Algerian socialism. According to this policy, man-to-man exploitation was over for the *khammessat*¹⁰, the indigenous sharecropping system, was banned. The rural masses had to obey a collectivist organization of work and living through co-operatives and villagization (the famous 1,000 socialist villages' programme). Agricultural production was organized through *Coopératives Agricoles de Production de la Révolution Agraire* (CAPRAS). In addition to the existing dualism between the self-managed and the private sectors, a third sector called 'agrarian revolution' or 'co-operative' sector was born through nationalizations and donations of land to the *Fond National de la Révolution Agraire* (FNRA), which was redistributed to landless 'attributaires'.

A very rigid, monopolistic and mechanistic organization of credit through the *Banque Nationale d'Algérie* (BNA), which was later replaced by the *Banque de l'Agriculture et du Développement Rural* (BADR), created in 1981.

Input supply and output marketing were organized through the *Coopératives Agricoles Polyvalentes Communales de Services* (CAPCSs), that were established, one in each *baladia* (commune). Their services concerned machinery rental, seeds supply, advice, short-term credit over inputs purchase, and collecting and transferring agricultural produce to the provincial *Coopératives des Fruits et Légumes* (COFELs). Even though, CAPCSs were assigned to serve in priority DAs and CAPRAS, they were in fact dominated by large landowners and civil servants (Nellis, 1983: 152). At the higher (national) level of the input supply and output marketing, many public enterprises known as the *Offices* were found. The major ones were the *Office National du Machinisme Agricole* (ONAMA), the *Office National des Aliments du Bétail* (ONAB), the *Office National du Lait* (ONALAIT), in addition to the previous OAIC and OFLA. Their main tasks consisted of international trade (imports and exports) and domestic market regulation.

In terms of technical assistance, the R&D system was reinforced by the creation of the 11 *Instituts de Développement* in charge separately on a commodity-approach to develop the main crops, among which were the *Institut de Développement des Grandes Cultures* (IDGC), the *Institut de Développement des Cultures Maraîchères* (IDCM), the *Institut de Développement des Cultures Industrielles* (IDCI), the *Institut de Développement de l'Élevage Bovin* (IDEB) and the *Institut de Développement de l'Élevage Ovin* (IDOVI).

As a result, the influence of the agrarian revolution on the agricultural development was very limited. This land reform did not impinge upon new job

¹⁰ *Khammessat* was the sharecropping system which allowed a sharecropper (*khammes*) to get 1/5th of the harvest in return of the exploitation of the plot he cultivated, the rest automatically went to the landlord.

creation, as promised in its charter, nor improved agricultural production. For many crops, Algeria had to rely on the foreign market to feed its 'booming' population.

Many causes can be advanced to explain the 'stimulated failure' of the agrarian revolution. Most of the beneficiaries abandoned their plots under the pressure of the landlords whose land was partly or totally nationalized, and the abandoned plots remained untouched until they were (recently) returned to their initial owners, due to the implementation of the 90-25 Law of November 11, 1990.

Additionally, the 1973 oil boom brought considerable amounts of foreign currency to the country. Given the level of agricultural production, food imports increased and were substituted for national production.

Another point worth mentioning is the competition of the 'industrializing industry' strategy adopted by the government during the same period, which was an additional factor that accelerated the rural exodus to the cities. Due to this socio-economic phenomenon, the agricultural sector lost its best-qualified labour for a better offer of salary and working conditions in the industry sector. Even though political leaders' vision was based on the mutual integration of both industrial and agricultural sectors, the consequence of this was that agriculture not only failed to produce sufficient raw materials for the developing industries or enough food for the rapidly expanding population, but it also failed to generate an adequate demand for industrial products as well (Sutton, 1981: 364).

Moreover, it is worth noting that the third phase of the agrarian revolution, which was due to start in 1975 in the steppe and marginal lands, did not move further than its preparation step. As a result, only 158.614 head of sheep were redistributed (Sutton, *ibid.*: 365), while the total number of sheep turned around 7 to 8 million head. In fact, the big cattle holders who still control the major part of the steppe and rangelands - where overgrazing has caused devastating phenomena such as desertification and erosion - leave alone their strong influence over the fluctuating domestic meat market.

The general impression of the agrarian revolution is that, due to the interests' dualism that existed among post-independence political leaders, on the one hand, and the bureaucracy and its allied bourgeoisie, on the other hand, this land reform was designed and implemented in such a way that the interests of the latter would remain 'intact' and their positions legitimized

As a result, and in perfect accordance with the Nigerian situation developed by Abdu and Marshall (1990: 316):

The consequences of the oil-led boom served... to undermine the government's commitment to increasing production from domestic agriculture.

Among these consequences, the massive surge of food imports caused by overvaluation of the national currency and the increased granting of import licenses as a lucrative state patronage and rent seeking should be mentioned. In return, these practices completely stifled domestic entrepreneurship within all agricultural sub-

sectors. Once the Algerian agriculture began to decline, the following period of policy-making did not change this trend much.

4.5.2.4 *Between 1981 and 1987*

In this period, the government started a new policy aimed at pushing the agricultural sector towards better performance. This policy was articulated with the following elements:

- Integration of both DAs and CAPRAs sectors into one sector that would be called the 'socialistic' sector;
- Redesign of the agricultural units whose denomination has since become the *Domaines Agricoles Socialistes* (DASs);
- Staffing of the DASs with B.Sc. holders (for management positions), technicians, accountants, and other staff;
- Practical training of other line staff;
- Liberalization of the non-strategic products marketing;
- Integration of the private sector into development policy, etc..

Many DASs performed very well during this phase in terms of productivity and economic efficiency. Credit, input supply, marketing, as well as farm management improved significantly, but there was still a strong influence of the state apparatus on the overall production. In fact, the annual cultivation plan of the DASs and the inherent annual budget were established under a strict central dirigism and interference, especially in aspects related to strategic food crops such as cereals. For this, an annual national land-use plan was made at the ministry level and therefore disaggregated between the provinces. Each province had its annual land-use plan made by the ministry and it was the task of the *Direction des Services Agricoles* (DSA) to 'split' it up between the DASs of the province. Once the annual land-use plan was made for the DASs, the other documents such the annual budget, the annual inputs purchase plan, the annual plan of casual labour recruitment, etc. were elaborated.

On the other hand, the same period acknowledged a great shift at the political level towards the private sector in terms of opening up more opportunities for credit, input supply, integration in development programs, etc.

Although the agricultural sector achieved its best performance since independence (best cereal production at that time for 1985 and 1986 consecutively), this period was the final step of the socialistic sector which would be completely reorganized in 1987.

4.5.2.5 *From 1987 up till now...*

The **87-19 Law** of December 8, 1987, concerning the socialist sector's reorganization was applied as quickly as possible to help forget about the assumed devastating

performance of both the 'agrarian revolution' and the 'self-managed' sectors. Around 2,400 DASs were reorganized into more than 20,000 new agricultural units called *Exploitations Agricoles Collectives* (EACs) or *Exploitations Agricoles Individuelles* (EAI). These newly-created units have a semi-public status of property, that is, the state continues to own the land while the usufruct and investments belong to the beneficiaries, which are also transmittable to their descendants.

Since then, Algeria has been moving through a structural change process at political, economic, and social levels due to the establishment of multipartist 'democracy' and market economy. Prices have been completely freed from state subsidies, and marketing and trade have been liberalized. Individual initiative and entrepreneurship are highly encouraged through recent legal measures. However, among some known interests (implicit and/or explicit), the state bureaucratic apparatus shows a clear resistance to these reforms [see Box 4.5.2.5(1) below].

Box 4.5.2.5(1) - World Bank conclusions on the Algerian agricultural policies

The review aimed at assessing the specific issues in the transformation process of Algerian agriculture pertaining to agricultural services, and reviewing recent policy developments affecting the agricultural sector, in preparation of an eventual adjustment program seeking to induce adequate supply response and promote flexibility, efficiency, productivity and stability in agricultural production.

In its conclusions, the review highlights four major constraints in agricultural marketing services.

These are:

- 1. The strong Government market intervention policies implemented through para-statals affect short- to medium-term positions taken by private entrepreneurs in the market;*
- 2. The preferential treatment and monopolistic position of the para-statals in marketing chains, in access to foreign exchange and credit, serve as barriers to entry for the private sector;*
- 3. The poor infrastructure and equipment at the wholesale level, and;*
- 4. A poor regulatory environment, where some positive developments have been taking place since mid-1993.*

The review discussed also 4 major constraints in input supply and provision of agricultural services. These are:

- 1. The inability of the public enterprise to adapt in the face of an agricultural sector now composed of private farmers;*
- 2. The maintained privileges of the public enterprise monopolies in access to resources such as a foreign exchange, subsidies, credit;*
- 3. The Government interventions in prices, margins and other controls such as effective quantitative restrictions;*
- 4. The limited involvement and experience of the private sector in these areas.*

Source: World Bank, 1994c

All the agreements signed with the IMF imposed drastic economic and social measures to be undertaken by Algerian authorities. Among all other economic sectors, agriculture is presently undergoing a fundamental structural change which is supervised - if not controlled - by both the IMF and World Bank. One of the major issues that remains on the political agenda is the privatization of state-owned

agricultural land. For this purpose, the government recently introduced a law in the APN (the 1st Parliament Chamber) on the privatization of public landholdings through sale or long-term rent. With these last measures on land tenure, the government would have undertaken the most important change in the agricultural sector since the independence of Algeria. It is the last obstacle to a complete liberalization of agriculture which, from the government's point of view, would certainly secure more investments in the sector and thus stimulate a great and quick improvement in production. However, all powerful social actors (or clans) in Algeria, especially the so-called '*famille révolutionnaire*'¹¹, are against this law.

During this phase, the agricultural research and development system was reorganized in a way to have better contact with farmers and improve insight on their needs, especially through the newly-born professional farmers' organizations which now have their own extensionists. The *Institut National de la Recherche Agronomique d'Algérie* (INRAA) got an expanded public mandate to co-ordinate all programmes of agricultural research, be they fundamental, applied, or adaptive, and the 11 *Instituts de Développement* were reorganized into 5 *Instituts Techniques*, among which the *Institut Technique des Grandes Cultures* (ITGC), my present employer. Moreover, the *Institut National de la Vulgarisation Agricole* (INVA) and the *Centre de Contrôle et de Certification des Semences et Plants* (CNCC) were created. In this sense, it is assumed the R&D system would develop technologies that could better fit farmers' needs and the diversity of their conditions.

The last event worthnoting in this section is the organization of a National Conference on Agricultural Development that took place on June 1996, which discussed the Mid-Term Agricultural Development Plan (1996-2000). The official report of the conference acknowledged that this plan was based on a participatory vision. However, the use of the concept 'participation' in this document needed, in my own opinion, a precise conceptual definition from the designers of this plan, as this concept, as many other 'loaded' concepts, may have different meanings to different people, depending on their interests in its use.

However, it is still too early to attempt any comment on this new policy, although some signs of subsistence agriculture, due to the removal of public subsidies and market liberalization, are reappearing after more than two decades of its 'eclipse'.

4.5.3 Agricultural policy-making consequences in post-independence Algeria

After the brief introduction to these different phases, it can be said that the policy-making process in post-independence Algeria was conditioned by a very strong ideological debate coloured with the interests of powerful political clans that took control of the state during these different periods. It is true that in any one of at least

¹¹ This clan is the most powerful in Algeria and includes the organization of the veterans of the independence war, the organization of the children of the martyrs of the independence war, the organization of the children of the veterans of the independence war, and some high officers of the army.

the first three periods mentioned earlier that policies were used, depending on the ideology and the interests of the political leadership, to maintain and expand or radically change current 'status quo', especially in terms of land tenure regimes, in accordance with von Benda-Beckmann (1995: 55).

Moreover, the policy-making arena was so restricted to the powerful clans that policies could never achieve their targeted objectives, if there were any, whenever these objectives clash with their interests or concern the populace development. Moreover, these policies were always designed in such a manner that they never threatened these powerful clans' interests (as we shall see in Section 5.1).

In practical terms, and in line with Hinderbrink and Sterkenburg (1985), a brief analysis of the different periods of agricultural policy-making in post-independence Algeria, as described earlier, would put in perspective the following statements:

- Agricultural policy-making was - and still is in some segments of the sector - influenced by a strong and intensive government interference which gave very little room to entrepreneurship and individual initiative. Confined into a very mechanistic top-down process, this interference was based on a stereotyped and 'uniformized' vision of rural reality and lacked flexibility towards the diversity of farm types and production zones. The best example to mention here is the central dirigism of the agricultural units that characterized - although differently - the different periods of policy-making.
- Since 1973, after the first oil boom, agricultural policy-making was - and still is - strongly influenced by the availability of foreign currency (mostly coming from hydrocarbons exports), world market prices (as compared to domestic prices of food crops), and other socio-cultural considerations. Choices made by the state bureaucracy served to a high extent the interests of certain groups rather than farmers themselves. This could be perceived by uncovering the hidden agenda of the increasing granting of imports licenses mentioned earlier.
- Agricultural policy-making was one-sidedly oriented towards increasing production and was never embedded in a wider approach of rural development. Very few development actions, apart from the agrarian revolution, showed low interest in really improving the living and working conditions of rural populations. In many development actions, the great deal of attention given to increasing production rather than farmers' income¹² and/or livelihoods explains the failure of many of these actions [see Section 7.1].
- Agricultural policy-making was - and still is - based on a reductionist commodity-oriented approach underpinning the structural and functional organization of the agricultural R&D system which did not fit the farmers' needs. Farmers develop a more integrated and system-oriented approach in their production strategy and farm management. Such a holistic approach adopted by farmers has always been reported by scholars that investigated farming systems, and aspects of innovation adoption and technology transfer.

¹² The farmers' conceptualization of income will be presented in one of the case-studies later.

- Agricultural policy-making was usually supported by erroneous agricultural research findings which neglected agro-ecological and socio-economic circumstances under which farmers' production processes take place. This was mainly due to the above-mentioned structural and functional reductionism of the R&D system. Lack of knowledge about farmers' strategies to adapt to climatic risk and economic uncertainty in the policy-making process led researchers to overlook how risk management was a fundamental issue to farmers when it came to crop intensification [see Sections 5.3 and 7.1].
- Agricultural policy-making was negatively influenced by the huge gap between the handsomely phrased rhetoric of development plans, especially in the political leaders' discourse, and its implementation as compared to budgetary commitments and concrete efforts. As a consequence, this engendered a tremendous lack of credibility in politicians and policy-makers among rural populations [see Sections 4.3 and 4.4].
- Agricultural policy-making was - and still is - characterized by low public expenditures. Whenever a great effort of investment occurred in agriculture it was biased towards sophisticated technology which underpinned the intensification model. This model does not apply large segments of the peasantry and their conditions, most of whom are located in very harsh environments [see Section 7.1].
- Agricultural policy-making was - and still is - supported by a universal and Western-biased favouritism towards on projects as a characteristic form of a needed external intervention to develop a rural society that is assumed to be a traditional society with an inert structure that can only be put in motion by outside intervention (Elwert and Bierschenk, 1988).
- Agricultural policy-making was - and still is - characterized by a striking lack of continuity, and attention regularly shifts from one aspect to another. This 'fashion of doing things' is supported by an inherent default of political practices which pressure politicians to get good results out of any action with a very short term horizon (see Section 4.5).
- Agricultural policy-making was characterized by a striking lack of participation from the beneficiaries themselves. Projects or policies were identified by an 'external' body that had very little knowledge about the farmers' conditions, environments, and wishes.

CHAPTER 5

WALKING DOWN THE EMPIRICAL PATH: *PRESENTATION OF CASES 1, 2 AND 3*

In this chapter, I present three case-studies in which I introduce features of conventional development thinking adopted by the post-independence state and how it has particularly influenced agricultural development in Algeria. I shall first present the case-studies in this chapter, and then discuss and analyze them globally in the next chapter.

Case-studies can be selected for different purposes. In the context of this work, the selection of case-studies conformed to the need to present features that are idiosyncratic in each case and confront them with theoretical postulates. These idiosyncratic features are traits of real-life events that happen daily in any development action.

I must acknowledge that the first case - which I would rather call a macro case - represents a mixture between a mere archive review and a historical study. It completes the background elements presented in the previous chapter in setting the context of Algerian agricultural development planning and policy-making. The second case-study takes its foundations from my previous work on the cereal seed production improvement policy (Malki, 1994). It highlights the lack of learning from previous experiences in the agricultural development planning system and how this engenders a futile loss of national wealth in repeating the same errors for many years. Finally, the third case introduces the results of research work recently undertaken in the frame of a regional project called the Mashrek-Maghreb project, conducted between 1995 and 1997 under the aegis of ICARDA and IFPRI, two CGIAR-sponsored international centers. It concerns a review of past policies implemented in the steppe rangelands in Algeria and how these influenced the sustainability of the steppe ecosystem.

All three case-studies share common traits that are representative of conventional development thinking adopted by the state in post-independence Algeria:

- They were centrally planned in the capital (Algiers), with objectives set without consultation of the beneficiaries;
- Their design was based on a top-down approach, strongly loaded with ideologically and politically explicit - but also implicit - goals, in complete amnesia of the local sociology and the beneficiaries' knowledge, experiences and preferences;
- They were implemented without a credible and viable monitoring and evaluation mechanism in the sense that when re-framing the objectives or reorienting the course of actions became necessary, adjustments were not undertaken;
- They conformed all to a rent-seeking logic rather than a real development logic, thus sustaining a pattern of opportunism and parasitism rather than a fair laborious process of development.

5.1 Case No. 1: The agrarian revolution policy

5.1.1 Introduction and justification of the case

In this case-study, I introduce the Algerian state intervention in agricultural development through the 1971 agrarian revolution. Such a case, as any land reform is a sort of innovative planned action, is very politically connotated as it aims to break an on-going status-quo and set a new order. Of course, this is not an easy task as far as this kind of intervention breaks the world into two parts: Those who want to keep the on-going status-quo intact and those in opposition who want a change. And it is ineluctable that the presumably powerful side in the confrontation will win the battle. This is what theories may sometimes say but, in practical terms, this is not always the case. The supposed would-be losers will not cross their hands, waiting passively for the others to ruin their life. On the contrary, they will lobby to maintain the status-quo by any means and through any channel, for their own benefit. This is exactly what the present case is about to show.

However, in undertaking such an investigation, it is necessary to place it in its own historical dimension and contextual arena. For that, it seems opportune to look at two sensitive issues. These are: (1) The evolutionary process of the Algerian peasantry over the years, on the one hand; and (2) State formation, and its underlying ideology, and how this responded to the needs of the peasantry, on the other.

In this respect, I think there is no need to talk at length on the second item, given that I already described, although sketchily, the process in section 4.3. This case represents, in fact, a tangible continuity of this process and an illustration of its outcomes. Instead, I shall introduce of the evolutionary process of the Algerian peasantry. Given the insight needed to understand the outcomes of the agrarian revolution, and the 'technical' requirements of the investigation, it seems there is no other alternative but to 'monitor' this process over a long period, which should start at least with the beginning of French colonization (1830). The case will thus focus on describing the different struggles that emerged between different social actors (be they collective or individual) and their interests, and how these struggles shaped policy outcomes and, in our case, the agrarian structures.

But before I begin, I acknowledge this case is peculiar because it is a sort of hybrid between a mere archive review and a historical study, as I said earlier, consolidated with information from persons that lived the event. Its inclusion in this chapter fulfills to the need of completing our understanding about the philosophy of development in post-independence Algeria under the one-party system that took place in 1962, of which an important part has already been presented in section 4.3.

Additionally, it is closely connected to the rest of the case-studies presented as far as it sets, complementing of Chapter 4, the socio-political, ideological, and managerial context for many development actions in Algeria that were undertaken through the end of the 1980s. That is why I consider it to be a macro case-study.

5.1.2 Algerian peasantry evolution since the French colonization

Since 1830, when the French invaded Algeria, it was the peasantry who were the most threatened by this colonization. In fact, the political and economic life of all Algerian rural communities were affected and conditioned by the nature, form, and the degree of French colonization. Since the first day of colonization, peasants underwent a series of struggles against land de-possession and spoliation by the French army and settlers, which were seen as a general popular resistance to the penetration of colonial supremacy [see Box 5.1.2(1) below]. Between 1830 and 1840 the French state expropriated 3,445,000 hectares of arable land from Algerian peasantry for the benefit of its settlers (Bennoune, *ibid.*: 13).

Box 5.1.2(1) - Why an agrarian revolution in Algeria?

Since the beginning of colonization, peasant struggles against land de-possession and expropriation were identified with the popular resistance against colonial penetration and hold. This struggle has sharpened more and more as the Algerian people faced a totalitarian de-possession enterprise in both its means as well as its goals. The colonial policy was not in fact limited to a simple action of land expropriation. It went beyond that, aiming to break up the popular resistance to colonialism by undermining the organizational foundations of the Algerian society through the destruction of its economic and cultural base. Before the conquest, the collective tenure system prevailing in agriculture reflected the organization of society. The break-down of collective land, the brutal dispersion of the peasant communities had hence engendered the dislocation of the agrarian structures, and of the rural society in general. In this context, the struggle for independence was closely related to the unanimous will of constructing a new, just society where everyone has a place but with a priority to the consecration of the workers' dignity. Inequity in land distribution is the main cause of the rural masses' low living standards and their incapacity to transform their cultural practices in order to take part in the country's economic development.

Source: AR charter in JORA (1971) No. 97 of November 30th, 1971, p.1270.¹

As Bennoune (*ibid.*: 13) suggests,

In the 1840s and 1850s, the colonial army resorted to a drastic method of law colonization called the 'cantonement' policy which consisted of three operations: (1) containment, (2) compression on the spot, and (3) pushing back. The army proceeded to concentrate the peasants of several villages into one smaller geographical radius on which numerous families were contained. By such operations the colonial army gained control over the vacated land which was immediately transferred to the settlers. After a few years, with the demands of the settlers for more land increased, the army was frequently ordered to operate a compression on the spot among the already contained peasantry. If the Algerian peasants happened to be located on an area that was considered as a perimeter for official colonization, they were merely pushed back (*refoulés*).

¹ References used for this case such as JORA were mainly in French. The translation into English was done by the author (MM).

This process had twofold effect on the native population. On one hand, the old Muslim '*grandes familles*' based on tribal organization were eliminated. On the other, many of the small subsistence producers were displaced, first from the better lands of the plains up into the poorer mountain lands, then from subsistence farming altogether into wage-labour force.

In 1863, the French governorate in Algeria applied the *Senatus-Consulte*. According to Bennoune (*ibid.*; author's italics), its Article 3 aimed to:

- Delimit the territories of the 'tribes';
- Break up every tribe of the *Tell* (northern Algeria) and other agricultural areas;
- Constitute individual property and its distribution among the members of the *douars*.

The delimitation of the tribes' territories undertaken by the colonial state under the aegis of the *Senatus-Consulte* was not intended as an end *per se*. Its real objective was the introduction of concepts of 'ownership' and 'property' into the reality of the community lands. According to Bennoune (*ibid.*), these measures aimed at achieving three goals at the same time. They must first "provoke a general liquidation of the soil", that, as a direct result, would "attract and receive immigrants from Europe", as a second goal. Finally, they would enable the colonial state "to disorganize the tribe" which was seen as the principal obstacle to the pacification of Algeria.

Simply as a result of the application of the *Senatus-Consulte* between 1863 and 1870, Algerian rural communities as a whole lost a national average of 14 percent (over one million hectares) of their best arable lands and forests to the colonial public domain. It became clear that the colonial policy did not content itself with land expropriation but aimed to dismantle the economic and cultural basis of the indigenous society by sapping its basic institutional foundations, that is the tribe.

In 1871, in response to the arbitrariness of these measures, as Bennoune (*ibid.*: 13) recalls, the peasants mounted an insurrection called '*El-Mokrani revolution*'. This was described as the last major peasant rebellion of the 19th century. However, the peasants were defeated, and the French parliament passed the *Warnier Law* in 1873 to speed up the colonization of rural areas. This law, also called the 'colons law', aimed both at the suppression of common land and a breaking up the familial holdings that remained unpartible. Most of the colons used this law to expropriate land from peasants who could not show a 'good title'. The costs of implementing this law were solely borne by Algerian peasant collectivities (750,000 gold francs/year between 1873 and 1887).

As a consequence of all these measures, by 1954 the Algerian *Tell* consisted of about 20 million hectares of usable land divided as follows:

- 24,000 settlers owned 3,028,000 hectares (an average of 126 hectares per farm);
- the colonial public domain controlled 7,200,000 hectares; and,
- the 'natives' - numbering 8 million individuals - were in full control of only 7,133,000 hectares (0.89 hectares per individual).

As many authors argue, two-thirds of the land left to the indigenous peasantry was infertile pastures of the steppe and unproductive plots located on the steep slopes of mountainous northern Algeria (Bennoune, 1976: 13; Cote, 1976: 83).

While the poor and small peasants were being strongly threatened by colonization, other notables, big landlords and rich peasants, known as notorious feudals, were serving the cause of colonialism wholeheartedly, in return for keeping their landholdings away from expropriation by the French army. Some of them had even been given honorific titles like 'Caïd' and 'Bachagha' by the French administration and granted more land expropriated from small peasants through the favours of a colonial government seeking to win over a few strategic native allies (Bennoune, *ibid.*: 14).

When the struggle for independence was launched in 1954, most of the small peasants whose land had been expropriated - either from them or from their fathers and grand-fathers - joined the guerrilla insurrection to fight to recover their land and to reduce the gap between the differentiated standards of living imposed by the French colonialists. Meanwhile, the big landlords and rich peasants, who were not deeply involved in serving the colonial state, supported the struggle by however they could, as they believed that independence would give them a golden opportunity to take control over the colons' landholdings. This was the main contradictory effect borne by the struggle for national independence since its inception, where both classes had to fight under the same umbrella, the FLN party.

When independence came, Algerian society inherited, as some observers noticed, a very heavy legacy as "colonialism engendered not only rentier and feudal-like landlords and an impoverished subsistence agricultural sector, but also the capitalist/wage-labour relation in agriculture" (Pfeifer, *ibid.*: 3). One type of this relation was the '*khammessat*' where the '*khammes*' - a sort of share-cropper who gets one-fifth of the crop in return for his labour - was exploited by the absentee landlord living in the city.

5.1.3 Political context and socio-economic conditions of late 1960s

Given the historical context I described in the previous section, the urge for an agrarian reform in Algeria was so obvious that for some it was seen just as a continuity of the struggle against French colonization. However, the implementation of such a policy waited until 1971. The first question one might ask about the Algerian agrarian revolution is: *Why did the agrarian revolution have to wait until 1971 to be promulgated and until 1972 to be first applied?* To answer this pertinent question, it is necessary to turn once again to history.

According to Jackson (*ibid.*: 60), the first platform that mentioned the necessity of an agrarian reform was the draft of the FLN programme discussed during the Tripoli Conference, held on May 27, 1962. "It has been prepared before the conference by a group of young militants, well inspired by Marxism-Leninism, seeking to formulate an FLN ideology and statement of goals", says Jackson (*ibid.*),

in order to orient the action of the party after the independence. This document acknowledged that:

The analysis of the social content of the fight for freedom underlines the fact that it is in general the peasants and workers who have been the active base of the movement and who have given it its essentially popular character. This statement embodied the first formal recognition of the peasant base of the revolutionary war.

This indicates that a program of agrarian reform would be the first action to be implemented after independence in order to compensate the peasants for their war efforts. But given the basic antagonism that existed between the various classes, as Bennoune (ibid.: 12) suggests, which "originated from the fact that the national bourgeoisie, bureaucracy, the landlords and rich peasants in the countryside were all favourable to the continuation and development of the capitalist mode of production", on the one hand, and the open opposition of this minority by "the industrial workers, the permanent and seasonal agricultural labourers, and the lumpen proletariat and rural landless peasants as they thought that the continuation of a capitalist economy will not offer any prospect of change", on the other.

Moreover, Bennoune (ibid.) considers that the political climate in post-independence Algeria was not stable enough to help the FLN party, which was itself subject to a deep crisis, to think even about an agrarian reform program.

Another cause of this delay can be explained, as Le Coz (1976: 8) argues, by the unexpected departure of the colons during the summer of 1962, which created an unpredicted vacuum of the colons' domains and encouraged the labourers to spontaneously set up their own self-management committees [see Box 4.5.2.2(1)]. The obligation to 'digest' and then smoothly control the *de facto* creation of the self-managed sector imposed a prudent position of the state towards the rest of the agricultural sector and decided to delay the implementation of the expected agrarian reform, although the ministry in charge of agricultural development was named Ministry of Agriculture and Agrarian Reform.

After the 1965 coup d'etat, it was the responsibility of the sole Council of Revolution - constituted by the military generals - to decide upon the implementation of such a policy, i.e. the agrarian reform. However, this body could not make such a decision for two major reasons: (1) It was clearly heterogeneous in terms of ideologies and interests; (2) The coup d'Etat itself created a generalized climate of suspicion among the population. The new executive first started taking strategic decisions aimed at nationalizing the natural resources (such as mines, hydrocarbons, etc.) and some business services (such as banks, insurance companies, etc.) that would bring some confidence of the population towards the new regime.

Nevertheless, in the beginning of the 1970s, the worsening of the social and economical conditions of the peasantry alarmed some members of the Council of Revolution and the government cabinet when they realized that the only solution to this problem lay in the undertaking of an agrarian reform.

More than that, this intervention was mostly needed as the countryside was completely disturbed by the 'rural exodus' to cities where neither housing nor employment were available in sufficient quantities. This exodus was engendered somehow by the very little attention given by the 'political leadership' to the agricultural sector in comparison to the industrial one, as it was felt by the peasants. The lack of investment in the agricultural sector exacerbated the problems of the peasantry, who preferred migration to big urban centers where industrial projects offered them much better working and living conditions. However, the speed of industrialization at that time could not absorb the overwhelming surge of peasantry, and this exodus, if not stopped at the right time, could have counteracted the development plans of the 'political leadership'.

5.1.4 Philosophy, goals, and objectives of the agrarian revolution

Given all the aforementioned factors, the Council of Revolution decided in November 1971 the implementation of an agrarian reform, to which was given the title of an *agrarian revolution* in order to label the change that this intervention would introduce in the countryside [see Box 5.1.4(1) below].

Box 5.1.4(1) - General framework of the agrarian revolution

The second step of the agrarian revolution will concern land properties and holdings owned by the nationals and collectivities. It is of utmost importance that it must not be seen solely as a simple nationalization of land. More than that, it should create the conditions for land improvement and reclamation at the benefit of the rural masses, who were kept away from progress and modernization for a long time, and for the sake of their cultural, economic and social promotion. It is for these reasons that the agrarian revolution, beyond the simple preoccupation of social justice, signifies a radical transformation of the living and working conditions in the rural world.

In order to really be a fundamental element of progress for the most deprived masses, the agrarian revolution must give them access to the bulk of progress factors. To achieve this, it combines land redistribution with farmers' organization and the gathering of the conditions for their promotion.

The agrarian revolution, through a double action at the level of production relations and structures, can and must reverse the process of land concentration and eradicate the last sequels of colonization whose consequences, such as the rural exodus and the increasing economic and cultural disparities between urban centers and rural areas, are challenging the development strategy of the country.

The agrarian revolution must constitute a new starting point for the peasant masses, due to a coherent and continuous global action upon the human and material factors that impinge upon their progress and promotion.

Source: AR charter in JORA (1971) No. 97 of November 30th, 1971, p. 1270.

This meant, in practice, that the five million peasants whose monthly income did not exceed 170 AD², who were pushed aside after independence, would have a chance to

² 1 US\$ = 4 AD in 1974

have access to modernity, according to the vision of the intended policy. On the other hand, it must be realized that, up to 1971, the rural bourgeoisie, with the help of its allies in the state bureaucracy, had been successfully blocking any land reform to be launched since independence. It was in this crisis-prone context that this intervention was launched.

Based on slogans like "*land belongs to the one's whoever crop it*" and "*abolition of man-to-man exploitation*", the declared agrarian revolution in Algeria "was intended to promote a set of institutional changes that would force agriculture to respond in the manner necessary for accumulation in industry and for economic development" (Pfeifer, 1985: 11) [see Box 5.1.4(2) below].

Box 5.1.4(2) - Goals, aims and objectives of the agrarian revolution

The agrarian revolution aimed to tackle three main factors that were causing the low living standard of the peasant masses. These were:

1. *The inequity of land distribution among farmers, characterized by a huge gap where 3% of big farmers whose landholdings outsized 50 hectares owned 25% of the total arable land, and 72% small farmers whose landholdings were less than 10 hectares owned 25% of the same land³.*
2. *The sequels of colonization that were engendered by the many expropriation measures of the colonial state which pushed back farmers to the sloppy hills and mountainous areas, and which was articulated by national notables who served as intermediaries of the colonial administration.*

The precarious working conditions of landless farmers who were exploited by absentee landholders through a system of sharecropping (khammessat) that was not conducive for a modernized agriculture made by these populations during the struggle for independence which was meant for them to recover their spoliated land. It is thus a consequent recognition of their historical rights by the revolutionary regime which assumed to eradicate any form of man-to-man exploitation, as far as it aims at establishing direct working relations on the basis of the slogan: "land belongs to the one whoever cultivate it". Major objectives of the agricultural revolution were:

1. *The suppression of all forms of absenteeism and big landholding, with compensation;*
2. *The clarification of property rights of small farmers that exploit unowned land derived from public (domanial and communal) and private (*Arch*⁴ and *Habous*⁵) collectivities;*
3. *The redistribution of nationalized and donated land to landless peasants with a clear definition of the rights and duties of the beneficiaries;*
4. *The maintenance and protection of non-exploitative private landholding;*
5. *The economic, social, and cultural promotion of the rural masses through the modernization of agricultural practices and the transformation of living conditions in the countryside.*

Source: Compiled from AR charter in JORA (1971) No. 97 of November 30th, 1971, p. 1271-76.

³ In Table 4.5.2.2(1), quoted from Mesli (1996:166), I mention that both classes respectively represented during the colonization (Algerian category) 4% for 37% owned of the total land and 70% for 19% owned of the same land.

⁴ *Arch* stands for collective, tribal lands found mostly on the central and eastern part in Algeria. They have similar legal nature as the Sebaga lands found in some western parts of the country (Mesli, 1995:36).

⁵ *Habous* is a legal status of property related to religious endowments.

Intending to bring the agricultural sector in line with the state's overall transformation strategy, the agrarian revolution, and agricultural policy in general, according to Pfeifer (*ibid.*), were assigned a complex agenda, with explicit as well as hidden components.

The explicit agenda included, first, the goal of providing a national self-sufficiency in terms of the production of basic foods, not only in terms of quantity, but also in terms of diversification and provision of raw materials to the would-be food processing industries. The beneficiaries of the agrarian revolution and the remaining private farmers would be organized into co-operatives, using technical processes that raise land and labour productivity and contribute to the growth of aggregate agricultural output. This intervention was necessary in order to feed the growing urban labour force and to provide inputs to industry, both at low prices. So, aggregate agricultural income was expected to rise, nevertheless, as output was supposed to increase (Pfeifer, *ibid.*: 12).

Concerning the second component of the explicit agenda, Pfeifer (*ibid.*) argues that it concerned:

The expropriation of 'lands despoiled by colonization' and their redistribution to landless and land-poor peasants. This was to entail an end to 'exploitation' of sharecroppers and renters by absentee landlords, and thus, a reduction in inequality among segments of the rural population.

According to Pfeifer (*ibid.*: 12), the implicit (hidden) agenda of the agrarian revolution was the following:

1. The first element was the unstated but essential requirement that Algerian agriculture should become fully commercialized. All peasants and co-operatives members would turn their produce over to the market, and then purchase all their other needs out of their monetary outcome. This was supposed to increase the demand for industrial products, both consumer goods and inputs to agriculture such as fertilizer, pesticides, seeds, machinery, etc. In this respect, fertilizer provided a prime example of inter-industry and inter-sectoral integration because it is a product of the petrochemical industry, itself a spin-off of hydrocarbon production and refining.
2. The second element was the *de facto* securing of non-absentee private ownership of land and other means of production, meaning that commercial family farms and resident capitalist farms were exempt from the reform.
3. The third element was the *de facto* enhancement of wage-labour employment both in rural areas, and, more importantly, for the overall development programme, in urban industry and services. Labour surpluses would be effectively transferred from underemployment in rural agriculture into more productive sectors, such as industry.

But what Pfeifer neglects to mention in the implicit agenda of the agrarian revolution is the fright of the peasantry that the regime developed, both because of

its mobility and its tough reaction towards an illegitimate force of violence as peasants showed against the French colonial state. This is why the explicit agenda for villagization of the peasantry, meant for bringing 'modern life' into the rural areas, was in fact guided by a hidden, implicit agenda for reducing the mobility of peasants by parking them in these villages which would serve to control the peasantry better. The state volition was even more visible in its attempt to 'sedentarize' the pastoral tribes that were practicing the very old system of transhumance known as *El-Achaba*, through the implementation of the third phase of the agrarian revolution [for more details about the state policies in pastoral areas, see section 5.3].

5.1.5 Actors involved in the agrarian revolution's arena

In this section, I mainly focus on the most important actors that played an active role in this policy throughout its 'life', either at the formulation stage or during implementation. First, I shall differentiate the interfaces that existed during the entire cycle of this policy between politicians and central bureaucrats, on the one hand, and between the latter and the local administration, on the other. Further, I will include in the picture the beneficiaries of and the opponents to the intervention and how they perceived and reacted to this policy.

As far as I have already described above in terms of the state formation process, state and bureaucracy composition, its culture, as well as the interests of its different clans and members, there should be no doubt about how and why the agrarian revolution had been designed and implemented as it did. To achieve this, I shall 'decompose' the state intervention in the context of this policy into two different but complementary steps: (1) The policy formulation step and, (2) The implementation step. This is especially required. As Long (1988: 113) suggests, in such an endeavour, one needs to investigate

The social composition of the bureaucracy and the organizational means and sets of interests, both bureaucratic and private, that shape the formulation and outcomes of policy.

5.1.5.1 Political leadership-'military-bureaucratic complex' interface and policy design⁶

The reading of agrarian revolution charter showed that the design of the agrarian revolution favoured the landless and small farmers, as many observers claimed (Jönsson, 1978: 42), although some ambiguities were found in the legal texts of the policy, such as the 71-73 Ordinance of November 8, 1971. This was an evident fact that Houari Boumediène and some members of the political leadership, alarmed by the worsening of the economic and social conditions of the countryside, were in favour of a real agrarian reform rather than a *stricto sensu* land reform.

⁶ I owe the metaphor of "military-bureaucratic complex" to Wallis, M. (1989:31)

However, one must not forget the position of these political actors within a very heterogeneous ruling body, the Council of Revolution, which was made of a constellation of different visions, ideologies, and interests. In this way, concessions had to be made by the reform's adepts in order to avoid the open opposition of the conservative clan, which could have had disastrous consequences for the country.

In this respect, policy was designed so as to not concern the landholders that exploited their own lands, although some of them were to be partially nationalized when exceeding the '*fourchettes de limitation*', the higher limits of landholdings for each type of land (dryland, irrigated, planted, etc.). This was one of the big 'gifts' the reformers conceded, although their first idea was to nationalize all big landlords who bought or acquired the land during colonization, whose majority were suspected of having 'collaborated' with the colonial administration. In fact, if these owners supposedly possessed land within the same high-quality perimeters as their compatriots that were expropriated, one must ask why these were not expropriated like their compatriots. Instead, some even increased their holdings during the colonial period. Quite an intriguing situation!

The 'military-bureaucratic complex' metaphor seems appropriate, in my opinion, to 'nominate' the Algerian state as the regime relied, as already said in section 4.3, on two sources of strengthening and maintaining power: The military and the state bureaucracy. The third part of the regime, which was the FLN party, was used mostly as window-dressing to carry the socialist ideology extremely needed for the regime to achieve its hidden goals.

As the term 'bureaucrats' may connote, it is widely known that senior civil servants and business managers require equal knowledge of management, although it is widely acknowledged that the former are well-acquainted with the rigidity of the administrative world of the civil service bureaucracy. As the French scholar Bruno Etienne, cited by Yacoubian (1997), suggests, the Algerian bureaucracy represented "the new notability" which "possess a precious capital: They know how the system works".

However, public administrators have a far closer connection with the world of politicians as their role is mainly performed within a political context. In this respect, the processes involved in policy-making and planning are, to a large extent, of a political nature. It is thus obvious to expect, as Wallis (1989: 22) puts it, that:

All the time policies are being carried out, political interventions would occur. Many administrators have found to their cost that to resist these interventions is to invite reprisals harmful to career development.

Nevertheless, it is acknowledged that if politicians have their own interests in formulating policies - policies and politics are closely interwoven - bureaucracies also have their own 'internal politics', and top civil servants have their own preferences.

The caricatured relationship seen by most people between politicians or, in our case, the military, and central bureaucrats is that politicians have, according to Wallis (*ibid.*), the task of deciding which policies should be followed whilst the administrator is allocated the burden of carrying out these policies. In fact, "while the army remains the arbiter of power relationships, technocrats within the Algerian bureaucracy wield inordinate influence in the daily lives of most Algerians" (Yacoubian, *ibid.*).

In the first place, senior bureaucrats can generally be expected to know more about the subject matter of policy issues than the political leader. That is why they play a major policy-making role, or at least attempt to do so. 'Beneath a cloak of knowledgeable ability, bureaucrats may well in fact be pursuing their own interests' (Wallis, *ibid.*: 26) and sometimes can secretly manipulate political leaders in taking strategic decisions which merely work for their interests. Another way of having the 'last word' over the control of the situation is the centralized control over policy implementation which they keep within close reach. In this frame, as Nellis (1983: 139) argues,

Centralization of political and administrative activity is seen as part of a larger process in which a coalition of bureaucrats and essentially petit-bourgeois populists have captured the control of the post-colonial Algeria state. These policies they put forward - expansion of the central state's machinery and control, reliance on para-statal industries, de-emphasize of competing sources of interests aggregation and articulation - are uniformly centralist.

In this context, military intervention in politics since the 1965 coup was not, according to Wallis (*ibid.*: 30), confined to seizing power. It is merely a kind of 'tacit coercion' used to let compel civilian authorities to behave according to their wishes. In this context, the military has operated as a particularly powerful pressure group because it possesses the ultimate sanction in the form of its control over the use of violence in society, combining two rather contrasting motives. On the one hand, they acted to promote and protect their own positions, mainly by holding civilian authorities to concessions made to them. On the other hand, they often claim to be motivated by the desire to save their country from the chaos and ruin they accuse civilian rulers of creating by their lower-equity policies. Although the evidence showed that many military regimes had shown a great deal of effectiveness as economic developers, they still constituted, with the bureaucracy, a kind of state bourgeoisie, closely-tied to the national bourgeoisie, which would control either the policy formulation and implementation processes to strengthen their power.

Notwithstanding this somehow universal picture, the Algerian case presents slight differences: (1) The regime was split between reformers and conservatives; (2) The head of state Houari Boumediène was, in the context of this policy, in favour of the former group.

To protect their interests and those of their allies, the conservative group could have hampered the process of designing and avoided the implementation of the policy by overtly opposing it. But given that the heterogeneity of the conservative

group itself, and the fact that the *rapport de forces* was in favour of the reformers, opposing openly the agrarian revolution policy could have been seen as challenging the top man in the country, and charismatic leader Houari Boumediène. In such a situation, they knew they would lead the country to some dramatic consequences and would at the end loose the 'battle', given the great popularity of the leader who could have easily manipulated the people against the conservative group.

They did not openly declare their opposition to the agrarian revolution but tried to interfere in the process of policy formulation acting upon the interests of their natural allies in rural areas (landlords and rich peasants) in order to secure the big commercial farms whose owners were not absent. For the rest, they agreed on the intervention, which meant for them a great deal of rural population control by moving them into the *Villages Agricoles de la Révolution Agraire* that would be built in the frame of this policy. The services and commodities that these villages were supposed to offer were used as instruments of bolstering false hopes among peasants that the state would help them enter the 'modern life'.

Box 5.1.5.1(1) - Decentralization and participation as implementation 'tools'

In order to achieve these objectives [the content of the policy], decisions should be taken with consideration of a precise knowledge of local realities: This is possible given that it is at the level of the commune that these decisions will be made by all grass-roots institutions of the country with direct and majority participation of the peasants that are concerned by the success of the agrarian revolution, taking into account the state recommendations. This revolution cannot, in fact, be an imposed change on the peasants. It should spring up from a democratic effort of the peasants collectivities in order to organized their future.

The agrarian revolution is an eminently political operation in its foundations as well as its goals, which constitutes a fundamental dimension in the construction of socialism. Its implementation must consequently adopt the same methods of this construction in our country, i.e. decentralization, participation of the beneficiaries themselves, mobilization of all political institutions, and adaptation of the technico-administrative instruments (my emphasis).

Source: AR charter in JORA (1971) No. 97 of November 30th, 1971, p. 1272 and 1277.

According to some officials that were in office at the Ministry of Agriculture at that time, the conservatives succeeded in adding articles and modifying others in 71-73 Ordinance in order to channel the implementation process in respect of their preferences, and over which the central bureaucrats were secretly prepared to play a big role. The way they introduced the necessity of decentralization of the policy implementation [see Box 5.1.5.1(1) above] in the legal text of the agrarian revolution was very intelligent. It aimed to both keep their hands clean from directly nationalizing their own allies, and make the process of decentralization fail, being convinced of the messy problems that local administrations faced with this policy due to the great lack of experienced staff they were facing.

Moreover, to keep their room of maneuver intact in the implementation of this policy, central bureaucrats inserted into the legal framework of the agrarian

revolution the right instruments to over-rule the decisions of local executive bodies that were the appeal and arbitration commissions settled at the *wilaya* and national levels [see Box 5.1.5.1(2) below]. Although these bodies were meant to avoid abuses and wrong decisions made at the local level, they were used to protect their allies' interests by countering the decisions made at the local level, as we shall see later in section 5.1.6.

Box 5.1.5.1(2) - The appeal and arbitration bodies of the agrarian revolution

*In order to prevent abuses and deviations that can occur in the course of implementing the agrarian revolution, a democratic and efficient system was set up. A right of appeal was acknowledged and allocated to every citizen concerned by the agrarian revolution measures, including the issue of compensation. This right could be exerted, in primary resort, before the appeal and arbitration commissions set up in each *wilaya*, and, in last resort, before the national appeal and arbitration commission. This formula, which did not call for the legal, juridical procedure, was the most fitting to the principles on which was based the process of implementing the agrarian revolution.*

Source: AR charter in JORA (1971) No. 97 of November 30th, 1971, p. 1279.

In summary, it is easy to assume that the agrarian revolution policy was conceived in order to bring justice and welfare to the landless and poor peasants by abolishing man-to-man exploitation, especially through the absentee big landlords. This was backed by some powerful politicians in the ruling body. However, some subtle manipulations were present in order to turn the designed policy into a 'stimulated failure' during its implementation.

5.1.5.2 Central bureaucrats and local administration: The implementation interface

As this policy should have been implemented across the entire country by local administrations, a process of decentralizing its implementation to local bureaucrats was normatively required. Decentralization could greatly help the implementation of the agrarian revolution, according to the advantages enumerated by Shabbir Cheema and Rondinelli (1983: 14). However, decentralization was taken as threatening the interests of the conservatives in the ruling group and the central bureaucrats, as they might have lost power and control over the resources distribution through decentralization.

Centralization was chosen by the Algerian regime at independence for a variety of powerful factors, including history, culture and religion, the colonial experience, the constraints of underdevelopment, and the ideologies and self-interest of the dominant elite, although there was a usual claim that power and responsibility had to be put in the hands of 'the people' (Nellis, 1983: 127). In the context of the authoritarian and self-proclaimed Algerian regime, a concept such as 'centralization' is strongly connotated with power relations. It cannot thus be seen as a mere organizational pattern upon which planning, decision-making and administration

are founded. It was very much "in the self-interest, both political and economic, of the elite controlling the post-colonial state" (Nellis, *ibid.*: 138). In this sense, centralization can be a misleading neutral euphemism for anti-democratic rule of a clique, a class, an oligarchy or a person, as Nellis (*ibid.*) suggests. In the Algerian context, centralization went beyond that in sustaining the control over the national resources of the country and served to develop very corrupt patron-client mechanisms of governance. Such a system is always worried by any claim for decentralization which would give room for spontaneous initiatives from the populace to strengthen its base and demand more balance in the power distribution in the society.

Along these lines, I recall the self-management movement spontaneously imposed in the summer, 1962, by peasants, "officially if belatedly embraced by Ben Bella, then head of state" (Pfeifer, 1985: 5). The bureaucracy reversed the movement by the promulgation of the decrees of March, 1963, on '*autogestion*' and the simple creation in the same year of the *Office National de la Réforme Agraire* (ONRA) which appointed technical directors to the self-managed farms, ostensibly to advise - actually to control - them. This showed how the petty bourgeois technocrats suppressed decentralized actions giving power to the peasants and re-framed them into a legal statute to better control them (Nellis, *ibid.*: 148). Even the agrarian revolution charter acknowledged these actions in its Preamble as Box 5.1.5.2(1) below shows.

Those central bureaucrats knew, in fact, that decentralization would run the risk of devolving power to the peasants and workers, who are mostly represented in elected local administration. So the petty bourgeois central bureaucrats controlled the state and had to continue to do so in a centralized manner if they were to perpetuate their dominance (Nellis, *ibid.*: 139).

In Algeria, after the first local administration units, that is the *Assemblées Populaires Communales* (APCs) were elected in 1967, these bodies were just what they appeared - essentially powerless, 'consultative' bodies giving the illusion but not the substance of representation and decentralization (Nellis, *ibid.*: 150). In fact, from their inception in 1967 to the beginning of the second phase of the land reform effort in 1973, elected APCs virtually lacked any meaningful function. When they deeply felt a lack of 'political life' (Wilfrid Knapp, quoted by Nellis, *ibid.*), they added their voice to the mounting movement for decentralization which began in the 1970s. This resulted, according to Nellis (*ibid.*: 140), from the fact that centrally planned and implemented policies as pursued up to then did not yield adequate levels of economic production and distribution.

Taking advantage of this opportunity, and anticipating the implementation problems that local administration would run into, central bureaucrats attempted a highly-controlled process of decentralization to implement the agrarian revolution. This included delegation of authority to the communal assemblies, which became *Assemblées Populaires Communales Elargies* (APCEs), to include representatives of the mass organizations, like the peasants' union.

Box 5.1.5.2(1) - Relation between 'autogestion' and the agrarian revolution policy

The national independence and the recovery of national resources was translated during the first phase of the agrarian reform by the recovery of the colons' domains at the benefit of the labourers [of 'autogestion'] which were promoted to the position of becoming producers, in conformity with the socialist orientation of the country. The second step of the agrarian reform will concern land properties and holdings owned by the nationals and collectivities.

The first experiment of 'autogestion' coincided with a phase of centralization which had simply taken the management prerogatives out of the labourers collectivities. Lack of farm individualization, lack of free elections to form the bodies of orientation and management, management quasi-directed by the administration transforming the producers de facto as simple wage-labourers, confusion of production, inputs supply and marketing functions were the characteristics of a period during which the bureaucracy brutally stopped the evolution of this management system and sterilized its political, economic and social effects.

The agrarian revolution is a new, decisive and important step of the agrarian reform, a true revolution that sprang up with 'autogestion' which was created by the labourers and consolidated these last years by the political power.

Source: AR charter in JORA (1971) No. 97 of November 30th, 1971, p. 1270, 1273 and 1280.

These bodies had to fulfill the important tasks of deciding which lands were subject to nationalization and which farmers would be given plots on the expropriated land, as well as apply the norms on land property limitation (Nellis, *ibid.*: 153). It was the first time since independence that a non-national (meaning, non-central) body implemented an important decision with enough room to adapt national directives to local conditions. But this strategic maneuver from the central bureaucracy was not without '*préjugé*'. According to Nellis (*ibid.*: 154), many observers saw that:

The regime sent this particular issue [the implementation of the agrarian revolution] back to the communal level precisely to avoid responsibility for a programme that could have raised powerful opposition.

In this respect, I assume that, given that power relations were in favour of the reformists, central bureaucrats agreed with a policy that was imposed on them but did not want to get directly involved in implementing it. They anticipated the negative results that the decentralization 'experiment' of the agrarian revolution would lead to and thus adopted decentralization just to destroy both the arguments for decentralization and 'shut the mouths' of the decentralization lobby leaders, on the one hand, and hamper the realization of a true agrarian reform which would have really impacted their allies, on the other.

5.1.5.3 Local administration and peasants face-to-face

The factionalism developed by the FLN party since the days of the struggle for national independence became a culture of all the structural units of the Algerian state at whatever level. It is thus easy to notice the same characteristics of this factionalism at the APC level, given that the FLN was the exclusive organizer of the elections. To give the population a democratic choice, the FLN, although being a single party, used to present two or three candidates to run for each position in the APC assembly. However, when it occurred that an elected mayor started to develop a behaviour that did not fit the FLN 'standards', such as fair and equal treatment of all citizens of the commune, this was felt as threatening to the party's interests, which decided, as a consequence, to nullify the election through the *wali* - head of the province (*wilaya*) - who had the legal right to do this, given a report written by the party. That happened many times, especially in the APCs. This evidently shows that individuals who developed a culture of justice and equity were not allowed to take over political leadership in the country in the eyes of the party. This 'new' culture was the opposite of the one that the FLN was developing among its units and the state bureaucracy. Embracing it would have been seen as challenging the power of the party.

It is the latter culture that led, as Bennoune (*ibid.*: 19) puts it, all administrators, with few exceptions, to be arrogant and hostile to the population, especially in their contact with peasants. Sometimes they exhibited a tendency towards authoritarianism and an inhumane indifference towards the people. The differences in attitude, standards of living, and lifestyles between the local administrators and clerks and the ruled rural population were very striking. The majority of the bureaucrats complained how 'wicked' the peasants were, but never about the miserable life this peasantry was leading in the countryside.

This culture was encouraged by a complex of superiority felt by the administrators, although the level of political consciousness of the peasantry was certainly higher and relatively more developed than of the local bureaucracy and FLN functionaries. The spontaneous action they took in the summer of 1962, without waiting for any directive, to set self-management committees and continue managing the expropriated land left by the fleeing settlers is a good example of this. It is even more meaningful as this happened at the moment the national elite were almost leading the country into a civil war just for the sake of governing.

Thinking of a viable solution for how to 'contain' and control the peasantry, the state thought of taking it away from the control the *Fédération Nationale des Travailleurs de la Terre* (FNTT), of the very powerful *Union Générale des Travailleurs Algériens* (UGTA), which was behind the idea of the spontaneous 'self-management'. Hence, the regime created the *Union National des Paysans Algériens* (UNPA), a peasants' union under the aegis of the FLN party, and of which everyone who had a relation to the rural sector could be a member.

It was, in fact, a very subtle, diluting, and filtering operation to get the most virulent, 'politicized' peasants away from causing serious 'troubles' within the UNPA, and to make it easier for the regime to control all workers by dividing them into different organizations. The slogan "*divide to reign*" still had some adepts.

The farmers' participation in the bodies of the agrarian revolution as legalized by the 71-73 Ordinance [see Box 5.1.5.1(1) earlier] took the form of including some UNPA representatives into the *Assemblées Populaires Communales Elargies* (APCEs), which were in charge of carrying out the implementation of the policy locally. In fact, "two-thirds of the peasants' union representatives in these assemblies were landless farmers or seasonal labourers" (Nellis, *ibid.*: 153). Again, this shows how the design of the policy permitted to undermine, through another process, the peasants' virulence when it comes to the farmers' participation in APCEs. This was made possible by the evident 'mosaic' of people and interests that composed the *Unions Paysannes Communales* (UPCs), local units of UNPA at the communal (*baladia*) level, and the *Faoudjs*, the basic cells of the UPCs. Jönsson (1978: 68) argues that many shortcomings in the composition of the UPCs were reported. Some members were not really farmers, or were big landlords; others did not work in the agricultural sector at all; in another case, some members of the *Faoudjs* did not know each other or even knew they were members of a *Faoudj*. He concludes that:

It is evident that such an organization as the UNPA... is not adapted to mobilize the poor Algerian peasantry, which is the fundamental condition for the agrarian revolution to succeed.

When the participatory mechanism started functioning during the implementation of the second phase of the agrarian revolution, landless and poor peasants tried to use it to their benefit to influence the decisions to work in their interests and/or, in some cases, to take their revenge over central and/or local bureaucrats and their allies. They tried to plainly apply the legal dispositions of the 71-73 Ordinance without any derogation, but sometimes they trespassed the rules by purposely exceeding the limits of nationalization imposed by the Ordinance. When they could do that, they over-limited some big landholders and/or totally nationalized some landholders who were not absentees.

But many decisions made by the APCEs were overruled by the provincial bureaucrats, that is the *wali* and his staff, or, to a lesser degree, by the central bureaucrats, through the excessive use of the provincial and national appeal and arbitration commissions [see Box 5.1.5.1(2) earlier]. Jönsson (*ibid.*: 49) mentions that, although the rules stipulated that the people sitting on the appeal and arbitration commissions should not have any concern regarding land, the big landlords had a great influence over these commissions, without sitting on them. As examples, he mentions that till December 31st, 1975, no less than 2,850 decisions for restitution were made by the so-called commissions.

If few were accepted, most of these decisions displeased the members of the APCEs, especially the landless and poor peasants. In fact, these decisions

squandered the already belittled enthusiasm they initially had about the design and implementation of this policy, given their natural mistrust of the bureaucracy. I still remember the hard words some landless and small farmers used during the heyday of the Student Volunteers for the agrarian revolution in 1974 and 1975 to nominate local and national bureaucrats regarding this policy. They were even very skeptical, thinking that this policy would resolve none of their fundamental problems in a sustainable manner (Bennoune, *ibid.*: 24).

This is how farmers' participation and centrality of their knowledge, which appeared obvious in the beautiful phraseology of the reformist clan official discourse [see Box 5.1.5.3(1) below], was turned into an elusive dream by central bureaucrats and their allies in local administrations.

Box 5.1.5.3(1) - Centrality of peasants' knowledge in the agrarian revolution

"No agrarian revolution can occur without considering the peasants' knowledge and wisdom, given the actual insufficiencies of studies and experienced staff in the rural areas" (Agrarian revolution charter, JORA (1971) No. 97, p. 1278).

The core of the agrarian revolution is absolutely the peasant's knowledgeability, either the unlettered or the literate. If the strength of this knowledgeability is ignored, underestimated, overlooked or despised, nothing sustainable can be achieved and failure is warranted.

Peasant's knowledge is of a same nature as of other persons', although most of us, in front of a peasant, silent and dressed in rags, would be tempted, sometimes unwittingly, to feel like better endowed with a knowledge made superior by university studies, a diversified and rich vocabulary, a talent of handsomely phrased utterances, or even with urban clothes and uniforms, materially looking more tidy.

However, acknowledgment of the peasant's knowledge should conform to a balanced position between a blind admiration and a systematic disparagement.

Many people have talked about peasant's participation in the different operations of the agrarian revolution. Can we not say that this formulation is somehow inexact and misleading? Peasants cannot participate, they are the main actors. Technical staff, politicians and researchers, we are the one who should participate.

To not believe in the unlettered is a mistake that will result in heavy consequences, and announces the failure. Believing in peasant's knowledge, although illiterate, is scientifically right, and the first and foremost step towards success'.

Source: Kergoat, L. (n.d.).

5.1.5.4 Position of big landlords and rich peasants towards the agrarian revolution

Before 1971, big landlords played a big role in blocking any land reform to be launched since independence, thanks to their allies in the state apparatus. They even influenced the state, due to the ties they had with the bureaucracy, to reverse the spontaneous decentralized 'self-management' movement in 1962 undertaken by agricultural labourers to weaken the experience and later take control over the land and means of production left by the fleeing colons. They tried all possibilities they

had at hand to discourage the labourers in the self-managed farms, using propaganda campaigns.

According to an old farmer who was telling his story of '*autogestion*', many times they lit fires in the haystacks or grain barns to discourage '*autogestion*' labourers and give up their 'stubbornness' about a supposedly failing movement

When the agrarian revolution was approved in the early 1970s, the big landlords were not bothered by it as they were assured by their natural allies in the state apparatus that their interests would not be threatened. They were even able to infiltrate and undermine the UNPA to make it 'work' for their interests rather than for landless and small farmers.

Their strength resided in the fact that most of them were affiliated with religious circles, having been to the pilgrimage many times and were not afraid to instrumentalize the religion in order to protect their position and interests [see Box 5.1.5.4(1) below]. People in Algeria are very receptive to the religious discourse, especially in the rural areas. A good example of this is in the on-going violent movement of terrorism in the country.

When some big landlords were partially nationalized by the APCEs, they introduced appeals at the province and national levels where their allies acquiesced by rejecting the APCEs' decisions and overruling them by restitution decisions. This was made possible by to the agrarian revolution charter which gave the *wali* - the province governor - the right to overrule the APCEs decisions.

It is worth noting that these nationalizations, either partial or total, occurred in localities where the big landlords were not well represented in APCEs. Whenever they had a 'heavy weight' representation (what a strange paradox!) in APCEs, either directly or indirectly, they used their position to influence the decision-making process to their benefit in local administration.

Other ways of influencing the course of this policy were to develop (again) propaganda campaigns using mainly religious precepts to dissuade beneficiaries from accepting plots and parcels on the expropriated lands. Sometimes they use rewards to corrupt the '*attributaires*' - the beneficiaries of land redistribution - in order to give up working on the land. When those methods did not get the wished results, they used a more violent and dissuasive strategy; they organized, according to Bennoune (ibid.: 24), special bands which came at night knocking at '*attributaires*' doors to threaten and intimidate them. Due to this method, but for other reasons too, many beneficiaries resigned to work on 'their' plots after having accepted them.

Although their interests were taken into account at the moment the policy was designed by their allies in the state bureaucracy, the big landlords and rich peasants wanted to show that they felt threatened by this intervention and responded by resisting it wherever and however they could. They were very wary to show their extreme anger at and fierce opposition to a 'low-intensity' threat in order to dissuade reformist policy-makers to think about policies seeking more fundamental change. It was a very good piece of 'comedy' played by highly-skilled actors under the direction of highly-qualified 'scenarists'.

Box 5.1.5.4(1) - Why does El Hadj Amar disagree with the agrarian revolution?

El Hadj Amar, 71 years old, is a big landlord who inherited his land from his father. He lives with his two wives and 12 sons and daughters in a small village in the wilaya of Souk-Ahras. In 1973, 30 hectares of his land was expropriated by the APCE and versed to the Fonds National de la Révolution Agraire (FNRA). In the same year, a Coopérative Agricole de Production de la Révolution Agraire (CAPRA) of 5 beneficiaries was founded on his land which annexed another plot of 20 hectares nationalized from an absentee neighbour. He is called El-Hadj because he went to the pilgrimage three times, one of the five 'pillars' of the Islamic faith.

After three cropping seasons, he saw 'his' land left uncropped for 15 years, before it was returned to him. He made many claims either at the local, provincial and/or national levels, but nobody seemed to have an ear for him. He could not imagine that his land that had produced for centuries could become unproductive because of these 'lazy' beneficiaries, as he 'painted' them. "If God would have wanted these people to enjoy having land, He could have given land to their ancestors, like me. This is my land, I inherited it from my father who inherited it from his ancestors. Lots of people were collaborators of 'França' [the colonial administration] and their land was intact, not one sq. cm was nationalized. They were supposed to be the first concerned by this agrarian revolution, which brought only arbitrariness. We are Muslims and I don't think that there is a verse in the Quran that says: "Take the land from one to give it to another". I do not believe that".

In 1991, his land was returned to him due to the application of the 90-25 Law. He told me once, during a discussion we had in his house while he offered a cup of tea: "If the country was ruled by law and justice, I would have sued 'El-Houkouma' [the government] and 'El-Dawla' [the state] for having taken my land for more than 20 years. Nobody has gained something in this story, neither me, nor the state and for sure not the beneficiaries who left my land fallow for more than 15 years".

Source: field notes

5.1.6 Some of the policy's results under the microscope

It is widely known that when a revolutionary group tends to apply a land reform policy, the objectives assigned to this intervention are mostly political and social, although there are some economic aspects that interfere. That is, this intervention would have aimed to develop a sort of social justice which would have helped to alleviate rural poverty among poor peasants and, moreover, developed the agricultural sector. In the specific case of Algeria, it is in this context that the agrarian revolution would have been defined. Unfortunately, though the political leadership was so sincere - there is no doubt - about working in this sense, the conservative clan of the regime and the bureaucracy interfered in the policy cycle and succeeded in 'deflecting' the impact of the intervention in order to keep the interests of the national bourgeoisie untouched. After the coalition of central bureaucrats and the national bourgeoisie, particularly the big landlords and rich farmers, successfully blocked all attempts at land reform after independence, they tried to react strategically under the pressure of the political leadership in the early 1970s and agreed to develop a land reform policy. However, they thought this policy should be designed and implemented in such a way that their and their allies' interests would remain 'intact', and thought to try - why not? - to weight their positions in

controlling the state. That gave birth to a sort of, what Ellis calls (1990: 198), a "defensive land reform", which intended to prevent any social change in the land tenure system. More than that, it legitimized the land transactions that took place during the colonization between the colonial state and/or the French settlers, on the one hand, and the national rich farmers, on the other. As Pfeifer (1985: 194) concluded,

Through all of this, power relations in the countryside were modified: The commercial family farms and their material base were strengthened and the capitalist farms were legitimized, so that these groups can now promote their interests directly and openly. There were also some real achievements for reform beneficiaries in some communities, but on the whole this did not amount to a 'revolution' by or for petty producers and workers.

According to the legal dispositions of the 71-73 Ordinance, many deviations had been reported. Based on the results of a case-study he made of Oued-El-Alleug commune (Blida province), located some 40 km from Algiers, Mutin (1976: 66) argues that:

It is evidently clear that some landholdings within the commune that should have been totally nationalized were just limited [partially nationalized].

In accordance with Mutin (*ibid.*), Pfeifer (1985: 46) argues that the majority of land finally reorganized by the agrarian revolution were public [domanial and communal] rather than private. Among the latter were some small-scale absentee-held farms that were concerned rather than directly-worked farms.

It is worth mentioning a fundamental metaphor in this policy which conditioned the implementation process, that is the term 'absentee'. The way the legal text was drafted full of ambiguities leaves one to ask the question: *How could absenteeism be testified to and who had the right and ability to testify to it?* The implementation was, in fact, influenced by the degree of subjectivity - and then discretion - granted both to field implementers (APCEs) and protectors from abuses (appeal and arbitration commissions) in interpreting which farm was 'nationalizable', which was 'limitable', which farmer or landlord was 'exploitant' and who was 'absentee'.

More important, given that implementation was based on participation of the beneficiaries themselves in the agrarian revolution bodies [see Box 5.1.5.1(1)], I assume that the implementation of such policy was expected to be carried out in the spirit of a *vendetta* by landless and small farmers taking a revenge on the big landholders, especially those who were the collaborators of the colonial administration. This spirit was even reinforced by the Marxist-Leninist ideology of the agrarian revolution taking the stance of a '*dictature du prolétariat*', which was easily perceived in the agrarian revolution charter in the use of French terms such as '*exploitation*', '*rappports de production*', '*transformation radicale*', '*masses paysannes*', etc.

However, some big farms were nationalized and distributed to some '*attributaires*' that were organized into co-operatives. Mutin (*ibid.*) mentions that, in his own case,

the big modern private farms that were located in the southern part of the commune he investigated were just dismantled. This is in line with Pfeifer (ibid.) who states that, to maintain any system as a whole, sacrificing some particular interests may sometimes be required. Commercial farms as a group benefited from the agrarian revolution, though some individual cases may have suffered from it. She (Pfeifer, ibid.: 45) concludes that:

Private property in land and other means of production and the capital/labour were carefully protected, and this was built into the fabric of a 'successful' reform all long.

Moreover, Mesli (1996: 137) mentions that, although the policy was based on peasants' participation, the '*attributaires*' were never consulted about how their farms should be managed. They were led to 'adopt' the representatives that the officials had chosen for them. They created co-operatives with other people that were chosen by the bureaucrats. The '*attributaires*' were not enthusiastic about the proposed system of management and organization, and stayed passive. The juncture between peasants and the state was biased by decisions in full disharmony with the legal dispositions of the agrarian revolution charter. This situation can easily be understood by referring to the numerous '*attributaires*' that quit their co-operatives.

5.1.7 Main interfaces of the agrarian revolution policy

The design and implementation of the agrarian revolution as described in the previous sections attract our attention to two important interfaces whose features are mentioned in the case. The first concerns the political leadership under the guidance of Houari Boumediène and the central state in an interface that took place during the design phase; the second regards the central bureaucrats and the local administration that were linked in an interface that was more concerned about the implementation phase.

In both interfaces, central bureaucrats played an important role, meaning that they were crucial actors in the whole cycle of the policy.

Given the power relations that were present at that time, on the one hand, and the ideologies and interests underlying the actions of the different social actors that were at stake in the first interface, I assume a strong process of manipulation from both the political leadership and the central bureaucrats. The latter manipulated the participation of farmers to try to smoothly impose a sort of '*dictature du prolétariat*' which, if succeeded, could reinforce the political leadership's power and consequently lead it to undertake other more structuralist policies, and finally win its battle over the national bourgeoisie.

On the other hand, the central bureaucrats manipulated the design of the policy in order to ensure their own interests and those of their allies. Their manipulation of decentralization was very strategic in undermining both the decentralization process and the agrarian revolution.

At the second interface, the central bureaucrats behaved in continuity with the design stage. By 'offering' the policy implementation to the local administrations (APCEs), they offered in fact the poisoned gift which left their hands clean and far from any direct opposition to their allies, the big landlords and rich peasants. Moreover, they kept a close eye on the implementation process by controlling the appeal and arbitration commissions, which were used as last-resort tools for the protection of their interests and those of their allies.

5.1.8 Conclusion

In summary, the way this policy was designed shows a strong similarity with the Peruvian example of land reform described by Long (*ibid.*: 112) where

The principal rhetoric of this reform was 'cooperativism', 'peasant participation' and 'equity', but its implicit aims were to increase central control over the rural population and dynamize the production.

In line with what Pfeifer mentioned above about the fabric of a 'successful' reform, I argue that the agrarian revolution did not fail during its implementation. Its failure was already stimulated during the design stage. I thus suggest that the agrarian revolution and/or its 'stimulated failure' has helped Algeria's post-independence state and its inherent bureaucracy to complete the ambitious enterprise that the French colonization started in 1830: The dismantling of the peasantry and, as a consequence, the burial of the Algerian agriculture.

5.2 Case No. 2: The cereal seed production improvement policy⁷

5.2.1 Introduction

In the jargon of intensive, high external-input agriculture, quality seeds are of paramount importance. Their potential and desirable characteristics set the attainable level of production, given that other inputs such as fertilizers, pesticides, and herbicides are just means required to realize the productivity potential of the former (Srivastava, 1986: 1). Consequently, availability of quality seeds in sufficient amounts for appropriate varieties and cultivars is the basic duty of the seed programme (or the seed system) acting in the country. Feeling the importance of these inputs, Algerian authorities tried, for many years, to devise appropriate measures to improve the national seed production, especially the cereal seeds.

In this section, I shall present the *problématique* of the cereal seed system in Algeria, how it was developed by the Ministry of Agriculture, how it gave shape to a cereal seed system with different - but however complementary - functions, how it responded to the needs of its clientele, and to what extent the underlying policy of cereal seed production achieved sustainable results.

5.2.2 Genesis of the cereal seed system in Algeria

At the time of independence, when the re-appropriation of the colonial estates started, production and distribution of certified (or quality) seeds became a crucial factor for cereal production in Algeria. Until then, seed production, if I can call it as such, concerned a few colonial landholdings which were used to grow their own seeds from the limited amounts of certified seeds they annually purchased from the *métropole* (France). Though these colonial farms used to sell their surpluses of produced seeds to other colonial farms, the *fellahs* - i.e. the native, traditional farmers - had no access to these seeds and had to make use of their traditional seeds they selected from heterogeneous landraces and local populations or use any 'commercial' seed they could find in the local market. It must be clarified that both sectors (the colons estates and the traditional farms) were very different, not only in terms of agro-ecological and socio-economic conditions but in terms of cultural practices as well.

In 1962, when the settlers left Algeria forever, the so-called 'seed system' somehow broke down and there were no produced nor controlled seeds during that year. The deficiency was so acute and no imports were possible because the local varieties grown by the *fellahs* could not be found abroad, given that they were selected from a local material that was completely unknown in other countries (Kadra and Aït-Amer, 1979a: 175).

⁷ This section relies mainly on my own research (Malki, 1994) which I undertook as a partial requirement for my MSc degree at Wageningen Agricultural University (MAKS Programme).

In order to solve this problem, or at least reduce its acuteness, the Ministry of Agriculture and Agrarian Reform, as named at that time, decided in 1963 to undertake a programme of identifying the best fields among those in cereal production that could be re-oriented as seed production fields. The seeds harvested from these fields were collected for processing and distributed to farmers, who were mostly the *Domaines Autogérés* (DAs). At that time, this intervention was supposed to be a temporary measure in the transition of setting up a modern seed system that the authorities were thinking of. However, this remained the only 'seed system' that the Algerian agricultural sector had until 1973. During all this time, the majority of the farms, especially the private sector, were using, according to some seed specialists, very low-quality seeds of an unidentified origin (Kadra and Aït-Amer, *ibid.*).

Until 1973, it was in fact the *Institut National de la Recherche Agronomique d'Algérie* (INRAA) which had the duty to produce the breeder and basic seeds, while the *Projet Céréales*, that started at the beginning of the 1970s, was in charge of control and certification of all seed multiplication from the first to the last generation of the 'seed pyramid'. At the same time, the *Office Algérien Interprofessionnel des Céréales* (OAIC) was, through a large network of *Coopératives des Céréales et des Légumes Secs* (CCLs), in charge of collecting, processing and marketing the harvested seeds (Kadra and Aït-Amer, 1979b: 14). It must be said that the *Projet Céréales* received a strong support from the FAO as the executive agency, and a significant input from the CGIAR-system International Center for Maize and Wheat (CIMMYT), based in Mexico, in terms of technical and scientific assistance.

According to Kadra and Aït-Amer (1979a: 175), a reorganization of the seed system was very much needed at that time. This action took place with the implementation of the 1st Quadrennial Plan of Development (1973-77), which established the foundations of the cereal seed policy. The measures of this plan aimed to:

1. Identify, with precision, the cereal seed needs and production objectives;
2. Promulgate the required seed regulations according to universal standards in order to guarantee seed control and certification, and marketing in order to protect the end-users;
3. Mobilize the appropriate human, physical, and financial resources to correctly undertake the various seed system functions.

5.2.3 Organization and main functions of the cereal seed system

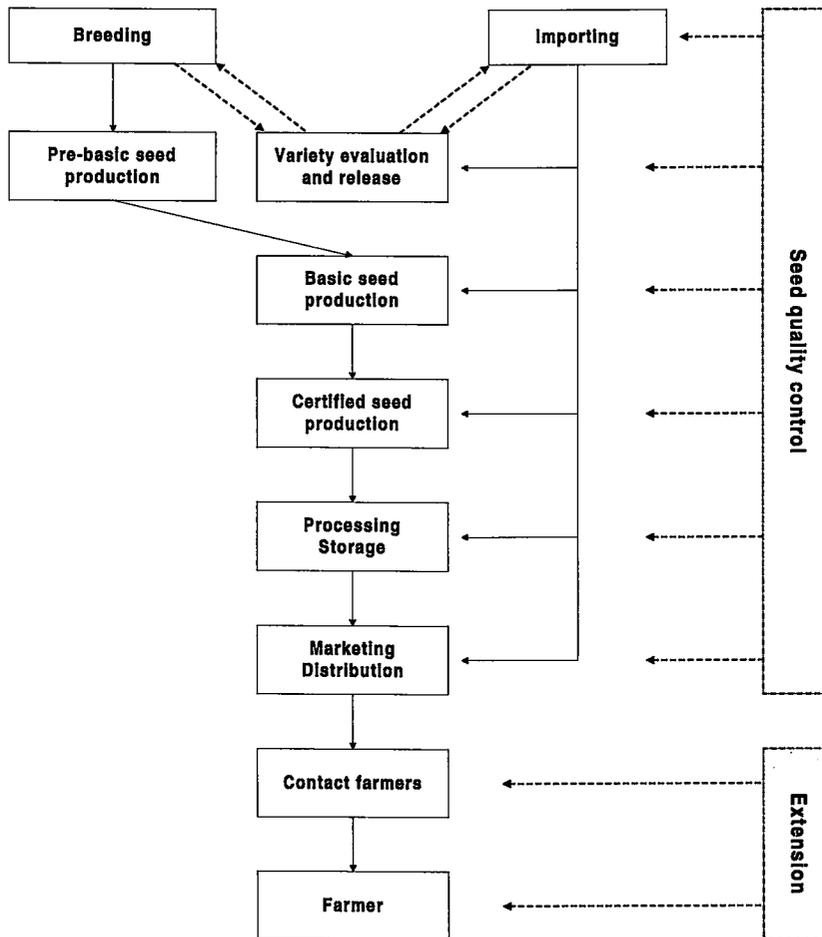
By definition, a seed programme is "an outline of measures to be implemented and activities to be carried out to secure the timely production and supply of seeds of prescribed quality in the required quantity" (Feistritz and Kelly, 1978 cited by van Gastel, 1986: 15). Moreover, the term 'seed system', or even the term 'seed industry', refers to the entire complex of organizations, institutions and individuals associated with or involved in the seed programme in a given country (Douglas, 1989: 154). It is a complex and integrated organizational system composed of several essential

components or functions. These components are strongly inter-related to the extent that if one of them is not correctly operating or not operative at all, the whole system will be affected and may result in a poor-quality end-product (van Gastel, *ibid.*: 15). It is, in fact, the complexity of the whole system and the interdependency of its different parts that, to a large extent, determine the quality of the final product.

According to van Gastel (1986: 16), the major functions that can be found in the seed system are described in Figure 5.2.3(1) below. This model, which reflects how the seed system is organized in general world-wide, was used in my previous work (Malki, 1994: 26-37) which analyzed the Algerian cereal seed system and identified the main differences that can explain the low-quality seed that this latter system produces. In this work, the main functions that were identified are as follows.

Figure 5.2.3(1) - Main functions of a seed system

(Source: van Gastel, 1986: 16)



5.2.3.1 *The breeding function*

Breeding is a basic function that provides the seed system with the basic genetic material through hybridization (or *crossing*) and/or introduction of varieties and cultivars from abroad. Although it is a very time-consuming activity and requires highly-trained personnel, hybridization is one, but not the only, alternative. Newly released varieties and/or advanced and segregating material can also be introduced from abroad, especially from IARCs.

In Algeria, only the *Institut Technique des Grandes Cultures* (ITGC) has dealt with this function since its creation in 1974. Given that breeding is mostly considered as a research activity, breeders are sometimes not aware that they are also part of the seed system, thinking that seed production activity is the duty of others. This is perfectly characterized by the weak relations between the breeders and the seed production staff working within the same organization, and sometimes within the same experimental station.

Moreover, the breeding programme, as it was actually functioning for the last two decades, was based on a very weak local genetic diversity, for only few crosses per year are realized, and for relying more and more on genetic material coming from IARCs with a strong orientation towards high-yielding varieties (HYVs). As some observers have argued, "we experience [in Algeria] an internationalization process of the breeding function with a very high dependency risk" (CIHEAM, 1998: 20).

It is for this reason that the breeding function, and therefore the whole agricultural Research & Development (R&D) system, especially the cereal seed system in Algeria has been exclusively focusing on high external-input farming systems, although the dualistic structure of farm typology, i.e. modern farms vs. traditional farms, showed - and still shows - the supremacy of traditional, very marginal, fragmented, small farms that are not really the appropriate ones for intensive agriculture (Groosman, 1991: 25).

5.2.3.2 *The variety testing and release function*

The task of this function is to evaluate new varieties upon some legal standards such as uniformity, distinctness, stability, value and quality, and agronomic performance, before they are released to farmers. It is a very important function that manages and regulates the interface between the breeding and seed growing functions.

In the case of Algeria, this function did not exist until few years ago. It was the creation of the *Centre National de Controle et de Certification des Semences et Plants* (CNCC) in 1994 that gave birth, among others, to this function which did not really start until 1996 and has yet to develop correctly in order to fulfill its duty. It is closely related to the management of the National Register of Varieties.

5.2.3.3 *The seed growing and multiplication function*

This function can be described as a very long chain of simultaneous actions of growing and multiplication, starting from the *breeder* seeds (1 generation) to the *pre-basic* and *basic* seeds (3 generations) to the *certified* seeds (2 generations), which can be finally sold to the end-users (farmers). However, seed growing is not an isolated activity. It must be supported upwards by an efficient breeding function (or programme) which provides the necessary adapted genetic material to be multiplied, on the one hand, and downwards by an effective processing activity (which includes storage and packaging activities), on the other. It is regularly monitored by the quality control function [see section 5.2.3.5 hereafter]. It is for this reason that the seed growing function cannot be considered as an independent activity but as being part of an integrated whole (Douglas, 1969).

In this function, differentiation between the *seed producer* and the *seed grower* needs to always be made. The former is in general a private, semi-public or public organization that has the entire duty of seed production, while the latter is a kind of 'professionalized', specialized farmer, of whatever legal status, who grows seeds on his farm for the *seed producer* on the basis of a clearly-defined contract. In the context of this function, Van Gastel (*ibid.*: 18) mentions that:

The small amount of breeder seed is multiplied a number of times to produce the large quantities of certified seed to satisfy farmer's [end-users] requirements. The breeder seed is first multiplied to produce basic seed; this in turn is used to produce certified or commercial seed. The quantity of seed and the acreage in the different classes increase at each step. . . . Throughout the multiplication cycles, a high level of purity should be sustained to guarantee a high quality end-product. The standards for early generations are slightly higher than for later generations.

5.2.3.4 *The seed processing function*

This function is very important in the process of producing quality seed. It is based on an increased capital-intensive orientation, for being a complex, largely mechanized operation using relatively sophisticated equipment (van Gastel, *ibid.*: 18). According to van der Burg and van der Scheur (1986: 107), when the processing is conducted with the right equipment and appropriate methods - and with the adequate, qualified staff, I would suggest - it can increase purity and germination, decrease the amount of other undesirable seeds, especially the diseased ones, and improve the visual, commercial, and planting quality of the seed lot.

As far as processing and storage facilities are concerned, Algeria did not possess any specialized infrastructure at the time of its independence, and the situation remained so many years after. Cereal seeds were processed by the *Coopératives des Céréales et des Légumes Secs* (CCLSs), whose equipment was rudimentary. It was only with the First Quadrennial Plan (1973-77) that the establishment of 26 cereal seed processing and storage centers was decided. Currently, only 12 centers with an

overall capacity of 42,000 tons have been realized, all of them located in the western part of the country (Benadel, 1988: 43). The rest of the programme's infrastructure was built but the operational equipment is still lacking.

As a matter of illustration, the level of quality, reflected in high rates of rejection decided by the seed quality control function, as we shall see later, did not show any significant difference between the three regions of the country (the west which is relatively better-equipped, and the center and the east, which are less).

5.2.3.5 *The seed quality control and certification function*

This function is in charge of checking the quality of any seed lot produced in Algeria or imported from abroad. Needless to say, this function has to be assigned to an independent, public or semi-public institution directly accountable to the Ministry of Agriculture while having no contact with the other actors in charge of the other functions of the seed system, except the professional, routine contact engendered by the carrying out of the control and certification function itself (Douglas, 1989: 157).

The concept of quality control is embedded in a series of checks and balances intended to maintain a high quality seed, where quality includes both specific and variety purities, germination, health, weed seed content, moisture content, and other desirable characteristics. It is applied through seed certification mechanisms and procedures, whose application is enforced by the seed legislation. As a matter of fact, seed certification includes the field inspection, the seed lab testing and the pre-and/or post-control trial. In the case of Algeria, it includes additional activities related to the variety testing and release function and the management of the National Register of Varieties [see section 5.2.3.2].

In Algeria, since 1973 and till 1992, the quality control function was assigned to ITGC which at the same time was the breeder, the pre-basic and basic seed multiplier and producer, and the national seed production planner. This situation, as strange and paradoxical as it appeared, influenced to a large extent the level of quality of the seeds produced during this period, which was exacerbated by the quality of processing and storage [see section 5.2.3.4]. Benadel (ibid.: 41) reveals that "the seed produced is generally of mediocre quality and the quality is often rightly challenged by users". Given the evoked situation, the Ministry of Agriculture and Fisheries finally decided in 1994 to create the *Centre National de Controle et de Certification des Semences et Plants* (CNCC), an independent organization in charge of the seed quality control and certification. After its creation, the CNCC started first working on the preparation of the seed legislation, which was promulgated through executive decrees in 1995.

However, some constraints are worth reporting. The lack of qualified and certified specialists to carry out field inspections, the lack of trained personnel for lab testing, the absence of variety purity and health sections in the three regional labs that CNCC inherited from ITGC, and the difficulty of mobilizing the necessary

means of transportation to conduct the field inspections every year are the major constraints of the quality control function.

5.2.4 Other intervening actors in the cereal seed system

Many other actors intervene either directly or indirectly in the cereal seed system, maybe not as main function performers as described above, but whose intervention is still very influential and of great importance to the whole system. Among these actors, I mention only the most important one: The state.

Represented in the cereal seed system through the Ministry of Agriculture and its different structures, the state has been, up to the present, the exclusive policy-maker of the seed system. For a long period, it played an intensive role in attempting to develop an as-sound-as-possible and efficient seed system through a continuously-revisited policy.

In this respect, the protocol signed in 1989 with the EC for funding an important project on seed production improvement, and the adoption of a more broader vision of how the actual seed organization could be improved were indubitable signs of the increasing awareness of the policy-maker *vis-à-vis* the importance of this system.

Moreover, the state annually injects a significant amount of subsidies into this system in order to keep it 'going'. King (1991) estimated, for instance, the subsidies allocated for the 1990-91 growing season for only Constantine *wilaya* (or province) was at 33 million AD (almost 1.5 million US \$ at 1992 official change rate of 1 US\$ = 22 AD). If I add that at least 25 to 30 *wilayate* (or provinces) are concerned by seed production and thus by state subsidies for seed, it is not difficult to estimate an indicator about the amount of these annual subsidies.

One form these subsidies take is seed price dumping, meaning that farmers pay lower prices for seed purchases from the co-operatives (CCLs), relative to the harvest they had to deliver to the same co-operatives.

Such a measure was supposed to achieve two objectives: (1) It aimed to encourage farmers to buy and use seeds produced by the system rather than to store a part of their harvest and use it for the next growing season, given the risk of seed-borne diseases that can reduce the yield and may engender the endemic spread of a given disease; (2) It would help the CCLs, and thus the state, to improve its control over the cereal national production through an expected increase of grain inflow that passes through the CCLs.

It seems that the cereal seed policy, which was run for more than two decades, had swallowed huge amounts of public finance which were derived from the sales of cereals the CCLs traded every year. To mobilize these resources, a special mechanism called the '*decret de campagne*' was set up, signed every year by the President of the Republic, or by the Prime Minister since 1989, and which defined a royalty to be levied from the farm-gate price paid to farmers on each quintal of

cereals or food legumes produced locally and delivered to the CCLSs. For many years, this royalty was set at 15 AD/quintal⁸ [see Box 5.2.4(1) below].

Box 5.2.4(1) - Use of cereal and food legume levies in cereal seed production

The amount of this royalty is meant partly (0.50 AD) to aliment the administrative budget of the Office Algérien Interprofessionnel des Céréales (OAIC) and for the remaining (14.50 AD) to finance activities of development, extension and technical assistance, as well as activities of international trade, distribution, regulation and sponsorship of farmers' organizations.

Among the activities that were supported by these resources, the following can be mentioned:

- 1. The whole or part of the selection premium paid to seed multipliers above the price for consumption grains;*
- 2. The whole or part of the costs of inputs, infrastructure, goods and means used for seed processing;*
- 3. The costs related to the introduction of new intensive cultural techniques and/or varieties ;*
- 4. The costs of experimental trials, activities of diffusion and technology transfer;*
- 5. The costs of other support activities related to technical assistance and logistics;*
- 6. The sponsorship of farmers' organizations activities regarding cereal development.*

Source: JORA (1992) No. 77 of October 26th, 1992, p. 1615.⁹

5.2.5 Key elements of the cereal seed production improvement policy

According to the 1988 CIHEAM study on the cereal seed system, which was supported by the EC before it decided to fund an important project on the issue, the Ministry of Agriculture and Fisheries decided to set the quantitative production objectives at 70% of the total seed needs for cereal crops. Hence, to sow every year some 3.3 million hectares with cereal crops, and at a national average norm of 120 kg per hectare, 400,000 tons of seeds were needed. Given that the rate of rejuvenation decided by the ministry (70%), the annual production objectives ranged between 250,000 and 300,000 tons of quality seeds to be produced by the Algerian seed system. For some experts, the objectives seemed to be rather very ambitious for a system that was in the first stage of consolidation, and thus should be lowered. They tried to convince the ministry that if seeds produced by the system met the universal standards of good quality, they could be used consecutively for at least two or three years by farmers, given that cereals are autogamous species, with a very low rate of out-crossing. Acting upon these recommendations, the Ministry of Agriculture and Fisheries decided to lower the objective of the rate of rejuvenation at 30% instead of 70%, producing around 150,000 tons of certified quality seeds.

To achieve these objectives, many complementary measures were put on the agenda, such as improving the personnel's technical ability in the different parts of

⁸ For instance, if the farm-gate price of wheat was set by the state at 1,900 AD/quintal, the farmer received only 1,885 AD and the remaining 15 AD went the *Fonds d'Appui à la Céréaliculture*.

⁹ The reference used here, that is the JORA, was in French. The translation into English is from the author (MM).

the system through training, completing the equipment of the processing centers, defining criteria for a more strict selection of farmers for seed production, motivating seed growers to work for a better quality, etc.

However, although much of these measures started being carried out in 1990, when the EC project started, it did not influence the quality level of the end-product of the system. In fact, a quantitative variable, that is the *rate of rejection*¹⁰, is used annually by officials to evaluate the performance of the seed system. For them, this indicator illustrates the level of quality reached by the system after 1990, when the EC project started [see Table 5.2.5(1) below].

Table 5.2.5(1) - Evolution of the rate of rejection of cereals seed plots

Growing season	Before the EC project						After the EC project	
	82-83	83-84	84-85	85-86	86-87	87-88	88-89	1991-92
Rejection (%)	49	36	39	42	39	46	38	39

Source: ITGC data

It can be clearly seen that the rate of rejection, which theoretically must not exceed 10%, is very high and even intriguing. It can even be said that the system is diving deeply into an indefinite mess that I called a 'non-quality vicious circle' (Malki, 1994). In my opinion, these statistics do not show the reality; on the contrary, they hide it very well as far as it does not determinate where the causes of this high rate of rejection and thus low quality reside.

Let us assume that the rejection rate of 38% during the 1988-89 season could be a starting point for the EC project, for instance. One can assume that this high rate of rejection originated from problems that could be attributed to one or another function in the seed system. Consequently, it could be expected that by the 1991-92 season, the rate would be lower, meaning that these problems were circumvented and quality improved. But this was not the case, and given that some functions were missing or not correctly operating at that time, it was difficult to declare who was responsible for what, or who caused this or that problem. This is why I believe that this indicator is highly misleading. Trying to understand this very high rejection rate, an analysis of the resources made available to achieve the quantitative and qualitative objectives of seed production seemed rather essential. However, having studied at length the constraints that confined the system within a 'non-quality vicious circle', I will content myself by describing the main issues that deal with this policy as a development action that attempted to support the improvement of cereal production in Algeria. In the remaining part of this section, I will assess the following points:

¹⁰ As a matter of definition, the rate of rejection is a percentage ratio of the rejected seed acreage per year compared to the total cultivated seed acreage. The rejection is decided either at the field inspection or at the seed lab testing.

- the basic foundation of the seed system and its philosophical background, and how it influenced the response of the system towards the needs of its clientele;
- the general criteria of being elected a seed grower, and the alternative stratagems used by 'free-riders' to benefit from the 'gifts' offered by this policy;
- the relationships between different types of farmers and the cereal seed system and what perceptions these types of farmers developed towards this system.

5.2.5.1 Basic orientation of the seed system and its philosophical background

Having a strong influence from the *Projet Céréales*, implemented during the 1970s with the support of the FAO and the technical and scientific assistance of CIMMYT, the breeding function, and thus the whole seed system, embraced a clear orientation towards the Green Revolution paradigm, since 1974, when ITGC was created. A strong focus was placed on HYVs, external inputs, mechanization, etc. New varieties based on this philosophy were released mainly by ITGC breeders, whose seeds were increased through a multiplication programme yearly planned by the main actors of the seed growing function.

A very active programme of extension and diffusion of these new varieties and their underlying technical packages was set up to make these aspects known to the *Domaines Agricoles Socialistes* (DASs), called at that time the 'modern' sector as they were settled on the former colons' landholdings, with the best, most fertile land in the country.

New types of varieties, known as semi-dwarf varieties, became the *leitmotiv* of ITGC in the middle of the 1970s and the basis of cereal crop improvement because these varieties were adequate for an intensive package (mechanization, high fertilizer input, use of herbicides, etc.) with a high yielding potential. Without questioning if this model could fit in any agro-ecological zone of cereal production, ITGC breeders and developers launched the battle of intensification everywhere, even in the private farms when they started to be incorporated in the development plans at the beginning of the 1980s.

Some specialists warned at that time that such a model could not be managed in a standardized manner given that the most cereals were grown in risk-prone agro-climatic areas where farms had neither the required resources for such investments nor have the potential to give an acceptable return to these investments. According to Mesli (1995: 166), the typology of farms that existed since independence was mainly characterized by small farms (less than 10 hectares) that could by no means fit the intensification vision [see Table 4.5.2.2(1) in Chapter 4 of this book]. In this typology, the European sector (colonial farms) gave birth to the public sector, that is the 2,188 *Domaines Autogérés* (which later became the 3,400 DASs after the 1982 reorganization of both the socialist and agrarian revolution sectors). In 1987, the same DASs were split up (again) into more than 27,000 semi-public farms (EACs-EAIs). Meanwhile, 70% of the Algerian farms owned not more than 10 hectares.

Among this class, 108,000 farms did not reach the level of 1 hectare of land. Moreover, only 25,000 farms were considered modern (Mesli, *ibid.*).

Finally, what this typology does not show is that the total agricultural land owned by both sectors (9.6 million hectares) included more than 2 million hectares of collective rangelands (*Arch*), the rest (7.5 million hectares) represented the potential of arable land that is suitable for agricultural practice. According to Mesli (*ibid.*: 169), cereals and cereal-based farming systems (which include cereals as well as fallow, feed crops and pulses) represented respectively 53% and almost 91% of this area at the time of independence [see Table 5.2.5.1(1) below]. Slight changes have really occurred within this typology or land-use since then.

Table 5.2.5.1(1) - Distribution of the agricultural land at the time of independence

Nature of crops	Area in hectares	Importance
Cereals	4,000,000	53,2%
Fallow	2,600,000	34,6%
Pulses	163,000	2,2%
Feed crops	56,000	0,7%
Vegetables	56,000	0,7%
Industrial crops	54,000	0,7%
Fruit trees	190,000	2,5%
Vineyard	400,000	5,3%
TOTAL	7,519,000	100,0%

Source: Mesli (1996: 169)

Providing more recent figures, Mesli (1996: 117) suggests that the 1973 census of agriculture indicated the existence of 710,000 private farms in addition to the 'autogestion' sector. In the former sector, 310,000 farms possessed less than 5 hectares and 114,000 farms owned between 5 and 10 hectares. This meant that more than 400,000 farms were considered unfit for the intensive model of agriculture practice. On the contrary, these were based on extensive models of farming, practicing subsistence agriculture such as cereals-fallow, in most cases, integrated with sheep herding in some cases. Yet, only 25,000 farms, having 50 hectares or more, could be considered as modern farms, susceptible to 'absorb' the new HYVs and their underlying technical package.

However, in spite of this evidence, a huge HYVs 'marketing' movement was supported by the Ministry of Agriculture and Fisheries. Such a movement succeeded in disturbing even the most resistant scientists that warned about the danger of pushing farmers to relinquish their traditional varieties and native landraces that represented the cherished stewardship of the traditional farmers, with the risk of creating an irreversible genetic erosion.

It is within this context that the cereal seed system started to be organized. In order to facilitate the use of the seed produced by the system, the impetus of real demand was required. Towards this goal, the state started injecting huge amounts of

subsidies by lowering the price of the produced seed as a means to motivate farmers to buy seeds from the CCLs. In fact, the financial resources were not real public subsidies as they were derived from the royalties levied from the farm-gate price of locally-produced cereals and food legumes. They were thus not public subsidies but farmers' own subsidies.

In reaction to this stimulus, farmers showed different reactions towards these new varieties. Some rejected them blatantly at first sight. However, most of the private farmers, who were located in harsh and risk-prone zones, decided to use them, at least to get a better, personal insight. After some years of 'trial', they rejected them and went back using their old landraces and cultivars. Others continued to use the seed produced by the system just because it was economically cheaper. When the state applied the Structural Adjustment Programme and consequently liberalize the prices of cereal products, seed prices were also liberalized and the total amount of annual royalties collected could no longer cover the totality of the required subsidies for seeds. Consequently, the price of cereal seeds grew dramatically and most farmers became reluctant to purchase and use the system's seeds, returning to the old practice of keeping part of their harvests every year to sow in the next cropping season.

This reaction of farmers towards the seed system must be seen as dramatically negative. Some statements can be presented in order to attempt an explanation of this situation:

1. The Algerian seed system was based on a Western-oriented concept of 'quality seeds' that can be found in any seed system in the developed world but which had neither the same resources to improve the quality of the produced seeds nor the same agro-ecological context. Algerian policy-makers adopted the same philosophy as in the developed world, decided upon the production objectives in a similar way, but forgot to mobilize the same resources to concretize this philosophy and achieve these set objectives of production and quality. When the seed price was not 'subsidized' any more, the seed system was not able to convince its clients to continue purchasing its products at a real market price. I assume that the system was not institutionalized enough as its product was lacking an acceptable level of quality in comparison to the price they had to pay for it since the liberalization of the seed price.
2. Many observers may argue that farmers stopped using the seeds produced by the system because of the price liberalization. Anyway, the case may be true to a certain extent. However, most of the time, farmers who were interviewed answered that they could not completely rely on the new varieties' seeds produced by the system. This is why they could not relinquish their cherished traditional landraces and cultivars because of their high potential of adaptability to harsh environments and their yield stability, whatever the climatic year can be. For them, the new varieties, although they showed better performance in a good, rainy year, showed a striking lack of the deemed desirable characteristics of adaptability and yield stability mentioned earlier.

Following what I said earlier, the breeding function was perceived by many actors as part of the research component within a development programme strongly embedded in a linear model of technology transfer (ToT model) that completely ignores upstream flow of information from farmers to extension and to research, let alone the direct flow from farmers to researchers. As a consequence, and in addition to the philosophical orientation adopted by the breeding function that I described at length earlier in this section, I suggest that the breeding function, and thus the whole seed system, worked for not less than two decades in a completely closed vacuum and disconnected from farmers' needs, to not say in a complete amnesia of the agricultural national history.

This statement is reinforced by a practical example that I derive from the heyday of the intensive model of cereal cultivation developed by ITGC which was far from meeting all expected outcomes after more than 25 years of public sponsorship. In the 1995-96 cropping season, which is the best agricultural season of the century, 3.5 million hectares of cereal species were cultivated. However, according to the official statistics of the *Direction de la Production Agricole* of the Ministry of Agriculture and Fisheries, only 167,000 hectares were treated with herbicides (5% of the total) and 100,000 hectares were fertilized with nitrogen (3% of the total). The total production of cereals was estimated at 4.9 million tons. Careful 'meditation' upon this example prompts me to ask two questions:

1. If we consider that the seed production acreage amounts to between 150,000 and 200,000 hectares annually, can we not say that ITGC and the significant public sponsorship failed in implanting the intensive model?
2. If the R&D system was not really 'water-proof' against and so disconnected from the farmers' real - and not assumed - needs, could it not prevent such a failure?

5.2.5.2 *The general criteria of being elected as a seed grower*

According to a specific brochure entitled "*La production des semences certifiées des céréales*" (ITGC, 1992), farmers likely to be selected as seed growers had to meet these criteria:

- They must have one or more accessible plots for seed production;
- They must have enough technical competence and expertise;
- They must possess some or all required equipment (seed broadcaster, pesticides sprayer, harvesting combine, etc.);
- They must eventually possess specific equipment for supplemental irrigation;
- They should subscribe to a contract with a seed producer (ITGC for pre-basic and basic seeds, and CCLs for certified seeds)

However, in comparison with international standards, these criteria seem unconcerned with the important criterion that farmers, according to Termohlen (1986: 22), must show some professionalism in seed production, and not be solely motivated by the economic aspects this activity can generate. In this particular sense,

farmers who are likely to have a strong professional interest in seed growing cannot become seed growers as far as they do not possess the required equipment mentioned above, if these criteria are strictly followed. Moreover, the possession of a harvesting combine as a criteria to be selected as a seed grower is really questionable. Knowing the cost of such a machine, it is prudent to question the relevance and the rationality of requiring such an investment from a farmer that cannot possess more than 10 hectares. In fact, the requirement of this kind of investment applies more directly to farmers that owned more than 50 or 100 hectares of land. Is this not additional evidence that some policies are 'tailored' towards some type of farmers?

This shows, in one sense or another, either wittingly or unwittingly, the bias of development planners and development institutions towards rich farmers and highly-mechanized farms. It highlights the philosophical orientation of the seed system towards a certain type of farm that does not represent the majority of farms and the support of a development model that is significantly lacking representativeness. Nevertheless, I am not against this orientation as far as seed production must be secured and protected from biotic and abiotic stresses, given the importance of seeds. Locating seed production within few farms that show a great extent of modernization is not a problem *per se*. The potential danger in this orientation is that seed production becomes a referential model of agricultural development and through the model of technical assistance it develops and the extremely intensive-oriented technologies it produces (HYVs), as was the case in Algeria.

According to some specialists that I interviewed, the process of selecting farmers for seed production first and foremost should involve evaluating their competence, good morale, professional values and hard working potential.

However, the reality was different. Farmers were selected upon criteria that fit neither the official ones, mentioned earlier, nor the specialists' ones I have just mentioned. In fact, during my field research, I was in contact with farmers who neither met neither criteria, and who were still struggling to be, by any means, selected as seed growers. The most lucky ones had recourse to the use of the famous politics - or "politricks" (Paul Richards, 1998: pers. comm.) - of using 'intermediaries' to overtake the restrictions the official criteria imposed on them. Is 'quality' really linked to professionalization?

5.2.5.3 *The farmers - seed system relations and farmers perception*

It is generally admitted that quality seeds' availability of appropriate and adapted varieties are the elements of the *raison d'être* of any seed system. In this respect, farmers, as end-users of this system's products, develop their perception towards the system in relation to the quality and quantity of its products. But, given the particular context, farmers cannot be represented by one exclusive category. Given their degree and type of involvement in the seed system, farmers can be either: (1)

End-users of the seed system, i.e. farmers who are only involved in the use of the system's products (seeds); or, (2) Seed growers, i.e. farmers who grow seeds to cover the needs of the end-users¹¹. Whether, a farmer is a seed grower or an end-user, differences of perception towards the seed system can be found.

a). Seed growers' perception of the seed system

Being a seed grower gave an opportunity to farmers to access a seed multiplication premium that amounted to between 20% (for pre-basic and basic seeds) and 10% (for certified seeds) of the official farm-gate price of cereal consumption grains paid to farmers. For many farmers, the amount of the seed multiplication premium was so motivating and/or tempting that it created a remarkable rush of 'new-comers' willing to be selected as seed growers, some of them likely to get 'their share of the cake'.

The importance given to the seed multiplication premium gave rise to different reactions which divided seed growers into two main groups. The first group represented 'truly professional' seed growers who saw the premium as a just compensation for their efforts, given that seed multiplication needed additional practices and more care and nurturing than consumption grains production, such as off-types roguing, borders clearing, etc. [see Box 5.2.5.3(1) below].

Box 5.2.5.3(1) - What do seed growers think about the seed system?

Si Omar, 55 years old, grows yearly between 100 and 120 hectares of cereal seeds. He correctly applies technical recommendations given by ITGC staff and is satisfied with their assistance. He believes seed production is more than a professional business; it is quite an art. For that, any Algerian farmer cannot be a seed grower.

Mihoub, 35 years old grows yearly up to 250 hectares of cereals seeds. Before he adopted a new variety, he first experimented it on his farm for at least two years. For him, there was no problem about quality control with the field inspectors but believed there are some 'pseudo seed growers' who used illegal tricks to influence or modify afterwards the field inspector decision rather than working hard to achieve the required level of quality.

Si Rachid, 50 years old, yearly grows up to 180 hectares of cereal seeds. He acknowledged that seed production expanded steadily during the last five years because of a social phenomenon he called 'neighbour imitation' (a sort of farmer-to-farmer diffusion process). He recommended that the distinguish the 'truly professional' seed grower should be distinguished from the 'free-rider'. He also believed pre-basic seed field inspectors were real professionals and knew their jobs, while others lacked practical experience and training.

Source: Malki (1994: 40).

The second group represented the 'free-riders' of the system who tried to benefit as much as they could from the seed system through being seed growers but with very

¹¹ Although this category (end-users) represents both farmers' types, this dichotomy is adopted for strategic reason of differentiating the perceptions of the different categories of farmers.

little investment on the plots. Two distinct sub-groups can be distinguished among this population:

1. The first sub-group concerned seed growers that were directly interested in the premium. farmers in this group tried any stratagem to get their plots certified by the field inspectors and thus get the premium. They could even influence the field inspector to certify their plots even in case they did not live up to the official quality standards.
2. The second sub-group showed a very well-developed strategy based not only on the multiplication premium but on the other advantages seed production offered. In fact, all co-operatives (CCLs) possessed their specific agricultural equipment that was supposed to work (upon an extreme priority) on seed multiplication plots belonging to farmers who lacked equipment, offered at very competitive rent prices, which was another deviation from the official criteria mentioned in section 5.2.5.2. Any farmer who wanted to have access to this offer needed to be selected as a seed grower, even though their seed plots would not be certified at the end of the cropping season for not meeting the official quality standards.

This strategy was in fact based upon a very simple economic calculation. Being seed growers, they first had access to a younger generation of seeds (G4 or R1 for farmers selected for certified seeds, and G2 and G3, for farmers selected for pre-basic and basic seeds), which means greater productivity potential. They then had access to better quality, cleaned, processed and chemically treated seeds, which meant no- or lower recourse to herbicides. They also had access to rent machines from the CCLs, if needed, for ploughing, sowing, weed control treatment and even harvesting at a very competitive price in comparison to the free market. They had a great chance to get the premium with a very low investment from them, pending that the plots were certified. However, if their plots were rejected for not meeting the standards, they would sell their harvest as consumption grains. In such a case, they lost the multiplication premium but achieved a better gain instead through the better yield the used seeds could guarantee, in addition to the lower charge of renting the co-operative's equipment, the saving of herbicides' cost (sometimes), and without as much effort as required from a 'truly professional' seed grower (especially for off-type roguing).

These diverse reactions were always sustained and reinforced by the lack of specialized farmers' organizations that could help seed growers organize themselves into a more professionally-oriented force. This situation engendered opportunism from some seed growers (or pseudo seed growers) of the second group mentioned above, which had nothing to do with seed production, - professionally speaking. They could, however, have access to the public resources even before a 'truly professional' seed grower. In fact, the politics (or 'politricks') of 'intermediaries' in Algeria could develop some specific 'channels' for these types of seed growers in order to snatch any public help initially oriented to the 'really professional' seed growers.

b) End-users' perception of the seed system

For the majority of farmers, the seed system did not respond to their wishes as it focused more exclusively on promoting new varieties (mostly introduced HYVs) that were replacing the farmers' preferred old cultivars at an increasing rate [See Box 5.2.5.3(2) below]. From the onset, the seed system was set up according to IARCs' orientation, that is, to develop Green Revolution-like packages which were thought of as the only alternative for agricultural production development.

Box 5.2.5.3(2) - What do farmers think about the seed system products?

Over the years, most farmers located in risk-prone areas rejected, either at first sight or after being experimented upon, the seed system's product just because its varieties did not meet their preferences. In doing so, they avoided relinquishing their old cultivars because of their potential adaptability to their agro-ecological zones. Their process of agricultural activity is part of a knowledge process wherein knowledge was transmitted between generations mostly through oral communication. The old landraces and cultivars they continued using represent the continuity of this knowledge process. After many centuries, their conceptualization of resource conservation included domestication of wild resources, massal selection, seed multiplication and increase, utilization of the domesticated resources in wide-scale cultivation, use for human and/or animal consumption, and storage and/or surpluses marketing. So, conservation of resources is strongly connected to the use of these resources. The new varieties promoted by the formal, institutionalized seed system were mostly of a high grain harvest index and with low proportion of straw for being semi-dwarf. The grain did not meet the nutritional qualities required by the household and the straw yield was quite low to cover the animals' needs. Moreover, these varieties were mono-variety (composed of only one cultivar) while they preferred their mixture of cultivars for reasons linked to their agro-ecological and socio-economic conditions.

Sources: Malki *et al.* (1995: 81-82); field notes.

However, for the few farmers that used the seeds produced by the system, they did it not because they were convinced of the usefulness of the seeds *vis-à-vis* the productivity of their plots, but because their dumped price, i.e. the price they paid for purchased seeds, was much lower than the price they were paid when they delivered their harvest to the CCLs. As a simple remark, the option of using the system's seeds was taken to save money by bringing the CCLs the few quintals they used to keep as seeds for the next season and take the same amount from the CCLs at a lower price. Farmers were thus not critically looking to the issue of quality.

Another psychological consequence some specialists talked about in Algeria is that seeds, because of being cheaper, had no or low value in the eyes of farmers, as compared with their own harvest. The price dumping was perceived by some farmers as the CCLs just getting rid of their stocks because of a lack of efficient communication between both parties.

For the few last years, the state stopped its support of the seed system as the application of the Structural Adjustment Programme (SAP) went on. As a consequence, the removal of public subsidies occurred and engendered a significant

reduction of seed purchases from the CCLs, unveiling the lack of interest among farmers towards the system's seeds as the price liberalization brought seeds to their real economic value, though they have not yet lived up to the quality standards established by the official seed legislation.

5.2.6 What can be concluded about the performance of the seed system?

Supposedly created in order to provide a basic input, seeds, for agriculture production improvement and development, whose process is basically founded on professionalism, the performance of such a system can be evaluated by two basic indicators: (1) The responsiveness of the system towards its diverse clientele's needs in terms of quality seeds, and; (2) The ability of the system to maintain an increasing trend of professionalism among the seed growers in order to improve both the levels of quality as well as quantity.

Checking the performance of the system against these two indicators would determine the level of sustainable development of the system itself as well as its diverse clientele, and, consequently, the level of the underlying policy's sustainable achievements.

5.2.6.1 Responsiveness of the system to the diverse needs of its clientele

The orientation of the Algerian cereal seed system basically focused the activities of the system on the intensive model of agricultural development founded upon HYVs and their underlying packages. Moreover, the concept of seed quality adopted by the Algerian seed system was the one enforced in the developed world. It was in fact related to high-yielding, diseases- and pest-resistant varieties that are *distinct, uniform and stable* (DUS). In such a conceptualization, quality stands for a sample (or a lot) of seeds that attains universally-known standards like variety purity, health, germination power, and vigour.

However, if this conceptualization fits the production environment of the developed world perfectly, it proved to be not adequate for the harsh environments and resource-poor areas which constitute the majority of Algeria's production environment, as demonstrated earlier by the farms typology [see section 5.2.5.1 earlier].

That the adoption of this orientation was decided upon indicates a neglect of the agricultural national history, given the dualism of sectors that always existed in Algeria: (1) The modern sector which concerned the pre-independence European landholders (which evolved into the '*autogestion*' sector after independence) and few large local, indigenous farmers, and; (2) The traditional sector, which became the private sector after independence, along with the big indigenous farmers of the modern sector. Each of these sectors had its own seed 'market'. The simultaneous

existence of two different seed systems in developing countries is not new and has been reported by many authors. As Hardon and de Boef (1993: 66) put it,

Two independent systems of crop improvement continue to exist side by side in most developing countries, with their own exclusive linkages for the management of plant genetic resources. This includes:

- A formal institutional system involving IARCs and other regional and commodity-oriented centres, national research systems and private industry, linked to farmers through extension transfer. The emphasis is on maximizing yields and use of external inputs...
- An informal system at the farm level using and developing crop diversity through local landraces and seed production and distribution at the community level. The major emphasis is on yield stability, risk avoidance and low external input farming.

The present seed system was established during the implementation of the 1st Quadrennial Plan of Development (1973-77). It was mostly meant to support the development of the 'autogestion' sector and, to a lesser degree, the agrarian revolution sector, which were both combined into the socialist sector in 1982. Given the evolution of the ideology of planning and policy-making of the 1970s, the orientation of the seed system could be seen as plausible until 1987. In this context, the use of the system' produced seeds by the DASs, like other inputs, was enforced by means of administrative injunctions from the Ministry of Agriculture. Whether the quality was good enough or not, nobody cared.

Since the reorganization of the socialist sector in late 1980s, a revision of orientation was necessary as the *Exploitations Agricoles Collectives* and/or *Individuelles* (EACs-EAIs) that were created out of the *Domaines Agricoles Socialistes* (DASs) developed farming strategies that were closer to the private sector rather than to the former DASs. Unfortunately, the same orientation persisted unquestioned until the last two years. Slight changes are very smoothly being introduced because of the price liberalization.

As a consequence, having lost hope at the beginning of the 1970s that the formal seed system would consider their preferences, farmers, especially those located in risk-prone areas, and their different organizations have been relying increasingly on their own - yet not institutionalized - seed system during the last years. They continued using the old, traditional cultivars with longer stalk for the straw rather than the semi-dwarf HYVs which stemmed from the focus "on raising the genetic yield potential, etc. by increasing the amount of dry matter diverted to harvested product and minimizing the increase of total biomass production" (Hardon and de Boef, *ibid.*: 64).

Again, these HYVs needed, as Hardon and de Boef (*ibid.*: 65) put it, strong environmental manipulation through the use of external inputs such as fertilizers, herbicides, etc., in order to adapt the growing conditions to the requirements of these new varieties. However, in harsh areas where the presence of resource-poor farms is the rule rather than the exception, these HYVs have no comparative advantages whatsoever in comparison to the old, traditional landraces and cultivars.

The choice made by farmers to adopt a given cultivar is guided by different parameters which might concern either their agro-ecological conditions as well their socio-economic aspects, such as the household's human and animal needs, for instance [see Box 5.2.6.1(1) below].

Box 5.2.6.1(1) - Where and why do some farmers get their seeds?

When we were visiting a region in the south of the wilaya of Souk-Ahras with an agro-pastoral orientation, we found that some farmers cultivate barley for their sheep, using old, traditional landraces. Among our group of researchers, a breeder was taking part in the mission. He was completely puzzled when one of the farmers started naming the cultivars they use because he had never heard or knew the existence of these cultivars. One of the barley cultivars that was known in the region was named SEFRA BETZ. When we asked the farmers where they get the seeds of these cultivars, one of the farmers replied: "We buy them in the village market, as some farmers sell their seed surpluses in the market. Sometimes, if we do not find it in the village market, we borrow some seeds from other farmers we know". I asked him if they buy seeds from the CCLS. He replied: "We never go to the CCLS of El-Aouinet because we cannot find SEFRA BETZ there. The co-operative sells only new varieties that we experimented with and found not fit for our region". Our breeder could not go back to his station without some samples, which would let him understand what farmers' preferred traits are while selecting cultivars.

During the same period, we visited some farmers in the wilaya of Khenchela, a more pastoral province than Souk-Ahras. While discussing with farmers and an old retired technician, we understood why farmers in these harsh areas cultivate a mixture of wheat landraces and cultivars having different genotype and phenotype traits. It is a technique that had proven its ability within climatic-risk-prone areas to produce a minimal yield whatever the climatic year is. Moreover, the mixture met the multiple purposes of using wheat in the household. A cultivar might be good enough for couscous but not as good for pasta or cake; another one can be good for bread-making but not as good for couscous, and so on. We thus discovered that farmers were just putting an old knowledge in use transmitted from generation to generation, and that selection of cultivars is conditioned not only by their potential of adaptability to harsh areas but by their feeding capacity and transformation ability as well.

Sources: Malki *et al.* (1998: 21-22); field notes.

As a conclusion, I assert that:

1. Given the differentiation of the agro-ecological and socio-economic aspects among the types of farms shown by the typology, differentiation of quality standards should have been considered in order to get the concept of quality adapted to the diverse environments. The concept of quality should then stand for a guarantee that farmers will be provided good-enough seeds for their (s)electd varieties, whatever the label of these varieties.
2. The cereal seed system that was set up at the beginning of the 1970s was developed upon an orientation which neglected the real - and not assumed - needs of the majority of the farmer population. It focused on the foundation of a formal institutionalized seed system that was ignoring the informal seed system for more than 25 years, ignoring that "co-operation between both systems is essential and is in the interests of both farmers and plant breeders" (Hardon and de Boef, *ibid.*: 65). It was certainly not aware that both systems should be seen as

lying on a continuum rather than being independent, conflicting and competing entities and/or approaches (Hardon and de Boef, *ibid.*).

5.2.6.2 Improvement trend towards a professionalization of seed production

The evidence of the study I undertook on the Algerian seed system (Malki, 1994) showed that quality as conceptualized through technical standards and regulations enforcing the activity of the seed system can be a necessary but not sufficient condition for bringing this system about to produce better quality seeds. It has to be recognized, in fact, that a seed system is a socio-technological one, which by definition required both a material technology (with its standards and norms) and a social organization of the people who operated the material (and comply with the norms). In such a system, the social organization possessed some social and psychological properties that are independent of the demands of the technology (Huczynski and Buchanan, 1991: 316). These properties, which are fairly conditioned by the cultural and social settings (norms, beliefs, standards, etc.) of the community, can in fact strongly influence the performance of the equipment and/or the quality of its outcome.

Consequently, quality appreciation became, despite the naiveté of some specialists, highly dependent on the ethics of human beings, especially under conditions where mechanisms delimiting the responsibilities of each actor were lacking, as in the case of the Algerian seed system. In this context, the concept of quality, as a mere technical concept, left the place for a social construct, where different conditions, such as historical, socio-political and economical ones, had considerably influenced the degree of compliance of social actors with the agreed-upon technical norms. As shown by the Algerian case, the type of regime that was established at independence time and the socialist economic model it induced, on the one hand, and the monopolistic pattern of goods and services production and marketing that grew up as a direct consequence of the socio-political settings, on the other, determined the Algerian cultural system of values and social norms which completely excluded quality issues. Lack of competition and deficient supply in regards to the increasing demand of goods and services engendered the fact that domestic markets absorbed products made available by public companies, not because of their good quality but because of the unique and insufficient presence on the market. In this respect, I suggest that one cannot mention a formal existence of a culture of quality within the Algerian socio-economic system, neither at the consumers' nor at the producers' levels.

Given this socio-political and economic context, opportunism developed stronger in Algeria, and the seed system could not escape it. Upon the temptation of the seed multiplication premium, an enormous rush of 'new-comers', keen to 'get their share of the big cake', took place since the late 1970s. Behaving like rent-seeking 'free-riders' and motivated exclusively by their own economic interests, most of them made use of illegal mechanisms to benefit from the public resources and services

made available by the government policy, without any respect of the regulations - seed quality standards and norms - of the seed system. Therefore, the whole system was trapped into a 'non-quality vicious circle'. This situation could occur because of or even be exacerbated by the absence of legitimate farmers' organizations that would have defended the professional interests of the 'truly professional' seed growers or the end-users.

As a result, many public resources were 'swallowed' by the seed system either without being made responsive to the needs of its diverse clientele nor improving the professionalism of the seed growers and their perception of the concept quality.

5.2.7 Main interfaces in the Algerian cereal seed system

In the particular case of the Algerian cereal seed system, many social and organizational interfaces take place in the contexts of the different functions of the system. Given it is not an easy task to go through the whole number of interfaces in this study, I will focus on two major ones that have a real impact on the whole system. They are: (1) The breeder - farmer (end-users) interfaces; and, (2) The field inspector - seed grower interface.

5.2.7.1 *The breeder - farmer interface*

It is hard to talk about an interface in such a setting, given that it was rarely seldom that a breeder discussed the farmer preferences about cultivars and varieties with a farmer. Breeders in Algeria considered themselves as part of the National Agricultural Research System (NARS) which obeyed to a mere top-down approach, without having direct linkages with farmers. However, let us build an 'assumed' virtual interface.

Farmers, as end-users of the seed system product, are divided into two different groups: The resource-rich farmers and the resource-poor ones. For this purpose, I identify two different forms of the same interface.

- the breeder - resource-rich farmer interface: Breeders were more keen to develop HYVs since the onset of the seed system, given the strong influence of IARCs, mostly praising the Green Revolution paradigm. The varieties developed and/or promoted by the breeders fit the resource-rich farmers likely to have better access to the acquisition of the required inputs and credit from the bank. In this case, the interface operated along a continuity between the interests of both parties. The only problem faced by the breeders was that this class of farmers was not quantitatively very important as shown the farm typology introduced earlier. Any positive impact of the breeding function on these farms cannot live up to a significant impact on overall national production.

- the breeder - resource-poor farmer interface: In the case of this interface, the breeder was completely 'turning his back' on the farmer, given that the varieties developed and/or promoted by the former did not meet the agro-ecological and socio-economic conditions of the latter. Some breeders believed it was illusory to rely on these types of farmers to increase national cereal production. Alternatively, these types of farmers, representing the majority in the farm typology, had to increasingly rely on their own informal, non-institutionalized seed system which was the right instrument to protect their old traditional landraces and cultivars from the genetic erosion that swept many others, such as the Oasian wheat varieties, for instance. In this case, the interface functioned upon a complete discontinuity between the preferences of the two parties.

5.2.7.2 The field inspector - seed grower interface

During my work on the seed system (Malki, 1994), I suggested that this interface took many forms depending on the types of parties that interacted on both sides of the interface, which I believe really existed in the field, in contrary to the previous interface [see section 5.2.7.1 above]. The interference of 'free-riders', basically rent-seekers motivated by their own economic opportunistic interests, introduced a systematic differentiation in the interface. At least three forms of interface were proposed, according to the Brown's "taxonomy" (Brown, 1983):

- A problem-solving interface: In this interface, both parties showed an acceptable level of professionalism and considered quality as a main issue for the seed system. Their interaction was primarily based on common interests and co-operation. The pattern of interaction aimed at problem-solving was reinforced by circumstances where common interests were perceived as more important than conflicting interests (Brown, *ibid.*: 224). Such a pattern more often than not involved trust and friendliness among social actors on both sides of the interface, open and accurate exchanges of information, and largely co-operative tactics (Brown, *ibid.*: 40). This was another type of interface, the functioning of which followed a continuity between the interests and preferences of both parties.
- A bargaining interface: In this interface, quality checking was influenced by the unwillingness of 'free-rider' seed growers to comply with the official standards, and who used different strategies to get their seed plots certified, whatever the level of their quality, on the one hand. On the other, the lack of sufficient professionalism of certain field inspectors contributed to the abuse. One of the tools both parties used was their capacity for bargaining as they had different interests and similar knowledge problems, both were lacking professionalism. In this interface, the success of one party was perceived as the loss of the other, in a way that bargaining underlies a transfer of information in guarded and selective terms, and an action to control each other's options without escalating past shared limits (Brown, *ibid.*: 223). In this kind of interface, suspicion or distrust, guarded

or distorted information exchanges, and 'hard-ball' tactics of influence were basic ingredients (Brown, *ibid.*: 40).

- An isolation interface: In this interface, the two parties were from the same board, belonging to the state apparatus. Field inspectors were civil servants and farmers were represented by state farms. Somehow, they shared similar values: Passivity, demotivation, being both parts of a pattern of centralization and hierarchization that characterized public administration in Algeria. Both parties preserved a false sense of organizational independence, failed to recognize interdependencies, and avoided interaction that would produce disagreement and reduce engagement that would help them recognize and manage common problems (Brown, *ibid.*: 222). Both parties remained unaware of, or unwilling to address, potentially conflicting issues (Gricar and Brown, 1981; cited by Brown, *ibid.*: 223). This was very common in the Algerian administration context where different interfacing departments behaved similarly [see section 4.3.1]. This kind of interface could not bring about co-operation between the interfacing parties as neither was concerned about the public *thing*. Social actors in presence neither bargained nor joined their efforts to solve problems. Whether the seed system produced enough quantities of good quality seeds or failed to do so was not their primary concern.

5.3 Case No. 3: The collective rangelands management policy¹²

5.3.1 Introduction

The steppe rangelands in Algeria represent huge territories that can similarly be found in other countries. These are mainly used to feed livestock, especially sheep. The resources they provide put the local populations in a position of increasing dependence, especially within the context of demographic pressure and environment degradation and the lack of other livelihood alternatives.

However, the dilemma of these resources is epitomized by the fact that "*the steppe rangelands belong to everybody and to nobody at the same time; none has ever taken care of it*", as Couderc, a French fellow, once said. This quotation summarizes both the complexity of the puzzling tenure system and the underlying institutional arrangements of the rangelands' exploitation and conservation, as depicted in the case of Algeria. According to Nordblom *et al.* (1995), succession of civilizations (and different socio-political regimes) led to unstable ownership patterns in the rangelands by throwing out existing governing rules and regulative bodies, and thus replacing them by new 'imported' ones. In Algeria, as well as in the rest of the Arabic countries, and since the Islamic conquests, only the urban property was privately owned; farming land and pastoral areas were the property of the community.

In the case of Algeria, rangelands are sometimes wrongly 'classified' under the authority in charge of the agricultural sector, even though their exploitation, conservation, and even development always called upon a specific institutional management model because of many idiosyncratic features. Some of these characteristics are as follows:

- Rangelands are always wrongly taken as open-access resources (public or common good) to which different social actors have free (unpaid) access;
- Rangelands usually obey, when the rules are not clearly established, a zero-sum game which engender conflicting situations among different highly-strategizing social actors;
- Rangelands have been always subject to state interventions with mitigated results, undertaken in ignorance of the history of these areas and without consideration of the indigenous settings. These areas were therefore confined into repetitive experimentation with different 'imported' collectivist patterns of use and management.

The present case-study intends to describe the situation of the steppe rangelands in terms of tenure, access rights, and managing institutions, and the effects these aspects, made unstable by the diverse policies and interventions of the state

¹² The study was undertaken under the aegis of the Mashrek-Maghreb Project entitled "Development of Integrated Crop/Livestock Production in West Asia and North Africa", in which 8 Arab countries (4 from the Mashrek and 4 from the Maghreb) participated with ICARDA and IFPRI, and funded by IFAD and AFESD.

apparatus, on the productivity and the sustainability of these natural resources. Moreover, it sheds light on the disastrous effects of state policies in terms of drought management in these areas.

The focus of this case-study is on the basic features of state intervention and their (negative) impact on the steppe rangelands. This is intended to give a clear vision of how state policies were designed and implemented. One of the basic elements that needs to be emphasized is that policy-makers never differentiated between the rangelands' specificity and the rest of the agricultural sector in terms of technological solutions. More importantly, lack of appropriate knowledge about the processes of sheep rearing in the rangelands, and negation of local populations' participation in the management and exploitation of these resources, as they had done for many generations, played an important role in the increasing degradation in some areas of the steppe rangelands.

As well acknowledged, agricultural development actions as instruments of state intervention in Algeria have emphasized technological solutions to improve the level of food availability¹³, which are of questionable appropriateness [see sections 5.2.5 and 5.2.6 in this chapter]. Through inappropriate design and implementation of these actions, state intervention yielded, directly or indirectly, incentives distortion that led to the over-use and thus degradation of the fragile ecosystems of the steppe rangelands.

In order to achieve an elaborated understanding of the issue at stake, I will review the state intervention in the steppe rangelands on the following major points:

- The tenure system and access rights of the domanial and communal territories that mostly characterize the steppe rangelands;
- The institutional arrangements in relation to the enforcement of the tenure system and access rights, as well as the management, conservation, and regulation of rangeland exploitation and use;
- The different state policies regarding the improvement of the productivity of the rangelands, especially anti-drought campaigns in the steppe rangelands, and their effects on the balance between the feeding capacity (supply) and the importance of flocks (demand).

This review will follow an historical as well as a chronological evolution of these aspects. But first the importance of the steppe rangelands in Algeria must be introduced.

¹³ Improving food availability was meant as "food self-sufficiency" in the 1970s and 1980s, and became "food security" in the 1990s.

5.3.2 The steppe rangelands and their importance

5.3.2.1 *The spatial dimension of rangeland importance*

Although Algeria is the second largest country in Africa after Sudan with a total area of 238 million hectares, agricultural land accounts for around 39 million hectares. All kinds of rangelands occupy approximately 31 million hectares, while the steppe rangelands, the subject of our investigation, represent more or less 20 million hectares.

Classified under the aegis of the Ministry of Agriculture and Fisheries, the total rangelands represent 78% of the total area declared as agricultural land, while the steppe rangelands represent more than 50% of the same area.

Rangeland spatial distribution across the northern part of the country, from East to West, bears a tremendous testimony to the importance of these areas in modeling rural and agricultural development in Algeria.

5.3.2.2 *The economic dimension of rangeland importance*

The rangelands represent the main livestock feeding reserve, as feed availability is the primary function of these areas. In terms of 'real' feeding capacity¹⁴, over 12 million sheep graze in the steppe rangelands, in the semi-arid and arid zones. A recent study has estimated the 'optimal' feeding capacity at 525 million FU per year in 1993, after it was 1.6 billion FU per year in 1978. Meanwhile sheep flocks which were 8 million head in 1978 outnumbered the 12 million head in 1993 (Redjel, 1993; Boukheloua, 1995).

At present, rangeland output is estimated at 43% in average of the total diet of the sheep living in the rangeland area (which represents 71% of the total sheep in the country). This is the equivalent of the production of 14,400 tons of meat per year.

The steppe rangelands-related activities procure an estimated total annual income of 12.5 billion AD. This income represents an average income of 8,503 AD (US\$ 130-140) per capita per year for the total active population of the rangelands areas, estimated at 1,470,000 people (32% of the total population living in the rangelands). Again, it represents an average income of 3,750 AD (US\$ 50-60) per capita per year for not less than 70% of the local population¹⁵, most of whom engage in sheep rearing activities.

¹⁴ The concept of feeding capacity will be used as "real" to represent the real amount of feeding demand that is presently acknowledged through the total heads of sheep that are parked in these areas (what it is). When use as "optimal", it refers to the theoretical amount of sheep it can feed (what it ought to be).

¹⁵ It is reported by these authors that more than 4.5 million inhabitants are living in these areas (a bit more than 1/6 of the Algerian population), among which 3.2 million live out of the rangelands-related activities (sheep rearing mostly).

Given its importance to these populations, these figures reflect the low productivity of the actual potential of the rangelands. This may be because of the unstable conditions of rangelands development, use, and management.

5.3.3 The steppe rangelands and their legal status of ownership

The main characteristic of the rangeland territories is in the unstable tenure system and access rights since the different invasions and colonization that Algeria has undergone. In the following, I will try to attempt an historical-descriptive overview on the joint evolution of the tenure system issues and main points of Algerian history.

5.3.3.1 *The historical background of the rangelands ownership*

The history of land property rights in Algeria goes hand in hand with its political history. As problematic as it could be, the issue does not exclusively concern the rangelands; it is a common feature of any piece of agricultural land in the country. It is almost a political issue as far as property is also an important means through which positions of socio-political authority are gained. The legitimate authority to control, allocate, and exploit land or any other property is one of the most salient elements of power through which people can be subordinated at all levels of socio-political organization (von Benda-Beckmann, *ibid.*: 55). Thus, I undertook a historical dimension of the investigation so that the *problématique* of the rangelands' ownership in Algeria may be understood.

Land ownership represents a major factor in agricultural development which is, in the context of this study, the most important feature in any exploitation and conservation model of the rangelands. In fact, as the primary source of natural resources, land has been the subject of many debates in Algeria since independence without a sustainable solution to the problem being reached. According to some analysts, the agrarian crisis can be explained by the nature of the Algerian state that gained power in 1962 and its relationships with the peasantry, as I explained earlier [see section 5.1].

Factionalism was a distinct feature within the Algerian state. The debate about land was an intensive political matter, engendering substantial conflicts of interests which represented, in the context of a self-proclaimed state, an effective way to maintain the status-quo, given that the very notion of state intervention is highly problematic.

In order to understand this statement better, I shall describe the historical evolution of the different tenure regimes in the rangelands. In this description, I will compare the formal regimes (the legal framework or theoretical dimension) with the informal rights (the customary framework or practical dimension).

5.3.3.2 Formal land tenure regimes (legal rights)

a) Before the French colonial state

The rangelands were considered to be *bled jema'a* (the land of the collectivity), mainly derived from *Arch* lands. This means that each member of the tribe had his own territory as delimited by the collectivity. In most cases, boundaries were not fixed and evolved as the needs of the tribe members changed. This form of property guaranteed the usufruct right for each member, but ownership was still in the hands of the collectivity, i.e. the tribe. Land conflicts were mediated, judged, and solved by the *jema'a*, a council of elders that decided on the main social and political aspects of the tribe.

This land tenure regime was set for many reasons in order to: (1) Guarantee the rights of use and access for each member upon an equitable distribution of the available resource; (2) Ensure its sustainability so that no degradation would occur, and; (3) Protect the tribe economy. This form of property tenure conformed to a socio-political strategy motivated by the tribe's concern about the security and survival of its members and territory (Redjel *et al.*, 1996).

Under the Ottoman empire, the tenure system of the rangelands underwent the introduction of a new form of property rights which established the '*Makhzen*' land. This type of property was allocated to the allied tribes (*Raiyya*) on land expropriated from the rebelling tribes, in return for their contribution in tax collection (Mesli, 1995: 35).

This provided an argument for the disaggregation of the rebelling tribes by the Ottoman state and their underlying tenure regimes upon the rangelands. This was the first step in a long-term, recurrent process of transformation of the land property rights in Algeria, as partially explained in section 5.1.

b) During the French colonial state

As stated in section 5.1, when French colonization of Algeria started in 1830, the peasantry was the most threatened group by this invasion. In fact, the political and economic life of all Algerian rural communities were affected and conditioned by the nature, form, and degree of French colonization. From the first day of colonization, peasants undertook a series of struggles against land dispossession by the French army and settlers, as a general popular resistance to the penetration of the colonial supremacy (Bennoune, *ibid.*: 13).

In the 1840s and 1850s, the colonial state implemented the '*cantonnement*' policy through military intervention [see section 5.1.4]. Peasants from several villages were concentrated into one small geographical radius where many families were relocated (or contained). The army gained control over the vacated land, which was immediately transferred to the French settlers.

Attempting to satisfy the ever-increasing demand by settlers for more land, the French authorities promulgated an adequate legislation to enlarge French and

European settlers' landholdings through land expropriation from the indigenous populations. The enforcement of these laws was very violent.

At that time, the steppe rangelands were mostly the property of communities. They were defined either as:

- *Melk*¹⁶: land held in absolute freehold, rights of ownership and usufruct belonging to the individual;
- Arch, tribal or collective land: land owned by the state with usufruct rights belonging to a tribe, with unrestricted grazing;
- Communal and domanial rangelands: public land owned by the state or the 'commune' with common open access to resources.

However, with the sequential application of the *Senatus-Consulte*, between 1863 and 1870, the *Warnier Law*, from 1873, and other legal texts that were promulgated by the colonial state [see section 5.1.2], many changes were made in the tenure systems which caused the loss of thousands hectares of land and forests in Algerian rural communities.

Tribal response to these measures took the form of many popular revolutions in different parts of the country. Although, the colonial state contained these movements and achieved its objectives of colonization and land expropriation, it did not totally succeed in disorganizing the tribes as planned, which continued to live in 'hibernation' until independence.

c) During the post-independence period.

Since independence in 1962, land has been subject to many reforms and reorganizations without achieving a significant evolution in the contribution of the agricultural sector, neither in economic growth nor in food security. All these legal manipulations of the tenure systems have yielded an agrarian crisis. In fact, the non-determination of appropriate property rights, the practice of *individision* within some landholdings, and the undefined legal nature of a large proportion of land (*autogestion*, *Arch*, etc.) undermined any organized action about land structures, in general, and in the steppe rangelands, in particular.

The problem was more complex in the rangelands because of the lack of an adequate, officially acknowledged legitimate institutional framework to regulate the exploitation of these resources at the time of independence. In some regions, however, independence saw the resurrection of indigenous systems and a return to traditional management of rangelands and forms of resources access rights.

Considered to be a *beylik*¹⁷ where tribes had lost their traditional 'power' over rangelands management and control of access rights, resources started to be

¹⁶ *Melk* stands for a private property of land whose owner has the rights to sell, rent, mortgage, etc.

¹⁷ During the Ottoman period, *beylik* represented a parcel of land that belonged to the *Bey*, the head of a province. It has a legal status similar to *Melk* lands but owned by the state. At independence, the term took a cultural meaning of an open-access space with no owner, although it was a public domain.

depleted many years ago as a consequence of various anthropic actions (overgrazing, food crop encroachment, etc.).

Upon independence, agricultural estates established on expropriated land since 1830 were abandoned by the fleeing French settlers. Self-management committees were formed by the agricultural labourers in order to protect the land and continue production. Later, '*autogestion*' was consecrated by the promulgation of the decrees of March, 1963.

These decrees, however, did not concern the steppe rangelands, which were overlooked until 1968, as we shall see later in section 5.3.4.2. In fact, at that time, issues of tenure and property rights were too complex; no government would have taken the risk to undertake a policy of change.

In November, 1971, the state launched the agrarian revolution (the 71-73 Ordinance of November 8, 1971), aiming to readjust the inequalities observed in land distribution and, consequently, in rural people's incomes. One of the objectives of this land reform programme was the abrogation of all precedent legal and customary patterns of land tenure and property rights. The third phase of the agrarian revolution, which would have seen the implementation of the Pastoral Code (the 75-43 Ordinance of June 17, 1975) did not advance beyond the preparatory stage.

The intention of this code was to put an end to the legal void of the steppe rangelands by organizing the pastoral space into:

- Zones of degraded rangelands to protect;
- Perimeters of rangelands dedicated to the settlement of the *Coopératives d'Élevage Pastoral de la Révolution Agraire* (CEPRAs), and;
- Zones of common rangelands collectively used (open access) by livestock owners.

This code, instead of attempting to rehabilitate the indigenous institutions, gave birth to a parallel collectivist movement through 'cooperativization'. Each cooperative (CEPRA) was assigned a delimited territory where grazing was permitted for all members of the co-operative.

In 1987, the tenure and property rights can be divided into four main legal categories:

- The public domain, mainly composed of 188 Pilot Farms;
- The privatized public domain, composed of EACs/EAlS;
- the private properties, traditionally known as *Melk*;
- the rangelands, exclusively considered public domain, and over which tribal organizations exert a user's right.

After the dissolution of the CEPRAs in 1983, there was no body of a cooperativist nature. Taking advantage of the legal void, indigenous groups such as tribal organizations engaged in managing the common rangelands. Property rights were discussed and adopted within an indigenous body which decided upon the access rights of each member of the tribe. The basic measure of distribution of the collective rangelands was *El-Hbel* (the rope), which determined the dimensions of each

household' territory. It was, in fact, a very dynamic measure able to adapt to the evolution of the households' number in the community.

However, in 1983, a new law (the 83-18 Law of August 13, 1983) gave access to individual or collective ownership over public land through land reclamation in the arid and semi-arid zones. This law, which implicitly acknowledged customary rights, was part of a hidden evolutionary process towards an absolute privatized ownership of land. In fact, this evolutionary process was reinforced in 1987 by the promulgation of the 87-19 Law (of December 8, 1987), which stimulated the distribution of rangeland territories located within the former *Domaines Agricoles Socialistes* (DASs). Since then, Algeria has been heading towards tremendous changes in land tenure patterns due to the establishment of a free market economy. Finally, a recent law (the 90-25 Law of November 13, 1990) has abolished all legal dispositions established by the agrarian revolution (71-73 Ordinance of November 8, 1971) and allowed the reallocation of the expropriated land to their initial holders.

None of these successive manipulations in the rangeland legal statute yielded a solution to the dilemma of these important resources. They did neither formalized their management by a public or semi-public organization nor did they acknowledged the indigenous systems that were trying to take care of these resources. Nor did the rangelands receive the required attention to control the implicit privatization induced by the informal land tenure pattern taking place since 1984. If not adequately controlled, this process could lead these resources into a tremendous irreversible state of chaos.

5.3.3.3 *Informal land tenure regimes (customary rights)*

In contrast to what is represented in the legal framework of land tenure in the public sphere, pastoralists and pastoral communities always refer back to their own definition of the tenure system they are involved in, commonly known as 'customary rights', where the role of indigenous arrangements is central.

The most predominant customary rights in rangeland territory can be classified into the following categories:

- The *Melk* land which is a land that belongs to individuals, also recognized by the formal legal status of the tenure regime. Very few landholdings of this type exist in the rangeland areas, as a consequence of the application of the *Senatus-Consulte* by the colonial state;
- The '*land of the community*' (*Arch* land) also called *bled jemaâ*, which represents land that collectively belongs to the tribe and whose usufruct rights are individually owned to the members with agreed-upon boundaries and an individually-restricted grazing and use;

- The *collective land* (also *Arch land*), which is land that collectively belongs to the tribe with unrestricted grazing rights exclusively allocated to the tribe's members, and;
- The *common land* (open-access), which is land that belongs to the state and commonly used by all neighbouring tribes, without any restriction.

These different forms of land tenure evolved accordingly with the legal changes. In other words, a continuous adjustment of the customary rights was always implemented so that the rights of the tribe remained protected, although sometimes with slight restrictions. Indeed, the legal land tenure regimes had been of great importance in the evolution of the customary tribal rights. On the other hand, most regulations since the reign of the Ottomans aimed to de-structure the rangeland tenure system from which the tribe derived its power, strength and social cohesion. For the tribes, land possession was always of a sacrosanct principle. Mesli (1996: 8) mentions, quoting Frantz Fanon, that:

For a colonized people, the most essential value, because being the most concrete one, is land, the land which ensures bread and dignity.

Box 5.3.3.3(1) - Applying land tenure regulations without prior knowledge

Some officials of the wilaya do not acknowledge the presence of the tribes in the context of rangelands, even as remnants of the old tribal order. For them, all tribes had been dislocated during the colonialization. Although they say this openly because of the state apparatus' 'ostrich' behaviour, they surely know that some tribes are still very active. However, where the dislocation of the tribe had been successfully achieved, the customary rights evolved towards an individualistic pattern and therefore led to recurrent land conflicts, as individual interests emerged in a continuous transgression of the collective interests. Nevertheless, this assumption was taken for granted by some officials as they generalized it to all steppe rangelands.

The best example of such an incorrect generalization resided in the application of the 83-18 Law of August 13, 1983, that gave right to the wali to guarantee the access to individual or collective ownership over public land through land reclamation. The application of this law increased the violence of existing conflicts over land and brought to the light some other new conflicts. It was reported that after a person was allocated a piece of land by the wali of Khenchela in the context of this law, which was located within a tribe territory. The tribal chief went to meet the wali to explain the mistake he made by 'transgressing' the land that 'belonged' to the tribe but the latter, convinced that this land was the state's, did not want to meet the tribe chief. After many vain negotiations and discussions between the tribal chief and the new owner, a violent conflict burst out between them and one of the tribesmen shot the new owner, killing him. Only after the crime was committed did the wali decided to draw back from his decision.

Source: field notes

Today, the rangeland territory is mostly governed by customary rights. Thus, individual, collective and common properties are regulated through informal land tenure regimes, but with a tribe that has lost much of its regulatory power due to its

non-recognition by the state. The dismemberment of pastoral society and the birth of individual 'selfishness' were, at a same time, the main factors and consequences of the tribe's power decline. Conflicts over property are becoming frequent; a fair system is the only safe way to conciliate between tradition and modernity [see Box 5.3.3.3(1) above].

The legal void in the Algerian legislation surrounding land in general, and the steppe rangelands in particular, is reinforcing the social hierarchy by mutual recognition and thus enforcement of customary rights. It is estimated that 90% of rangelands remain public property while 10% have been somehow privatized through this process of informally enforcing customary rights (HCDS, 1991).

5.3.4 The steppe rangelands and their institutional arrangements

5.3.4.1 *The pre-independence period*

a) Before the French colonial state

Before colonialization, social organizations, such as the *Arch* or the *Ferka*, respectively derived from the tribe and the tribe's fraction, were in charge of rangelands management. For the sake of a fair and just distribution of the resources, the *jemaa*, a pre-colonial rural socio-political organization, composed of the elders and the most literate, especially in religious terms, represented the institutional framework wherein all aspects of tenure, property, and access rights, land conflicts were discussed, judged, and solved.

b) During the French colonial state

After the French invasion in 1830, many legal measures were enforced to expropriate land from the indigenous populations and redistribute it to the new European settlers. Later, when the colonial state discovered the cohesiveness of the tribe was closely related to the collective ownership of the land, colonial policy went beyond land expropriation and dismantled the indigenous society by attempting to destroy the tribe, its basic institutional foundation. Because of the robustness of indigenous social organizations (i.e. the *jemaa*) that took their strength from the way they dealt with land rights complexities, the French colonization had to promulgate and apply the *Senatus-Consulte*, which aimed, among other objectives, to blow up the cohesion of the tribe, as said earlier [see section 5.1.2].

Given the peasants' resistance to the colonial empire penetration and land de-possession, the colonial state eventually changed its strategy and oriented its efforts toward undermining the social and economic foundations of the Algerian society and dislocating its agrarian structures. The primary goal, however, was the acquisition of more and more land to satisfy the increasing demand from the settlers.

The dismantling of the tribes was followed by the replacement of the indigenous rangeland management systems by other 'imposed' arrangements, such as the *Sociétés Indigènes de Prévoyance* (SIPs), which became later the *Sociétés Agricoles de Prévoyance* (SAPs). In 1945, the latter institutions were reinforced by the *Sociétés d'Aménagement Rural* (SARs).

5.3.4.2 The post-independence period

a) From 1962 to 1971

At the time of independence, the rangelands were not given much attention by the regime, which, for some reason, was not willing to re-establish social local organizations in their function as rangelands 'managers'. The rangelands did not receive any attention until 1968, as policy-makers were mainly focused on the creation (or the formalization) of the '*autogestion*' farms.

A new organizational form was adopted in 1968 with the *Associations de Développement de l'Élevage Pastoral* (ADEPs). Hence, 49 ADEPs were created with the aim of integrating the rangelands into the 1963 land reform. These new institutional entities were mainly settled on the communal and domanial rangelands, and did not concern the *Arch* land. The *Sociétés Agricoles de Prévoyance* (SAPs) continued providing services such as credit and input supply to the pastoral society.

b) From 1971 to 1983

With the agrarian revolution in 1971 (the 71-73 Ordinance of November 8, 1971), experimental institutional settings were established in the rangelands. In 1972, the rangelands areas were divided into 5 *Zones de Développement Intégré Pastoral* (ZDIPs), which were set up to boost the pastoral economy through a 'cooperativist' organization. In 1973, the *Coopératives Agricoles Polyvalentes Communales de Services* (CAPCSs) were created all over the country in order to ensure the implementation of the agrarian revolution by providing the agricultural sector with the required inputs and assistance.

In 1975, the Pastoral Code (the 75-43 Ordinance of June 17, 1975), promulgated to put an end to the legal void of rangelands management by setting up, as said above, new organizational mechanisms to look after the pastoral space. The Ordinance stated that all steppe rangelands were owned by the state, and were thus part of the *Fonds National de la Révolution Agraire* (FNRA). The exploitation rights of the rangelands were exclusively leased to sheep-herders who directly owned the herds and whose livelihood depended exclusively upon sheep rearing, provided they organized themselves into *Coopératives d'Élevage Pastoral de la Révolution Agraire* (CEPRAs).

The social organization of the rangelands proposed by the Pastoral Code was thus basically a 'cooperativist' one, based over two different settings: (1) Sheep-owners'

co-operatives for the productive rangelands, and; (2) Range rehabilitation associations for the degraded rangelands. For the latter, sheep would be provided through semi-public agencies when the rehabilitated pastures were declared to have a sufficient feeding capacity.

In this respect, 200 CEPRAs were settled on 431,315 hectares. They concerned 1,385 beneficiaries and 124,800 sheep (Anonymous, 1988). Consequently, collectivization and 'cooperativization' had transgressed the traditional living conditions and customary rights of the local populations, creating a climate of perpetual conflict between the indigenous settings (tribes) and the CEPRAs.

In 1979, again another reorganization scheme was implemented in order to reorganize the CEPRAs, to improve the performance of the sector, and to solve the many land conflicts which appeared since the Pastoral Code was applied. This represented in fact an official - although implicit - recognition of the gap between the philosophy of the agrarian revolution and reality, especially in the rangelands.

The state policies concerning the agricultural sector during the 1970s represented the strongest state interventions since the independence. Most of the time, new institutional arrangements were imposed on local populations, creating many confusing, bureaucratic and monopolistic public (and semi-public) organizations. As a consequence, a climate of suspicion arose among pastoralists and sheep-herders as well as opportunism, which developed into a framework where illicit privileges were 'offered' to the political system's allies. Once this was set as a major cultural framework, opportunism for the few meant exclusion for the many.

c) From 1983 until today...

The CEPRAs were dissolved in 1983, leaving the rangelands under the clemency of the customary rights that more than 130 years of French colonialism and 20 years of independence had not managed to 'erase'. Lack of serious consideration from the post-independence state towards rangeland development was in fact a propitious opportunity for the informal tenure system to regain its place within the pastoral space, but with a potential danger as well, given the decline of the tribe's power. Some specialists in Algeria view the rangelands as an 'orphan' who lost both his father (the state) and his mother (the tribe).

As a concluding statement for the present section, the post-independence state did not achieve sustainable results in terms of institutional arrangements over rangelands management. More than that, there were no remarkable differences between the many policies of the colonial and the post-independence states, as they both tried to supplant indigenous non-governmental organizations in charge of management and conservation of the rangelands by public or semi-public organizations, although the reasons for doing so were different.

In fact, if the colonial state needed to 'destabilize' the local indigenous organizations in order to achieve pacification in Algeria [see section 5.1.2.], the post-independence state, as a self-proclaimed power, had to reinforce and maintain its

control over the whole country by replacing all popular organizations by public or semi-public (co-operative) ones. One of the principles it had to strictly observe was the avoidance of any grass-roots movement that could empower the populace, as had been in the '*autogestion*' movement of 1962.

This is what makes some observers say that the post-independence state had to carry out to its end the process of dismantling the indigenous organizations started by the colonial state in 1830.

5.3.4.3 *Since the beginning of the 1980s: The role of HCDS*

The creation of a specialized institution in charge of pastoral development was mentioned in the First Quinquennial Plan 1980-84. On page 71 of Volume Two of the Sectoral Plan for Agriculture, written in March 1980, its name was proposed to be the *Haut Commissariat au Pastoralisme* whose main tasks would be: (1) To co-ordinate the development programmes regarding all systems of sheep husbandry; (2) To guarantee the application of the third phase of the agrarian revolution.

Box 5.3.4.3 (1) - The HCDS: Creation, legal framework and tasks

In December 1981, the Haut Commissariat du Développement de la Steppe (HCDS) was officially created under the tutorship of the Ministry of Agriculture and the agrarian revolution, as a public organization having an administrative character but with a scientific and technical orientation.

According to the Article 4 of the creation decree, HCDS is an organization in charge of implementing the state policy in terms of integrated development of the steppe and pastoral zones. Many other organizational, technical assistance and relief oriented tasks are defined for HCDS but there is no clearly mentioned prerogative about the rangelands management. At most, it can only propose regulations regarding conservation and management of the rangelands as well as mobilizing the conditions and means to implement the proposed regulations and control the application of these regulations (Article 6 of the creation decree).

Moreover, in order to fulfill its tasks in terms of delivering relief programmes, implementing development programmes and controlling the application of the regulations, as mentioned earlier, HCDS needed to be reinforced by 4 Regional Commissions (Commissariats Régionaux). These were set up at the onset but not longer the Regional Commissioners were dismissed by a decision of the High Commissioner, although the nomination and dismissal mechanisms of the Regional Commissioners remain to be the promulgation of a Presidential Decree at that time, and an Executive Decree today, according to the creation decree.

Sources: JORA (1981) No. 57 of December 15th, 1981, p.1250; field notes¹⁸

However, setting up the *Haut Commissariat du Développement de la Steppe* (HCDS) did not solve the institutional problem of rangelands management. Its main task was to ensure coherence between the implementation of state planned actions and the orientation of rangelands development, without having genuine management

¹⁸ The reference used here, that is the JORA, was in French. The translation into English is from the author (MM).

prerogatives [see Box 5.3.4.3(1) above]. This legal incoherence inhibited the institution from undertaking an efficient development of the rangelands.

In summary, the legal void in the institutional framework in rangelands management is reinforcing an implicit social hierarchy between different class of pastoralists depending on the size of their flocks, supported by mutual recognition of customary rights. The expansion of the customary rights, enforced through remnants of the tribal order, created a climate of a *mutual rejection* between both formal/public and informal/indigenous types of institutions as well as their respective power. They both existed in the pastoral space but neither acknowledged the other. Yet, the only loser in this 'soft battle' remained the rangelands.

5.3.5 The steppe rangelands and the state policies for productivity improvement

5.3.5.1 An overview of public investments in the rangelands

Like the entire agricultural sector, pastoral development received very little attention from the state in terms of public investments during the first development plans. It is only with the Second Quinquennial Plan (1985-89) that relatively greater attention was given to the region. Needless to say that it is the socio-political developments in Algeria since 1992-93 that have put pressure on the Government to allocate substantial resources through the Great Works Programme, kind of a high labour-intensive public works programme, in order to undertake an integrated development programme on the rangelands. In this section, I shall attempt a brief documented review of three main periods of state policies since independence.

a) From 1962 to the 1st Quinquennial Plan (1980-1984)

This period saw the application of four national plans: The First Triennial Plan (1967-69), the First and Second Quadrennial Plans (1970-73 and 1974-77), and the First Quinquennial Plan (1980-84), although the first one did not concern the collective rangelands much.

Totally funded by the state, these programmes concerned infrastructures, co-operatives equipment, water boreholes, roads, plantations, rangelands improvement, and forestation. The objectives of these different plans were not realized as expected, as their rates of implementation were too low. Moreover, having concentrated exclusively on technical aspects instead of trying to set the institutional base for a real pastoral development, as it was said in the rhetoric of the plans, these actions had very limited impact on the improvement of production potential.

In fact, these actions could have achieved better performance in setting up the foundations of a real pastoral development if appropriate organizational mechanisms were set up to ensure the sustainable functioning of the realized

investment. The very low rate of implementation of the different plans, not more than 25%, sheds light on the limits of this kind of actions. As confirmed by the Ministry of Agriculture, although these programmes observed a good start, the engaged expenses did not have a great impact on sheep sector productivity (DGEP, 1982; quoted by HCDS, 1992: 8).

When the First Quinquennial Plan (1980-84) was launched, it was decided to achieve four major objectives. These were:

- The rigorous evaluation of the agricultural sector and its performance through the different development plans;
- The reorganization of the whole agricultural sector;
- The setting up of appropriate institutional instruments to execute development programmes in the agricultural sector;
- The elaboration of a comprehensive and clear agricultural development policy.

These objectives aimed to increase the national agricultural production, the reduction of food dependency on foreign markets, and the improvement of living conditions and income of the rural populations, with priority given for the development of the steppe pastoral zones.

Concerning the steppe rangelands, and given the very low achievements of all precedent planned interventions, the set of factors limiting the implementation of development actions in the steppe regions, and the reported contradictions observed in these regions between the reality and the planned actions, represented the basic motivations for the policy-makers to create the *Haut Commissariat du Développement de la Steppe* (HCDS) in 1981. The assumed role of the HCDS was thought to be an adequate solution to the particular situation that was, according to HCDS (1992: 10), characterized by:

- A general - yet not dramatic - degradation of the environment and the steppe natural resources;
- A stagnation and even a regression of the different pastoral produces;
- A bad situation of existing water infrastructure, in addition to the problem of water scarcity itself;
- A remarkable inefficiency and inappropriateness of support and assistance organizations, mainly concentrated in the chief cities of the *wilayate* (provinces);
- A weak training and technology transfer system, and;
- A very low rate of utilization of the important public resources that were mobilized by the First and Second Quadrennial Plans.

However, the achievements of this last planned intervention were not much higher as it took HCDS almost the whole period to build up its own capacity in order to be able to carry out the huge programme assigned to it in the frame of the latter development plan.

b) During the period 1985-1992

Given the results of the previous period, a new steppe programme with short- and long-term objectives was adopted by the Government on January 21, 1985. It would be implemented by HCDS through an action plan that was inserted in the Second Quinquennial Plan (1985-1989).

According to HCDS (1992: 10), this action plan intended to create the required conditions for the execution of a true development programme which would concentrate on solving the major constraints that had always inhibited the planned achievements of all precedent interventions. For the first time, the action plan did not concentrate exclusively on technical aspects. In other words, it aimed to set the adequate institutional frame necessary for the realization of pastoral development. This programme was planned to achieve:

- The setting of an institutional organization, to be articulated around HCDS;
- The real impulse of land reclamation through irrigation expansion;
- The management of rangelands, and;
- The organization and development of sheep husbandry, through the implementation of an ambitious training and technology transfer programme.

To illustrate, 185 projects were funded during this period through this action plan with an overall amount of 943.200.000 AD (around US\$ 15 million)¹⁹ and concerned 15,000 hectares. This global amount was dispatched according to Table 5.3.5.1(1) hereafter.

Table 5.3.5.1(1) - Public investments during IInd Quinquennial Plan (1985-89)

Project type	Funded amount (in AD)	Proportion (in %)
Production technical assistance	9.000.000	1
Studies and surveys	94.642.000	10
Land reclamation (dry and irrigated)	276.032.000	29
Pastoral works (shrubs plantation)	349.199.000	37
Small livestock acquisition	17.246.000	2
Fruit trees plantation	11.101.000	1
Equipment and infrastructures	184.480.000	20
Training	1.500.000	less than 1
TOTAL	943.200.000	100

(Source: HCDS data)

A closer look at Table 5.3.5.1(1) above shows that public investments focused mainly on rangeland re-vegetation and rehabilitation, as well as water mobilization through well digging and boreholes. These actions amounted to more than 66% of the overall public investments during this period, as the table shows. This was in fact motivated

¹⁹ The current official change rate in 1985 was US\$ 1 = 6 AD.

by the double objective of containing desertification through rangelands re-vegetation and the improvement of the pastoral outcome in terms of feed resources.

Although this effort of investment was acceptable (62,800 AD or more than US\$ 1,000 per hectare), it neither stopped rangeland degradation nor improved their productivity. Moreover, it did not realize a true integration of rangeland development with a larger and more consequent rural '*dynamique*' of pastoral development based on local spirit.

As a result, many constraints negatively influenced the implementation of this programme and inhibited the HCDS to correctly execute the development programme. The general degradation of the steppe is an evident consequence of this and is characterized by:

- The irrational exploitation and use of the rangelands, exacerbated by low productivity and technologies lacking diversification, and the skyrocketing feed requirements of the increasing sheep flocks;
- The important reduction of the vegetal cover, which increased the danger of desertification;
- The anarchic expansion of cereal crops through uncontrolled clearing of pastoral areas (barley encroachment mainly replaced during the last years by wheat encroachment);
- The lack of reforestation activities to maintain the already precarious ecological equilibrium of the rangelands ecosystem, and;
- The scarcity of watering points and the degradation of water infrastructures, which automatically induced the disappearance of pastoral species, such as *Artemisia sp.*

5.3.5.2 *The particular case of state anti-drought policies*

Anti-drought policies were the instruments most frequently used by the state since the mid-1970s. They were designed with explicit objectives to help pastoralists to cope with repeated severe droughts but the way they were designed and implemented created major, far-reaching problems for the ecosystem.

In our attempt to understand the characteristics of state drought policies in Algeria, it is opportune to begin with an analysis on the drought 'crisis' and its recurrence within a given time-span.

*a) Is drought a constant variable or an exceptional phenomenon?*²⁰

Drought is not a new event in the Algerian arid and semi-arid zones. In dryland environments, 'crisis' events have existed for a long time and are thus 'normal'. Although unpredictable, they were usually expected (Scoones, 1996b: 23). As a

²⁰ This section owes much to an unpublished work of Redjel Noureddine written in 1995.

matter of evidence, the climatic analysis of a recent decade (1978-1988) for the *wilaya* of Tébessa showed the followings:

- A periodicity of 1/10 for a rainfall higher than 400 mm (one good year in a decade).
- A periodicity of 2/10 for a rainfall higher than 300 mm (two medium years in a decade);
- A decennial average of rainfall of 277,38 mm (which means not less than seven dry years of an extreme severity in a decade).

It must be said that the dramatic rainfall situation of Tébessa is assumed to be representative of the totality of arid and semi-arid zones of the Eastern steppe region, composed of the *wilayate* of Khenchela, Oum-El-Bouaghi, Batna and Souk-Ahras. In this respect, this situation showed in a clear and indubitable manner that the presence of drought in these areas is a rule; not an exception.

Other evidence can be added to understand the randomness of rainfall in this region. This concerns the cereal cultivation in these areas which is assumed to be a game of chance rather than an agricultural activity. It shows that farmers are used to this phenomenon which might yield an acceptable return only three years in a decade.

An analysis of a period of seven years (1980-1988) reinforces the dependence of the cereal crops *vis-à-vis* the random rainfall, and shows the following:

- One year out of seven yielded a productivity higher than 8 ql per hectare;
- One year out of seven yielded a productivity between 3 to 8 ql per hectare;
- Two years out of seven yielded a productivity lesser than 3 ql per hectare;
- Three years out of seven yielded no productivity.

Both indicators (rainfall and yield) highlight the regular periodicity of drought in arid and semi-arid areas, which provide room for an appropriate long-term policy in order to tackle the drought effects on the rangelands ecosystem and the pastoralists livelihoods, instead of considering drought as an exceptional phenomenon and reacting to it through relief programmes. "Integrating relief with longer-term development activities is thus an important challenge", as Scoones (*ibid.*: 23) suggests.

b). Effects of anti-drought policies on the rangelands' feeding capacity

In order to reduce the effects of drought on the livelihoods of sheep owners, the state developed, measures known as anti-drought campaigns in the mid-1970s to tackle this problem. These concerned the distribution of subsidized imported barley and feed concentrates as well as the free anti-helminth vaccination of the flocks. Many observers argued that the hidden agenda of these interventions was to reduce the mobility of the pastoralists who used to devise, in such situations, tracking strategies that helped them move towards areas where feed could be found. This

transhumance movement, called *El-Achaba* (which in Arabic means, 'searching for feed'), is based on the mobility of the persons and their flocks.

As a result, what these measures achieved was an 'artificial' maintenance of the flocks to the detriment of the real feeding capacity of the rangelands. However, the far-reaching impacts of such policies could not be seen at that time.

Among the tracking strategies that pastoralists used to devise in a situation of severe drought was a systematic de-stocking, which consisted of keeping a reproductive core of the flock and selling all the undesirable animals. When the state started intervening through anti-drought campaigns, farmers did not see any necessity to de-stock their surpluses as far as subsidized feed - mostly imported - was secured by the state. As Scoones (*ibid.*: 9) puts it, "in North Africa where feed grain is heavily subsidized, livestock keepers maintain animals through the importation of supplementary feed".

The increasing flocks became a great danger to the ecosystem in a situation where pastoralists felt no concern about the level of rangeland productivity [see Box 5.3.5.2(1) below]. To them, it was the duty of the state to improve the productivity of the rangelands. Assistedness was already planting its roots.

Box 5.3.5.2(1) - How state interventions exacerbated the ecosystem degradation

In North Africa, grain is cheap because of government policy to subsidize basic foods. At one point, the price ratio of sheep liveweight to grain in Algeria exceeded 20:1. . . . Although various feeds are available, most livestock are not stall-fed. Range still offers the cheapest feed, meat quality is improved if animals have exercise and grazing requires less investment than stall-keeping. . . . If the animals had to rely solely on range vegetation, most would be long dead but, since part of their maintenance requirements is covered by [imported and cheap] grain, they survive to graze the last blade of grass of the range. As much as the original vegetation [of the rangelands] is perennial, the high grazing pressure affects range yield in subsequent years. In view of the high stocking rates, the range can cover an appreciable part of the forage needs only when rainfall is unusually high. Since the heavy grazing reduces soil cover, heavy rains [as well as wind] tend to cause greater erosion than previously'.

Source: Bayer, W. and A. Waters-Bayer (1996: 75)

As a consequence, sheep flocks boomed within 20 years, doubling their initial size [see Table 5.3.5.2(1). below], at a time of a tremendous reduction of forage resources. In fact, the average range output has dropped from 905 millions FU (average of 1975-84 period) to 563 millions FU (average of 1985-93 period). This situation became worrisome if we acknowledge the quasi-stagnation of the natural cultivated forage production for the same periods compared.

Table 5.3.5.2(1) - Evolution of flocks size in the steppe vs. the national level

Year	Importance of flocks				Feed resources *		
	National Total	Steppe areas			Ratio Steppe/ National	Forage prod.	Range output
		Pastoral Provinces	Agropast. Provinces	Steppe Total			
In 1975	9,772,550	4,285,900	3,987,830	8,273,730	85%	2,060	905
In 1993	18,664,640	9,449,200	5,667,310	15,116,510	81%	2,145	503
Annual growth rate (in %)	+ 5.1	+ 6.7	+ 2.3	+ 4.6		+ 0.2	- 2.1

(Source: Malki *et al.*, 1997: 20)

* Figures of feed resources are given in million FU.

It is worth mentioning that the above-mentioned results show, in fact, the extreme importance of the steppe rangelands in terms of sheep rearing, although the feed problem still represents a real dilemma which puts the livestock sub-sector in a very vulnerable situation.

In fact, feed imports represented an average of 49 to 60% of the diet in the steppe areas in recent years, and 39% at the national level. In similar vein, rangeland output contributed not more than 6 to 25% of the diet in the steppe zones, and 21% at the national level.

In contrast, Table 5.3.5.2(2) below highlights in a perfect manner the maximum size of the sheep flocks imposed by the ecological conditions and feed availability. This was stabilized by a alternate movement of de-stocking the surpluses in case of a dry season and re-stocking when the climatic conditions - and thus the feeding capacity - improved. This movement could create a great conflict between pastoralists if the *jemaa* was not there to arbitrate and referee the distribution of access rights between the members of the social unit (tribe, fraction, household).

Let us consider the year 1945, for instance, known as the '*year of hunger*' in the Algerian history. The harvest of cereals represented only 25% of the normal year. Given that barley, as a complement of the rangelands input, represented a basic source of feeding, it can be seen that the size of livestock herds was reduced by almost half in 1946. It is true that a large number of the sheep died due to the drought but de-stocking was also there. Moreover, this is corroborated by the statistics of 1927, 1931 and even 1961, in the same table.

Looking back to the statistics of post-independence Algeria, there is a linear progression which doubled the size of livestock within two decades, with more than 80% located in the steppe areas [see Table 5.3.5.2(1) above]. This progression was supported by unsustainable and incentive-distorting anti-drought policies that the state implemented in its attempt to support the improvement of the steppe rangelands productivity. In fact, between 1975 and 1993, the average annual growth rate of flocks size in the steppe areas (agropastoral + pastoral *wilayate*) was estimated at 4.6% (6.7% in the pastoral *wilayate* and 5.1% at the national level) at a time when rangeland output for the sheep diet was decreasing at a steady average pace of 2.1% a year (Malki *et al.*, 1997: 20).

In the case of post-independence Algeria, problematic situations in rangelands, which can be considered as "non-equilibrium" zones, were dealt with through bringing solutions that were adequate for "equilibrium" rangelands but by no means appropriate for the former. The dichotomy of these two different types of rangelands are documented by Scoones (199b: 1-2) and Scoones and Graham (1994: 188).

According to these authors, an equilibrium environment is characterized by fairly predictable rainfall patterns, vegetation change, and thus the expected availability of forage. It has a fixed 'carrying capacity', where the increase in livestock numbers, if outnumbering the set 'ceiling' and not checked, can hamper the vegetation process of recovery and degradation and/or desertification may occur. Such environments are typically found in wetter areas. In contrast, range degradation in a non-equilibrium environment is not such an issue. Sparse rainfall keeps vegetation production, and therefore livestock numbers, very low through drought impacts or other episodic events, so that livestock do not have a long-term destructive impact on rangeland resources. Such non-equilibrium environments have highly dynamic ecosystems and are mainly found in arid and semi-arid zones where rainfall variability is high.

Table 5.3.5.2(2) - Evolution of the size of sheep flocks in Algeria under the colonial state

Year	Sheep population	Year	Sheep population	Year	Sheep population
1925	4,605,000	1938	5,965,000	1951	5,321,000
1926	6,786,000	1939	6,406,000	1952	6,028,000
1927	5,083,000	1940	6,296,000	1953	6,014,000
1928	5,614,000	1941	6,150,000	1954	6,009,000
1929	6,196,000	1942	6,546,000	1955	6,298,000
1930	7,168,000	1943	5,529,000	1956	6,383,000
1931	4,671,000	1944	5,832,000	1957	6,632,000
1932	5,269,000	1945	5,375,000	1958	6,003,000
1933	5,262,000	1946	2,808,000	1959	5,460,000
1934	5,512,000	1947	3,145,000	1960	5,360,000
1935	5,845,000	1948	3,105,000	1961	4,469,000
1936	6,416,000	1949	3,839,000		
1937	6,416,000	1950	4,541,000		

Source: Mesli (1995: 228)

c) The end of anti-drought policies and wheat price liberalization

The effects of the wheat price liberalization, decided by the government in 1995, can be understood by referring to the process by which cereals, barley first and wheat later, made their intrusion into the rangelands. In fact, after the state decided in the late 1980s to progressively reduce and to stop its support of the anti-drought campaigns because of scarcity of public resources, feed imports dropped drastically and prices were liberalized. Pastoralists found themselves in the emergency to devise solutions to meet their feed needs. Most of them worked to clear the marginal lands in the steppe areas in order to cultivate barley for their animals. The crop gave both cheap grains and straw which could be used as supplementary feed to the

rangelands output. Since then, we have started hearing about the phenomenon of 'barley encroachment' in the rangelands.

Pastoralists ploughed the marginal lands and the 'cover-crop' dilemma became well-known in the steppe areas. This dilemma derived its name from a tillage tool pastoralists had to resort to in order to plough their plots, altering the structure of the already-problematic shallow soil in these areas and accelerated wind erosion. Year after year, barley acreage increased steadily to reach a frightening level, but nobody could interfere in this situation. Barley was not subsidized by the government anymore and was subject to the mechanisms of a free market, while wheat was still receiving a great amount of subsidies from the state.

Box 5.3.5.2(2) - How planners make wrong assumptions

When the government decided in 1995 to liberalize the price of wheat and its derived products (pasta, semolina, flour) at the consumer level, planners made an assumption that increasing farm-gate prices for durum and bread wheat would make farmers produce more of these commodities and thus substitute local production for the huge quantities Algeria had to import every year. In fact, during the 1995-96 sowing season, lots of farmers who used to produce barley reconverted their plots into wheat, especially durum wheat because it has higher price.

In some marginal lands, pastoralists started similarly reconverting their barley plots into durum wheat plots and some other started clearing additional land to grow durum wheat. Planners at the Ministry of Agriculture and Fisheries thought that their assumption was true, that the farm-gate price for durum wheat, which was almost twice the barley price, was so attractive to farmers that it would explain the reconversion. In response to planners, a hypothesis was formulated by the socio-economic team working for the Mashrek-Maghreb Project - of which I was part - that the reconversion observed, especially in the marginal lands, was mostly influenced by the liberalized price of cereal products, more particularly for semolina, at the market level. Some of the planners laughed in front of us when we talked about our assumptions. When we presented some of our findings, they did not even believe our research, saying that it was done to please some foreigners, meaning the IARCs experts.

Source: field notes

The application of the Structural Adjustment Programme in 1994, under IMF and World Bank 'medication', made things worse for these areas. As public subsidies were removed from wheat and the prices were liberalized, we assisted in the creation of a great shift in the marginal lands of the steppe areas. Almost all pastoralists, especially the small and poorest ones, started cultivating durum wheat, replacing barley cultivation. To my great surprise, I heard many officials and planners at the Ministry of Agriculture, instead of caring about the smooth process of degradation that was dramatically advancing in these areas, saying that the shift from barley to wheat was motivated by the farm-gate price of wheat fixed by the Ministry of Agriculture at almost 2 times the average price of barley on the free market [see Box 5.3.5.2(2) above].

When the ICARDA-IFPRI Mashrek-Maghreb Project started its socio-economic research component on the effects of policies and property rights on technology

adoption by farmers, we, the Algerian team working for the project, decided to work in some locations that were largely representative of the marginal areas. Tébessa, Souk-Ahras, and Khenchela were three locations where we undertook our research.

After the RRA exercise we organized with farmers and some development agents from the CR-HCDS for the Eastern region just after the sowing season (November 1995), we developed a research action based on our hypothesis that the shift from barley to wheat, although as questionable as it was given that these areas were not fit for wheat cultivation, were influenced by other considerations that planners did not want to discuss [see Box 5.3.5.2(3) below].

Box 5.3.5.2(3) - How planners stay blind in front of evidence

In the summer of 1996, even though the favourable and regular rainfall of the season yielded a remarkable production of durum wheat, only the 1/3 of the estimated total harvest of durum wheat was collected by the cereal co-operatives (CCLs). Trying to explain what happened, we undertook some additional research in order to collect additional indicators which might have a great potential to verify our hypothesis [see Box 5.3.5.2(2)]. Fortunately, we found that farmers were keeping their harvest to satisfy their households' needs. Additional indicators were found to corroborate this statement. They are as follows: (1) More than 2,000 traditional mills were put back to work after more than 20 years of stoppage; (2) The public factories that produced semolina declared a decline in their sales for at least three months, since the start of the harvesting campaign, and; (3) The public factories reduced the semolina price by 30% in August 1996 in order to release their stocks, which went back to their initial level in October 1996.

Putting all these indicators together, and after having some informal discussions with farmers, we suggested to planners that our assumption was true. In fact, planners have forgotten that being a farmer is only one side of a coin (person). The other side of the coin (person) is that a farmer is also a consumer and has household needs to satisfy. When pastoralists decided to reconvert their barley plots into durum wheat to satisfy their household needs, they had decided which among their households' needs and the sheep demand should be the first priority. When the market could cover the household needs at an affordable price, the farm had to satisfy mainly the sheep needs through producing barley. At the time, the price of semolina has become unaffordable to them in the market, the farm had to satisfy first and foremost the households' needs.

Source: field notes

During and after the harvest season (July and September 1996), we organized 2 monitoring visits to the areas where we did the RRA exercise after the sowing season and tried to track the itinerary of some samples of the harvested durum wheat from the plot to its end-step. We found that most part of the wheat harvested in these areas ended up in the traditional mills for transformation into semolina.

The indicator of the traditional mills was also corroborated by the results of research undertaken by the *Direction des Statistiques* of the Ministry of Agriculture in July and August 1996 [see Box 5.3.5.2(3) above].

Trying to understand more about why this was happening, some discussions and informal group interviews with farmers revealed that the price of semolina since its liberalization was too expensive for the pastoralists. They then decided to grow their

own semolina, slightly to the detriment of their animals feed. This behaviour even had far-reaching consequences affecting the public enterprises in charge of transforming durum wheat and selling semolina [see Box 5.3.5.2(3) above].

Our curiosity was really whet by the decision of pastoralists to switch to wheat cultivation in order to provide their households with semolina. We questioned whether it was economically better to produce semolina by themselves rather than to buy it from the domestic market. The results of our investigation, although lacking some theoretical foundations, are presented in Box 5.3.5.2(4) below.

Box 5.3.5.2(4) - Do farmers obey to some economic rationality?

Cultivating durum wheat could provide the grain for the household (transformed by the traditional mill of the neighbourhood), and the straw and bran (as by-product of the grain transformation) for the sheep basic needs. Trying to understand how farmers came up with this decision, we attempted a small economic calculation with the following items:

- *A quintal (100 kg) of durum wheat is paid by the co-operative at 1,900 AD;*
- *A quintal of semolina costs 3,000 AD in the local market, after the price liberalization;*
- *A quintal of durum wheat can give 75 kg of semolina, the rest (bran) can be fed to animals;*
- *A quintal of semolina produced by the farmer himself, including the mill cost, would cost $((1,900 \text{ AD} / 75 \text{ kg}) \times 100 \text{ kg}) + 50 \text{ AD} = 2,580 \text{ AD}$ from which we must subtract the price for the bran, given that for each quintal of semolina, he will have 33 kg of bran in average, estimated at 10 AD per kilo, (thus - 330 AD)*
- *The net cost for a quintal (100 kg) of farmer-produced semolina would be 2.230 AD, less than 70% of the public price.*

This example shows how the scientific-rational model may lead planners to put wrong assumptions. It shows also how their self-reference cannot - and should not - be challenged by social researchers, which is even worse.

Source: field notes

Given the fact that the household needs competed intensively with the livestock needs, pastoralists had to decide what their priority was. This put a great responsibility on the pastoralists' shoulders of having decided between feeding their animals or providing food for their family, especially when the climate was not very reliable in these areas. If the shift from barley to wheat was positively supported during the 1995-96 season by a great productivity of pastures and range because of the excellent climatic year, it would not be as easy for the farmers to meet both needs during the coming years, given the extreme randomness of rainfall in these areas. This would even announce more degradation for the rangelands as I assume that farmers will have to clear more range in order to solve this feed-or-food equation.

In conclusion, state policies, lacking an adequate prior knowledge about the different responses that could be anticipated from different agro-ecological zones, yielded the (negative) impact I have just presented.

First, the anti-drought policies of subsidized feed - mostly imported - implemented since the mid-1970s induced the break-up of the ecological equilibrium

of the rangelands as far as they were seriously at risk from the overwhelming, gigantic flocks of sheep in the steppe rangelands. The state withdrawal from supporting the feed price engendered an increasing degradation, as pastoralists faced the dilemma of how to feed their overwhelming herds without the state support, in addition to or even in competition with their household needs.

Second, liberalization of wheat and its all transformed products, implemented in 1994, has required farmers to face their own feed-or-food equation, which exacerbated the problematic situation of degradation, which is likely to increase in the near future.

d) The anti-calaminities' fund: Risk-protection or degradation factor? ²¹

The anti-drought campaigns proved to be unsustainable mechanisms the state could not support after the economic crisis of the late 1980s, given the big oil-crash of that period. Other measures had to be devised in order to 'protect' farmers, in general, and pastoralists, in particular, from the effects of drought.

The precariousness of the agricultural activity in arid and semi-arid zones and the recurrence of climatic hazards, such as drought, pleaded for the settlement of a special fund aiming to support and compensate farmers and agricultural activities in general, in order to achieve a recurrent revival of agricultural investments and improve production. However, the implementation of such measures should have been responsive to the local particularities of the main agricultural zones in the country. It observed instead a systematic, standardized approach everywhere.

The founding of such a fund with the active participation of farmers in the mobilization of its resources was a positive decision. However, the implementation of the compensation measures on a standardized pattern was actually harmful to the rangelands, as we shall see in the remainder of this section.

As a consequence of the institutionalization of the *Fonds de Garantie Contre les Calamités Agricoles* (FGCCA) in 1990, rangelands acreage and productivity dropped considerably for many reasons. Since its inception, on the basis of the Executive Decree n° 90-125 of May 26, 1990, the FGCCA had to compensate farmers who subscribed to an insurance policy with the *Caisse Nationale de Mutualité Agricole* (CNMA) for their losses in cereal cultivation when caused by some agreed-upon natural calamities, such as flooding and drought.

According to CNMA (1995), farmers of the *wilaya* of Tébessa, for instance, were compensated for the following reasons:

- The drought of the 1989-90 agricultural campaign;
- The flooding of the 1990-91 agricultural campaign;
- The flooding of the 1991-92 agricultural campaign;
- The drought of the 1992-93 agricultural campaign; and,
- The drought of the 1993-94 agricultural campaign.

²¹ This section owes much to an unpublished work of Redjel Noureddine written in 1995.

As the tables of CNMA (1995) show, compensation by the FGCCA for the 1993-94 agricultural campaign and for the pastoral *wilaya* of Tébessa concerned 1,698 farmers and almost 220,000 hectares for a total amount of 72 million AD. If we relate this to the cultivated acreage compensated by the fund, this would represent 328,80 AD per hectare, while the optimal level of return upon investment for a hectare cultivated in the steppe is estimated to be less than 50 AD, in relation to actual costs of inputs and labour (Malki *et al.*, 1997). We can assume that these results can be easily extrapolated to the whole steppe.

In comparison, the agro-pastoral *wilaya* of Souk-Ahras, 70 km north of Tébessa, benefited during the same agricultural campaign (1993-94) a compensation of 8 million AD for a almost 165,000 hectares. Reported for the cultivated acreage compensated by the fund, this gave an average of 48,53 AD per hectare, while the optimal level of return upon investment in this *wilaya* was much higher than the one of the *wilaya* of Tébessa.

Such an analysis, based on the standardized manner of implementing compensation measures without attention being driven to the particularities of the local settings and the needed differentiation of the optimal level of return upon investment under different environments, shows the inappropriateness of the systematic approach adopted by the FGCCA in terms of support and compensation. Hence, applying the same mechanisms, especially in the rangelands, is highly questionable for various reasons:

1. Given that the FGCCA mainly concerned the compensation of cereal growers, which is not the first priority in the rangelands, although closely linked to sheep rearing, the fund is assimilated to a device that supports a secondary activity for pastoralists rather than being a compensation fund for the main activity of the pastoral space, that is the production of a cheap feed resources. Cereals play an important role in feeding animals, but we saw that the rate of return on their subsequent investment was highly affected by rainfall randomness.
2. It is not needed to recall the obviousness that drought is a constant variable in these areas, and 'guarantee' mechanisms are always devised for an exceptional phenomenon, not for a constant variable. It is thus questionable whether sustainability of such a mechanism is possible at all at the long run.
3. Such devices can, in a context where clearing of rangelands increased after the withdrawal of the state from anti-drought campaigns, be seen, in the case of the rangelands zones, as the appropriate 'engine' to:
 - Stimulate the clearing of rangelands, thus reducing the pastoral space;
 - Disfavour the real productive zones by instituting a unique, standard insurance and compensation rate;
 - Comfort and probably worsen the situation of feed dependency on imports;
 - Contribute to the maintenance of the ecological backwardness in the rangelands, where annual losses are estimated at 300,000 hectares per year due to natural and anthropic (provoked or stimulated) erosion.

e) Who benefited from the state anti-drought policies in the rangelands?

There is no doubt that these policies benefited pastoralists in general. However, the big sheep owners took greatest advantage of them, given their resource endowments and the facilities they had access to in the Algerian socio-political context.

The big sheep owners could use trekking facilities more easily for moving their flocks from one area to another, sometimes hundreds kilometers from their initial location. They could even use trailer water-tankers to transport water from distant locations to their flocks.

During the anti-drought campaigns, big owners' means of transportation and their introduction to the state bureaucratic system secured faster relief for their flocks while poorer pastoralists had to queue days and days to get their rations, which sometimes did not even meet half the needs of their flocks, as told to me by some pastoralists and development agents.

The most important facet of this situation is that when drought was very severe and relief programmes were late in reaching them, small pastoralists were not able to cope with their animals' needs and started selling part of their flocks. The big sheep owners were always waiting for this situation to buy all the animals the small owners intended to sell, given their own facilities for transportation and their easy access to subsidized feed. This behaviour was perceived by some observers as an appropriate "instrument" to speed up "the process of concentration of stock ownership in a few hands" (Bayers and Waters-Bayer, 1996: 75).

In conclusion, state policies supposedly conceived to support the productivity of the rangelands and the maintenance of pastoralists livelihoods ended up with a kind of either-or results:

1. Either exacerbating degradation of the already fragile ecosystem of the steppe rangelands; or,
2. Speeding up the concentration of livestock in the hands of the big sheep owners, whose endowment the agrarian revolution [see section 5.1] tried to limit for equity considerations.

CHAPTER 6

ON THE FALLACIES OF CONVENTIONAL DEVELOPMENT THINKING: DISCUSSION AND ANALYSIS OF CASES 1, 2 AND 3

The three cases I presented in the previous chapter, though somehow interrelated, are representative of the current development vision adopted by the post-independence Algerian regime. Such a vision assigned the role of the main actor in development to the state and its bureaucracy while the beneficiaries had to content themselves to being assisted as 'objectified' passive recipients.

Each of these cases represents one of the facets of planning as social guidance developed by Friedmann's typology (1973: 51). In fact, the agrarian revolution case describes a typical form of an *innovative* planned action, while the cereal seed policy encompasses a true *allocative* planned action. Alternatively, the rangelands case shows some features of a mixed innovative/allocative pattern type of planning.

Notwithstanding, each of these cases contains, in my opinion, some features of a non-development situation rather than a real development one, given that little improvement has occurred in the living standards of large segments of potential beneficiaries, especially the poorest ones. However, as Goulet (1979: 557) suggested, "although no full-blown theory or policy model can emerge from the small number of cases outlined in these pages, some important lessons appear. These are worthy of critical reflection". This statement thus sets the context of this chapter.

The present chapter engages a discussion that intends to test the study's hypotheses I adopted in Chapter 3 in the light of the shortcomings of the conventional development thinking adopted in post-independence Algeria.

6.1 Recalling the hypotheses

In this section, the position that the current vision of development in post-independence Algeria, as described by the three proposed cases, is not successful will be asserted. This will be done through testing the hypotheses in relation to the fulfillment of the four fundamental prerequisites (van Dusseldorp, 1992: 12) developed in sections 2.2.1 and 3.2.

Recalling these hypotheses, any development action seeking to achieve its objectives, must fulfill the four following prerequisites:

1. The possibility of **formulating** a consistent, realistic and durable **set of objectives**, which is **acceptable** to all, or at least to a **large majority of the people** who will be involved in and/or affected by the planned development;
2. The **availability of knowledge** of all the relevant **processes** and their interrelationships which have to be influenced to change the present situation in such a way that the objectives will be realized;

3. The **availability of the means and power** to influence these processes;
4. The **political will to use the available means and power**, to influence the relevant processes in order to realize the desired objectives.

From the preceding pre-requisites, any development action seeking sustainability should verify, in the frame of this study, the general hypothesis (Hg) as shown in Box 6.1(1) below:

Box 6.1(1) - The general hypothesis (Hg) of the study

Participation and social learning increase the probability of the fulfillment of the four prerequisites required for a sustainable development action.

Given the achievement of this general hypothesis (Hg) is linked to the fulfillment of the four pre-requisites mentioned above, I attempted a decomposition of this general hypothesis into four hypotheses which were formulated in such a normative way in order that the 'positivity' of sustainable development might be strengthened. These hypotheses are shown in Box 6.1(2) below:

Box 6.1(2) - The four hypotheses (H1 - H4) of the study

- H1 - Development objectives are not determined by planners in an exclusively top-down way and are always in accordance with beneficiaries' needs.*
- H2 - Major needs of required knowledge about processes to be influenced by a development action are covered by different sources of knowledge.*
- H3 - All resources needed for the achievement of the objectives of the development action are available and fairly distributed among the actors.*
- H4 - The political will to use the required resources for a given development action is concretized in order to achieve the formulated objectives.*

At the third level, each hypothesis was 'deconstructed' into three sub-hypotheses [see Figure 3.2(1) in this book]. However, given the context of the case-studies presented in the previous chapter, as I mentioned earlier in Chapter 3 [see section 3.3], I suggest there is no need to test the sub-hypotheses and content myself with solely checking the four hypotheses H1, H2, H3, H4 mentioned in Box 6.1(2) above. This decision is motivated by the evidence that the failure of the conventional development thinking in Algeria does not require such in-depth investigation to understand its causes. On the contrary, in Chapter 8, I need to go into more depth and test the sub-hypotheses in order to understand the 'innovations' of the alternative development view I am advocating.

6.2 Hypotheses' verification

6.2.1 Development objectives are not determined by planners in an exclusively top-down way and are always in accordance with beneficiaries' needs (H1)

In the sense of the four hypotheses developed above, sustainable development requires that problem definition, and development objectives determination should be envisaged through a process of increased, active participation of all actors concerned with a given development action. This process must give special attention to those known as the 'beneficiaries', i.e. those who will be affected, either negatively or positively, by the planned endeavour. However, this statement would take the form of a rather utopian discourse in the socio-political context of post-independence Algeria, as the three cases presented in the previous chapter showed how and by whom development objectives were determined.

In fact, the three cases present evident similarities in the way problems were identified and development objectives defined. If we exclude the ideology-driven process of manipulating farmers' participation in the agrarian revolution policy (Case No. 1) by the reformist 'political leadership', the beneficiaries participated neither in the identification nor in the implementation phases. To the contrary, they were perceived as passive recipients of those development actions. The strength and width of their 'mute' response towards those actions, lacking enthusiasm because of their distrust in the state apparatus, was so significant that the authorities should have asked themselves whether they were really in a situation to realize their presumed cherished slogan of '*A revolution from the people and for the people*'.

The great majority of needy farmers did not openly give their opinion about these development actions. They could just not declare their opposition to these actions loudly, they could not afford it given the authoritarianism of the regime. It reminds me of an Indonesian case where military force was used to coerce farmers into cultivating the new IRRI semi-dwarf high-yielding varieties of rice (Soetomo, 1992: 31). Instead of loudly protesting, Algerian farmers expressed their disapproval through silence, as '*silence speaks louder than claim*', as an old adage says. To overcome this, the ruling body, as heterogeneous as it was, enveloped these actions with a populist, ideological discourse based on national unity and stability in order to make the beneficiaries adhere to the implementation of these actions.

Strongly inspired by the political orientation adopted by the post-independence regime, based on a self-proclaimed ruling body, authoritarianism, and control of spontaneous popular initiatives, the process of formulating development objectives and planning development actions was restricted to the bureaucratic apparatus of planning, which showed a complete obedience to the regime. In the process of state formation that took place at independence, and the way the administrative structure was organized and staffed, it is not difficult to find an explanation about the foundations of this political orientation.

The state apparatus was 'installed' in a hurry to replace the dying colonial state and was staffed, in most cases, with people lacking the elementary knowledge about the functions they had to fulfill. Recalling the 1963 census of civil servants cited by Bennoune (1976: 8), 40% of the bureaucratic personnel were Algerians graduated from schools of the colonial administration (mostly trained and promoted during the war within the framework of the counterinsurgency strategy, called the *Promotion Lacoste*). The remaining 60% were co-opted FLN and ALN cadres, recruited after March 19, 1962 (cease-fire day). Consequently, the colonial system did not change much and the newly-settled bureaucrats inherited the attitudes and values of the colonial system, being indifferent and disdainful to the plight of the administered population.

Although the masses of post-independence Algeria actively participated in the anti-colonial struggle, they were denied the right to participate in the governance of the country by the newly-settled elite after independence.

As it might be said, if the colonial state had to 'destabilize' local indigenous organizations, such as tribes, to achieve pacification in Algeria, the post-independence state had to reinforce and maintain its control over the whole country by replacing all popular organizations, as Cases No. 1 and 3 show, by public or semi-public (cooperativist) ones which were in disharmony with the old, traditional indigenous settings. Placed under the aegis of popular participation, mass organizations, such as the *Union Nationale des Paysans Algériens* (UNPA) and state-proclaimed co-operatives were, in fact, appropriate mechanisms for controlling and containing the popular voice. In this particular context, co-operatives proved to be a "litany of broken promises" as they became monopolies of influential lobbies and lost their privileged status as a development instrument to benefit smaller and less powerful citizens (Hospes, 1992: 242).

On the other hand, it is almost a rule in any revolutionary movement that there will always be, as Goulet (1979: 564) suggests, elites who assume they know better than the people themselves what is good for them. Hence, these elites assumed that any alternative development strategies must place decisions in their (the elites') hands, even those initial decisions which aim to diagnose the nature and causes of their populations' problems. Participation, in the vision of these elites, should be understood from the sole perspective that was in line with their thinking. Any other conceptualization of participation that would mean the liberation of the populace from the supremacy of the elites is not welcomed and would be fought by any means. This was why they are always suspicious about new initiatives and new ways of thinking.

Following this trend, the post-independence state developed a strange paradox. For two decades, the political discourse, which followed a socialistic, collectivist orientation, served as a '*paravent*' to the orientation of the administrative structure which was mainly at the service of petit-bourgeois and capitalistic-oriented rural and urban elites.

In this way, it can be assumed that, as far as the planning of development actions and thus the determination of objectives was the duty of the bureaucratic apparatus, it was clear that the interests of rural and urban elites would always be protected and scrupulously looked after. However, the question arises of why the agrarian revolution was planned and implemented when it seems as though it was planned and implemented as if it was meant to be a 'stimulated failure', as I stated earlier. The answer to this question should not deny the strength of the bureaucracy-elite' lobby which was able to develop different strategic reactions to keep its interests intact, without having recourse to an open opposition towards the actions of the reformist clan of the ruling body, as it was the case of the agrarian revolution. Smoothly but surely, this lobby could bow strategically to the pressure of the reformist clan but did never broke down. It grew even stronger after it succeeded at f making the agrarian revolution fail.

Since 1962, rural bourgeoisie and rich landlords, co-operating with their bureaucratic allies who had infiltrated the state apparatus skillfully, maneuvered to avoid a real land reform in Algeria. However, "the arrival of a reform leader with deeply felt commitments" (Cleaves, *ibid.*: 290) after the 1965 coup d'etat, and the particular context of the 1970s, created a propitious "historical moment" (Cleaves, *ibid.*) for the agrarian revolution.

Feeling that overt resistance would not pay, the bureaucracy-elite' lobby adopted a precise strategy to interfere with the design and implementation phases of this reform policy so as to yield a 'stimulated failure'.

According to the features that characterized post-independence Algeria, the state apparatus represented a *closed* system (Cleaves, 1980: 284; Heywood, 1997: 340; my italics). In such a system, the state became blind to the society which it is a part of. However, this was not always true as the state remembered its people when elections were to be organized to again proceed to manipulate participation. Moreover, in such a system, mass pressure becomes inconsistent with bureaucratic norms of deliberation, procedure, and control, given that the norms for promotion and recognition make bureaucrats respond, even in a negative way, to superiors' aspirations for the image of success, rather than work to satisfy their clients (Cleaves, *ibid.*: 300). This is why bureaucrats never became accountable to all development beneficiaries and make them participate in steering the process of development. There was no chance to discuss participation in such a system, let alone to implement it as a development alternative.

This mode of functioning, based on the exclusion of the majority of the populace, became the underlying philosophy of the state apparatus which always worked to reduce popular control over public institutions. Even the popular assemblies, elected at different levels, which existed presumably to orient and control the activities of these highly-bureaucratized and elite-biased institutions, were left amorphous, without political life, as the example of the *Assemblées Populaires Communales Elargies* (APCEs) in Case No. 1 shows.

The poorest performance of public institutions can be found in welfare and relief programmes, such as the anti-drought campaigns in the collective rangelands management policy (Case No. 3). As far as the different ways in which national income was distributed sustained and reinforced the existence of such public institutions, they decided upon both explicit and implicit criteria that gave citizens access to benefit from any state service. Given their ties to powerful segments of the population, it is not difficult to guess how these criteria were defined. The dichotomy between explicit (usually written) and implicit criteria, and the supremacy of the latter, did not allow the explicit criteria to be enforced. It was the rule that every time a new regulation or law was implemented, some implicit criteria would be defined in parallel. It was always these latter criteria that commanded the behaviour of staff working in public organizations, which were always in favour of their allies whatever the regulation or law stipulated.

Moreover, this so-called philosophy did not consider the causes and objectives of the struggle against the colonial state. The state apparatus devised development strategies while forgetting the causes that caused peasants to fight against French colonialism; they always repeated the same errors. As Case No. 3 shows, the colonial state employed all measures to disaggregate the tribe because it was the last obstacle to the country's pacification. To achieve this, the colonial state found that disaggregating the tribe would first need the disaggregation of land, which was the source of tribal force, power, and social cohesion.

In a similar context, the post-independence state knew that governing a country in a context hostile to an illegitimate regime would not be easy. It would be even more difficult if the regime would have given more access to the population to control and manage some parts, even the smallest ones, of the country and thus end up facing complaints about power distribution in the society. This put the post-independence state in the position to carry on developing 'imposed' institutional arrangements over the rangelands and avoid acknowledgment and recognition of the indigenous settings.

Again, although it is only one case among many similar ones, the cereal seed improvement policy (Case No. 2) is an illustrative example of the way development objectives were defined and the criteria of being eligible to public aid were determined. To clarify this, some main issues will be discussed hereafter:

1. The policy was designed upon an imported development model that could never be successful *intra-muros* unless it was located in the areas that possess the right potential for it. The Green Revolution metaphor, as a model, could not accommodate more than 800,000 to 1,200,000 ha annually cropped with cereals. However, this model became the sole alternative which the entire R&D system worked to promote. This was, in fact, the planner's vision rather than the beneficiaries' preference that was imposed on the development agenda. Another consequence of this model was that it imprinted on most development actions an exclusive orientation, while supported by public resources, towards the well-off farmers possessing the necessary means to valorize, at best, the intensification

model. As a consequence, this imprinted orientation excluded the large majority of farmers whose constraints were never solved or tackled by the intensification model. This raises a problem of ethics concerning agricultural development, if we assert that development is synonymous with improvement of life and work conditions and, therefore, with income improvement. It is in consideration of this type of perspective that some development theorists call for the promotion of participatory models to guarantee more appropriateness and equity for the 'hitherto excluded' small farmers.

2. The policy needed a professionally-organized population of specialized farmers who demonstrated a professional interest and sufficient knowledge in seed production. Given the facilities they had access to in the corrupted bureaucratic apparatus, 'free-riders' infiltrated the seed system to gain more than to serve the seed 'cause'. Facilitated by the public organizations' acknowledgment of implicit criteria instead of the explicit official ones, their infiltration of the seed system granted them the benefit of a big reward in return for very little efforts. Meanwhile, the real professional seed growers became frustrated because, whatever their efforts, the seed system was always confined into a 'non-quality vicious circle' [see section 5.2].
3. The policy needed to induce an end-user seed demand so that seed production met the projected levels of use. The state had to annually inject a huge amount of subsidies to favour the use of 'quality' seeds. Farmers used the seeds because they were neither convinced of that, nor because the quality was good. They used seeds because they were priced lower than the price they were paid for their own harvest. Consequently, when subsidies were removed and the price liberalized, farmers felt little attachment to or gratitude for the 'services' rendered by the seed system. The story of cheap seeds took the form of something 'offered' as a gift by the state which was counterproductive as it deprived them of the practical experience of demanding and receiving these public goods through their own pressure and initiative (Cleaves, *ibid.*: 291).

In summary, agricultural development policy-making and planning were plagued by intensive government interference with very little room for participation, entrepreneurship, and/or individual initiative. Taking advantage of their supremacy as part of the state apparatus and a less-organized population, planners and policy-makers assumed they know, better than the beneficiaries themselves, the objectives of social groups whose situation they sought to ameliorate. This situation, although founded by some basic concepts intrinsic to the planning philosophy, was exacerbated by the political system that came into being at the time of independence, and which adopted central planning as a model of development guidance.

By means of such supremacist behaviour, planners and policy-makers enjoined the development process in a very centralized, mechanistic top-down process, based on a stereotyped and 'uniformized' vision. Such a vision itself represented one of the persistent, salient causes of policy failure, especially in the case of non-mobilized,

unorganized populations. With more participation of the beneficiaries and if they had learned from their previous experiences, planners could have designed appropriate policies that took the behaviour of the beneficiaries over time into consideration, rather than according to the policy-makers' own preferences (Cleaves, *ibid.*: 288). According to Goulet (*ibid.*), as one Indian revolutionary activist recently declared to an author, "development makes life worse for 80% of our people, and confirms the other 20% in their selfishness" (Goulet, 1979: 564).

Hypothesis H1 is not verified because development objectives of the proposed cases were exclusively determined by the planners in a centralized, top-down way and were not in accordance with the real beneficiaries' needs as they were planned in a complete amnesia of the rural areas' history.

6.2.2 Major needs of required knowledge about processes to be influenced by a development action are covered by different sources of knowledge (H2)

In the sense of the four hypotheses developed above, sustainable development requires a clear, precise, and complete understanding of the processes a given development action seeks to influence in its attempts to achieve the set objectives. This can be made possible only when enough required knowledge about these processes is gathered from whatever the source.

As illustrative as it might be for Case No. 1, the charter of the 1971 agrarian revolution recognized that "there is no agrarian revolution that can achieve its goal without considering peasants' knowledge and wisdom" [see Box 5.1.5.3(1)]. The core of the agrarian revolution was supposed to be the peasants' 'intelligence', in a sense of wisdom and knowledge, but also social learning. The legislator, following instructions of the political leadership, wanted to convince all reluctant planners, policy-makers and administrators that if this force - i.e. the peasants 'intelligence' - was ignored, overlooked, or despised, no sustainable action could be undertaken and the failure could not be avoided.

Furthermore, if we look to Case No. 2, we can certainly assert that if this policy was designed in respect and consideration of the peasants' wisdom and knowledge, it would never end in failure, neither for farmers (end-users) nor for the seed system. The 'intensification' model of cereal crops development was not appropriate for all agroecological zones. A minimum amount of field investigation, which could have reinforced the planners' learning process, and a bit of participation of local farmers from the different agroecological zones would have spared the planners from embarking upon a hopeless endeavour such as the Green Revolution-driven development programme and its cherished HYVs. It is true, however, that this model could fit certain resource-rich agroecological zones, but it certainly was not fit for all regions where cereals have been grown for many generations.

Additionally, because farmers know each other at the village level, the participation of local farmers in defining the criteria for seed grower selection and thus could have spared much of the resources' spoiling.

Case No. 3 reinforces the assertion that if pastoralists' wisdom had been taken into consideration, planners could have understood the peculiar characteristics of the steppe rangelands management that were not only technical or economic, but also social and cultural. Rangelands management was based on the monitoring of an ecological balance between the feed needs of livestock and the availability of resources in the pastures. A dramatic increase of the livestock population could endanger the future of the ecosystem and the sustainability of the livelihoods of local populations.

According to Scoones (1996a: 23), lack of knowledge about the processes to be influenced by a development action - and maybe other reasons - resulted in state-led anti-drought interventions that engendered aid dependency and loss of indigenous coping mechanisms. This was achieved because these interventions were designed in a complete ignorance of the pastoralists' knowledge about so-called coping mechanisms such as tracking strategies.

The major shortcomings of state-led interventions in achieving the goals of a genuine, sustainable and fair development scheme of the steppe rangelands can be summarized through the following:

- A total ignorance - or better yet, a neglect - of the indigenous principles of range management, exploitation and conservation;
- A creation of chaos in the rangelands by transgressing of the indigenous philosophy keeping the ecological balance in check. This was achieved through the transformation, as a consequence of state policies, of a non-equilibrium area into an equilibrium one (Scoones, 1996a: 1-2). Measures oriented towards an equilibrium area relied on an unlimited state support which, for many reasons that I explained in this book, could not be sustained;
- A lack of deep and careful analysis of the indigenous tenure systems and a disregard to consider some basic principles of management relevant to future development;
- An over-emphasis on imported, imposed organizational arrangements and settings that yielded land conflicts between state-imposed, mostly cooperativist, institutions and indigenous systems;
- The use of inappropriate anti-drought measures, mainly seen as relief programmes not linked to a long-term development strategy, yielding a significant livestock dependency on feed imports (60% of the sheep diet in the steppe areas were covered through feed imports, according to Malki *et al.*, 1997: 20).

Analyzing the implicit agenda of such development actions, one could conclude that these actions - and there were too many policies conceived and implemented in a context of total marginalization of the beneficiaries - were always designed and implemented seemingly not to achieve the true explicit objectives, but mainly to meet their hidden agenda. They were used to justify the '*raison d'être*' of the state and its bureaucratic apparatus in the process of development so as to "increase the

legitimacy of the state through the supply of resources" (Arce and Mitra, 1991: 4). In other words, such policies were used as appropriate tools to seemingly concretize a not-very convincing social justice in the national income distribution, which succeeded in effectively hiding the process of distributing the national income.

Any attempt to understand this situation would lead to the philosophy of the Algerian state and its bureaucracy, which seems to instill the message: "In the process of development, the population is nothing without the state. This is why the process of development can be managed only by the state". In fact, passivity and self-depreciation, as defined by Paulo Freire (1972: 49) needed to become internalized by the population in order to reinforce the presence of the state in the process of development and legitimize its permanent intervention, sometimes taking the form of intervening for the sake of intervention *per se*. The worst part is that this philosophy thwarted the spontaneous entrepreneurial actions of as well as the rest of the population's social life.

As a summary, as far as agricultural development policy-making and planning was characterized by a striking lack of participation from the beneficiaries themselves, development actions were identified by an 'external' body that had very little knowledge about the farmers' conditions, environments, and wishes, or even farmers' knowledge and wisdom. However, opening any opportunity for farmers to present their wisdom and share their knowledge in the context of the three cases I presented would have been perceived as a considerable threat either to the powerful lobbies that were controlling the state or to its bureaucratic apparatus. It is for this reason that choices made by the state bureaucracy usually tended to serve the interests of these latter groups rather than farmers themselves, especially small and poor ones.

Such an opportunity of farmers' participation may also indicate a considerable threat to planners who cannot accept any questioning of their own instrumental and functional rationality, supposedly based on 'scientific' knowledge but frequently lacking a humane (or ethical) dimension¹. We need to keep in mind the degree to which the bureaucratic staff of the state apparatus was depicted as disdainful *vis-à-vis* rural populations. Thus, opening any opportunity for rural populations to discuss policies would mean not only discussing the power distribution in the society but a systematic behavioural adjustment of the bureaucrats as well. This would have empowered the 'oppressed' communities and thus reinforced their creative strategizing capacity (Goulet, *ibid.*: 564), which would lead them to ask for more and more concessions from the state and the bureaucracy.

Hypothesis H2 is not verified because the required knowledge about processes to be influenced by a development action were not covered by different sources of knowledge. It was just not possible for neither the self-proclaimed regime nor for its bureaucrats to step down from their ivory-tower and talk directly to and/or with the populace.

¹ See Goulet, 1986: 301-2 on the three *political, technical and ethical (or humane)* in the development decision-making arena.

6.2.3 All resources needed for the achievement of the objectives of the development action are available and fairly distributed among the actors (H3)

In the sense of the four hypotheses mentioned at the beginning of this chapter, sustainable development needs not only the mobilization of the required resources, either public, semi-public or private, but most importantly their fair and just distribution as well. Along these lines, I want to mention that, in many articles about development, authors always mention that underdevelopment of countries such as Algeria is mainly conditioned by scarcity or a total lack of resources. It is very seldom, however, that an author explains how these resources became scarce or even mentions that when resources were available, they were wasted in futile investments or unfairly distributed between different segments of the population. In fact, a strong complacency developed - wittingly or unwittingly - among some of these authors which kept them from not revealing that resources, even when available, were made 'artificially' scarce either by some powerful actors to distribute them according to their own preferences and discretion; or because of inefficiency and unfairness of their distribution and irrational use in development actions. In fact, through employing criteria to harmonize the competing claims of potential resource users in order to ensure maximum efficiency of public goods (Friedmann, *ibid.*: 54), planners and policy-makers, and bureaucrats in general decide on access and exit according to their own preferences. Knowing whose interests these actors look after, it is clear that even in allocative planned actions, the lion's share of resources goes to the most powerful actors who are most of time not those truly in need.

If we look back to the official discourse, the agricultural sector was always given high priority in planned development but the mobilized resources did never lived up to this utterance. In my personal experience, every time agriculture 'took a capital letter at its beginning', as Mesli (1996: 3) said, in the official discourse, I expected an increased marginalization of the sector.

As the three case-studies presented have showed, agricultural policy-making was always characterized by the tremendous gap existing between the handsomely phrased rhetoric of development plans, especially in the political discourse, and their implementation as compared to faithful commitments and concrete efforts.

Among others, Case No. 3 shows this perfectly through the low rate at which the different plans and programmes were implemented, although the resources were supposedly there. This can only be explained by the centralized administrative procedures that ruled the system of funding and disbursement of public resources. This is a perfect case of making resources 'artificially' scarce by shackling their disbursement to very heavy, long, and centralized administrative procedures.

Again, as Case No. 1 has shown, the basic resource to be mobilized and fairly distributed in the frame of this policy was land. This would have concerned, first and foremost, all *colons'* landholdings and some big holdings of rich landlords, which had to be distributed - or better, given back - to landless farmers. As these two

types of landholdings were neither explicitly nor implicitly addressed by this reform, one could assert that the agrarian revolution was conceived and implemented in a such a way that it reinforced the great lack of trust that small and poor farmers, in particular, and the populace, in general, developed towards politicians and policy-makers.

Finally, Case No. 2 shows another way of how the targeted objectives of a development action were missed because of inefficiency and unfairness in resources distribution. In this case, public resources were not only mobilized and unfairly distributed but, more strikingly, allocated with priority going to powerful people who did not deserve them professionally.

One of the most important resources for sustainable development is the political power which acts as a variable that directly affects implementation due to the resources that can be mobilized in favour of or in opposition to a specific development action, according to Cleaves (1980: 281).

In fact, resource allocation in the context of sustainable development stipulates that a model of future society is formulated that is different from the present one in important ways, as Friedmann (*ibid.*: 54) suggests, and in line with the aspirations of the majority. It should aim to break up the existing status quo, which favours only the powerful segments of the population and build up and - more importantly - maintain a new social order that favours the majority. From the foregoing, one can derive that development as well as social guidance are political issues. The debate over who is able to decide what future is for a given society introduces the question of legitimacy, and thus of genuine participation and representativeness.

In a similar vein, for the sake of achieving the set objectives of development actions that can themselves be more or less difficult to implement, such as Case No. 1, according to Cleaves (*ibid.*), social actors need to mobilize sufficient power to ensure the execution of a policy design. This depends on their influence they can exert in the political sphere.

The common feature of the three case-studies presented resides in the fact they were all implemented using public resources. Being embedded in a particular political system as described earlier, public institutions had difficulty in mobilizing the population around their proposed development agenda, especially the poor segments of it, let alone their resources (Cleaves, *ibid.*: 300). One may ask why I should be so critical about a political system that dared to mobilize resources for the development of the supposed under-privileged segments of the population. In an attempt to answer this question, I would rather acknowledge the fact that the regime mobilized some resources, and re-emphasize that my criticisms apply to the way in which resources were made scarce by artificial mechanisms, and the way in which they were distributed among different segments of the population, giving better, wider access to the less needy while denying the adequate access to those in need.

In this vein, I admit that many authors (Clay and Schaffer, 1984; Long, 1984, 1992; Arce and Mitra, 1991) acknowledge the potential ability - human agency - of social actors to devise strategies that help them create room of maneuver in order to bring

about favourable changes and/or outcomes that are in line with their preferences. However, in corrupted political and administrative settings, such social processes about creating room for change by a social microcosm are sometimes harnessed with the intrinsic feature of excluding the needy majority for whom development actions are - or should be - meant.

In summary, agricultural development policy-making and planning in post-independence Algeria was characterized by a low proportion of investments in public expenditures. Whenever a great effort to invest in agriculture occurred, it was biased towards sophisticated technology which did not fit large segments of the peasantry and their conditions, most of whom were located in very harsh environments. Moreover, public resources that were mobilized for a given development action were unfairly distributed to opportunistic clients to the detriment of the appropriate, needy people. Such a situation led to a lack of confidence in the state, and explains people's unwillingness to invest their own resources in any development action that is sponsored by the state apparatus. This situation shed light on an important socio-political phenomenon in post-independence Algeria: The mutual rejection between a state organization serving development and the less-powerful of its clients it is supposed to support.

Hypothesis H3 is not verified because all the resources needed to achieve development action objectives were not available, and when available, they were not fairly distributed among the actors. Rent-seeking and patron-client relationships favoured less-needy actors and corrupted the real sense of development. Moreover, no adequate mechanism was established to include the locally available resources.

6.2.4 The political will to use the required resources for a given development action is concretized in order to achieve the formulated objectives (H4)

In the sense of the four hypotheses to be fulfilled, as developed above, sustainable development is strongly linked to power and to social justice. Any development action that aims to meet the objectives of a pattern of social justice requires the political will of the ruling body - or better, the powerful actors in the society. This is essential given that any development action will attempt, in one way or another, to disturb a given current status quo, either as an explicit objective or as an implicit agenda or even as a side-effect. The linkage, either real or assumed, between development and power, and thus politics, is again underscored. Developmental work is not - and will never be - apolitical.

In fact, any development action, especially the one that can be labeled as *innovative* planning, is highly idealistic in its assumptions, the achievement of which requires political will to be mobilized. However, sometimes the political will of convinced and sympathetic political leaders is a necessary but not a sufficient condition, as was the case of post-independence Algeria, especially after the 1965

coup, wherein the political leadership represented a mosaic of different and antagonistic driving forces and interests.

Although showing planned action differences as being either innovative, allocative, or mixed planned actions, the three case-studies presented are examples of development actions presumably planned to show more social justice towards the non-powerful segments of the population (the landless, the professional seed growers, and the small and poor pastoralists), but they mainly benefited the most powerful (the big landlords, the opportunistic pseudo seed growers, and the big pastoralists). Given that Cases Nos. 2 and 3 can be seen as consequences of a political system and its underlying planning apparatus that were reinforced after the 'stimulated failure' of the policy, as shown in Case No. 1, it became clear that either innovative or allocative planned actions were implemented with the same orientation in such a system: Serve, by any means, the less-needly to the detriment of those in need, be it individuals and groups. Since the independence, and more particularly during the 'black decade', all development actions were designed and implemented based upon this orientation.

However, in a society like post-independence Algerian society, lacking organizations of civil society, the results would have been the same whatever method, form or style of planning was used, given the supremacy of the 'bureaucratic oligarchy' and the interests it had to serve, protect, and look after. It was basically the rule rather than the exception that, in the self-interest of the bureaucracy, bureaucrats needed to establish links with the elites who were the best organized in the rural areas, having strong connections in the urban centers due to the facility of access they benefited from the post-independence state.

Notwithstanding, a great paradox lies in the issue of political will as a prerequisite of sustainable development. Its fulfillment assumes that there is a need for some 'humanitarian' pity from the powerful towards the excluded. Quite an utopian vision! This seems to resemble what Freire (1972: 29) calls "false charity" (or "false generosity"). This only takes place through a process of perpetuating injustice by the powerful in order to give meaning and a *raison d'être* to this kind of generosity.

In my opinion, this call for a 'humanitarian' feeling from the powerful seems to be a rather perfect illusion that can never yield to the new just social order that is required in a context of sustainable development. Such a call requires to make sure that the powerful have not completely lost their 'human' (and not 'humanitarian') character, as Freire (*ibid.*: 28) puts it; otherwise it will be illusory to talk about the prerequisites for sustainable development, such as participation, democratization, justice, freedom, etc.

Such an enterprise of recovering lost humanity can only be made possible through a process of liberation - or better, self-liberation - of the 'hitherto excluded' which means, within the special context of development, a victory over privilege, stagnation and dependency (Goulet, 1979: 555).

Concerning development, this statement brings to the fore the fact that political will as a prerequisite for sustainable development depends on power and how it is

distributed among segments of a given political system, given that power distribution influences both the content of a development action and the success with which this action is implemented (Cleaves, *ibid.*: 282). As Cleaves (*ibid.*: 303) suggests, implementation of development actions requires bureaucratic responsiveness to the poorest segments of the population and in cases where politically dominant groups are unwilling to carry out such an assignment and/or try to oppose it, anti-system advocates will try to fill the breach and to manipulate the so-called poorest segments. This is exactly what happened in Algeria during the last seven years as a consequence of three decades of exclusion. It might be said that this situation can be explained through the use of a metaphor of 'marginalized energy' which was neglected by the post-independence political system that omitted to channel it into sustainable development work and was then used by manipulators to push the country into chaos.

In summary, agricultural development policy-making and planning in post-independence Algeria worked faithfully toward maintaining the status quo that was inherited at independence and consolidated in society and thus in its political system through the design and implementation of most development actions since 1962. Elites' interests were always looked after by the state apparatus, although some of the political leaders that governed the country since the coup d'etat in 1965 until 1978 were truly willing to alter this status quo. However, development actions have not achieved the formulated explicit objectives to the same extent as they did in their hidden agenda.

With a minimum of participation from the excluded and a modicum of social learning from politicians, planners and policy-makers, mobilization of the required political will as a prerequisite for sustainable development would have improved. This was necessary not only to mobilize and use the needed resources for achieving the objectives of development actions, but to fairly distribute them among needy beneficiaries. However, some powerful actors, blinded by their interests and guided by rent-seeking as pattern imposed by the post-independence political system were not aware of the far-reaching consequences of their persisting exclusion 'policy' for the country and the population.

Hypothesis H4 is not verified because the political will to use the required resources for a given development action is mobilized in order to achieve the formulated (explicit) objectives. Blindness of powerful actors imposed by their interests threatened the political will shown by some political leaders.

CHAPTER 7

BACK TO THE EMPIRICAL PATH: PRESENTATION OF CASES 4, 5 AND 6

In the previous chapters, I presented three cases-studies related to the mainstream top-down, non-participatory, conventional development thinking that was adopted by the post-independence state in Algeria. I discussed their philosophical and theoretical foundations, and asserted the irrelevance of this thinking for the post-development era.

In this chapter, I will present three other case-studies which will be analyzed and discussed. These cases have been selected for their idiosyncratic features which will be used to confront theoretical postulates with real-life events that happened daily in any development action. The underlying criteria recall the main theoretical foundations of my development vision which are based on participation of the beneficiaries, either direct (individually) or indirect (through representative local organizations), and on social learning and how new knowledge can enhance the achievements of a development action, either at the planning, implementation or evaluation stages. All cases relied particularly on a strong mechanism of participatory evaluation that gave room to the beneficiaries to discuss and comment on development objectives and strategies, and thus propose their own vision.

Among these cases, the first one focuses more on a participatory monitoring and evaluation model (M&E) that took shape throughout the chronological evolution of the development action itself, and shows the effects of this model on the planning and implementation of the project's activities.

The second case introduces a new vision of how implementing a development action using public means and resources to create a truly participatory sustainable development. Moreover, this case shows that public bureaucracy is not a monolithic block and that there can be civil servants who are ethical and moral and who consider development from another point of view with different values.

The third case, the most innovative in terms of development, introduces a vision of a genuine grassroots participatory development with very limited external help. It is in fact innovative at least at three levels: (1) It developed on the spot, in the field, through a trustful partnership strengthened through the second case mentioned above, and aimed at complementing this case; (2) It concerned the education aspects, especially of those who represent the future generation of pastoralists, i.e. the primary school pupils living in the steppe rangelands areas, and dared to enter the world of national education as an original experiment which was gratefully acknowledged by the local and regional policy-makers, and; (3) It did not rely on public funding resources to start the basic activities, even though some resources for practical field-work exercises were mobilized through a public agency.

7.1 Case No. 4: The cereal production improvement project

7.1.1 General outline about the project

As I have already described in Chapter 4, Algeria has become since independence one of the biggest cereal net importer countries in the world. Many policies on cereal crop improvement has been implemented since the beginning of the 1970s, which didn't stop the deterioration of this situation. In fact, cereal production stagnated while, under demographic pressure (population growth more than 3% a year during the 1970s), domestic demand was booming. Imports had to fill the gap between domestic demand and supply, given that cereal grains represent a major food staple for large segments of the population [see Box 7.1.1(1) below].

Box 7.1.1(1) - How important are cereals in Algeria?

Cereal crops are of paramount importance in Algeria, either at political, economic, social, or nutritional levels. They represent a very old tradition in agricultural practice, especially for wheat and barley. Any farm, whatever legal status it could have, incorporates at least one of these two species in its annual land-use plan.

Algeria's total arable land area is estimated around 7.5 to 8 million hectares. Each year, Algerian farmers cultivate an average of 3.5 to 4 million hectares under cereal crops, even though domestic production does not actually cover more than a third of the total needs. Cereal crops count for almost 50% of the annually cropped land. However, the cereal-based farming systems, including food legumes and/or forages in addition to fallow, count for more than 90% of the total arable land [see Table 4.4.2.1(2) in Chapter 4].

The average production of the last 10 years has never gone beyond 2 million tons a year, which represents at maximum 30% of the domestic needs [see Table 4.4.2.1(3) in Chapter 4].

Observation of time-series related to cereals productivity in Algeria has revealed that within 10 years-range, the highest performance of the national average productivity was 845 kilograms per hectare, while the lowest was 411 kilograms per hectare.

Cereals at the same time represent 80% of the average food diet, 70% of the total amount of proteins in the diet, and 60% of this diet in terms of calories.

In spite of this strategic importance, Algeria is one of the ten most major cereal net importers. Algerian imports of cereal grains count for not less 70% of the domestic needs. This situation visualizes very well the vicious circle of extreme dependency which the country is locked into.

Source: field notes

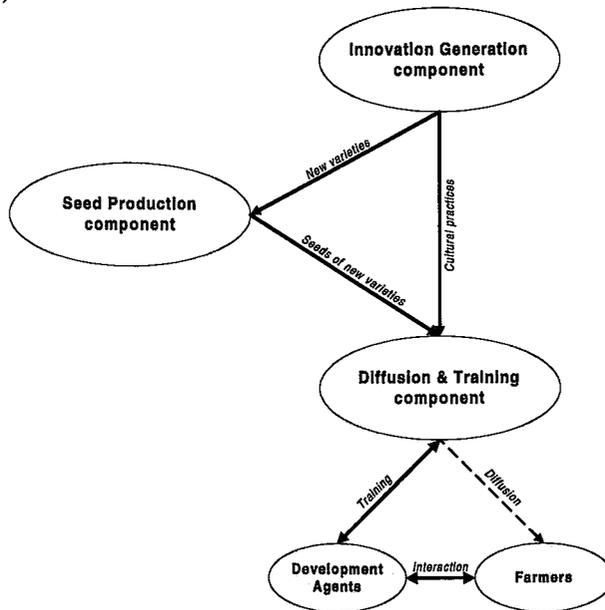
Given this *problématique*, the situation became unsustainable after 1986 when the oil-prices crashed, and solutions had to be found. In this context, in October, 1986, after an intensive discussion between development and international co-operation experts from both countries, France and Algeria governments agreed to co-finance a project on cereal production improvement in the province of Sétif (19) in central eastern Algeria [see Figure 4.2.5(1) in this book].

The region was well chosen, for it was one of the most productive cereal zones in the country for centuries. It used to be called the "breadbasket of the Roman empire". Located in the semi-arid *High-Plateaus* ecological zone with at least a 900-meter elevation, it is characterized by tough and cold winters and dry and hot summers.

The so-called project was supposed to provide solutions to the technical weaknesses reported for cereal production processes among what was known at that time as the *Domaines Agricoles Socialistes* (DASs), i.e. the state-owned and workers self-managed farms. Its main focus was on setting up a high-productivity agricultural technology system linking generation, diffusion, and utilization of innovations. Based on this orientation, three components constituted the basis of the project:

1. The Innovation Generation (IG) component;
2. The Diffusion and Training (DT) component, and;
3. The Seed Production (SP) component.

Figure 7.1.1(1) - Basic items of the project's underlying philosophy
 (Source: this study)



As Figure 7.1.1(1) above illustrates, the interdependency between the three programmes resided in the underlying philosophy that the IG component would generate new technologies (develop cultural practices and/or release new varieties) adapted to the harsh - though sometimes extremely differentiated - environments of the project area. These technologies would be diffused into the farmer's context through the DT component. In case new varieties would be developed by the former component and in case their diffusion would be successful, these new varieties would

first be passed to the SP component to get them sufficiently increased diffusion to eventually meet the farmers' demand. As the development agent - farmer interface is extremely important to the outcome of the project, training on specific topics would be provided to development agents in order to improve the quality and productivity of the interaction at this interface.

7.1.2 Major actors and executive partners of the project

From the outset, implementation of the project involved both long-term expatriate French experts with great experience in R&D and Algerian staff from different organizations.

The Algerian partners were:

- The *Institut Technique des Grandes Cultures* (ITGC) Algiers-based headquarters was the executive agency of the project, which channeled the Algerian funds, and was thus the main co-ordinator and evaluator of the project;
- The ITGC Sétif-based station for the three components and for the monitoring of the project;
- The *Direction des Services Agricoles* (DSA) of Sétif province for the DT component; and,
- The *Coopérative des Céréales et des Légumes Secs* (CCLS) of Sétif for the SP component.

The French partners were:

- The *Caisse Française de Développement* (CFD), channeling the funds from the French government;
- The consultancy bureau FERTILE for the IG component;
- The *Atelier Départemental de Développement Agricole* (ADDA) of the *Chambre d'Agriculture des Alpes de Haute-Provence* for the DT component; and,
- The *Groupement National Interprofessionnel de Semences* (GNIS) for the SP component.

For the Algerian part, it was the first time - since the common R&D approach has been put aside for many years along and replaced by a mere commodity approach - that a project was conducted on a multi-disciplinary development perspective, linking research to development. Since then, this type of *federative project*, as it was named at that time, became the new development paradigm among ITGC staff and within the Ministry of Agriculture as well.

However, the project team concentrated on the technical issues of cereal crop improvement without acknowledging the socio-economic dimension of the context of such a development action.

Financial resources came from both Algerian and French parties. In contrast to other projects, the budget of this project was not fixed from the outset for the whole duration. On the French part, there was an initial allocation of 6.458.000 FF at the

level of the *Caisse Française de Développement* (CFD), which served for the start of the project. Every phase would have its budget. When this initial allocation was over, the project team, depending on the results and decisions of the evaluation meeting, would introduce a demand for additional funds either to the CFD if the allocation was still available, or to the *Comité Mixte Algéro-Français des Projets*, if the amount deposited at the CFD was over. In the fourth phase (Act IV), the project benefited from another allocation of funds which amounted to 3.753.000 FF.

For the Algerian part, the project started with an initial contribution of 2.500.000 AD from the CCLS de Sétif, which was refunded by the *Office Algérien Interprofessionnel des Céréales* (OAIC). This covered the first and second phases. Another contribution of 3.018.000 AD came from the government (Ministry-Delegation of Planning and Ministry of Agriculture and Fisheries) and had to cover the last two phases.

The details of these funds is given by Table 7.1.2(1) below.

Table 7.1.2(1) - Detailed funds allocations of the project's different phases

Phase	Algerian contribution (in AD)	French contribution (in FF*)
1st Phase (Act I)	2.500.000	4.200.000
2nd Phase (Act II)		
3rd Phase (Act III)	3.018.000	2.258.000
4th Phase (Act IV)		3.753.000
TOTAL	5.518.000	10.221.000

Source: ITGC

* In the late 1980s, 1 FF was roughly equivalent to 0.80 AD.

7.1.3 Chronological evolution of the project

Before starting a descriptive 'journey' into the evolution of the project, it is useful to mention that the official document signed by both French and Algerian governments (which was the sole project document at the starting point) decided to launch the project first for an initial phase of 18 months. This phase would determine the course of the project for other eventual phases. Implicitly, the duration of the project was meant to be longer, but how the future of the project would be structured would be decided during the evaluation session that would be held before at the end of the initial phase.

The overall objective of the project was the improvement of cereal production in the region, but no detailed plan of action was provided to the field implementers. Both authorities agreed to leave this to the specialists, who would propose the course of action after they gathered a comprehensive understanding, and thus knowledge, during the initial phase.

Figure 7.1.3.1(1) - Configuration of the project during Act I
(January 1987 - June 1988)

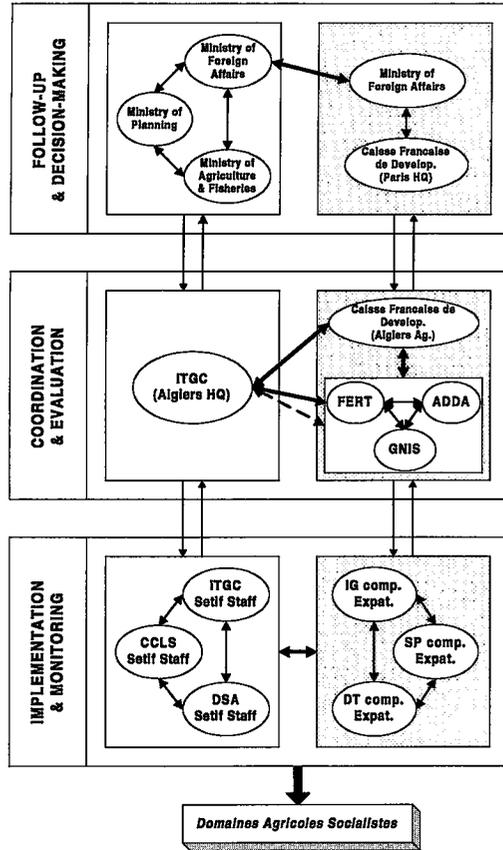
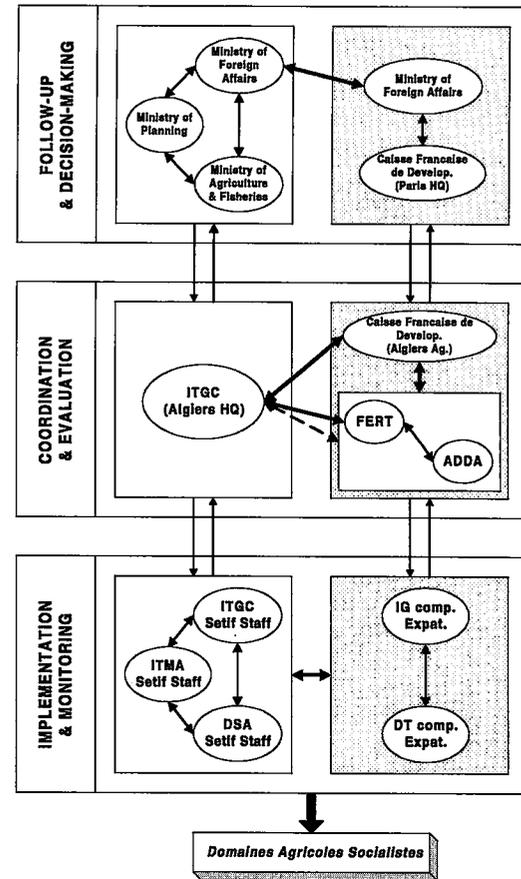
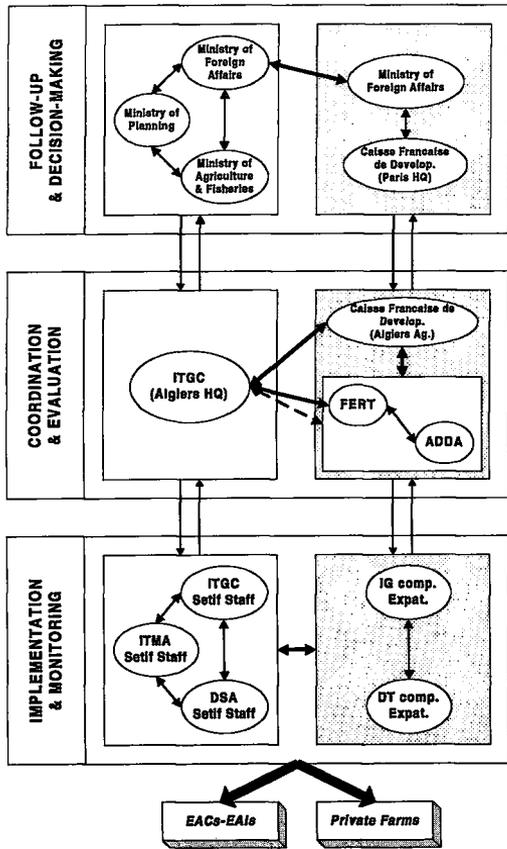


Figure 7.1.3.2(1) - Configuration of the project during Act II
(October 1988 - August 1989)

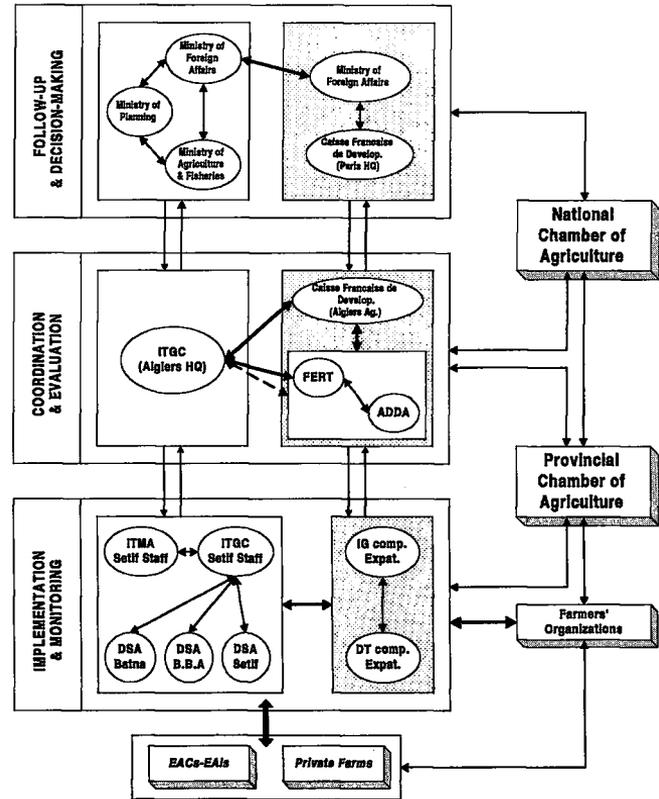


NOTA: The grey area represents the French part of the project, while the white area concerns the Algerian part.

**Figure 7.1.3.3(1) - Configuration of the project during Act III
(October 1989 - September 1990)**



**Figure 7.1.3.4(1) - Configuration of the project during Act IV
(October 1990 - September 1992)**



NOTA: The grey area represents the French part of the project, while the white area concerns the Algerian part.

7.1.3.1 Act I: January 1987 - June 1988

The project started in January, 1987 on its first 18-month phase. Three French expatriates settled down in the ITGC Sétif station, and the Algerian-French team started working, backstopped by short consultancies from highly-experienced French scientists and/or ITGC headquarters staff.

This first phase mainly aimed to investigate, in depth, the different constraints that negatively influenced cereal production in the project area. During this phase, the configuration of the project was as Figure 7.1.3.1(1) shows.

An evaluation session took place at the end of the phase in September, 1988, at ITGC headquarters, gathering together Algerian actors and French partners. The outcome of this evaluation were as follows:

- A documented analysis of the agricultural technology system within the project area was presented by the Algerian-French team, discussed and approved by the participants. This analysis acknowledged that, for any development action to be successfully undertaken, there had to be a trustful interface between farmers and development staff. It mentioned the striking evidence that, in the region, development agents were not adequately prepared to work in this 'new' context, and needed thus to be accordingly trained before the project would undertake any activity towards the other side of the interface, i.e. the farmers' community.
- The linkages between research (ITGC) and technology transfer (DSA), described as very weak, needed to be strengthened through, among many other measures, the establishment at the ITGC station of a small team chaired by an ITGC staff, and included the French expatriates of both IG and DT components, and both ITGC and DSA development staff involved in the project. This team would be in charge of editing reports and brochures that could be used to 'transform' the scientific findings into an 'accessible-to-farmers' message.
- The Seed Production (SP) component needed to be stopped because it was premature to think about increasing seeds of the new varieties as far as the investigation revealed that the problem was no longer the availability of new seed varieties, but mainly the lack of adoption of these varieties by farmers. In fact, ITGC has been on breeding new high-yielding semi-dwarf cereal varieties working for more than 15 years and posses many of this kind.

Moreover, given that there was an on-going negotiation at that time between the Algerian authorities and the European Community for funding a specific project on cereal seed production improvement, there was no need to duplicate efforts in that field as far as the model of organization that would emerge from the would-be EC project could easily be replicated in the Sétif region.

According to this evaluation, there was decision made to extend the First Phase for an additional 10-month period so that the capacity of the development agents to build and maintain a trustful interface with farmers could be improved.

7.1.3.2 Act II: October 1988 - August 1989

During this phase, a significant emphasis was placed on development agents' training in order to help them improve their performance at the interface with farmers. But before starting this training programme, an attempt to design a new Provincial Development System was undertaken by a joint ITGC-DSA team. This sought to incorporate entities working locally in the fields of research, extension, and education, and their inherent articulations and linkages.

Analysis of this proposed system revealed that there was a need to incorporate an agricultural education centre, the *Institut de Technologie Moyen de l'Agriculture* (ITMA) of Sétif, to secure the fulfillment of the training needs. The configuration during this phase changed to be as Figure 7.1.3.2(1) shows.

Moreover, participation of farmers themselves in the project needed to be mobilized in a representative way, which will be examined later.

At the grassroots level, the project introduced the 'one-development-agent-for-one-commune' slogan. The *Délégué Communal* (DC), as he was called, was a DSA development agent who should be discharged from all administrative business in order to exclusively focus on development activities within a commune. Each DC had to identify a group of farmers to start working with as a pilot unit in order to set up a trustful interaction.

For this purpose, all DCs attended a cycle of short training seminars (4 seminars of 2-3 days each) during this phase. This training programme provided them with the required skills of a real development agent. It should be mentioned that the theoretical foundation of this programme was based on the philosophy of the 'linear model' of technology transfer.

Many aspects such as farm management, communication techniques, farmer file-keeping and so on, were introduced to the curriculum of this programme. It served as a pilot model and aimed to build up a final version that would be used in other similar regions. It was therefore based on the very active participation of the DCs themselves whose input was highly appreciated by the French expatriates.

Additionally, training activities were held in France. These mainly concerned the researchers/experimenters and the staff affiliated with the team in charge of editing brochures and bulletins. Themes related to experimental designs based on farmers' constraints and expectations as well as communication methods and writing styles were developed.

On another field, and in anticipation of the coming phases, the project started very smoothly, developing activities with farmers. In this respect, representatives of French farmers' organizations visited Algeria to establish a forum of experience exchange with their local counterparts.

At the end of this phase, an evaluation meeting took place in September, 1989, in the project area. Some new actors, such as development staff of DSA, teachers of ITMA and invited farmers, attended the meeting along with the previous year's

participants. The evaluation came up with very interesting conclusions. Some of them were as follows:

- During the two-and-a-half years of its existence, the project had given enough attention to the first side of the development interface (researchers and development staff). In the future, the project must basically focus on the farmers' side of the interface.
- Some activities undertaken by the DT component through the new Provincial Development System proved to be highly instructive and were discussed in-depth within this evaluation meeting. The focus was on how to get ITGC researchers more involved as subject-matter specialists (SMS) in solving farmers' problems in a more '*développement à la carte*' way. Participants in this meeting adopted a new model of farmers' support and assistance, known as '*personalized monitoring*'.

At the end of the evaluation, some activities, mostly oriented towards the farmers' side, were scheduled for the coming phase which was decided to last until the next September (one year). Among the planned activities, the following are worth to mention:

- A programme of demonstration plots and field-days on improved cereal crop techniques would be conducted by the DCs, with the help of the DT component, especially the French expatriate who proved to be a very experienced man on development issues¹, and other Algerian scientists.
- One or two visits of Algerian farmers to France would be arranged, in order to complete the forum of exchange that started earlier in Algeria with the visit of representatives of French farmers' organizations.
- A group of DCs would visit their French counterparts to be inspired by their working and organizational methods. It was decided to choose the best ones in the project area, in order to reward them for their hard work.
- The new semi-private collective and individual farms (EACs-EAIs)² should be included in the project in replacement of the dissolved DASs.

7.1.3.3 Act III: October 1989 - September 1990

This phase proved to be one of the most important steps in the project. It was the one which gave a new orientation to the project and put the project on a more 'organismic' track in comparison with other 'contemporary' projects that ITGC dealt with or was dealing with at that time. 'Organismicity' resides in the in-built flexibility mechanisms which made the project able to adapt to new situations in very dynamic environments.

¹ In fact, when his contract was over, ITGC decided to enroll him in the EC project on a similar diffusion programme oriented towards seed multipliers.

² These new farms were known as *Exploitation Agricole Collective* (EAC), and as *Exploitation Agricole Individuelle* (EAI). The proportion is 75% of the new farms for the former, with 3-5 members, and 25% for the latter. The State still is the owner of the land.

In fact, conceived, as said before, as a means of bringing solutions to the technical weaknesses of cereal production processes in the DASs, the project could have been closed up at that moment as far as the existence of such farms was no longer possible in Algeria. Due to the implementation of the 87-19 Law concerning the reorganization of public agricultural sector, the DASs were divided into EACs-EAIs. The status of these new farms was completely different from the former as far as the civil, economic, and financial responsibilities were no longer the state apparatus' business. Instead, they were the obligations of the collective or individual ownership of the usufruct of these farms, given that the state remains the owner of the land.

During this phase, the project undertook initiatives to prepare for a complete switch from the DASs to the EACs-EAIs by including some of these new farms in the project network. This changing environment helped to increase the awareness of all actors involved, be they collectively or individually, upon the necessity to also include some private farms, given that some similarities were assumed to be found between these latter and the EACs-EAIs. In fact, most of the actors involved in the project were undoubtedly convinced that the strategizing capacity of the new EACs-EAIs would resemble the private farms more than the former DASs. In this regard, it was necessary for them to understand the way private farmers made decisions and managed their farms, which have been completely left out for more than 25 years, by the socialistic development thinking of the state agencies. Of course, this does not mean that the development of the DASs over the years followed the principles of a sound and rational approach, yet they received most of the attention from the state.

After the decision to integrate these new farms into the project, the configuration of the project became as Figure 7.1.3.3(1) shows.

At the end of this phase, the feeling among all project actors was that the project should no longer focus exclusively on increasing cereal crop productivity through the introduction of new, improved, high-yielding technologies. From then on, the project should aim primarily at getting farmers better organized to influence development and solve their problems. The idea was to discover the best organizational mechanism to help them pull down and steer the state services to adequately respond to their needs. As Cernea (1984: 192) suggests,

Intensified agriculture cannot occur without intensified human organization.

The evaluation held at Sétif in October, 1990, yielded three very important outcomes that dedicated the project's future undertakings towards a more 'social-engineering' orientation. The most important outcomes are briefly mentioned hereafter:

- After all the activities undertaken by the project towards scientists and development staff, and the visits of Algerian farmers to France, who were very enthusiastic since their return, it was time to 'construct' an improved development interface with the necessary condition that farmers get organized to set their own development agenda. Under farmers' suggestion and pressure, project staff decided to schedule some initiatives to be undertaken with farmers in the next

phase to facilitate the formation of new forms of farmers' organizations. It has to be said that these initiatives did not please the leaders of the *Union Nationale des Paysans Algériens* (UNPA), created during the one-party-system. This would also have required adjustments by the development agents. Since the DCs were trained for working with organized farmers and exchanged experiences with their French counterparts, they could initially keep up with these changes, yet it was too early to assess, given that it was only through practicing in their own context that they could learn how to adapt to this new situation.

- The evaluation by the DT component team, especially by the French expatriate, of the demonstration plots and field-days programme undertaken by the DCs helped understand the reaction of farmers towards the project's recommendations better. First of all, it appeared that cereal crop improvement actions could not be isolated from the overall farm and its farming system(s). As a consequence, this called upon the project team to include some activities about livestock husbandry and nutrition and potato cultivation in the DT action plan for the next phase, although these activities needed the intervention of two other ITGC sister organizations, that are respectively the *Institut Technique des Elevages Bovin et Ovin* (ITEBO) for the livestock activity, and the *Institut Technique des Cultures Maraîchères et Industrielles* (ITCMI) for the potato activity.
- Secondly, it appeared that improving any aspect of the farm would first require an investigation of the farm and its inherent farming system(s), which could not be undertaken in a mono-disciplinary pattern and/or in the absence of social scientists. It was then stated that the project's future activities must comply with a systemic (and thus multi-disciplinary) approach, therefore integrating research on the lacking dimension of socio-economic variables.
- Moreover, to overcome problems that had recently appeared among some development organizations in Sétif province (reduced contribution of DSA development staff under the pressure of UNPA, which opposed the idea of creating new farmers' organizations), it was decided to expand the project activities to two other neighbouring provinces (Batna and Bordj-Bou-Arréridj).

These three points set the agenda for the next phase, which was decided to be longer than usual (2 years). It needs to be mentioned that socio-economic variables, as referred to in the second evaluation outcome mentioned above, were mostly perceived by ITGC natural scientists, such as breeders and experimenters, as economic elements only. This was also true for some decision-makers in ITGC and the Ministry of Agriculture.

I had to personally question people many times when they talked about, for instance, socio-economic studies, asking them to what extent the intended socio-economic studies were socio- and economic at the same time, and not only economic. I even asked them where scientists with an academic degree in socio-economics could be found, and in which university were these people educated. People were

frequently puzzled responding to these kind of questions, as they took the concept of 'socio-economy' for granted.

7.1.3.4 Act IV: October 1990 - September 1992

Finalizing the decision to expand the project activities into two other neighbouring provinces consumed a large amount of the implementers' energy and time during this phase because of the originality of the project's strategy (farmers' participation, creation of new farmers' organizations, exclusive role of DCs on development issues, etc.).

However, the expansion of the project to other provinces coincided with the Ministry of Agriculture and Fisheries application of the 1990 Executive Decree, which gave freedom to farmers, among other citizens, to organize themselves into free associations. This process was completed by another Executive Decree promulgated in early 1992 regulating the settlement of the National and Provincial Chambers of Agriculture [see section 4.1.5].

In this respect, the project configuration had changed again and became as Figure 7.1.3.4(1) shows.

During this phase, some field-days and visits to ITEBO and ITCMI experimental stations and pilot farms on livestock husbandry and nutrition and on potato cultivation were undertaken, as demanded by farmers themselves during the last phase. These activities concerned the Sétif province only and were organized by the DCs and the DT component, under the indirect supervision of ITEBO and ITCMI, which were not directly involved in the project and intervened in these activities only upon the demand of the ITGC Director General. However, the socio-economic research did not start due to lack of clarity and co-ordination of the subject by the project team.

Nevertheless, this phase seemed very laborious in terms of activities and yielded highly-impressive outcomes which I think are worth reporting, according to the evaluation meeting discussions:

- This phase showed how diverse responses came from similar entities *vis-à-vis* the same stimulus. In fact, the DSA of Bordj-Bou-Arréridj managed to assign a DC to all communes of the *wilaya* within the first year of its involvement in the project, and provided them, at the *wilaya* expenses, with a motorcycle each, while the DSA of Sétif was still waiting after no less than five years for the project to provide its DCs with means of transportation, as it did in 1991. This was an additional point which legitimized the expansion of the project, showing that a state bureaucracy was not a monolithic block.
- It also showed how farmers of the Sétif *wilaya* were very enthusiastic about founding the first farmers' UNPA-independent association in the country after they visited their French counterparts. From the outset of the movement, before this phase had started, UNPA firmly opposed even the idea of settling new independent configurations among the farmers' population. But the moment

UNPA leaders saw that the movement was on the right track and became finalized when the Minister of Agriculture and Fisheries announced the establishment of the National and Provincial Chambers of Agriculture, they strongly lobbied the movement in order to control it for their own exclusive benefits. For this reason, they preceded the movement in other regions and provinces, and former UNPA leaders were placed at the top of the newly-founded farmers' organizations. However, this was fortunately not the case in the project area, where the leadership of all newly-settled farmers' organizations was awarded to people who had always been very critical of the non-representativeness of UNPA and the unscrupulous practices of its leaders in general (be they at the local, regional or national level).

An evaluation meeting was held at the end of this phase in September, 1992, and a few decisions were made:

1. The project's first period (1986-1992) needed to be closed, given that some French and Algerian procedures related to project planning and funding needed to be respected.
2. An ex-post evaluation of the whole period should be conducted, upon the terms of reference that were already prepared by the project team.
3. A new project (second period) would be designed upon this evaluation's conclusions.

At that point, some indicators had been developed for the new project. Proposed to be of a 5-years duration, split up into at least two or three phases, the project would strengthen the capacity of the newly-set farmers' organizations to design their own development agenda. It was provisionally entitled "**Sustaining Farmers' Organizations Claim Capacity in Sétif Region**". The proposed project was welcomed by the *Comité Mixte Algéro-Français de Projets*, which agreed to co-fund it according to the indicative budget that was discussed and adopted at the evaluation meeting.

The new project was in fact scheduled to start in early 1993 after the project's first period ex-post evaluation would be over. Unfortunately, the security situation rapidly declined in Algeria and neither the ex-post evaluation have taken place nor the new project started. This shows how development co-operation is sometimes hampered by the socio-political conditions in a given country.

7.1.4 Project configurations and actors involvement

As it would have been already noticed, different actors were involved in the implementation, monitoring, and evaluation of the project's first period (1986-1992). But what was peculiar about this project was the fact that actors' involvement was not as static as a conventional, blue-print project would have been. It kept changing adequately as the project evolved. When changes in the project's environment were

noticed, these were immediately taken into consideration in order to adapt the project to its new environment [see Figures 7.1.3.1(1), 7.1.3.2(1), 7.1.3.3(1) and 7.1.3.4(1) above].

However, as in 'multiple realities' situations, it was opportune to uncover the opinions of these different actors involved in the project through interviews of planners, researchers, extensionists, farmers, donors, etc.. Being more numerous, farmers outnumbered the rest of the interviewees.

Box 7.1.4(1) - What did the French partners think of this project?

For the Caisse Française de Développement (CFD), the basic partner channeling the funds of the French government, the project was quite an innovation from the methodological point of view. CFD was even very keen to 'capitalize' on the experience through a scientific publication.

FERTILE, which was dealing with many other projects in French-speaking Africa, wanted to develop an extrapolable model out of this project, and put much more effort and resources into it than the ITGC-FERTILE contract stipulated in order to facilitate the evolution of the project.

For the Atelier Départemental de Développement Agricole (ADDA), the project was a good initiative for developing a training module for development agents and see it work on the field. It has to noted that the French expatriate delegated by ADDA to the project played an active role in this achievement. After having delivered a satisfactory motion about him, the Institut Technique des Grandes Cultures (ITGC) recommended that he should be recruited by the EC Seed Project in Constantine province. The man was recruited in early 1993 and then replicated the training module in the neighbouring province.

For the French government in general, the project was a real success and deserved funding for its continuity.

Present once in the 1990 evaluation meeting, an official from the CFD Paris headquarters told me: "I think that we face a new animal of project, looking very flexible and moving like a snake towards its destination, without having a precisely-and-by-advance fixed one. It's quite original to me having been working for almost three decades with projects but I see a big danger for such a kind of animal; it can end-up everywhere but nowhere too. Because of this, we have to be very careful."

Source: field notes

If the project received an excellent mark on the French side [see Box 7.1.4(1) above], even though some dangers may have hampered its desired course, on the Algerian side, the appreciation was somehow mitigated among the different actors at the start of the project. In fact the satisfaction of the technical staff [see Box 7.1.4(2) below] developed after the first two phases (Acts I and II) was faced by a complete disapproval from farmers who were not directly involved in the project. Their disapproval concerned the technological orientation of the project [see Box 7.1.4(3) below].

Box 7.1.4(2) - Algerian staff's opinion of the project

The Algerian staff involved in the project was, in general, very enthusiastic about the innovativeness of 'their' project in terms of incorporating stepwise the changes of the project's environment. Some of the following statements are appropriate indicators to show the atmosphere the project set in the region and how this was transmitted in the feelings and acts of different technical actors.

Researchers published many publications and articles from their findings, while developers continuously produced brochures and bulletins about the technologies developed by ITGC station.

The development team, a 'merger' between ITGC station staff and DSA staff, tried their capacity of abstraction in designing a theoretical model of the Provincial Development System, which was discussed and re-discussed many times for improvement.

Planners at ITGC headquarters and the Ministry of Agriculture and Fisheries were very keen to develop their 'offensives' against the Ministry of Planning to have the additional funding needed for the project allocated on time.

Top managers at ITGC and some directors of the Ministry of Agriculture and Fisheries praised the project for linking research to development and developed the slogan of a 'federative project' as a model taken out of this project and recommended that agricultural projects work on this basis.

Source: field notes

Box 7.1.4(3) - Private and EACs-EAIs farmers' initial opinion of the project

The discussions I had with some farmers that disagreed with the project's technological orientation were very informative and demonstrated that their perception of the cereal production process was closely linked to the issue of annual rainfall, which they considered as the most limiting factor of cereal production. It was in fact recognized that scarcity and erratic distribution of rainfall was the essential factor that influenced farmers to limit their adoption of improved technologies for cereal production. Consequently, farmers adopted very extensive (low investment with acceptable return) 'packages', characterized by poorly prepared seedbeds, hand-seed broadcasting, very low amounts or no fertilization, no herbicides use, etc.. The most important thing, however, is that farmers used their own landraces in terms of seeds, instead of adopting improved high-yielding varieties (HYVs) because these were seen as less responsive to their conditions. Moreover, they crop land once every two years, leaving it fallow for the next year, with fallow used as a main basis for livestock rearing. Once the project started its activities, the assumption was that cereal production in the region could be developed only with the intensification model, promoted through the use of HYVs, mainly known as semi-dwarf varieties, supported by a high consumption of external inputs.

*Even though farmers developed a positive perception toward this model in terms of land productivity, as they saw through the demonstration plots, they recognized that they could not make use of this model because of the rainfall problem they recurrently face. Moreover, they could not relinquish their 'traditional' practices because of a very simple fact: Their cereal-fallow biennial strategy, integrating livestock, is based on an indicator called **income**, to the contrary of the planner whose indicator in crop improvement is **yield** [see Box 7.1.6(1) below].*

As one of my interviewees said: "I just cannot imagine myself investing all my savings in autumn to assume getting it back the next summer, knowing all the recurrent climatic risk I am living with in this area". Most farmers interviewed thought that, from the outset of the project, researchers and extensionists were trying "to bring the water-stream upwards with their loose hands".

Source: field notes

Evidently, planners, researchers, and extensionists were very satisfied with the project, for they considered it a real innovation in terms of development activity and international co-operation for development. Notwithstanding, some farmers did not understand why the project was investing in an intensive technology of cereal cropping that, although very productive in rainy years, does not suit the local conditions of their arid and semi-arid zones. Unless water is available and irrigation equipment is affordable, supplemental irrigation, for instance, as recommended by the project, cannot be thought of, given the conditions of their farms.

However, after the first and initial opinion developed by farmers after the first two phases, farmers became more positive about the project as it incorporated the environment's changes as it evolved and made room for their direct and active participation [see Box 7.1.4(4) below].

In fact, after they started participating in evaluation meetings, and benefited from new knowledge, after their field visit to France, for instance, farmers started feeling more concerned about the project and their opinion towards it improved tremendously.

Box 7.1.4(4) - Private and EACs-EAIs farmers' opinion change about the project

Since the start of the project's third phase (Act III), farmers began to take part in multilateral evaluation meetings and actively participated in criticizing the project's activities, making suggestions or proposing ideas to be considered during the planning of new phases.

Further discussions with French farmers and Algerian development agents led farmers to understand the necessity of becoming better organized in professional terms. New forms of professional organizations were necessary to participate in setting the development agenda.

One of the indicators that could show their 'ownership' of the project is the way they reacted very enthusiastically in creating their first UNPA-independent association in Sétif province (and the first farmers' association in the whole country) without paying attention to the pressure the UNPA local leaders were putting on them.

As one of the farmers participating in the 1990 evaluation meeting told me: "In this project, I benefited from a visit to France where I saw a goat rearing farm. For many years, I have been interested in setting up a similar unit in my farm. Now, with some farmers, we will create a goat rearing farmers' association and ask the state to import improved goat breeds that we will increase here in the region. With this we can improve the availability of animal products in the market. And besides, this kind of livestock does not ask for a high proportion of farm-external inputs such as imported feed concentrates".

Source: field notes

The position of the UNPA local leaders was made very clear from the first phases of the project. In fact, after having participated in the 1989 evaluation meeting, they refused to attend the next two meetings, thus putting pressure on the project team to drop the idea of creating new farmers' organizations. This was in fact perceived by them, as they once said openly, as a denial of their legitimate mandate of peasantry representation [see Box 7.1.4(5) below].

Box 7.1.4(5) - UNPA local leaders' perception of the project

For the UNPA local leaders, farmers' participation in the project, which stimulated farmers to create their own professional organizations did not to please them. This way of thinking was not in line with the 'culture' of this politically-oriented organization. Created by the FLN party in 1974, among other mass organizations, UNPA was explicitly meant to 'politicize' farmers' and develop their level of ideology. However, its implicit hidden agenda was to control and 'canalize' farmers. UNPA local leaders opposed even the idea of talking about creating new forms of farmers' organizations, let alone the fact of creating them.

When I questioned some of the local UNPA leaders on their opposition to the setting up of new, professionally-oriented farmers' organizations, they replied that it was just an unnecessary redundancy that would lead to the division of peasants' for their better control and containment by external agents (?). They said they would never accept this, and perceived this project even as a threat to their power and authority in the province.

Nevertheless, when the idea gained some strength, these leaders were the first to lobby for their election to at least the farmers' organizations executive committees, or better yet, as chairpersons. It was not IF YOU CANNOT BEAT, JOIN THEM any more, but IF YOU CANNOT BEAT THEM, TRY TO BE THEIR LEADER.

Source: field notes

7.1.5 The project's main development interface

Being development-oriented, the project had to articulate its intervention at the main interface that was central to its performance, i.e. the *Délégué Communal* (DC) - farmer interface. However, I assume that this interface did not exist from the beginning of the project for the simple reason that the *Domaines Agricoles Socialistes* (DASs), certainly being farms as entities, cannot be taken as farmers as they were staffed by agricultural labourers (or workers) who did not perceive these farms as their own 'thing'. Thus, it is useless to try to conceptualize the DASs labourers as farmers, although their activities were based on some farming features (land, machinery, inputs, livestock, cattle, etc.). This summarizes the whole story of 'autogestion' in Algeria [see Box 5.1.5.2(1) earlier in this book].

It was only when EACs-EAIs and private farmers were incorporated in the project, on the one side, and the DCs started to be trained to build up such interfaces, on the other, that a real development interface started taking form. It is for that that I will focus mainly on this interface to describe how it evolved, and what its influence was on the evolution of the project.

As mentioned earlier, some farmers were very disappointed by the technological orientation of the project before they were incorporated into it. From the outset, the interface was undermined by this opinion they had about the project. However, the specific training of the DCs and the visit farmers had with their counterparts in France played a great, positive role in bringing the two sides together to collaborate and redefine the dynamics of the interface.

Hereafter I will introduce three items of this interface: (1) The opinion of a farmers' group on their collaboration with the DCs [see Box 7.1.5(1) below]; (2) The opinion of a DCs' group about their work with the farmers, especially the private ones [see Box 7.1.5(2) below]; and, (3) An original aspect of this project which resides in a development agent who was trained by the project as a DC and later founded an EAI, and who could give the feeling of both having been a DC as well as becoming a farmer that worked with the project [see Box 7.15(3) hereafter].

Box 7.1.5(1) - Private and EACs-EAIs farmers' opinion on collaboration with DCs

"At the beginning, we were not happy with the technological orientation of the project, as we saw ourselves excluded de facto from such an orientation. When you do not possess the basic requirements for such an improved technology that the project was promoting at the beginning, you know in advance that you will not be part of that project. Always the DASs, throughout the years. These 'domaines' swallowed too many funds for nothing.

When the project invited some of us to the ITMA for the first gathering of the project team in 1988, we hesitated to join but at the end decided to observe what would be presented. When they presented the DCs, we thought, ironically: "Again, we will talk about délégués". But when our DCs started visiting us regularly and discussing some technical issues about cereal production, some contact was being established. This contact was strengthened after the visit to the French farmers and the consequent discussions we had with them.

When some of us attended the evaluation meeting for the first time in September 1989, we were amazed by the degree of flexibility shown by the project and how the project team incorporated our suggestions when planning activities for the coming phase.

Since that time, our collaboration with the DCs increased and concerned diverse issues about the whole farm and not only cereal production. Many times, we discussed about whether getting organized into associations can help us to orient state projects towards our needs. After two years of discussion, some of us decided to create the first association of cereal producers in the country. Others decided to create an association of goat rearing farmers. Others did not want to face the pressure of the syndicate (meaning UNPA)."

Source: field notes

On the other side, the work of the DCs towards the DASs was easily done due to their experiences with these farms. But when private farmers were incorporated by the project, they were afraid for many reasons. They were apprehensive because these farmers were very critical (but seen as stubborn by the DCs) about the state projects, co-operatives and bureaucrats, given their past different experiences with the development state apparatus, such as the agrarian revolution, for instance.

Box 7.1.5(2) - DCs' opinion on collaboration with private and EACs-EAIs farmers

"When we were chosen by the DSA to work for the project, we thought that it was as we usually do with the DASs and above that we could benefit some visits or training courses in France. But when the project started after September, 1989, switching to EACs-EAIs and private farmers, some of us were a bit anxious, especially about private farmers, given their perception of anything that is public and state-related and known their initial perception of this project. We started our experience with them very prudently because we did not wanted it to be a failure. Given the atmosphere set by the project, we want to achieve something positive.

Our contact with farmers differed a bit whether we were with EACs-EAIs or private farmers. But after two years of work together, both sides felt more comfortable in our regular contacts. In comparison to our experience with the DASs, we learned new things from the private farmers and we were more convincing on some aspects that we proposed to farmers. Now thanks to the project, they have their own associations and we are very happy for such achievements, although we felt very threatened by UNPA leaders sometimes.

Due to their new professional organizations, farmers reinforced the discussions we had with them and even channeled them to the capital through the National Chamber of Agriculture. The only thing we hope is to start the new project so that we can help farmers consolidate their new 'constructions' in the future."

Surely the contact with the French system of development and French farmers' organizations influenced the appearance of this new pattern of collaboration between DCs and farmers.

Source: field notes

One peculiar dimension that I want to introduce about this interface is the case of a *Délégué Communal* (DC) that started working with the project in 1987, significantly benefited from his experience with the project, and founded an EAI in 1990.

Box 7.1.5(3) - An initially-DC, presently-EAI owner's opinion about the project

The man was a BSc holder, with a post-graduate diploma from France. He worked for some years as teacher in the Institut de Technologie Agricole where I received my own BSc and ended in the DSA of Sétif province as a development agent. When the project started in 1987, he was among the first DCs that were chosen by the DSA. He was very critical of some aspects of the project but he actively participated in the design of the new Provincial Development System. He was very active during the visit of the French farmers to their counterparts in 1989 in the project area, stimulating local farmers to question their French counterparts about their experiences in establishing their own organizations. Although trained in a French university, the man mastered a good knowledge of local culture which allowed him to speak with farmers and play the role of interpreter during that visit.

In early 1990, he decided to found an EAI and thus became a farmer. In his new occupation, he became very critical (in positive terms, of course) about the project and always put new ideas on the evaluation meeting agenda. He played a very active role in stimulated his fellow farmers to create the cereal producers association, although he was once insulted by a UNPA local leader.

He states his opinion about the project as follows: "I have been involved in many development projects. They were all conforming to the same methodological pattern but, given my experience, this project is rather original. I had never worked or even heard about a project like this one for it kept changing when the environment changes and everyone has a say in the planning of its activities".

Source: field notes

This diversified interface between DCs and farmers played a great role in orienting the project activities, as several discussions that took place between the two parties at the interface level were brought to the evaluation meetings for discussion among participant members. Several decisions made during these meetings had their origins in the interface itself, although it is also true that some decisions were proposed by other actors not involved in the interface itself.

7.1.6 Effects of M&E system set by the project

Although the project did not follow its normal course of action as had been decided (continuation for a second 5-year period), and left some issues pending and open-ended, it really had some positive effects in the field, which are summarized in the following:

1. Reorientation of the project's development strategy: When it became more participatory, the project offered a propitious opportunity for merging farmers' knowledge and development practitioners' knowledge. During their free, trustful interaction with DCs, farmers opened a valuable opportunity for the latter to better understand what motivated their 'on-going' cultural practices, and thus their decision-making process which is rather farming system-based. Moreover, they understood the necessity of becoming better organized to participate in setting their own development agenda and pull down and steer agricultural development public services. These elements played a considerable role in reorienting the project's development strategy, adjusting it to the diversity of farmers' conditions it was dealing with.
2. Creation of the first farmers' organizations in the country: Since 1974, it was the UNPA, a more politically-oriented organization in its essence, which received the blessing of the FLN to represent the farmers, even in professional terms. As all other similar mass organizations acting under the aegis of the FLN, it served as a frame for opportunists to use the organization to represent their own interests. Since the time that the project team had introduced the idea of creating new, professionally-oriented farmers' organizations in the region, UNPA local leaders firmly and openly opposed the project. But this did not discourage some farmers from carrying on the struggle for the idea and got the first farmers' association created in the country. Since then, National and Provincial Chambers of Agriculture were set and consequently opened a new frame of debate in terms of farmers' representativeness, that is, professionalism.
3. Farmers - development agents relationships: The evolution of the project helped to reinforce and improve the quality of relationships between farmers and development agents in the domain of development. The main project's activities that directly and consequently influenced this were the sustained support and training of DCs for a real profile of 'Agent de Développement' and the installation of new forms of farmers' representation in the project's region. These new developments helped to establish a real development interface between farmers

and development agents, on the one hand, and to reinforce the farmers' participation in development actions, on the other. Moreover, information flow and knowledge availability and use improved at both levels of DCs and farmers. A good example of this is the farmers' conceptualization of income, hereafter introduced in Box 7.1.6(1) below.

4. *Farmers' yield improvement in the project zone*: Taken as measurable indicators (although also considered to be indirect ones) of the effects of the M&E mechanisms of the project, not only did cereal yield increase (20% more between 1987 and 1992 in the province average yield), but other crop yield (such as potato) and livestock outcome improved as well. These increases were the result of better-oriented assistance from development agents to farmers, and a direct participation of farmers in setting the priorities of development assistance. For cereal crops, the yield improved not because farmers adopted the improved technologies initially recommended by the project, although some of them meeting the required conditions did. The improvement came from the fact that the project reoriented its strategy towards the farmers that could not adopt the improved technologies. For instance, disseminating information on fallow improvement techniques yielded a better outcome for both cereal crops and livestock.

Box 7.1.6(1) - Farmers' conceptualization of income

According to farmers' conceptualization of income, securing a sustainable income in the harsh environments where they are located requires them to design strategies based on risk management, and accordingly reduce investments.

For them, income, as a return from investment, is the result of the balanced trade-off between expenses and revenues. Sustainable income can be secured through producing more, but this necessitates more investment, which is possible only in conducive, low-risk environments. It can also be secured through maximum reduction of expenses and avoid gambling on their very harsh, high-risk environments. Given their limited amount of resources, they prefer to opt for the second strategy.

A good example of this strategy is livestock rearing on fallow, producing meat at a very-low cost. Instead of using more intensive techniques of cereal cropping which would thus require more external inputs such as HYV seeds, mechanization, fertilizers and herbicides, farmers leave their plots fallow every other year. The land rests and accumulates water reserves for the next cropping season, which makes a higher yield than the same land cropped every year. Moreover, the spontaneous weeds that develop on the resting land serve as free feed for the sheep, which makes meat production cheaper. Given the meat price at the market level, this cropping system is more profitable to farmers located in harsh environments.

It is this centrality of fallow in farmers' reasoning that made certain researchers at IITGC have innovative ideas and think about experimenting fallow improvement techniques and identify what their effects would be either for livestock rearing and/or cereal crops.

Source: field notes

7.2 Case No. 5: The rangelands regeneration and conservation project³

7.2.1 General outline about the project

The steppe rangelands are huge expanses of flat territory, located between the 400 mm and 200 mm isohyets. Since colonization, they have been represented through a vivacious *cliché* depicting them as '*le pays du mouton*' (Boukhobza in AARDES, 1978: 1) or '*Bled El Ghanem*' (Mesli, 1996: 131; Couderc, 1976: 95), both meaning, either in French and/or Arabic, '*the country of sheep*'. The importance of these areas has already been presented in section 5.3 of this study.

Given their importance, these areas were subject to diverse and numerous policies that the state undertook since independence, supposedly for their development. However, it is argued, according to Redjel and Boukheloua (1996: 7), that these policies were based on a vision that rangeland development is an exclusive state obligation. This vision aimed to continue the destruction of both pastoral culture and communities as indigenous institutions in regulating the rangelands; a vision the French colonial state started developing many decades earlier. In fact, post-independence state interventions in these areas were always based on the implementation of 'imported' management and exploitation mechanisms, such as the *Association de Développement de l'Élevage Pastoral* (ADEPs), the *Coopératives d'Élevage Pastoral de la Révolution Agraire* (CEPRAs) and other similar 'tools' which could not match the indigenous system [see section 5.3].

As a result of a lack of grounded knowledge about the socio-cultural aspects of access, use, and management of the rangelands, state policies had, in contradiction of their purpose, far-reaching, negative consequences. Degradation of the rangelands has increased because of two main factors: (1) The anthropic degrading actions over the rangelands that were perceived in many parts as open access resources ('*beylik*') because they lacked a real 'owner'; and (2) The break-up of the natural balance between the feed needs (flocks size) and the feed supply (forage availability). These consequences were exacerbated by the 'open access' character of the range, as the indigenous institutional arrangements were not officially recognized, as well as by the anti-drought state policies carried out since the mid-seventies [see section 5.3].

In order to reverse or at least slow down the process of degradation in the rangelands, the *Haut Commissariat du Développement de la Steppe* (HCDS), a public organization in charge of steppe rangelands development and improvement [see section 5.3], in continuity with the policy conducted before, started a new pilot action on rangelands regeneration and conservation in 1992 based on a new approach: The active participation of local populations and pastoral communities [see Box 7.2.1(1) hereafter]. However, taking into consideration the above-mentioned

³ The study was undertaken under the aegis of the Mashrek-Maghreb Project entitled Development of Integrated Crop/Livestock Production in West Asia and North Africa, in which 8 Arab countries (4 from the Mashrek and 4 from the Maghreb) participated with ICARDA and IFPRI, with funding from IFAD and AFESD.

situation, and taking advantage of the socio-political context of the early 1990s (multiparty 'democracy', freedom of association, etc.), HCDS attempted to develop a very innovative strategy which rested on:

- The partnership between public agencies and local populations in the conception, implementation, and evaluation of development actions;
- The implication of local populations in development management through legal contractualization of the partnership;
- The responsible involvement of local populations in the perpetuation (recurrence) of the rangelands natural function, and;
- The consideration by the public agencies of the pastoral tradition and the local specificities, given that communities devise different strategies and mechanisms in terms of range access, use, and management that are location-specific.

Box 7.2.1(1) - The *problématique* of the steppe rangelands in Algeria

Since independence, the rangelands do not belong - in practical terms - to a 'real' owner. During colonization, they were allocated - or better, re-allocated - to the tribes by the Senatus-Consulte of 1863. In fact, the application of this law resulted in the delimitation of the territories of 709 tribes, although the land was considered inalienable and the tribes had no real officially-acknowledged property right over them (Bennoune, 1976: 13). Upon independence, they were made part of the public domain while the tribes could still use and manage them with a customary tenure system.

Since independence, the Algerian state undertook too many policies attempting to improve these areas in terms of both institutional arrangements as well as technical assistance [see section 5.3 of this study], which did not achieve much, as their biggest problem of Arch (tribal) lands has remained unsolved. This type of collective property represented a particular form of land tenure which was in harmony with the Algerian society of the 17th century. For some reasons evident in the Senatus-Consulte of 1863 [see section 5.3], the French colonial state did not recognize this form of property, and the post-independence state did not change much in the colonial policy, according to Mesli (1996: 124).

Given this attitude towards the recognition of an old, indigenous land tenure system and its relation to the indigenous institutions in charge of access regulation, use, management, and conservation of common resources, the steppe rangelands suffered the break-down of a long-lasting and monitored natural balance between sheep flocks' size and feed availability in these areas. As a result, degradation, and even desertification in some parts, is there, although not dramatic yet. More importantly, population livelihoods could face some problems in the future and no longer be secured if sustainable solutions cannot be found.

Source: field notes

Given the good achievements of this new approach, the government decided to inject more resources into the steppe areas in 1994 through the adoption of the *Great Works Programme for the Steppe* [see Box 7.2.1(2) below].

Box 7.2.1(2) - Brief description of the Great Works Programme for the Steppe

The programme concerns 18 steppe and/or agro-pastoral provinces. Its major objective is to reset the economic and ecological functions of the rangelands. It encompasses four highly integrated major components, which concern:

- *The protection and preservation of the rangelands' fragile zones from the 'threat of desertification' through the restoring of their natural balance;*
- *The conscientization of local populations on the benefits of fodder shrub plantation, through extension activities, to improve their living environment, their feed availability and the sustainability of their ecosystem;*
- *The improvement of rangeland productivity and the orientation of local populations towards the adoption of less-degrading farming systems; and,*
- *The creation of job opportunities and the promotion of income improvement measures.*

The quantitative objectives of the programme for the period 1994-98 are as follows:

- *Absorption of unemployment through creation of 8,000 job opportunities per year.*
- *Restoration of 100,000 hectares of rangelands through fodder shrub plantation.*
- *Natural regeneration of 700,000 hectares of rangelands through protection fences.*

Source: field notes

It has been reported that the government, fearing that the on-going security conditions could be worsened by the unemployment of the young men in these areas⁴, placed a high priority on the allocation of money to this programme in order to create imminent jobs for these people. A good indicator of this resides in the fact that the programme anticipated its start in October, 1994 while the decision of funding of the Ministry of Planning was signed in December, 1994. In common procedures, however, projects do not start until the evoked decision is signed.

Through this programme, the Eastern Regional Office of HCDS, based in Tébessa, succeeded in funding a four-year project (1994-98) on rangelands regeneration and conservation encompassing 5 provinces of the eastern region: Oum-El-Bouaghi (04), Batna (05), Tébessa (12), Khenchela (40), and Souk-Ahras (41) [see Figure 4.2.5(1) in this book]. The main characteristics of the project area are presented in Table 7.2.1(1) below.

⁴ It has been reported that many youngmen, lacking hope in their future because of unemployment and dissatisfaction of other social needs, had been enrolled by the terrorist fundamentalist movement that is bleeding Algeria since 1992.

Table 7.2.1(1) - Main characteristics of the project area*Units: 10³ ha for area, 10³ heads for sheep, 10⁶ FU for feed⁵*

Wilaya	Territorial statistics			Feed statistics			
	Baladia	Total Area	Range Area	Sheep flocks	Needs	Production	% cover
Oum-El-Bouaghi	09	619	51	342	243	78	32
Batna	09	1,204	175	370	334	70	21
Tébessa	28	1,350	718	766	360	62	17
Khenchela	12	981	480	332	256	66	26
Souk-Ahras	08	436	33	110	184	38	21
TOTAL	66	4,590	1,417	1,920	1,377	314	23

Source: CD-HCDS data

It is obvious that the feed shortage is quite significant, given that the project area does not cover more than a quarter of the needs of its sheep flocks. For instance, Tébessa has the largest range area and the highest number of flocks but covers only 17% of the feed needs.

The objectives and the budget of the project are presented by Tables 7.2.1(2) and 7.2.1(3) below.

Table 7.2.1(2) - Quantitative objectives of the project for 1994-98

Wilayate	Pastoral plantation			Fenced areas (ha)	Well creat. *		Job creation (day)	Total funds (10 ³ AD)
	Collect. (ha)	Individ. (ha)	Total (ha)		Dig. (unit)	Equip. (unit)		
Oum-El-Bouaghi	2,100	900	3,000	5,000	5	10	65,220	46,799
Batna	1,700	700	2,400	15,000	5	9	63,208	41,155
Tébessa	7,000	3,000	10,000	18,000	13	23	218,536	152,445
Khenchela	5,250	2,250	7,500	15,000	10	15	165,380	114,402
Souk-Ahras	3,500	1,500	5,000	7,500	5	10	107,220	74,780
Total	19,550	8,350	27,900	60,500	38	67	620,064	429,580

Source: CD-HCDS data

* Created wells were planned on a normative depth of 50 meters each, meaning the total depth was planned to be 1,900 meters.

As the budget shows, pastoral fodder shrub plantation for both collective and individual forms of intervention [see Box 7.2.1(3)] represents nearly 90% of the costs, while the rest is divided between fenced areas (3.7%) and well-digging and equipment (7.5%).

⁵ FU stands for the Feed Unit which is a conventional measure used in cattle and sheep nutrition. One FU is equivalent to the amount of energy given by one kilogram of barley grains.

Table 7.2.1(3) - Distribution of the project's budget among the main components

Unit: 10³ AD

Wilaya	Plantation costs			Fenced area costs	Well creation costs			Total costs
	Collect.	Individ.	Total		Dig.	Equip.	Total	
Ourn-El-Bouaghi	32,918	8,071	40,989	1,310	2,000	2,500	4,500	46,799
Batna	26,648	6,278	32,925	3,930	1,800	2,500	4,300	41,155
Tébessa	109,725	26,904	136,629	4,716	4,600	6,500	11,100	152,445
Khenchela	82,294	20,178	102,472	3,930	3,000	5,000	8,000	114,402
Souk-Ahras	54,863	13,452	68,315	1,965	2,000	2,500	4,500	74,780
TOTAL	306,446	74,883	381,329	15,851	13,400	19,000	32,400	429,580
Importance (%)	71.3	17.4	88.8	3.7	3.1	4.4	7.5	100

Source: CD-HCDS data

Taking some lessons learned from the pilot action begun in 1992 into consideration, the *Commissariat Régional* of HCDS (CR-HCDS) proposed to diversify the forms of project intervention [see Box 7.2.1(3) above] and based the strategy of the project upon a participatory approach, which consisted of:

- The regular consultation and participation of pastoral communities in the project implementation to achieve a sufficient level of consciousness on conserving the ecosystem and making a better use of the natural resources;
- The active participation of the local communes (*baladiate*) through the allocation of some to-be-rehabilitated perimeters and the use of their material resources to achieve an integration between public organizations and attain the set objectives at a lower public price without useless redundancy;
- The undertaking of an adult educational programme aiming to stimulate a true dynamism of local development which could enliven the economic and social functions of the rangelands;
- The contractualization of the relationships between HCDS and pastoralists, either collectively and/or individually, in order to sustain the committed investment.

In addition to job creation, which is the most important expected outcome, the intended effects of the project were tremendous. They were as follows:

1. Improvement of rangeland productivity by increasing the annual uptake from 60 FU/ha to 600 FU/ha through fodder shrub plantation;
2. Containment of the desertification menace through a direct intervention on the vegetal cover and the implementation of a programme of substitutions; the latter will be based on the introduction of less-desertizing, more income-generating and appropriate farming systems, given the specificities of the different types of rangeland exploitation; and,
3. Valorization and enhancement of the pastoral communities' role in rangelands management and conservation through establishing pastoralist organizations, on the one hand, and the establishment of a user-license fee which would be paid to a *Fonds National du Développement de la Steppe* to be created, on the other.

In this view, a mechanism of recurrence would be put in motion to sustain the effects of on-going public investments and bring about management and conservation autonomy to the pastoral communities.

Box 7.2.1(3) - Forms of intervention of the project

As far as fodder shrub plantation is concerned with range revegetation and rehabilitation, the project intervention will take two different forms:

1. *The collective form: Consists of intervening on perimeters allocated by the local communes for revegetation and rehabilitation. Such perimeters must belong to the public domain and preferably not be assigned to private usufructaries, and whose function must be strictly pastoral. In certain situations, where usufructaries are present on the perimeters, the project would recommend a warranted commitment of the pastoral communities to respect the technical conditions of management and use of the rehabilitated perimeter. If degradation happens again, it would be the obligation of the only usufructaries to assume responsibility for it.*
2. *The individual form: Consists of intervening on the basis of contractual agreement on private holdings, acknowledged as such and not being subject to litigation or conflict. In this case, the project provides pastoral plants, such as fodder shrubs, and technical assistance, while the beneficiary would guarantee the planting and cultivation of the plants, according to the agreement. In this form, some 'in-nature incentives' are given to the beneficiary on the basis of the success rate of his planting [see Box 7.2.4.1(2)].*

Source: field notes

However, to achieve these effects, the project designers assumed that some additional measures needed to be taken at the central level (Ministry of Agriculture, government). The most important of these measures was the promulgation of a specific legal text, preferably a law, that would define the legal and institutional framework of the main socio-economic functions of the steppe rangelands. Moreover, the role of these areas in regulating of the natural/ecological equilibrium of the whole country should be acknowledged as well. In fact, the rangelands represent a sort of buffer-zone (or barricade) against the desertification of northern Algeria, and, if presumably, these areas succumb to the desert, it is very probable that the whole country will be desertized, given that the distance between Algiers and the nearest 'border' of the steppe zone is about 150-200 kilometers.

7.2.2 Project context and adopted strategy

The project started in 1994 in continuation of the pilot action that was launched in 1992. The project's context was characterized by a policy of foreign trade liberalization, the adoption of a market economy model, and the application of structural adjustment measures, in accordance with the one-year stand-by agreement signed in May, 1994, by the government and IMF, followed later by a three-year extended facility agreement signed in May, 1995.

The implementation of the 1987 public land reorganization and the 1990 law of land orientation engendered a revival of the pastoral traditions that were in a sort of 'hibernation' since independence. Since then, customary rights of rangeland exploitation regained their place in the centre of the decision-making arena of the steppe rangelands and the traditional, indigenous institutions were strengthened in their old role of regulating users' access to the range. In fact, this role never disappeared; it was just not acknowledged and was frequently and purposely overlooked by public agencies.

This revival of traditional institutional arrangements sustained by the socio-political context of the early 1990s, became a new principle for HCDS in the design of development actions. These have since been based on a fundamental conciliation between rangelands function in terms of farming systems and the respect of the pastoral culture that places indigenous institutions at the centre of the decision-making arena in these areas [see Box 7.2.2(1) below].

Box 7.2.2(1) - The adopted strategy of the project

In comparison to previous development actions that the steppe rangelands underwent after independence, a significant shift took place in the development strategy adopted by HCDS and thus in its development programmes. The newly adopted strategy intended to:

- *Develop new organizational mechanisms that ensure a continuous and regular communication process between development agents and pastoralists; such mechanisms aimed to introduce fundamental changes in the way development agents and pastoralists usually interacted.*
- *Take advantage of the different competencies that are present at the development interface; these are wisdom, experiences and knowledge of the pastoral communities, and the theoretical and practical knowledge acquired by the technical staff and build upon this interaction to achieve sustainability.*
- *Facilitate a smooth and progressive adoption by the pastoralists of alternatives and sustainable technologies made available by development agents.*

However, these items of a new development vision required a systematic adherence to the pastoral communities, either individually and/or collectively, especially vis-à-vis the adoption of the fodder shrub technology both for the conservation and sustainable exploitation of their ecosystem and the sustainable improvement of their livelihood and living conditions. In this vein, such an intervention needed to be supported by convincing discursive practice and behaviour by the development agents as well as concrete technological solutions to be evaluated in the field by pastoralists themselves instead of the 'dirigist' way that was commonly used in the 1970s and 1980s.

In the words of the CR-HCDS Regional Commissioner, the project aimed to re-localize development through improved communication between the stakeholders and reduce the interference of what he calls the 'remote-controlled agriculture'.

Source: field notes

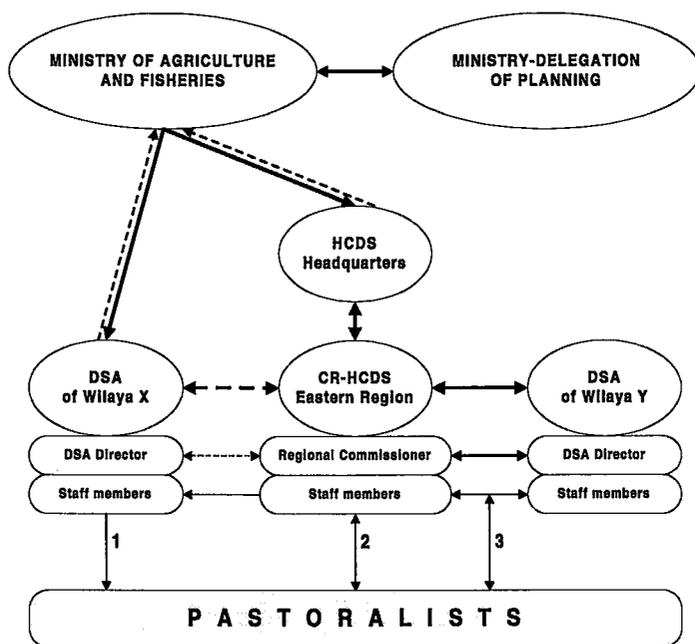
7.2.3 Configuration of the project and actors involved

In Figure 7.2.3(1) below, I attempt to describe the configuration of the project schematically, depicting the major actors involved in the implementation, monitoring and evaluation of the activities. However, to simplify this figure, I avoided representing the five DSAs of the *wilayate* involved in the project. Instead, I represented two types of relationships between the DSA Directors and the CR-HCDS Regional Commissioner: The first one (with bold line) represents a strong linkage based on collaboration, while the second (with dashed line) represents a very weak linkage based on limited interaction [for an explanation, see Box 7.2.5.4(1) hereafter].

Depending on these types of linkages, the interaction between the CR-HCDS staff and the DSA staff at the interface with the pastoralists will take three different forms. These are:

- Indirect and hierarchical (line 1): CR-HCDS staff discusses the set objectives with DSA staff but does not intervene in the implementation of these objectives; it is the duty of the only DSA staff;
- Direct and mono-structural (line 2): CR-HCDS staff directly intervenes in their pastoralists' network without the agreement of the DSA staff;
- Direct and multi-structural (line 3): CR-HCDS staff and DSA staff intervene together in a 'joint-venture' team with the pastoralists.

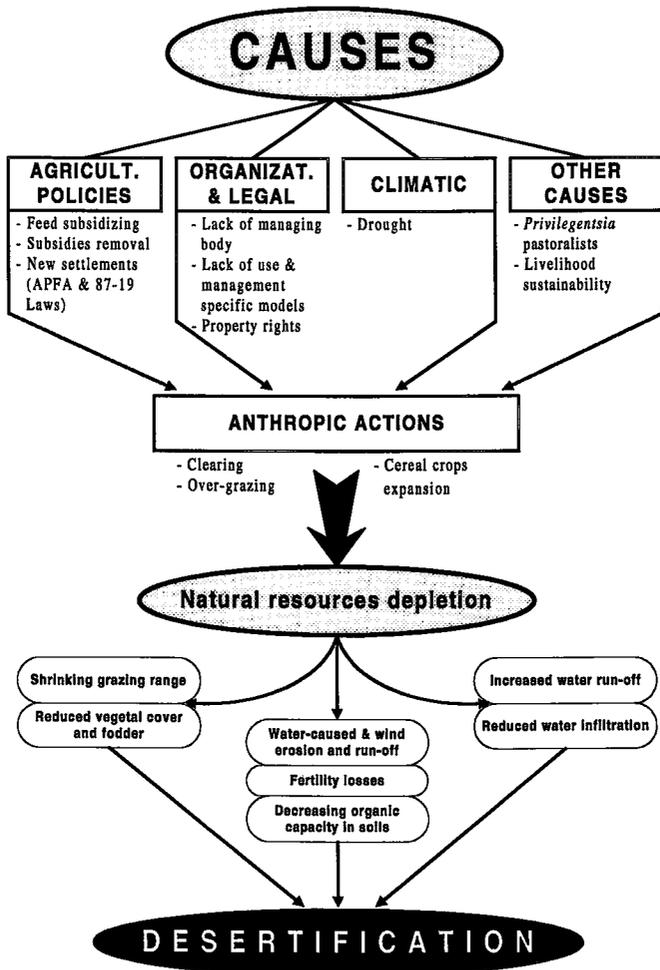
Figure 7.2.3(1) - The project configuration



7.2.4 Major achievements of the project

First of all, the project started by gathering the CR-HCDS staff and some individual pastoralists, heads or representatives of customary indigenous institutions and heads of local communes to attain altogether a consensus on the *problématique* of the rangelands. The discussions took two days and a visualization method was used in order to help all participants understand and internalize the discussions of the meeting. After that, the discussed *problématique* was documented and presented to the participants in a second meeting for re-examination and adoption. The adopted *problématique* is presented in Figure 7.2.4(1) below.

Figure 7.2.4(1) - Factors causing the problem situation in the steppe rangelands (Redjel *et al.*, 1997: 6)



After these meetings, the project team, consisting of CR-HCDS staff and DSAs staff, started putting together and operationalizing the strategy developed earlier and decided to steer the project activities towards three levels of intervention:

1. Intervene at the level of vegetal cover through fodder shrub plantation, either in collective and/or individual form [see Box 7.2.1(3) earlier], and following the participatory approach.
2. Intervene at the level of substitutions by introducing some alternatives that are less demanding on the rangelands but more income-generating and appropriate. Otherwise, the intervention at the former level would be hopeless. At a maximum of every five years, the government (or public agencies) should start the same process of range revegetation.
3. Intervene at the software level in order to conscientize, educate, and train local populations on how and why better rangeland exploitation and management is strongly conditioned by their behaviours and thus by their role, either collectively or individually, in conserving these natural resources. This latter type of intervention seeks not to teach pastoralists these aspects but only to stimulate them to actively play the role their fathers and grand-fathers were used to for centuries.

A mid-evaluation meeting took place in July 2nd and 3rd, 1997 at the CR-HCDS (Tébessa) which I was supposed to attend but for personal reasons I could not. In this meeting, the achievements of the project were reviewed and discussed. Hereafter, I introduce some of the major results the project achieved. In quantitative terms, the results were quite satisfactory in comparison with the planned objectives. Table 7.2.4(1) below describes these achievements.

Some results remain very interesting in terms of efficiency. For instance, the project realized 29 wells, amounting to 76% of the objectives with only 54% of the planned total depth. Moreover, 71% of fodder shrub plantation objectives were realized and 72% of the planned employment was attained.

Table 7.2.4(1) - Brief description of the quantitative results of the project (1994-97)

Wilayate	Pastoral plantation			Fenced areas (ha)	Well creat. *		Job creation (day)	Total funds (10 ³ AD)
	Collect. (ha)	Individ. (ha)	Total (ha)		Dig. (unit)	Equip. (unit)		
Oum-El-Bouaghi	2,290	445	2,735	2,000	4	3	92,740	42,813
Batna	1,177	23	1,200	13,000	2	1	43,064	22,398
Tébessa	719	3,905	4,624	0	10	4	52,731	37,035
Khenchela	5,712	1,239	6,951	1,000	7	3	194,329	99,740
Souk-Ahras	1,163	3,176	4,339	500	6	2	66,039	44,458
Total	11,061	8,788	19,849	16,500	29	13	448,903	246,444
Realization rate	57%	105%	71%	27%	76%	19%	72%	57%

Source: CD-HCDS data

All these results were achieved with only 57% of the planned total cost of the project, which shows a great mastery of the project and thus an efficient management of the public funds, contrary to what commonly happens in state interventions.

However, some results are still low and explained by the low procedures of tendering for the well equipment (19%), which was mainly decided at HCDS headquarters. For the fencing areas, the low realization rate (27%) is explained by the reticence shown by the project team to again go into this kind of activity which moves the local population out in order to rehabilitate the perimeters.

This technique has been used several times in the past without achieving the expected results. When the perimeter is reopened for grazing, a 'tragedy of the commons' is likely to happen again. But the project team had to include the objective of 60,000 ha to be fenced only for the reason of getting the project funded, given that some 'big shots' in HCDS headquarters still believe in the fencing technique.

On the other hand, the public cost was lower than planned because of the active participation of the beneficiaries. The total costs shown by Table 7.2.4(1), above, represents only 80% of the total cost of the realized investment; the remaining part of the costs came from the pastoral communities (18%) and the local communes (2%). If the active participation of the local communes was motivated by the job opportunities the project offered for their young populations, the pastoral communities actively participated through the funding of some items of the investment because they were convinced by the project team to 'own' the project. It was true that these communities that were thwarted many times in the past could not believe in 'smooth' and 'massaging' discursive shows, but for once they started really believing in this project, given the morale of the CR-HCDS and the strong dedication of his staff [see Boxes 7.2.5.1(1) and 7.2.5.3(1)].

Participation of the pastoral communities was concretized in both direct and indirect ways. As a direct participation, 3,311 pastoralists (12% of the whole pastoral population of the project area) participated in carrying out the project activities. Each of them, concerned about fodder shrub plantation, either collectively or individually, mobilized himself and his family members as labour to plant and nurture the pastoral plants provided by the project.

As indirect participation, 18 pastoralist associations were created to represent the communities towards the project and the CR-HCDS, and attend the project meetings. The idea of creating these associations stemmed from the project team in order to prepare the local populations for the 'after-project' phase. In order to avoid the failure of this experiment, the CR-HCDS Regional Commissioner proposed that each association should espouse the boundaries of the traditional, indigenous (tribal) institutions in order to avoid clashes and complement them by focusing on technical aspects related to the range use, management, and conservation.

Moreover, participation of other public institutions was very high. 57 local communes (90 % of all communes of the project area) consequently supported the project and actively participated by mobilizing their material resources, such as lorry-tankers for water transportation, etc.

However, some constraints encountered by the project need to be mentioned. The centralization of the funds management at the HCDS headquarters was inappropriate to the nature of the project's activities and its expanded area. If it is undeniably true that the project created real job opportunities, salaries and wages, however, took too long to be paid to the beneficiaries, given the mentioned centralization pattern.

7.2.5 Actors' perception of the project

Many actors intervened in this project, but the success of its activities remain significantly influenced by some peculiar ones. One must assume it is difficult and even hazardous, in fact, to tie the results of any project to the performance of an exclusive actor, as far as I consider sustainability as the autonomy of a development action from any given influence. I assert, however, that this project owes much to the great competence of the CR-HCDS Regional Commissioner himself, and thus the hard working of his staff members.

This was even evident in my discussions with some other actors of the project. Every time I asked a question about the project, my informants started answering my question but then unconsciously digressed in the discussion to aspects related to the CR-HCDS Regional Commissioner and the way he managed the project. It was likely that the man and the project could be easily linked together, or were the same entity.

7.2.5.1 *The CR-HCDS Regional Commissioner*

It is rare to meet someone like this man, who is the embodiment of competence, knowledge, morality, and equity. It was even more intriguing that he worked so hard without gaining any advantage from his administrative position, his salary being similar to a common development agent, having the degree of *Ingénieur d'Etat*.

In fact, the man developed a great balance between his own administrative position, which systematically conferred power over the resources allocated to the project on him, and his good contact with his staff. He kept consulting his staff and carefully listened to anyone's ideas [see Box 7.2.5.1(1) below].

On the other hand, he is very well-known among the pastoralists, collectively or individually in both the project area and his mandated area. He was shown a great reverence and recognition for his competence. He was very knowledgeable about their culture and history, and recited the *Senatus-Consulte* of 1863 by heart. Moreover, he was known to be difficult to corrupt, as he never agreed to be complacent in order to please others.

The project was of great importance to this man because he strongly participated in its conception and design, especially in the way he gathered all stakeholders to elaborate the diagnostic that grounds the descriptive, substantive theory of the

project. He investigated in depth, with the intensive participation of a core of pastoralists, the *problématique* of the rangelands [see Figure 7.2.4(1) earlier] and elaborated, with the same group, a prescriptive theory for the project based on a three-level integration, among which a paradigm of *substitutive conservation* is being conceptualized [see Box 7.2.7(1) below]. For him, such a project would be unsuccessful outside this conceptualization of the rangelands *problématique*, and without simultaneously integrating the three levels of intervention mentioned above.

Box 7.2.5.1(1) - The Regional Commissioner and his meaning of development

It is the so-called Mashrek-Maghreb Project that has offered me the propitious opportunity to visit the Rangelands Regeneration and Conservation Project in Tébessa, and to closely look at the development work the CR-HCDS Regional commissioner is doing in the region.

Graduated in 1991 as a Master of Sciences in Agricultural Engineering from Colorado State University, the CR-HCDS Regional Commissioner possessed some charisma that let him be the kind of person that nobody can resist listening to when he speaks. It was reported that Mesli (cited many times in this study), during his visit to the region as a Minister of Agriculture some years ago, had to ask for a chair and sit down when the CR-HCDS Regional Commissioner started talking. It is clear that the discourse of this man is so captivating even for a minister. After this event, Mesli asked him, through his cabinet staff, to move to the Ministry at Algiers and offered him different positions there, but he politely declined all of them.

I visited the project and was really impressed by the tremendous amount of work the man carries out on a daily basis, not only in terms of physical efforts but in the context of a truly sustainable, participatory development as well. His refined conceptualization capacity led him to develop a practice of substitutive conservation [see Box 7.2.7(1) below], and we are both currently working to shape its theoretical contour.

During field visits, when we were both with farmers, I noticed he never said a word on behalf of the project beneficiaries, he just let them speak for themselves. When I asked him a question about the project, he always replied politely by asking the question to the pastoralists themselves as he believes they know a lot about it.

When I knew that the man was paid as a common development agent, I became surprised and asked him why he declined the offers made earlier by the Minister of Agriculture. He convincingly replied: "Agricultural development is in the field not in the office, and my place is in the field of development. Agriculture cannot be remote-controlled."

Source: field notes

Once, we were visiting a pastoralist in his farm. During the discussion we were having with the farmer, I asked the Regional Commissioner a question about how many hectares the farmer planted with fodder shrubs. He reminded me that the question should be directed to the pastoralist himself because we were on his farm and he is the only one who steers the development process of his own farm. I was more impressed later when I discovered that he knew the answer.

7.2.5.2 *The CR-HCDS staff*

As someone who has been working for a long period within the Ministry of Agriculture, it was the first time that I was facing a situation where the example of a public agency leader positively influences the performance of the staff, although the socio-professional problems this staff encounters are tremendous (low salary, bad working conditions, low morale, lack of motivation from the Ministry of Agriculture and Fisheries, etc.).

The CR-HCDS employs a multi-disciplinary team composed of 2 MSc holders (the *Commissaire Régional* (CR) and the deputy CR) and 4-5 *Ingénieurs d'Etat* (higher than BSc), at the main office in Tébessa. This team was complemented in the field by a team of 10 staff members, mostly of a *Technicien* grade, in order to carry out the activities. The mandated area covers around 4 million hectares of steppe rangelands, making each one of the team members travel at least 1,000 km a week.

Box 7.2.5.2(1) - How do the CR-HCDS staff members react towards the project?

For many of the CR-HCDS staff members, the project is not perceived as different from what they regularly do. It is just continuity for them, even though they believe, that with the project, they are put under close scrutiny by all stakeholders (government officials, HCDS high staff, DSA Directors, pastoralist organizations, local communes, etc.). This places a high pressure on them and they take this project more as a challenge because previous similar actions have been total failures. They know that the project calls on hard work and continuous efforts, but this does not discourage them.

As one of them said to me: "When you work with a person like our Regional Commissioner, you cannot sit all day in your office without doing something, as many DSAs staff do, for instance. You are inclined to work and work hard because your boss is an example for you. The way he talks to you never makes you feel second rate. At the beginning of the work relation, he talks to everybody as he would to a responsible, mature person. Later, if you do not live up to his standards, he changes his way and considers you as lacking responsibility to yourself and your duties. It is the latter way that he treats our zootechnician (young woman) friend".

To all CR-HCDS staff members, the Regional Commissioner is the perfect example of the hard working chief, an example that is rarely found in Algeria these days. Although, he shows some restraint when evaluating them, they all believe this is the right way for their carrier; they all believe in working hard for the project and learn more through their daily interaction with their chief and/or with the pastoralists. As one of the staff members once told me: "I learned more about agriculture with the pastoralists than in school. In the agricultural high school, they teach us how to teach farmers while here I discovered that I am gaining more knowledge than I am in fact giving to the pastoralists". In contrast to that context, some of the staff members said to me, with a strong sense of humour: "We should not have accepted being assigned to the CR-HCDS because we have learned the 'wrong' things; how to work hard under any condition, for instance. Meanwhile, other colleagues who graduated with us and were assigned to other organizations, such as DSAs, are just relaxing in their offices all a day without bothering about their salary."

Source: field notes

Each of them tries to meet the standards of the chief by working hard and trying to keep up to date and committed to his assignments [see Box 7.2.5.2(1) above].

However, there is the exception of a zootechnician woman who was not integrated into the team even though she worked there for at least four years. She lacks a sense of initiatives and ideas, and cannot handle difficult assignments.

7.2.5.3 *The pastoralists of the project area*

During my field work, I had to interview some pastoralists about the project and the CR-HCDS Regional Commissioner and staff members. I had never in my professional life heard farmers talking so positively about a project which they considered to be 'theirs', and about the people that worked for that project, who they considered to be working for their own (the pastoralists) development [see Box 7.2.5.3(1) below].

In many similar field visits, development agents take visiting people to 'model' farms, i.e. where there are only positive results they can show about their work. Once these visitors would begin a discussion with a farmer, the development agents would talk more than the farmer himself, sometimes even inhibiting him from speaking frankly. In the case of this project, I could choose my interviewees and informants at random; every time I was talking with a pastoralist, the CR-HCDS Regional Commissioner (or his staff members) kept quiet and did not talk.

From the onset, this behaviour raised some doubts in my mind as, in a country like Algeria, it is not easy to believe at the first glance what people say. When a statement is too broad, one becomes more suspicious about it, given the culture of fallacies developed by the regime. For instance, if one popular march is organized by ordinary people to show support for the president of the Republic on a specific issue, one can believe in the spontaneity of this march. But if too many popular marches are organized within the country at the same time for the same purpose, one is very suspicious about their spontaneity.

After I visited all the selected informants, however, the pastoralists' thoughts made me believe that what was said about the CR-HCDS Regional Commissioner and the way he managed the project could be true. However, as a matter of triangulation, I had to look for some appropriate indicators to confirm the pastoralists' views.

One of the appropriate indicators was the level of realization achieved in fodder shrub plantation. In fact, plantations of *Opuntia* sp. (Cactus shrub) reached 1,200 ha in one year (1996) within a single commune of the Souk-Ahras province. This achievement was attained although some people, either for the sake of an easy criticism or by jealousy, launched a campaign against the CR-HCDS Regional Commissioner based on a rumour saying that the man was "polluting the steppe rangelands with *Opuntia*".

Another indicator resides in the opinion of the DSA Directors itself. In Algeria, where the bureaucratic apparatus is mostly staffed by 'privilegentsia'⁶-linked incompetent people, it is rare that someone is well-known because he does a hard and good work. In contrast, a culture of labeling others as incompetent to better hide their own is very common among these people. In this vein, the refusal of three DSA Directors to be interviewed about the project [see Box 7.2.5.3(1) below] can only be explained by the fact that the way the project was managed really did 'shake up' the actual status-quo in the region.

Box 7.2.5.3(1) - Pastoralists' opinion of the project and the executive agency

Given their past experiences with state agencies, farmers were very skeptical about the project from its outset. After three decades of collaboration with public agencies, they became very doubtful about these organizations which, in their opinion, were corrupt and served exclusively privileged farmers' interests.

*After some time, they discovered some new qualities in the CR-HCDS Regional Commissioner which tempered their skepticism towards the project and, by association, towards civil servants. His advice that they should organize into new representative farmers' associations resulted in the self-funding of their associations by transferring 4% from their net income of *Opuntia* fruits (Cactus figs) sales, as they had no recourse to public subsidies as many associations legally do. These are some indicators of that change.*

One day, due to complex financial procedures in the public sphere, the CR-HCDS could not repair a project water-tank trailer that was regularly used by pastoralists to water their new fodder shrub plantations. Convinced that it was not a lack of will from the Regional Commissioner, they spontaneously decided to repair it at their own expense.

*Again, during a field day, the CR-HCDS staff invited some pastoralists to watch a video tape on the use of young *Opuntia* pads for feeding their livestock, edited by the CR-HCDS itself. Pastoralists were very enthusiastic about the tape and asked the CR-HCDS Regional Commissioner if the development of similar tapes was possible for other subjects of interest to them. As the lack of a video camera was the limiting factor, they decided to participate with 100,000 AD in order to buy the item for the CR-HCDS. Recently, they made a similar decision to buy a portable computer for the CR-HCDS Regional Commissioner.*

Most of my interviewees, especially farmers and development agents, were unanimous about the qualities of the CR-HCDS Regional Commissioner, first as a person, then as a development agency manager. A president of a farmers' organization told me: "Unless he is on a mission or ill, he is in the office every day at 7:30 and supervises every activity of the CR-HCDS. For professional matters, he travels hundreds of kilometers every day to check things. If I need any information or help, I can have it even through a phone call, unless he is away on a mission or a training course. This man is really different than other officials we have had to deal with for many long years. To meet them, one had to queue from 8:00 until they come to their office only from 10:00 onward. And lucky the one who could find them and luckier if he could meet one of them".

Source: field notes

⁶ I owe this word to N. Boukrouh. He used the word in an article he wrote in El-Watan daily newspaper in July 1998 to describe the population of privileged persons that sustain the on-going political regime in Algeria.

7.2.5.4 *The staff of the Ministry of Agriculture and its decentralized structures*

The DSAs of the five *wilayate* involved in the project responded differently vis-à-vis the project, either at the level of the directors or the technical staff which was involved in the project implementation. Some of them, such as Oum-El-Bouaghi and Souk-Ahras really did work hard to achieve the set objectives and consequently achieved 91% and 87% of their planned total plantations. Meanwhile, others were just taking it as a normal undertaking, as were the many similar failures they had to deal with for several years. However, the *wilaya* of Khenchela achieved 93% of its planned total plantations because of the intensive work of the CR-HCDS staff that was positioned there. Yet, the presence of the whole CR-HCDS in the *wilaya* of Tébessa did not help them latter to realize more than 46%, far behind the *wilaya* of Batna which realized 50%. This shed some light on the quality of the relationship between the CR-HCDS Regional Commissioner and the DSA Director in this *wilaya*.

The DSA Directors are the only ones to decide how deep the involvement of their staff is in a given project, due to reasons that can assumed or even clearly uncovered [see Box 7.2.5.4(1) below].

Thus, if any DSA technical staff shows devotion and/or willingness to collaborate within a project, they will be thwarted in many different ways when this is not the will of the DSA Director himself. The last thing to do to discourage these personnel is to not provide them with means of transportation when they have to do field work for the sake of fulfilling their commitment to a given project, or to join a meeting of another project, or even overwhelm them with extraordinary tasks so that they lack time for a project's assignment.

After all, being myself one of the Ministry of Agriculture staff, having long practical experience with the functioning of the DSAs and the Ministry itself, the reaction of the DSA Directors was not new and was very understandable to me. Their reaction was motivated by the fact that if this project succeeded, it would not only reveal many errors committed in the past in these areas in the name of steppe rangelands development, but it would also empower the local populations to negotiate the development agenda, since they would have a successful experience to refer to.

Moreover, it will reveal that the technical staff in the Ministry of Agriculture can achieve positive results if the work context is conducive, meaning that the boss is the first one to 'get his hands dirty'. The success of this project can in fact confirm the very popular French saying that, in Algeria, "*there are not bad soldiers but bad generals*".

Box 7.2.5.4(1) - What do some DSA Directors think of the Project?

For the project as well as for other regular activities, the CR-HCDS develops professional links with the five DSAs of the project area, all being public organizations and civil service units. The former is a co-ordinating agency of pastoral development at the regional level. The latter are intervening units in agricultural development at the wilaya level; they have the duty to co-ordinate all activities related to rural and agricultural development that takes place within the territorial boundaries of their wilaya. In such a project, this poses a problem of institutional competence as far as a given wilaya is concerned. And given the innovativeness of the CR-HCDS in this project, this made the situation more complex.

Three out of the five DSA Directors refused to be interviewed. I assume they were not happy with the performance of the CR-HCDS in this project and saw me as a close friend of the CR-HCDS Regional Commissioner.

The remaining two thought similarly. They considered that the project was doing quite a good job but did not appreciate the strict way the CR-HCDS allocated the project resources, such as well location, on purely technical matters. Many times, they tried to ask the CR-HCDS Regional Commissioner to allocate this resource for that location, the latter referred them to papers they had already sent him to finalize the project document, with no mention of such a need. In other words, the fact that the CR-HCDS Regional Commissioner stuck to their initial requests that were elaborated in the presence of pastoralists' representatives did not please them, as it reduced their room for manoeuvre in steering the project towards their own preferences.

While looking for feed back from the CR-HCDS Regional Commissioner about what the DSA Directors said, he bluntly told me: "These people wanted to use the project resources, being public resources, in order to manipulate local populations to vote for the regime's candidate during the 1995 presidential elections. This was done before, but now we are supposedly in a multiparty democracy, and as public administration, we should be neutral. I do not want to be used in campaigning for any candidate or party. This is the main foundation of their problem with them".

In 1998, the five DSAs of the project region coalesced and wrote a report to the Minister of Agriculture and Fisheries about the situation of the project and mentioned the problem they faced with the CR-HCDS Regional Commissioner. During his visit to the wilaya of Khenchela (one of the five wilayate of the project area), the minister alluded to this problem in an open, official speech which pushed the man to ask for a meeting with the minister but he refused. As a consequence, the man felt very discouraged but never resigned. For him, it would have been abdication in front of these incompetent DSA Directors.

Source: field notes

Finally, as being part of the picture as a researcher, I shall attempt a brief appraisal of the project [see Box 7.2.5.4(2) below]. The aim is to show the originality of this project, in terms of approach and strategy of rural and agricultural development in general, and pastoral or agro-pastoral development in particular.

However, the so-called originality of this project has to be seen in the Algerian context, and was significantly conditioned, as I demonstrated earlier, by the exemplarity of the CR-HCDS Regional Commissioner as well as by the hard work, strong commitment, and dedication by his staff to the project.

Box 7.2.5.4(2) - The researcher's own appraisal of the project

The case-study describes a typical picture of the state withdrawal from the position of being the unique implementer of development actions as it was for no less than three decades, even though some public organizations are still intervening in this project. In fact, it is in contrast to the state interventionism that was strongly present in post-independence Algeria and which resulted in a sort of development characterized by:

- *A pastoral community rejection by of technological 'solutions' advocated/sponsored by the state agencies;*
- *An accentuation of the rangeland degradation caused by the irrational exploitation of rangelands that were denied an appropriate institutional management mechanism;*
- *An exclusive concentration on the technical dimension in the technology generation process and/or in the institutional dimension without paying enough attention to the socio-cultural and economic aspects which affected the resilience of development actions in the long run, especially with the first attempts of fodder shrub plantation.*

The new vision of development was based on a 'shared responsibility' between the development agency (the state) and the pastoral communities, which was strengthened through 'contractualization' of the collaborative relationships. An original feature was that it took into consideration the lessons learned from previous state interventionism failures within the same areas [see section 5.3].

Source: field notes

7.2.6 The project's main development interface

The main interface in this project is the one that takes place in the field between development agents and the pastoralists. However, as Figure 7.2.3(1) above shows, this interface was far from being unique. In fact, the same interface took at least three different forms, each achieving different outcomes:

1. The best form was the direct and mono-structural (line 2), where the CR-HCDS staff had to intervene directly with pastoralists, like in Khenchela. As a result, 93% of the set objectives of fodder shrub plantation were realized.
2. The second best form was the direct and multi-structural (line 3), where CR-HCDS staff and DSA staff both intervened in a 'joint-venture' team with the pastoralists. The results were quite significant (91% for Oum-El-Bouaghi and 87% for Souk-Ahras).
3. The weakest form was the indirect and hierarchical (line 1), where realization of the set objectives was the duty of the DSA staff only. The results were rather low (50% for Batna and 46% for Tébessa). The morale of the DSA staff played a significant role.

The different forms that this interface has taken describe how the level of commitment and dedication of the technical staff, sometimes highly conditioned by the morale and values of their chiefs, influence the outcome of a development action. As many references present bureaucracy as a homogeneous social system where

values and norms are shared by all its members, this interface shows that it is misleading to continue considering that any bureaucracy represents a homogeneous, monolithic block where all members think and behave the same way.

7.2.7 Field effects of the project

Based on the achievements of the project, and more particularly on its participatory approach, the programme reinforced the spirit of active participation among rural populations in the implementation of the scheduled activities, through collective responsibility within the collective rangelands, and through contractualization with individual households. According to Redjel and Boukheloua (1996: 10), the adopted type of 'contractualized' partnership achieved the following:

- A description of the main foundations of a new paradigm on substitutive conservation [see Box 7.2.7(1) below] which should be the basis of any intervention in the steppe rangelands in order to bring about the required balance between the feed demand (the size of the flocks) and the supply (the feeding capacity). Yet, this paradigm still needs to be elaborated upon at the theoretical level.
- A significant savings in state investment costs: The cost for one hectare of fodder shrub plantation decreased by 52% in the collective rangelands and by 77% on individual private farms, as compared to the state companies [see Table 7.2.7(1) below].

Table 7.2.7(1) - Comparative costs per hectare of fodder shrub plantation

Items	Private farms	Collective rangelands		state companies
		Mechanized	Manual	
Cost per hectare (in AD)	10,041	13,975	20,530	42,960
Rate of saving (in %)	77	67	52	0

Source: Redjel and Boukheloua (1996: 14)

- A progressive behavioural and mentality change by the pastoral communities towards their responsibility in 'their' rangelands. There was a complete shift from causing the degradation of the rangelands to an active participation in attempts to rehabilitate the degraded rangelands through fodder shrub plantation, either individually and/or collectively. The best evidence to support this statement is the incredible growth of the area planted with fodder shrubs on private farms in the Eastern region of the country [see Tables 7.2.7(2) and 7.2.7(3) below]. In comparison, the number of farms that planted fodder shrubs based on contractual agreement [see Box 7.2.1(3) earlier in this section] moved from 10 farms (with 20 ha planted) in 1992/93 to 2,050 (with 4,438 ha planted) in 1995/96, and then rapidly increased to 3,183 farms (with 8,883 ha planted) in 1997/98 in the project area.

Planted species of fodder shrubs were *Atriplex halimus*, *Atriplex canescens*, *Atriplex nummularia*, *Atriplex leuoclada*, *Atriplex semibaccata*, *Acacia cyanophylla*, *Acacia ebernuia*, *Medicago arborea*, *Gleditchia trianchatos*, *Elaeagnus angustifolia*, *Retama retam*, *Opuntia ficus indica*. The latter species experienced a great expansion as it can be used for many purposes [see Table 7.2.7(3) and Box 7.2.7(2) below].

Box 7.2.7(1) - The concept of 'substitutive conservation'

Understanding the concept of substitutive conservation, as a prescriptive theory for rangeland conservation, requires the understanding of the problématique of rangeland degradation. As the 'problem tree' developed by the CR-HCDS Regional Commissioner shows [see Figure 7.2.4(1)], rangeland degradation was influenced by agricultural policies and regimes of land tenure and property rights. Although these influences can be termed indirect, they influenced the behaviour of pastoralists (anthropic action), leading to degradation when their livelihood was endangered. Pastoralists sometimes developed strategies and/or farming systems that can perform well in the short term but are highly degrading in the long run.

A good example of such state policies is the anti-drought campaigns the government has sponsored since the mid-1970s. As a consequence of these campaigns, the natural balance between the feed needs of the flocks and the feeding capacity of the rangelands was broken and an artificial maintenance of an ephemeral balance took place through the injection of subsidized feed into the region. Before the anti-drought campaigns, pastoralists used to operate, in dry years, a systematic de-stocking, through marketing all surpluses and keeping only the reproductive core. After the anti-drought campaigns were started, almost all animals were kept because feed was abundant and cheap, thanks to the state. Farmers resorted to this practice especially when animal sales market prices were not in their favour.

When in the mid-1980s the state was not in a position of sustaining its anti-drought campaigns any more, pastoralists found themselves with a tremendous feed problem and resorted to an intensive, ever-degrading use of the rangelands, first through intensified grazing until over-grazing engendered almost irreversible degradation, then through clearing the range to grow barley for their livestock, as subsidized imported barley ceased to be provided by the state.

To reverse this phenomenon, the project needed to tackle many issues simultaneously, taking the three following principles into consideration: (1) Revegetation of degraded rangelands will have no effect without participation of the pastoralists; (2) Revegetation of degraded rangelands without reconsidering the total number of sheep relative to the feeding capacity of the rangelands will not give sustainable results; and, (3) Reconsideration of the total number of sheep will have no effect if income-generating substitutive solutions are not found. These three principles are the basis of the substitutive conservation paradigm of which aims to reset the natural balance between the flocks' feed needs and the rangelands' carrying capacity without threatening pastoralists' livelihood and living conditions.

Source: field notes

Table 7.2.7(2) - Area planted with fodder shrubs in the private farms (1992-96)

Season	Number of farms per category					Total planted area	Average planted area per farm
	0-5 ha	5-10 ha	10-20 ha	> 20 ha	Total		
	1992/93 season	10	-	-	-		
1993/94 season	249	-	-	-	249	500	2.01
1994/95 season	720	19	2	-	741	1,522	2.05
1995/96 season	1,026	17	5	2	1,050	2,396	2.28
Total	2,005	36	7	2	2,050	4,438	2.16
Proportion (%)	97.80	1.76	0.34	0.10	100.00	-	-

Source: CR-HCDS data

Table 7.2.7(3) - Recent statistics on shrub plantation in private farms of the project area

Wilayate	Commune	Fodder shrub plantation (in ha)					Beneficiaries	
		Opuntia	Others	Total	%	Number	Average land/benef.	
								Opuntia
Oum-El-Bouaghi	08	407	53	460	88.48	222	2.07	
Batna	04	20	06	26	76.92	10	2.60	
Tébessa	23	3,821	191	4,012	95.24	1,616	2.48	
Khenchela	11	979	219	1,198	81.72	687	1.74	
Souk-Ahras	04	3,059	128	3,187	95.98	648	4.92	
Total	50	8,286	597	8,883	93.28	3,183	2.79	

Source: CR-HCDS data

- An increased participation of pastoralists in co-financing development actions through funding the purchase of small but significant items that can serve to their own benefit.

Box 7.2.7(2) - Why *Opuntia* sp. made pastoralists so enthusiastic?

Even though an obstructing rumour was launched in early years of the project, *Opuntia* shrub plantations were spreading at a rather steady rate, especially on the private holdings [see Table 7.2.7(3) above], where involvement was based on a contractual agreement between CR-HCDS and land 'owners'. This pastoralists' enthusiasm about the plant can be explained by its capacity to adapt to the arid environments as well as its multiple uses.

In fact, the fruit, being very nutritious, may be sold in the local market for human consumption or exported. The plant gives two harvests a year. It also can be transformed into jam. Selling the fruit by itself provided a good-enough income for pastoralists during the last years.

The *Opuntia*'s annual 'racquet' (or pad) can also be sliced and fed to the sheep. It is nutritious, rich in water, and with low fibers content, which makes the intake (the rate of nutrients transformed) relatively higher. It can be easily combined with other feed resources to balance the diet. Additionally, it stabilizes the soil against water- and wind-erosion, and when it grows older, it decomposes into organic matter to enrich the fragile soils of the arid areas. It can even be used in cosmetics and pharmacy.

Source: field notes

7.3 Case No. 6: The rangelands population education project⁷

7.3.1 Introduction and justification of the project

The *problématique* of the steppe rangelands in Algeria [see Figure 7.2.4(1) in this chapter] represents a typical situation of "multi-causality" (Lewins, 1992: 27), where many factors or causes intervened in shaping human behaviour which yielded the degradation and depletion of natural resources. At the centre of this *problématique*, anthropic actions of clearing the range to expand cereal crops and over-grazing were influenced by different causes, mentioned in Figure 7.2.4(1). Resolving the situation would require not only the tackling of the effects of the intervening causes simultaneously, but also a necessary change in human behaviour as well. It is thus useless to conduct actions to revegetate and rehabilitate the range if additional, complementary actions inducing behavioural change are not undertaken [see Box 7.3.1 below].

In this respect, the CR-HCDS organized a meeting in November, 1995, of the main stakeholders involved in the Rangelands Regeneration and Conservation Project presented in the previous section. Convinced of the theoretical, logical foundation developed in this project, the CR-HCDS staff made a proposal to carry out a pilot action on population education (both adult education and pupil education in the primary schools). This pilot action intended to increase the pastoralists' awareness about the crucial role local populations can play in the conservation and management of their immediately surrounding ecosystem.

Referring to the *problématique* mentioned above, the CR-HCDS Regional Commissioner saw that degradation was influenced by anthropic actions which are indubitably induced by several causes that can be either development (such as policy ones), organizational, legal, climatic, or even actions aimed at maintaining livelihood sustainability. Thus, some on-going activities of the so-called Rangelands Regeneration and Conservation Project (Case No. 5) would yield better outcomes if implemented in an integrated and holistic way. This should be emphasized even more if attempts to bring about sustainable solutions of the problematic situation are planned.

Linking his proposed educational action to the Rangelands Regeneration and Conservation Project, the CR-HCDS Regional Commissioner argued that the proposed action would focus not only on conscientization of the actual generation that is presently exploiting the rangelands. It should also try to prepare the coming generation (the pupils in the primary schools) to take over the activities of the present generation (their fathers) in due time in such a way that an appropriate pattern of use, management and conservation of the rangelands would be developed.

⁷ This case represents field-work summarized in a paper by Redjel, N.; D. Boukheloua & M. Malki (1997), published in *Dryland Pasture, Forage & Network News*, Issue n° 14, December 1997.

Contrary to the tradition of past state interventions in these areas, the stakeholders adopted the CR-HCDS proposed educative action as a complement to the rangelands regeneration and conservation project [see section 7.2 in this chapter], using the lessons learned from these past experiences.

However, the originality of this action resides in the fact that it was decided on the spot, in the field and not in a planning office. It started without public funds and the stakeholders, principally the pastoralists, mobilized the required resources to carry out the project.

Box 7.3.1(1) - Majors criticisms towards past development actions

For three decades, steppe rangeland development programmes focused exclusively on structural (or 'hardware') aspects and considered measures that solved only the symptoms (natural resources depletion and degradation) and not the causes (the anthropic actions and their underlying determinant factors). Very little attention was paid to the socio-educational and institutional (or 'software') aspects. The planners saw pastoral communities, either individually or collectively, as mere objects of development intervention. Pastoralists, as any other development recipient, could just be 'programmed' to follow the instructions of a modus operandi developed by planners in order to achieve the objectives set for projects and programmes. In this vein, there was no need to develop 'software' activities to conscientize, train, and educate people about they could become active players in the preservation of their ecosystem.

Past experiences in rangeland development programmes in Algeria mainly consisted of 'imported' rehabilitation schemes characterized by an exclusively technocratic vision that imposed a state rangeland development orientation. This vision paid no attention to pastoral communities needs, cultural legacy, traditions and knowledge. Instead of improving rangeland productivity through appropriate mechanisms of exploitation, management, and conservation, these interventions resulted in increasing desertification through the break-down of the natural equilibrium of the ecosystem that in the past had been balanced by strategies and measures applied and legitimized by pastoral communities (see section 5.3 of this study).

In most development plans, resource allocation for 'software' activities was extremely low. For instance, the Second Quinquennial Plan (1985-89) for steppe rangelands development allocated only 0.16% of the allocated funds to such activities.

Source: field notes

7.3.2 Theoretical background of the project

Learning from past experiences to avoid the misuse of on-going investments [see section 7.2], a new, original development action aiming to educate local populations was initiated, based upon the following slogan: "*Rangelands are the wealth of the generations, their conservation means the recurrence of life*".

The design of this project was based on an integrated approach that intends to reverse, over the long run, the negative effects of previous anthropic actions. As an important component in the strengthening of the *Great Works Programme for the Steppe*, given that rangeland rehabilitation, exploitation, management, and

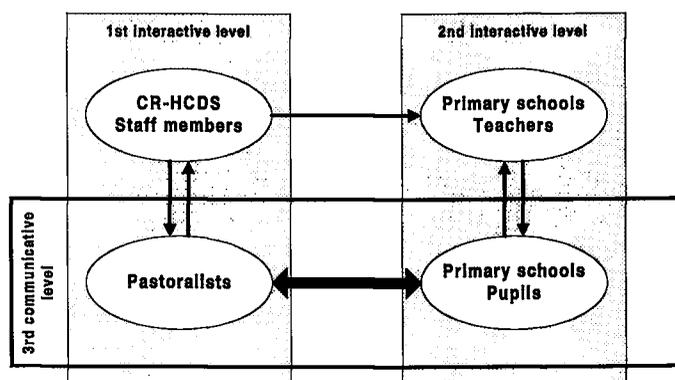
conservation cannot be realized without initiating the next generation into caring for the 'legacy' that will be inherited from the present generation.

In this way, the educational action aimed to set up a three-level interactive and communicative model between the different actors in charge of ensuring a sustainable development of the rangelands [see Figure 7.3.2(1) below]. This model encompasses two complementary integrated sub-models:

1. The first sub-model (two vertical grey rectangles) can be described as a two-level interactive process of conscientization between the development agents of the CR-HCDS and the actual pastoralists, on the first level, and of education and training between the primary school teachers and their pupils (the next generation of pastoralists), on the second level.
2. The second sub-model (a blank horizontal rectangle) represents a communicative platform between the present pastoralists (pastoral communities, households, individuals exploiting rangelands), on one side, and the future pastoralists (pupils of the primary schools, children of the actual pastoralists), on the other, facilitated by CR-HCDS staff members and the primary school teachers.

Figure 7.3.2(1) - Interactions between different sub-models and levels of the interactive/communicative model of pupil education

(Source: this study)



7.3.3 Evolution of the project and major achievements

7.3.3.1 Taking the first steps of the pupil educational action

The educational action concerned the education of the current adult generation of pastoralists, in order to facilitate their organization into professional associations and intensify their active role in rangeland access, use, management, and conservation. Additionally, it concerned the next generation of pastoralists in their conscientization, awareness about the surrounding ecosystem and the danger of

continued degradation to prepare them for a more active role in rangeland management and conservation than their parents are presently doing.

Unlike the first component, the second component of the educational action - the one dealing with the primary school pupils - encountered constraints because the primary school teachers were not prepared to undertake such an experiment, as the nation-wide curriculum for primary school education was elaborated in the capital and distributed to schools and teachers all over the country. Before the *Haut Conseil de l'Education* began adjusting it last year, the curriculum was characterized by extreme standardization. One can find the same programme taught wherever schools are located.

It is not the purpose of this study to talk at length about the dramatic educational situation in Algeria. However, I will content myself by saying that it seemed very strange and intriguing to see pupils in the Saharan desert or in the remote countryside areas taught a curriculum which introduces to them the Mediterranean coastal ecosystem or the mountainous ecosystem while they were not made familiar with their own, immediate ecosystem.

Some initial steps have been taken by the CR-HCDS staff to remedy this situation. These concerned:

- The preparation of a manuscript to be later edited as a booklet and distributed among the pupils, the content of which aims to give the primary school pupils basic insights into the surrounding ecosystem, the relationships between their life, their animals, and the ecosystem, and how the sustainability of their livelihood depends upon the sustainability of their ecosystem.
- The organization of a meeting with the Regional Director of the Educational Academy, which supervises the *wilayate* of the project area, to discuss the proposal of the pilot action and the content of the booklet. Issues about the numbers of schools, classrooms, and pupils to be involved in the first phase of the pilot action were also discussed. The decision was made to set up a small team composed of staff members from CR-HCDS staff, the Regional Educational Academy, and the *Ecole Normale Supérieure* of Constantine. This team would be in charge of defining the pedagogic approach for this project [see Box 7.3.3.1(1) below].
- Once the Regional Educational Academy agreed to begin the first phase in the 1996-97 season and the schools were identified, the teachers were asked to comment on the booklet's content and form.
- Once the booklet was reviewed and finalized, the preparation of the teachers was started through pilot exercises with selected pupils and the CR-HCDS staff members, in order to rehearse the content and the course presentation.
- After the teachers were made familiar with the new content, the school yard was prepared to host the practical field-work of the pupils.

Box 7.3.3.1(1) - Basic logical foundations of the pupils education

In order to achieve its objectives, such an educational programme should aim to develop a dialogue interface between the primary school pupil and his immediate environment. In such a dialogue, pupils need to ensure a correct understanding of the world surrounding them, its basic functions, its constraining factors, and the processes reinforcing its resilience. Thus, understanding, reflection, visualization and learning by doing become basic elements of such an action.

Although it started with the CR-HCDS staff, not sufficiently knowledgeable about the didactic and pedagogic aspects, the proposed course was further developed with specialized staff from the Regional Educational Academy and the Ecole Normale Supérieure of Constantine, especially in the pedagogic aspects.

It was designed upon a learner-centered, participatory approach based on a process of reviewing, reflecting upon, and applying what was learned. It was participatory because the teacher-pupil interface, where the pupil is a passive recipient of knowledge, was replaced by a new interface where the teacher facilitates a pupil's self-learning.

Pupils were kept active in the learning process, which was basically action-oriented and experience-building based, and stimulating communication and group interaction. In this respect, the classroom, where theoretical foundations were learned and debates organized, was complemented in first by the school yard, where practical assignments (fodder shrub plantation) were carried out by the pupils. Next, the area surrounding the household where the pupil lives replaced the school yard.

This approach was chosen by the pedagogic team for its ability to enhance effective skill transfer and consequently induce appropriate attitudinal and behavioural change from the pupils.

Source: field notes

7.3.3.2 Preparing the pupils' educational activities for the first 1996-97 season

Before the start of the pupils' educational course, further preparation was made at the beginning of 1996. This concerned the following items:

- Arabic edition of a booklet for pupil education, entitled: *Elementary Notions and Equations on the Steppe Environment*, published by the CR-HCDS with the financial contribution of pastoralists and the support of the primary school teachers. The publishing enterprise contributed by printing the booklet cover for free.
- Preparation of the supply of fodder shrubs, pastoral seeds, and fruit trees seedlings by the CR-HCDS to secure the practical field-work of the pupils. The CR-HCDS staff had to prepare the seedlings in their nurseries.
- Design and production of awards, prizes, banners and tee-shirts to be distributed to the pupils. The awards and prizes will be distributed to the best pupils after the evaluations, while banners and tee-shirts are used as slogan-carriers.

7.3.3.3 Facilitating the organization of pastoralists into associations

The goal of the first part of the educational action, focused on the actual generation of pastoralists, was to conscientize them of the role they have to play in using and conserving the rangelands, especially the collectively-exploited range. This was not

an easy task, given that many attempts at this kind of 'collectivization' were vainly undertaken by farmers in general, and pastoralists in particular, under pressure of the state apparatus. Various 'imported' patterns come to my mind, such as ADEPs, CEPRAs [see section 5.3], tested in these areas without showing the slightest success.

This legacy had to be overtaken and it was the object of this educational action to rouse the pastoralists in giving a more official form of their partnership with the CR-HCDS.

Box 7.3.3.3(1) - What motivated pastoralists to found their own associations?

Since the beginning of the 1990s, many farmer organizations have been established in Algeria in the context of the new socio-political environment and the 1990 Executive Decree allowing free association. However, according to some pastoralists, these organizations did not live up to their expectations inasmuch as most of them were induced by the state bureaucracy, which cannot be trusted. Additionally, most of these organizations were led by former leaders of the famous Union Nationale des Paysans Algériens (UNPA) and were seen only as means of perpetuating the control of the peasantry by the privilegentsia and the state.

Notwithstanding this lack of trust in public agencies, the CR-HCDS, taking advantage of the trustful partnership he and his staff had developed with pastoralists, suggested the pastoralists organize themselves into associations to formalize their partnership in the steppe rangeland development, more particularly in areas where the rangelands are collectively owned, managed, and exploited.

Source: field notes

The first association, that was the *Association de Producteurs de Figues de Barbarie*, was set up in late 1995 in the *baladia* of Sidi-Fredj (*wilaya* of Souk-Ahras). This association became thoroughly involved in the rangelands regeneration and conservation project [see section 7.2]. After initial reluctance, pastoralists showed some interest in the way this association was participating in setting the development agenda in collaboration with the CR-HCDS and started creating similar associations [see Box 7.3.3.3(1) above]. Presently, 18 pastoralists' associations have been created and are working as acknowledged partners of the previous project [see Box 7.3.3.3(2) below].

Some associations, for instance, participated in mobilizing financial resources for development activities, such as:

- Covering the costs of publishing the booklet conceived for the educative action of the primary school pupils (see section 7.3.3.2 above), which amounted to 70,000 AD.
- Repairing the equipment of common wells that were dug and equipped by the CR-HCDS some years ago.
- Buying a video camera for the CR-HCDS in order to produce more extension-oriented video tapes.
- Buying a laptop computer for the CR-HCDS to help its staff work during field visits, for instance, when evaluating the success of seedling plantations.

Box 7.3.3.3(2) - New associations profile and use of contractualized partnership

Based on the tribal tradition and intentionally espousing the old tribal confines, the new pastoralist associations in the eastern steppe region developed in a rather steady way. Some are used to revive and 'resuscitate' the indigenous arrangements that were in charge of range access, use, and management. Others are in charge of new tasks such as professional aspects of agro-pastoralism, agro-sylvo-pastoralism, or pastoralism, and develop new objectives of partnership with public development organizations.

Since the birth of such organizations, interaction between development agents and pastoralists changed significantly from the strict 'dirigism' that it was imprinted with during the 1970s and 1980s. Presently, development agents discuss the alternatives they have at hand with the members of each association and present the conditions required for each alternative. It is up to the association members to decide which alternative they will go for. They have the right to reject proposals, but once they agree upon a given alternative, they will have to assume some commitments to ensure the sustainability of the public investment.

After some initial discussions about the desired partnership, both parties, the association and the CR-HCDS, sign a contract where obligations and duties of each party are clearly stated. However, the 'contract' formula was not taken seriously in the beginning, and some associations failed to fulfill their duties according to the signed contract, still thinking of a complacent state bureaucracy. These associations ended up in court, and had to pay back the CR-HCDS the entire amount of the realized investment.

Source: field notes

7.3.3.4 Educating primary school pupils in understanding their ecosystem

The objective of this action was to bring primary school pupils to a level of positive thinking about rangeland conservation and efficient use. The desired outcome is to induce appropriate changes in the actual negative anthropic behaviour and mentality towards the pastoral resources upon which the sustainability of their livelihood depends. Schools were chosen during this pilot activity from the ones that are set in the neighbourhood of the rangelands revegetation and conservation project activities [see section 7.2], and where the teachers have agreed to collaborate with the CR-HCDS.

As Table 7.3.3.4(1) shows, the first phase of the pilot action started with 5 schools in 3 different *wilayate* (provinces) of the project area and concerned 209 pupils from the 6th to 9th grades out of 421 enrolled in these schools. The attendance was lower than expected for objective reasons such as the weather, and the insufficient number of class sessions (6 sessions for each school on average). Theoretical in-class sessions were always followed by practical field exercises, such as fodder shrub plantation, maintenance, and exploitation. With this field work, the school yard became the 'lab' for the pupils.

A booklet [see section 7.3.3.2 above] funded by the pastoralists themselves, either individually or collectively through their associations, was distributed to the primary scholars to drum up interest in this new, original course.

Table 7.3.3.4(1) - General evaluation of the pupils' education for the 1996-97 season

Wilaya	School	School pupils			Level of understanding		
		Concerned	Attended	Tested	> 60%	60-40%	< 40%
Khenchela	Boufissane	62	62	-	-	-	-
	H. Gousset	45	30	-	-	-	-
Souk-Ahras	Cheguaga	53	32	16	3	7	6
	O. Abid	49	35	13	4	4	5
Oum-El-Bouaghi	B. Chergui	213	60	23	4	10	9
Total	Number	421	209	52	11	21	20
	Percent	100.00	49.64	24.88	21.15	40.39	38.46

Source: CR-HCDS data

Looking at Table 7.3.3.4(1), it is worth mentioning that the pupils had no background knowledge about the ecosystem they were living in and were innocently ignorant of its fragility and vulnerability. They had great difficulty assimilating the course material: Almost 79% of the 52 pupils tested failed to answer more than 60% (considered as a good level of understanding) of the examination questions related to the basic environmental concepts and equations taught in the course. This confirmed the statements that were made after the consultations between the CR-HCDS staff and the teachers, which revealed a lack of familiarity of the pupils with their surrounding ecosystem, which guided both the conception of the booklet and the choice of the pedagogic/didactic method.

No matter which cause led to this situation, the extreme gravity of the problem is indicated. *Today's ignorant pupils will be tomorrow's main cause of desertification aggravation.* This is also the consequence of the pastoralists' lack of concern about their ecosystem, thus making them unable to transfer a greater concern to their progeny about their ecosystem.

In spite of this, the scholars developed a great interest in taking care of the plants through the practical exercises of fodder shrub plantation in the school courtyard and their plantation around the schools and sometimes near their houses. According to Table 7.3.3.4(2) below, 84% of the planted seedlings were successful. It should be mentioned that these native species were and still are destroyed by the pupils' parents either by over-grazing or by increasing arable land to grow barley for their sheep. Moreover, two fodder shrub nurseries were installed by the pupils in two different schools and produced 300 pastoral plants, nearly returning the same number of plants provided one year before by the CR-HCDS.

Table 7.3.3.4(2) - Evaluation of the pupils' practical field-work

Wilaya	School	Number of pupils	Distributed plants		Success rate (%)	Shrubs nurseries	
			Fruit tree seedlings	Fodder shrubs		Installed	Plant produced
Khenchela	Boufissane	62	10	80	85	01	90
	H. Gousset	30	-	60	-	-	-
Souk-Ahras	Cheguaga	32	15	70	90	-	-
	O. Abid	35	10	70	80	-	-
Oum-El-Bouaghi	B. Chergui	60	10	100	80	01	210
Total	Number	209	45	380	84	02	300

Source: CR-HCDS data

Many primary school directors in the region, as well as the director of the Regional Education Academy and his subordinate staff, became more enthusiastic about the idea and the action started to expand, with increased numbers of *baladiate*, schools and pupils, as Table 7.3.3.4(3) shows.

For the 1997-98 season, 18 schools were involved with a three-fold increase in the number of pupils attending both class and field-work sessions over the previous year. More than 5,000 fodder shrubs and 700 fruit trees were planted by the pupils and, more interestingly, 138 head of small livestock were distributed to the best pupils, preparing them to transfer their field-work exercise from the school yard to their household surroundings.

Table 7.3.3.4(3) - Evaluation of the pupils' education for the 1997-98 season

Wilaya	Number of entities involved				Sessions		Supplied resources		
	Baladia	School	Pupil	Assistant	Class	Field work	Fodder shrubs	Fruit trees	Small livestock
Oum-El-Bouaghi	02	04	100	03	05	09	100	170	20
Batna	01	02	60	02		08	400	64	
Tébessa	03	03	222	03	09	19	2,278	170	
Khenchela	03	05	209	04	11	12	1,708	160	26
Souk-Ahras	03	04	157	03	06	12	826	140	92
Total	12	18	648	15	31	60	5,312	704	138

Source: CR-HCDS data

Two evaluations were undertaken after both the first and second classroom sessions where basic notions were taught by a joint team of CR-HCDS staff and school teachers. The results of these evaluations are given in Tables 7.3.3.4(4) and 7.3.3.4(5) below.

Both tables highlight that some improvements were made compared to the previous year [see Table 7.3.3.4(1) earlier]. Almost two-fifths of the evaluated pupils obtained a mark higher than 8, and three-fifths obtained a mark of 7 or more. In terms of understanding the basic concepts taught by the new course, more than half of the pupils evaluated demonstrated a good understanding of the concepts; an

average score of 70% demonstrated a fairly-good ability to manipulate the basic environmental equations through practical examples.

The results of the practical field work were highly satisfactory, as the seedling success rate was more than 90%.

Table 7.3.3.4(4) - Evaluation of the pupils' level of understanding after the first class session of the 1997-98 educational season

Wilaya	Number of entities involved			Level of mark (on 1-10 scale)			Pupils showing a good understanding	
	Baladia	School	Pupil	> 8	7 - 8	< 7	Concepts	Equations
Oum-El-Bouaghi	02	02	57	06	13	38	15	20
Tébessa	03	03	220	67	61	92	117	128
Khenchela	01	01	97	80	10	7	88	83
Souk-Ahras	03	03	80	22	20	38	33	57
Total	09	09	454	175	104	175	253	288
Proportion (%)	-	-	-	39	23	39	56	63

Source: CR-HCDS data

Table 7.3.3.4(5) - Evaluation of the pupils' level of understanding after the second class session of the 1997-98 educational season

Wilaya	Number of entities involved			Level of mark (on 1-10 scale)			Pupils showing a good understanding	
	Baladia	School	Pupil	> 8	7 - 8	< 7	Concepts	Equations
Oum-El-Bouaghi	01	01	28	26	02	-	27	28
Tébessa	03	03	227	55	63	109	97	156
Souk-Ahras	03	03	71	17	09	45	26	57
Khenchela	01	01	76	52	12	12	68	68
Total	08	08	402	150	86	166	218	309
Proportion (%)	-	-	-	37	22	41	54	77

Source: CR-HCDS data

7.3.3.5 Facilitating a communicative platform among generations of pastoralists

In addition to evaluating the pupils' assimilation of theoretical content, sessions to evaluate field work were also organized.

The fodder shrub plantation realized by the pupils was evaluated by the creation of a forum comprised of all actors presented in Figure 7.3.2(1), i.e. the CR-HCDS staff, the school teachers, the pastoralists, and the pupils. Discussions within this 'forum', which sometimes extended into the households (fathers and children discussing problems of their environment), created a true communication platform between the actual generation of pastoralists and the future one. Yet, it is too early to advance conclusions about the results of this action, but some assumptions developed the fact that an evident '*prise de conscience*' is really there, according to the words of some pastoralists [see Box 7.3.3.5(1)].

Box 7.3.3.5(1) - How do some pastoralists evaluate the pupils education action?

The education action introduced some original aspects during the first year (1996-97) that no one was prepared for. Some improvements were introduced during the second season of the experiment (1997-98), such as the way of presenting the basic environmental notions, the mechanisms of evaluation (base on marks rather than on qualitative estimation of the level of assimilation), and the involvement of the pastoralists in the process of evaluation. According to the pedagogic team, this latter measure was introduced because of its double effect:

1. *It enhances the communication process between the fathers and the children;*
2. *It induces, as an indirect consequence, a reinforcement of the necessity to adopt behavioural changes by the evaluator, i.e. the pastoralists.*

Some pastoralists were very skeptical about this measure, which would put them in front of their children as stubborn, as farmers might be described. However, after the two sessions of practical field-work evaluation that followed the theoretical content ones, the head of a pastoralists' association told once the CR-HCDS Regional Commissioner, with a great sense of humour: "Si Mohamed, you have been putting some controllers in our households [meaning the educated pupils] who are always telling us how should we do things. Do you want to bring about a revolution in our region or what?" But, more convincingly, he recognized later that: "The results of this action will take time to be made visible, but I am sure that our children will harvest something out of what we are doing these days".

Source: field notes

7.3.3.6 Convincing local policy-makers of the required changes in national curriculum

A review meeting with the director of the Regional Education Academy and his staff was organized by the CR-HCDS in September 1997 after the end of the first year (1996-97) of the pilot action. Results were presented, constraints were discussed, and future perspectives of the action were presented by the Regional Education Academy.

In this respect, it was decided to continue the first phase for two more year. At the end of the third year, the Regional Education Academy will organize an official evaluation meeting to which officials of the Ministry of National Education and the High Council of Education will be invited. In the meantime, the Director of the Regional Education Academy has promised to send a report about the layout of the 'experiment' to both the Minister of National Education and the Chairman of the High Council of Education. Before the end of the second year, the CR-HCDS Regional Commissioner received promises of needed support, not only for the continuation of the experiment, but also its incorporation into the regular curriculum to be taught in similar areas.

7.3.4 The project's main development interfaces

Unlike the previous cases presented in this chapter (Cases Nos. 4 and 5), the educative action developed three different interfaces, as shown in Figure 7.3.2(1) earlier, each having its own particularities:

1. The CR-HCDS staff - pastoralist interface: As far as the social actors are concerned, it is almost the same interface developed in Case No. 5 which supported the direct and monostructural intervention of the rangelands revegetation and conservation project (see section 7.2.6). In this project, however, this interface was oriented more towards social engineering, i.e. conscientizing pastoralists about formalizing the partnership with the CR-HCDS through a better form of organization.
2. The primary school teacher - pupil interface: It is a new arrangement of the old interface where pupils were passive recipients of a top-down learning through an inductive education model. In the new form of the interface, the old image of the teacher giving a course was replaced by a facilitator stimulating pupil's self-learning, the latter playing an active role in his/her own education.
3. The pastoralist - pupil interface: It is the innovation of this project which establishes the foundations of a future social platform for negotiation and decision-making about resources use and management (Röling, 1994). It is still too early to presuppose the results of such an arrangement, however, as the action is still in its 'experiment' stage.

The most original aspect of these three interfaces resides in the way they complement each other and are different parts of a holistic interface that brings face-to-face interaction the public development organizations, intervening upon an integrated pattern, on one side, and the beneficiaries of development who, via the right organizational mechanism discovered how to make space for their own development agenda on the other.

Nevertheless, I would advance that although originality exists in this project, it is an action whose sustainability somehow remains questionable for two main reasons. First, will the education action succeed in raising the future pastoralists in the light of the projected vision of the rangelands' sustainability, given the required empowerment of the pupils within the households? Second, will it expand to similar areas satisfactorily, given that the steppe rangelands count for millions of hectares, and given that maintaining its success in a small pilot area would resemble just like a 'spit' of rehabilitation into an ocean of degradation?

CHAPTER 8

ON AN ALTERNATIVE DEVELOPMENT VIEW AND OUTCOMES *DISCUSSION AND ANALYSIS OF CASES 4, 5 AND 6*

After having critiqued the conventional development thinking adopted by the post-independence Algerian state in Chapter 6, and in sequence with the three case-studies presented in the previous chapter, I now intend to 'evaluate' these cases in the light of the hypotheses I have proposed in chapter 3. At the same time, I will try to consolidate the foundations of the alternative development I am advocating in the contexts of participation, local organizations, and social learning.

Nonetheless, I must again assert that, according to Goulet (1979: 557), although no full-blown theory or policy model can emerge from a small number of cases, some important lessons appear to be worthy of critical reflection. Thus, I do not pretend that a new vision of development will emerge from these cases, but theoretical contributions will be extracted out of their emergent properties. These are not new at the level of universal thinking, but they certainly represent innovations in the Algerian post-independence context. My concern here is that those who are criticizing planning and suggest it should be transferred to the humanities' museum without proposing a viable alternative behave, in my opinion, like a doctor who tells his patient who has a headache to cut off his head. Radicalism does not solve human problems.

In this respect, this chapter focuses on the verification of the set hypotheses of the study in the light of the presented cases.

8.1 Introduction to the study's hypotheses

In this section, an alternative line of thinking for sustainable development, as supported by the three cases of the previous chapter, will be asserted through testing the hypotheses developed in sections 2.2.1 and 3.2, and reintroduced later in section 6.1 of this book.

There is no pretension that the three case-studies presented in the previous chapter are perfect examples of the complete fulfillment of the four hypotheses adopted for this study. This can be only achieved in the case of a very idealistic model which is rarely encountered in daily life. However, the main issue here is that one has to determine, at the onset of a given planned intervention, the actual situation of the evoked prerequisites, and to be aware that part of the planned activities are directed to the best optimization of these prerequisites.

In this vein, these cases describe situations where social and human aspects, if taken into consideration, can increase the probability for the fulfillment of these prerequisites of successful development suggested by van Dusseldorp (1992: 12).

Moreover, according to Figure 3.2(1) in this book, verification of the fulfillment of any hypothesis among the four mentioned above requires first and foremost the

understanding and verification of the fulfillment of its three sub-hypotheses. This is what the following sections are about, wherein hypotheses testing, in contrast to Chapter 6, will go one level lower by testing the three sub-hypotheses of each mentioned hypothesis.

8.2 Development objectives are not determined by planners in an exclusively top-down way and are always in accordance with beneficiaries' needs (H1)

8.2.1 Genuine active participation of beneficiaries at earlier stages in the process of planned development improves problems identification and objectives formulation (H11)

Sustainable development requires that the orientation of a given development action - that is the problems it seeks to solve and the objectives it aims to achieve - must be accepted by all actors affected by this action. This statement puts the four major following issues into debate:

1. How the dialogue about the orientation of development and the acceptance of this orientation by all actors be organized?
2. Who has a 'right' to take part in this debate?
3. Whose opinion among all participants has to be considered?
4. How are potential conflicts between "basic" and "communal linking loops" (van Dusseldorp, 1992: 39-45) of the different actors mitigated in this debate?

Answering these questions would lead the debate into a discussion about participation and how this concept - and way of thinking at the same time - would influence the orientation of a given development action.

In the three cases presented in the previous chapter, setting the mechanisms of a large and active participation of all actors, such as the private farmers in the cereal production improvement project (Case No. 4) who were 'hitherto excluded', has prevented the waste of development efforts and helped orient the direction and approach of development which in return yielded more adherence from the beneficiaries as they felt more concerned about 'their' development.

In Case No. 4, the process of reorientation of the project's strategy through the participation of farmers in evaluation meetings and the creation of farmers' organizations in order to participate in a more organized way are good examples of the evidence that participation improves the outcome of a development action. This achievement meant to help the beneficiaries make room for themselves to partake in problems identification and objectives definition. Even though the project started with objectives set by planners, beneficiaries' participation in the evaluation meetings, and to a lesser extent in the implementation, gave them a valuable opportunity to re-plan the objectives of the development action and revisit the way it was implemented.

This is even more evident in the partnership framework developed by the CR-HCDS and the pastoralists through 'contractualization' in the rangelands regeneration and conservation project (Case No. 5), where development objectives were negotiated and agreed upon before both parties signed the contract.

In Case No. 4, farmers' participation, even in the middle of the project cycle, given that this project is based on a multi-phase pattern, allowed that problems identification and development objectives be revised and reassessed during the evaluation meetings. This helped the project to be properly reoriented and turned it into a model of *développement à la carte*. Thus, developing project monitoring and evaluation mechanisms as basic instruments of a process of social learning, giving way to the farmers' knowledge to be put into discussions during evaluation meetings, played a significant role in improving problems identification and hence the definition of development objectives.

Moreover, starting with a preliminary discussion about the *problématique* that the project would tackle in a meeting that gathered all potential stakeholders, such as in Case No. 5, has shown the influence exerted on the implementation of the project activities and the subsequent, highly significant results it achieved by the time of the mid-term evaluation. The enthusiastic reaction of the pastoralists towards the technology of fodder shrub plantation shows how their participation in the first and second meetings about the *problématique*, and the trustful collaboration developed between CR-HCDS staff and pastoralists, made the implementation easier and smoother. One can easily assume that their participation in the previous meetings, encouraged by the CR-HCDS Regional Commissioner, made the project fit their needs. However, the great problem that arises here is that the success of some development actions depends largely on one or a few people, which could threaten the sustainability of these actions.

Participation created the possibility to make people consensually agree about a set of objectives for the simple reason that the alternatives offered to farmers were very few. Although being diverse in terms of projects they had in mind, farmers and pastoralists presented in the case-studies of the previous chapter were all located in very harsh, arid, and semi-arid areas where livelihood alternatives were very limited. The livestock-cereal integration, was augmented by potato crops where water was affordable, as in Case No. 4, and/or the pastoral activity of raising sheep on the rangelands, given the necessity that these resources must be made sustainable, as in Cases Nos. 5 and 6, remain almost the sole alternatives available that rural populations can afford in these areas. So, this is what made all 'their' projects interlock without a need of a strong mediation mechanism (Long and van der Ploeg, 1995: 67), in comparison of what could have happened if these farmers were situated in more resource-rich areas. In their actual context, farmers and pastoralists could easily find 'their' projects reflected in the interventions indicated in the case-studies as their participation in problems identification and objectives definition shaped somehow these interventions and made them fit their own needs to a large extent.

In other words, the solution to rangeland degradation as in Cases Nos. 5 and 6 was beyond the reach of any single social actor (pastoralist). It needed the combination of the efforts of many social actors (pastoralists, CR-HCDS staff, DSAs staff, etc.) to overcome the effects of this problem which hampers the livelihoods of some of them. Borrowing the concept of "linking loop" from van Dusseldorp (1992: 39-45) [see section 2.4.4 in this book], I suggest that a "communal linking loop" was set in these areas in response to many similar "basic linking loops", and taking the form of a "formalized linking loop" proposed by the CR-HCDS, as reflected in Case No. 5. However, when this first "formalized linking loop" was determined to be unable to provide all the needed sustainable solutions for their problematic situation, social actors decided to complete it with another "communal" and thus "formalized linking loop", the rangelands population education project (Case No. 6).

Nevertheless, access to a forum where problems identification and objectives formulation, and participation to supposedly orient these issues towards the needs of the beneficiaries, is not sufficient *per se*. It needs to be complemented by a '*re-équilibre*' of the actors' interaction in the development decision-making arena by a democratized pattern that gives equal right to all actors in this arena.

8.2.2 Genuine active participation of beneficiaries secures a required equilibrium of different rationalities in the development decision-making arena (H12)

According to Goulet (1986: 301-303; my italics), and as mentioned earlier in this book [see section 2.8 in this book], each development action brings into interaction in one way or another, three different rationalities: The *political*, the *technical* and the *ethical* (or *humane*), each of them trying to approach the others in a triumphal (superior), reductionist fashion. In other words, each tries to get the others to adopt its own favoured ground rules of dialogue. In most cases, this situation creates in most cases a conflict situation which can end-up with bad decisions being made. It goes without saying that this identifies the orientation and true meaning of participation among the 'hitherto excluded when a given rationality - other than *ethical* (or *humane*) - tries to use this concept as a means for maintaining the on-going status-quo in its favour.

Sustainable development requires not only the participation of the three rationalities in the decision-making arena of a development action, but also necessitates a real equilibrium and dialogue between these rationalities. This anticipates the resolution of potential conflict situations which hamper the development action and mainly occur when one rationality has recourse to force or violence to make another rationality comply with its desires and wishes.

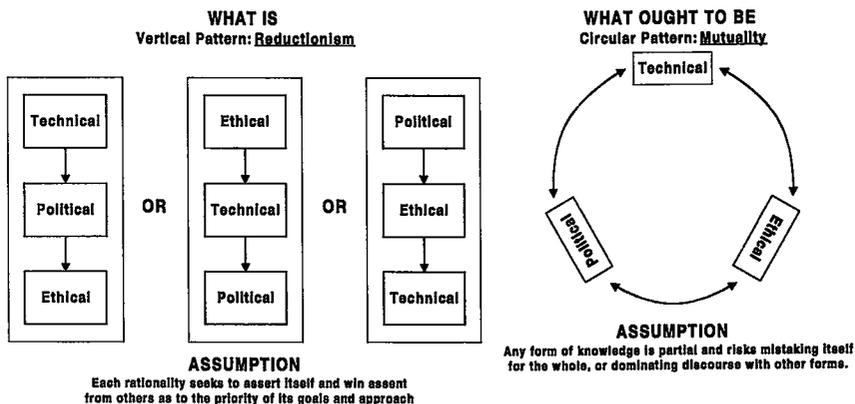
Situations described in the case-studies highlight how it is very possible to build the required consensus and equilibrium between the three rationalities when the political actor (*political* rationality) is not systematically supported and blindly followed by the technical actor (*technical* rationality), and/or when the latter allies with the beneficiaries (*ethical* - or *humane* - rationality) to work for the beneficiaries' interests, as it happened in Case No. 5 and, to a lesser degree, in Case No. 4.

However, the philosophy of any development action to be carried out in such harsh environments must be recalled here. This philosophy recommends to work in accordance of the beneficiaries' needs, as not working in this sense would exacerbate the problem of environmental degradation, as was demonstrated in the *problématique* of Case No. 5. In fact, if the political actor (*political* rationality) succeeded in dominating the management of rangelands, as it did following independence [see section 5.3] without appropriate institutional mechanisms to regulate access, use, and conservation of the range, it would be hopeless for the development agents (*technical* rationality) to bring pastoralists (*ethical* - or *humane* - rationality) to adhere to the process of revegetation with such an active participation.

This became possible only with a new pattern of dialogue started between the technical and ethical rationalities that can influence the orientation of development, given the required blessing of such a dialogue pattern from the political actor (*political* rationality). This new pattern of dialogue brought the development staff (*technical* rationality) to co-operate with farmers and pastoralists (*ethical* - or *humane* - rationality) towards the latter's own interests, using convincing discursive and competent manner rather than trying to enroll them in state development actions through force or coercion. This was not achieved without encountering problems from other actors that were found - maybe partially but certainly - among the political actors (*political* rationality), such as DSA directors.

Moreover, the new Provincial Development System, settled by Case No. 4 (Act II) and the similar mechanisms set up by either Cases Nos. 5 and 6 are good examples of this new pattern of dialogue which avoided reductionism and/or linearism in development. This resembles very similar to what Goulet (*ibid.*: 305) suggests, that what is needed for sustainable development is a new model of authentic dialogue where exchanges of views and experiences are circular and reciprocal, and by no means vertical and reductionist [see Figure 8.2.2(1)].

Figure 8.2.2(1) - Interaction of three rationalities in a development action
(Source: Goulet, 1986: 305-306)



In such a situation of equilibrium, a mutually respectful discourse among diverse rationalities rests on a postulate gained from an evident experience of exchanging views and experiences so that the mutual understanding about the world around us might be improved. This equilibrium would result in an active respect for other views. This can be the only proper stance of development, given that development is eternally locked in a world of multiple realities, and would always remain compartmentalized if this perspective is not considered and implemented.

But participation in problems identification, objectives definition, and the presence of a '*re-équilibrage*' of the actors' interaction in the development decision-making arena are not enough for sustainable development, as these measures could be seen as gifts from the powerful actors to buy acquiescence from the weakest, and thus perpetuate the status-quo with little change. Permanently maintaining these trends and reinforcing involvement of the beneficiaries in development actions require a sense of 'ownership' to be developed by these latter through the perpetuation of an increasing feeling of genuine participation in (self-)development.

8.2.3 Objectives are formulated for increasing people's genuine active participation in their (self-)development (H13)

Sustainable development requires social actors who are more keen to carry out the uninterrupted, permanent process of self-promotion by themselves. In this way, a process of beneficiaries' participation should be embedded in a self-sustaining cycle where the more participation is applied in development actions, the more it reinforces the active participation of the beneficiaries and the more it deepens its roots into the mentality of all actors. This reinforcement, as necessary as it is to achieve sustainable development, is especially emphasized for those who were 'hitherto excluded' or taken as passive recipients of development. It is true that participation has a corollary in self-sufficiency and self-help, in opposition to assistedness and dependence on the state, as Nelson and Wright (1997a: 3) argue.

The example of the pastoralists in both Cases Nos. 5 and 6 describe in perfect sequence this process:

1. Pastoralists agreed on the development agenda by setting contractual relationships with the CR-HCDS; then,
2. They founded their own associations, independent from the state-linked UNPA; and finally,
3. As a consequence of active involvement and ownership, they started funding some activities.

As a *résumé*, I propose that, according to Goulet (1979: 556), non-coerced, volunteer, genuine participation can only occur when all concerned parties can mobilize a decent sufficiency of goods which they need to feel fully human. In other words, material well-being opens up possibilities for further development and consequently reinforces genuine participation.

Hypothesis H1 is verified to a large extent because development objectives of the proposed cases were not exclusively determined by the planners in a top-down way but through a mutual dialogue between planners, implementers, and beneficiaries, and were in accordance with the real beneficiaries' needs. Although the objectives of some development actions were planned at the central level, they were re-planned at the local level during its implementation and/or through evaluation.

8.3 Major needs of required knowledge about processes to be influenced by a development action are covered by different sources of knowledge (H2)

8.3.1 Recognition of the importance of beneficiaries' knowledge in their (self-) development provides additional knowledge that is essential in the development theater (H21)

Successful and sustainable development can occur only if all required knowledge about any process to be manipulated is gathered *a priori*. But, "knowledge is never complete and action is always necessary" (Korten, 1980, cited by Scoones, 1996a: 6). According to my suggestion about embedding the implementation of a development action into a learning process when this latter is based on a multi-phase pattern [see section 8.2.1 above], an additional part of the required knowledge can also be secured during the first steps of the project implementation, as shown by Case No. 4. In this way, participation appeared to be a good means of additional knowledge mobilization as far as it serves as a forum for free expression where the 'hitherto excluded' can express their feelings and provide their wisdom for project input to be used by others (planners, implementers, development agents, etc.). This additional knowledge is even more necessary as the planning of development actions is frequently based on "assumed causalities" (van Dusseldorp, 1995, pers. comm.), as Uphoff (1992: 397) mentions that "blueprints would not succeed because the situation was inherently uncertain and relations of cause and effect were probabilistic and contingent".

Until 1992, private farmers, especially small-scale, and/or even the DASs, never had a chance to sit with technical staff or members of a project team during evaluation to express their opinions and to talk about their knowledge and wisdom. Once this so-called forum of expression of the 'beneficiaries' was created by some projects, objectives of development actions were reviewed and/or courses of actions modified in order to meet the desired goals set by the *problématique* as seen by the beneficiaries which the project had to tackle. Consequently, elements of the strategy to be adopted by the project were discussed, as in Case No. 5.

Moreover, after this so-called forum was created, a genuine dialogue took place between farmers and development agents, reinforced by trustful interaction at the interface. Since then, exchange has been very fruitful, especially for development agents, as it appears that cultivation of cereal crops are not important *per se* for farmers, i.e. for their agronomic and/or economic aspects, as demonstrated in Case

No. 4. But they are also of utmost importance as a basic feed source (straw) for their sheep. It was made clear that farmers design their strategy with the whole farming system in mind, that is a holistic vision. At the same time, planners and development agents viewed cereal crops as the first priority of the project, which was a rather reductionist vision.

Above all, development agents and planners based their crop improvement strategy on *yield*, while farmers base their strategy on the extreme priority of *income*, which included their consideration of animals that needed to be fed. As matter of fact, farmers thought, in their conceptualization of income, that reducing the investment costs in the high-risk environments they live in was considered as an income improvement. A good justification for this is that fertilizer use was never enthusiastically adopted by farmers, although the decision was made to encourage this use through a short-term and zero-interest credit scheme provided by their CCLS co-operatives.

This additional knowledge was needed to reorient the project, which then steered its intervention towards the farming system instead of trying to improve the crops while ignoring what was going at the farm level.

Similarly, Cases Nos. 5 and 6 set up an adequate dialogue framework between development agents and pastoralists which helped the former to design their actions based on the knowledge gathered through discussions with pastoralists, especially pertaining to how rangelands were managed by indigenous institutions and how this way of managing the collective rangelands was less damaging for the environment and the natural resources. Thus, it became clear that any development action aimed at stopping degradation and natural resource depletion, which exclusively focus on activities of revegetation and/or fencing, would be hopeless unless appropriate (but not imported) institutional and managerial mechanisms for access, use and conservation of the rangelands were set up.

Nevertheless, acknowledgment and consideration of the beneficiaries' knowledge will not achieve much *per se* unless it is incorporated into an overall process of setting up a permanent forum of mutual dialogue and learning aimed at producing corrective measures for development actions.

8.3.2 Building a development interface based on dialogue and mutual learning produces the adapted knowledge required for processes to be influenced in the development theater (H22)

The conventional philosophy of development is based on the postulate that planners and politicians assume they know what is good for the populations they have to plan and decide for. They assume they possess all necessary knowledge for planning and steering development and do not feel a necessity to 'triangulate' their knowledge and/or to exchange views and experiences through mechanisms of participation. However, there is evidence that many development actions conceived

on the basis of this thinking did not achieve more than exacerbating the bad conditions of the beneficiaries these actions were planned for.

On the contrary, sustainable development, especially in harsh areas where unpredictability and uncertainty prevail, requires that a process of mutual dialogue and learning between all actors of a development action is established. In the three cases presented in the previous chapter, the setting of a negotiation platform between the different actors of a development action has provided an adequate framework of mutual learning and dialogue in order to ensure adaptive management. The latter relies on principles and guidelines that will be used with great flexibility and a continuous process of learning. Its main foundation is that it accepts that "uncertainty and indeterminacy are fundamental and central" (Scoones, 1996a: 6).

The many discussions I followed in the field, within the frame of Cases Nos. 5 and 6, between pastoralists and development agents, reversed the information flow from the latter to the former, as it is in conventional development thinking in post-independence Algeria. They brought lots of information to the development agents, as was indicated by the development agents themselves. The way these pastoralists discussed some issues and respond to questions was very interesting. For instance, when asked if privatization of the rangelands would solve the problem of degradation, they said: "*Ahna mlekna el ma mamleknach etrab*" (which means "*our strategies are guided by water and not by land*"). This means is that, in some specific cases, rangelands cannot be privatized and should remain under the ownership of the community. For them, some types of rangeland cannot be put into boundaries as far as, in some regions, it is the flooding of spring streams that determine the distribution of rangelands between the members of the community. So, the scheme cannot be fixed in space but it is as dynamic, as the water spring streams keep moving year after year.

In another example, when asked why they annually sow their land with cereals, even though drought is always present, which lowers the probability of having a good harvest every year, they say "*El harth douam oue essaba aouam*" (which means "*we sow our plots every year but we harvest a good yield only in some years*"). Such a saying highlights the randomness of yield in such environments of rainfed agriculture that is highly correlated to the randomness of the climate. But in doing so, they sow their own seeds, which are made of a mixture of landraces, instead of a monoculture based on HYVs and certified seeds as recommended by development agents. The rationale behind this practice is that whatever the climatic year, they can harvest something, given the different traits of the cultivars in their mixture, while monoculture can give a good yield only when incidence of biotic and abiotic stresses is limited.

In doing so, they perpetuate the use of an old knowledge, which is part of a socio-cultural heritage, transmitted from generation to generation through proverbs, popular songs, and other social practices. Notwithstanding this popular culture that is present in all agricultural areas throughout the country, with some slight

differences between the regions, development agents recommend standardized, supposedly 'plastic' technologies that are supposed to increase productivity everywhere. I was told by a development agent that he spent three (3) years in working with pastoralists before he could understand the basics of their 'language'. This shows how it is difficult to realize a dialogue between actors who speak different 'languages', although this dialogue is extremely necessary for sustainable development.

Another example of such a platform of mutual dialogue and learning is presented in Case No. 6. This concerns the evaluation group set up to evaluate the practical field-work of the pupils and which included development agents, school teachers, pastoralists and pupils themselves. As a matter of continuity, this evaluation exercise even penetrated the pastoralists' households where pupils applied what they were taught in school. As a consequence, a platform of mutual dialogue and learning was set up in the household between the father and the son or, more specifically, between the actual and future generations of pastoralists. As a matter of fact, some pastoralists claimed, in a very humoristic way, that the project had put some nasty ideas in the minds of their children which created some problems in the households between the fathers and their sons. In their meaning, the project taught the pupils how to negotiate with their fathers about the sustainability of 'their' ecosystem instead of blindly taking for granted their parent's view.

Another example of such a framework of mutual dialogue and learning took place in the same project (Case No. 6), between the CR-HCDS staff and the Regional Education Academy staff. After some hesitation on the latter part, the Academy Director and his staff encouraged the rapid expansion of the experiment in its second year (1997-98) and promised that the results of the 'experiment' would be reported to the higher, central level of the national education system.

Those different frameworks of mutual dialogue and learning completely reversed the situation of the conventional thinking of development wherein planners do not feel necessary to learn or even communicate with people they plan development actions for.

Going back to the three rationalities mentioned in section 8.2.2 above, their equilibrium in a development action leads to a positive interaction of the different types of knowledge underlying these rationalities. The different types of knowledge will interact in way to bring complementarity and achieve mutual dialogue and learning in a sphere where no practitioner of a given knowledge will feel excluded or marginalized. Any kind of knowledge of whatever status, if not acknowledged to be partial, introduces the risk that its users (or advocates) develop a sense of self-sufficiency or self-reference. This can be dangerous for the learning process that should be part of any development action seeking sustainability

Yet, acknowledgment and consideration of the beneficiaries' knowledge and the building of a forum of mutual dialogue and learning can only be effective if these actions aim to increase the efficiency of the set learning process through the use of the lessons learned from past experiences and anticipate future problems. This can

only be achieved when the so-called learning process takes its momentum in steering the development action towards the desired goals and in maneuvering against the constraints that can be encountered. Notwithstanding this, some informal evidence exists about situations where farmers participate and give their opinions but nothing is changed in the development action.

8.3.3 Recognition of local/indigenous knowledge by other actors involved in the development theater increases the efficiency and effectiveness of the learning process (H23)

When participation develops into alternative thinking in development actions, errors, if any, are accepted as part of a trial-and error pattern, and the centrality of uncertainty about the future is acknowledged. Errors are thus made visible and courses of action are corrected on the spot, at the right time. When monitoring and evaluation are undertaken in a participatory manner, an in-built learning process takes place and development actions are correctly steered towards the needs of the beneficiaries. This refutes the long-standing assumption that Western science and technology, in the sense of scientific-rational planning and blueprint plans, that engulfed the development process in the past, can provide remote-planned solutions for conditions of high unpredictability and immense variability (Scoones, 1996a: 7).

However, a real learning process is the one that strikes a cadence when it steers a development action efficiently towards achieving expansion. Case No. 5 shows this well.

In fact, when pastoralists participated in the elaboration of the *problématique* of their situation, they understood perfectly how other causes beyond their reach can affect their areas either directly or indirectly, and sometimes translated this into their own behaviour. In doing this, they made the task of development agents easier, and facilitated the adoption of alternative technologies that take the particularities of their conditions into account. As a matter of fact, the understanding of their *problématique* requires that pastoralists develop, first of all, a capacity for self-reflecting upon their living conditions with the help of CR-HCDS staff as facilitators. The consequence of this exercise was that pastoralists started to feel more concerned and developed a sense of ownership towards the development action and decided to work for their own development (or better to say, self-promotion) with the help of the CR-HCDS staff. As Goulet (1979: 556) says, the main source of alternative development strategies remains the inventiveness of human communities when they devise strategies to cope with nature.

Hypothesis H2 is verified to a large extent because major needs of required knowledge about processes to be influenced by a development action were covered through the complementarity of different sources and types of knowledge. However, as knowledge can never be wholly complete, an in-built learning system in a development action can bring about some flexibility into the evolution of such an action and secure the achievement of the set objectives at a least cost.

8.4 All resources needed for the achievement of the objectives of the development action are available and fairly distributed among the actors (H3)

8.4.1 Genuine active participation of beneficiaries opens better opportunities for the 'excluded' to benefit from the resources made available via development actions (H31)

In its social dimension, sustainable, participatory development would require a self-sustaining trade-off between the system of public resources distribution and access, and the basic needs of different segments of the population. If more resources are allowed for the less needy segments at the time when the more needy people are receiving less or nothing at all, it is quite illusory to think about sustainability, given that acquiescence from these latter segments and their support of such a pattern of resources distribution are illusory.

One of the typical characteristics of development actions in the context of post-independence Algeria is the transformation of development logic into a rent-seeking logic, which engendered an extremely unfair distribution of the public resources by the use of largely developed patron-client mechanisms and the expansion of corruption [see sections 1.3. and 4.3]. In this way, each beneficiary with the privilege of being enrolled in a development action would rather seek how many resources he could snatch out of this action rather than how much he should contribute to this action to *participate* in the development of his farm or household. A logic of opportunism developed *vis-à-vis* public resources, based on the spreading culture of the 'rentier' state.

In the agricultural sector, the state had created the *Union Nationale des Paysans Algériens* (UNPA) which was mostly infiltrated by opportunistic 'pseudo-farmers' and/or agricultural labourers in order to implicitly perpetuate this 'culture of non-development', reinforce the pattern of rent-seeking, and sustain state control over rural populations.

When some concerns were raised about the necessity of more professionally-oriented farmer organizations, leaders and advocates of UNPA were aroused by interference in their own 'business', which could end up with a reduction of their control over the agricultural sector and induce a redistribution of public resources. Case No. 4 and, to a lesser degree, Case No. 5, described these aspects in the previous chapter. However, when the concretization of this idea was on its way, many leaders of UNPA local and regional structures succeeded in getting the leadership, or at least having a seat in the executive councils, of these new associations, but fortunately not in the project region. It happened exactly as van Dusseldorp (1981: 81) predicted when he warned about the ways participation at the local level can be manipulated.

Other examples in the case-studies presented follow this trend closely. However, this did not discourage some pioneers, such as the CR-HCDS Regional Commissioner, to go against this trend and attempt to develop, with the co-

operation of farmers, a real logic of development, even when public resources were involved. They preferred to 'swim upstream' instead of maintain the logic of rent-seeking practices, which benefited only the powerful segment of social groups (the *privilegentsia*). In this sense, the CR-HCDS Regional Commissioner faced enormous problems and pressure from some DSA directors, and even some officials from the Ministry of Agriculture and Fisheries, because of this new, fair and just way of distributing public resources, a behaviour not in line with the 'usual' practice.

In doing so, he meant to 'open up' a *closed* system (Cleaves, 1980: 284; Heywood, 1997: 340; my italics), that monopolized economic and social power in society and retained full discretion over policy initiatives, and the policies of which generally responded to the interests of the group that dominated the government machinery.

However, the opening of resource use opportunities for the 'excluded' may not suffice in conditions of economic recession or when resources become increasingly scarce, especially when the goal is autonomy and independence from the state. There is thus a need for a complementary action of mobilizing additional local resources, principally from the beneficiaries themselves. But this would require the development of trust and accountability between the beneficiaries and the development executive agency.

8.4.2 Genuine active participation of beneficiaries secures a better involvement of the latter in local resources mobilization and their fair distribution (H32)

Sustainable development requires a self-sustaining process that makes beneficiaries autonomous in terms of financing development instead of a continuous dependence on 'mendicancy' and assistedness. This is now a new vision of development in post-independence Algeria, wherein the state was seen for three decades as the unique provider of resources for development. *Counting on oneself* is the new *leitmotiv* of such a development (or self-promotion) vision.

However, trust is needed to bridge the differences between the development agency - be it public, semi public or private - and the development beneficiaries. In the context of the Algerian bureaucracy, it is not an easy business for farmers and pastoralists to trust any staff from public agencies for many reasons that have been already described in this book.

Notwithstanding this, the cases presented show some examples where local populations started playing an active role in mobilizing additional local resources for development actions after they developed a sense of trust towards the development agency. Cases Nos. 5 and 6 show how pastoralists, either individually and/or collectively, mobilized significant amounts of their financial and material resources to support development actions implemented by the CR-HCDS, after they gained trust in the Regional Commissioner and his subordinate staff. Of course, some traits indubitably influenced this situation, such as the morale and probity of the CR-HCDS Regional Commissioner and the hard work carried out by his staff daily. However, this was not unproblematic for the latter, who were faced with great

pressure and resistance from the technical staff of DSAs of the *wilayate* of Tébessa and Batna, where were located the lowest realizations of Case No. 5, as the results of the mid-term evaluation demonstrated [see Table 8.4.2(1) below].

Table 8.4.2(1) - Realization rate at the mid-term evaluation of Case No. 5 (1994-97)

Wilayate	Pastoral plantation			Fenced areas (ha)	Well creat. *		Job creation (day)	Total funds (10 ³ AD)
	Collect. (ha)	Individ. (ha)	Total (ha)		Dig. (unit)	Equip. (unit)		
Oum-El-Bouaghi	109	49	91	40	80	30	142	91
Batna	69	3	50	87	40	11	68	54
Tébessa	10	130	46	0	77	17	24	24
Khenchela	109	55	93	7	70	20	118	87
Souk-Ahras	33	212	87	7	120	20	62	59
Total	57	105	71	27	76	19	72	57

Source: This study¹

Nevertheless, providing resources for the 'excluded' and mobilizing additional local resources should not be seen as temporary results of a given development action. Such endeavours must be seen as opportunities to sustain genuine participation through developing a sense of 'ownership' of the beneficiaries' development for such similar development actions. This ownership is the acceptance by all beneficiaries that genuine participation depends on their will not only to mobilize their own resources for the development actions but to admit also a fair distribution between all beneficiaries.

8.4.3 Availability of resources and their fair distribution sustains the genuine active participation of the beneficiaries in their (self-)development (H33)

In the case of post-independence Algeria, an egalitarian society emerged at the time of independence and the state took a great responsibility in stratifying this society (Quandt, 1998: 110). One of the mechanisms that was used in this endeavour was the pattern of resource distribution. We all know the results of this approach, based on a rent-seeking logic in the field of development, but the huge gap that was created between the rich and the poor within three decades of independence must be mentioned, which is still growing, especially since the Structural Adjustment Programme was implemented.

Some of the case-studies presented in the previous chapter highlight these issues. In Cases Nos. 5 and 6, pastoralists experienced difficulties trusting the CR-HCDS Regional Commissioner and his staff from the beginning, when the pilot action started in 1992, as a result of their previous experience with the state bureaucracy in charge of development. At the beginning of this collaboration, both parties were

¹ Calculations made upon Tables 7.2.1(2) and 7.2.4(1) brought in section 7.2.

very cautious. But when pastoralists experienced the new vision developed by the CR-HCDS Regional Commissioner on the way development can be managed in accordance with their preferences, they began to trust the agency more and showed no hesitation to participate in funding some activities of development, very slowly at the beginning but more actively later on.

In this respect, sustainable development requires that beneficiaries take the real 'ownership' of development actions. The best way, in my opinion, to achieve this is to participate directly in the whole cycle of a given development action. Genuine participation in such a context takes the form of partnership, as shown by Cases Nos. 5 and 6, and, to a lesser extent, Case No. 4, where different actors hold dialogues, determined the common views through consensus of what development should be and shared the costs of development in the light of an equitable distribution of the benefits. Mobilizing local resources by the beneficiaries themselves should be seen from this angle. As a consequence, the process of participation becomes more and more sustained and consolidated, and not only taking the image of a 'political luxury' used now and then, especially when social turmoil begins.

One of the consolidating forces of this process of participation resided in the incremental involvement of the beneficiaries in some projects as individuals, then founding their new independent associations [see section 8.2.3] and finally participating in funding some development activities as follows:

1. Pastoralists put their own resources toward maintaining the functioning of their associations, instead of depending on public subsidies as many associations do;
2. They participated in CR-HCDS equipment repairs (trailed water-tank), even though they were public property;
3. They bought a video camera and a portable computer for the CR-HCDS in order to improve the quality of the organization output and make it fit to their needs; and,
4. Finally, they mobilized some of their own resources to publish a booklet that has been - and will be - used as a didactic support in the educational action of the primary school pupils (their children), i.e. the future generation that will take charge of their own legacy.

Anyone who followed these development actions, especially Cases Nos. 5 and 6, would see a kind of self-strengthening process of genuine participation. The more important of these was the financial contribution from the pastoralists, either individually and/or collectively, the more participation became active, increased in significance and expanding, and the more pastoralists felt an increasing 'ownership' of the development action.

Hypothesis H3 is verified to a large extent because all resources needed for the achievement of a development action objectives were available and fairly distributed to the dissent of some opportunistic rent-seekers. However, participation of beneficiaries with their own resources had palliated any shortcomings from the state apparatus and improved the accountability of the development executive agency towards its stakeholders.

8.5 The political will to use the required resources for a given development action is concretized in order to achieve the formulated objectives (H4)

8.5.1 Genuine active participation of beneficiaries requires their increased involvement at all levels of the development decision-making arena (H41)

Conventional development thinking, combined with the authoritarian character of the regime, made its development actions less accountable to local populations, and ignorance of local conditions led to a lack of commitment on the part of the intended beneficiaries (Feeney, 1998: 9). But sustainable development requires strategies that are more inclusive for the beneficiaries (Feeney, *ibid.*: 10), either at the level of human involvement as well as the use of knowledge. Participation is one of these strategies.

Participation in development actions can be part of a broad sense of 'public participation' which can be defined, according to Feeney (*ibid.*), as an opportunity for citizens and public and private organizations to express their opinions on policy goals or to have their priorities and needs integrated in decisions made about development actions.

Moreover, participation has played a significant role in increasing public awareness and concern about development, more particularly on social, ethical and environmental issues.

These 'theoretical' statements, which can be found in a great number of references, were, to a large extent, supported by the cases presented in the previous chapter. Case No. 4 shows how stepwise, year after year, and phase after phase, the involvement of the beneficiaries increased steadily through, among others, their participation in the evaluation meetings. It has to be said that these evaluation meetings were really a decision-making arena and not only a review of the results and a proposal of recommendations as a conventional evaluation would be.

Moreover, in Cases Nos. 5 and 6, awareness of the actual and future pastoralists was increased to the extent that they started feeling concerned towards 'their' surrounding ecosystems, and undertook actions to rehabilitate and preserve them. In these terms, participation should lead to the ownership of the development action which goes hand in hand, especially when the environment is concerned, with the renowned slogan "*Think globally, act locally*".

More than that, Case No. 6 shows an interesting example of development that Ackoff (1984: 195) describes as learning and as helping people how to learn for themselves. Pupils are educated not only about the preservation of their ecosystems but about negotiation tricks as well. This process of emancipation will prepare them to enter in negotiations with any body who might threaten their ecosystem, and consequently, their livelihoods and living conditions. Participatory development transforms the previously passive human beings into active subjects creating their own history (Goulet, 1979: 556).

But achieving this increased involvement of beneficiaries in the decision-making arena needs a great change in the political system of an authoritarian regime. This requires, in fact, a real process of democratization of social life.

8.5.2 Democratization of social life sustains a genuine active participation of beneficiaries in their (self-)development (H42)

If we attempt to go through the concept of democracy and its relation to participation, we find that this concept is strongly related to the extent human rights are secured and respected within a given society. It is not an idealistic view to say that genuine participation goes hand in hand with the practice of the basic democratic rights of a person, be it moral or physical. These rights, which represent the conditions for popular participation, are freedom of peaceful assembly and association, freedom of thought, conscience and religion, freedom of opinion and expression, the right of all to take part in the government of their country, and of equal access to public services (De Gaay Fortman, 1993: 14).

De Gaay Fortman (ibid.) compares these rights to the old Roman rule "*Quod omnes tangit debet ab omnibus approbari*" (which means "*what touches all has to be approved by all*"). If any decision is about to be made and its effects will affect given segments of the population, it is an ethical necessity to open up opportunities for these segments to be part of and/or influence such a decision. It is in this respect that some voices arose in Algeria when the government decided to sign a SAP agreement with IMF, saying it had to be put to a popular referendum.

In Algeria, the creation of free, independent (not under the UNPA umbrella) farmers associations became possible since the early 1990s, encouraged by some reasons related to the political situation described earlier in this book [see sections 1.3 and 4.3]. More than that, this associative movement can also be seen as part of the consequences of the economic chaos of which the population started feeling the effects in the mid-1980s and which gave rise to the popular uprisings of October 1988. Following that, a multipartism democracy was declared by the new 1989 constitution, and the freedom of association, among other democratic rights, was recognized and legalized.

Case No. 4 shows that the region of Sétif was the first province in the country that saw the creation in 1991 of an independent farmers' association after four years of 'social engineering' work of the project. In the last run, this movement yielded the creation of the National and Provincial Chambers of Agriculture which gave the right to farmers to participate in the political decision about the agricultural sector. Of course, the representativeness of these associations is still questionable, but it has to be remarked that none could have imagined that, before this movement started, private farmers, other than UNPA leaders, would participate in meetings at the Ministry of Agriculture and Fisheries and at the *Directions des Services Agricoles* (DSAs) at the province level, when important decisions concerning the agricultural sector are taken.

Case No. 5 shows other kinds of associations that were successfully created because they were not clashing with the remnants of the old tribal order. The pastoralists' associations that I visited (and met their leaders) in the Eastern Steppe Rangelands were more representative as they were small-scale, their members belonged to the same tribal fraction, and their leadership democratically elected as testified by the CR-HCDS Regional Commissioner and his subordinate staff. Every year, they actively participated in setting the action plan with the CR-HCDS. These associations are completely different, in 'organic' terms, from the ones promoted by the state since independence for being more cosmopolitan, aiming at dissolving the tribal barriers. This cosmopolitanism was a favourite tool of an illegitimate state in its attempt to stratify the society and build up an 'artificial' national unity.

Participation gives citizens - acknowledged as members of the civil society, particularly the poorest - a chance to not only discuss development plans with government officials and donors, but to devise strategies of action as well. Participation is then both a development tool and an essential component of the democratization process (Feeney, *ibid.*: 10). It is for this purpose that a contingency of development aid imposed by donors on recipient countries to promote democracy and respect for human rights has become a new support for participatory development, as Feeney (*ibid.*: 12) suggests.

In fact, there is a kind of dialectic of mutual reinforcement between participation and democracy. Participation requires democratization of social life to be played in its entire, genuine role. On the other hand, genuine participation is the indicator of a process of democratization, and the instrument that is needed for this process to be reinforced to the point of irreversibility and to avoid situations of '*démocracie de façade*'. Participation is thus the concrete side of a conceptualization of democracy on the basis of Abraham Lincoln's definition "Government of the people, by the people and for the people" (De Gaay Fortman, 1993: 10).

However, achieving increased beneficiaries' involvement in the decision-making arena through a real process of democratization of social life will not suffice to guarantee a democratized access to public resources. In fact, such a process of democratization should be crowned by an institutional process of decentralization to strengthen a 'democratized' access and use of resources.

8.5.3 Political will to use the required resources for people's development is secured through decentralization of the decision-making (H43)

After independence, Algeria adopted a centralized economic planning system for many reasons that were understandable at that time. As paradoxical as it could be, the national political leadership wanted to give it a popular participatory 'face' through the elections of Communal, Provincial and National Popular Assemblies (APCs, APWs and APN). After almost three decades, 'popular-disguised' centralization, both with top-down, dirigist intervention and strong state control through a huge, inefficient bureaucratic apparatus and para-statal, undermined by

rent-seeking and corruption, yielded the results that I have presented at length in Chapter 4. Nevertheless, many people, either in the Algerian political sphere and/or the bureaucracy, still believe that centralization brought positive results and good achievements. In a sense, one has to be fair with the post-independence state in his/her analysis. In the case of Algeria, there were both positive achievements and negative results, but the balance is leaning towards the latter.

Since the late 1980s and the beginning of the 1990s, another pattern of a more efficient development planning and administration approach came into being as society moved towards a pluralist democracy and a market economy. Consequently, the government smoothly endeavoured a process of decentralization, without calling it as such and without defining the objectives of such a process. In this respect, development planning and administration are presently still in the transition phase. Decisions and plans can be made both local and regional levels and then aggregated at the national level - this is well described by Case No. 5 - but financial management is still centralized. It is said that the decentralization of this should be the next step in the government process. As a matter of fact, we recently received at ITGC some instructions about preparing our nine experimental stations to take over the headquarters tasks of finance and budget management from 1999 onwards.

It is in this context that the CR-HCDS could manage to design its own project (Case No. 5) with its own vision on development based on 'contractualized' participation. Once the project was adopted by the HCDS and the whole Great Works Programme accepted by both the Ministry of Agriculture and Fisheries, and the Ministry-Delegation of Planning, the CR-HCDS received a notice indicating the amount of resources allocated for the project. The implementation started by the CR-HCDS and decisions about the distribution of the available resources were made locally, based on the discussions between development agents and pastoralists. However, when it came to execute the financial disbursements, the CR-HCDS had to rely on the HCDS headquarters who followed a centralized procedural system which, although less dramatic than some years before, is still hampering the conduct of development actions. Even the delay of paying wages and salaries of project employees I mentioned in section 7.2.4 could have created a delay in the project activities, if the CR-HCDS Regional Commissioner and his staff did not convince them to continue their work. Similarly, the acquisition of equipment for the wells dug by the project was delayed because of the low process of tendering that was centralized at the HCDS headquarters. Both examples can be seen as negative effects in this transitional period of the decentralization process.

Nonetheless, it has to be said that resources of the project were fairly distributed by the CR-HCDS, though some DSA directors tried to influence it by redirecting the process of resources distribution in 1995 and 1997, aiming to influence the scheduled political elections. This explains the motives of the 'alignment' of some DSA directors in order to create problems for the CR-HCDS Regional Commissioner with the Minister of Agriculture and Fisheries.

Even though it can not be advanced as a robust theory, decentralization of resource management at the local level helped people to improve the access of the excluded to public resources through a democratized access, supported by the morality of the head and staff of the executive agency.

Hypothesis H4 is verified to a large extent because the political will to use the required resources for a given development action was concretized in many ways in order to achieve the formulated (explicit) objectives. But this political will was not a gift from the powerful, given that external and internal pressures for change were behind this, although some powerful actors tried to manipulate and maneuver to maintain the on-going status-quo for as long as possible.

CHAPTER 9

AFTER THE OBSOLESCENCE OF THE CONVENTIONAL DEVELOPMENT THINKING, WHAT COMES NEXT?

In the previous chapters, I introduced two different sets of development actions designed and implemented in post-independence Algeria under different socio-political settings. Both sets were tested against a number of hypotheses (and sub-hypotheses for the second set presented in Chapter 7) that I derived from four prerequisites for sustainable development (van Dusseldorp, 1992: 12). The aim was to fix the same criteria of comparison in order to demonstrate where the differences between the two proposed sets of case-studies are located.

In Chapter 6, I assert my dissenting opinion about the conventional development thinking adopted by the post-independence state in Algeria, and showed the shortcomings of this philosophy. It is not necessary to recall the disastrous results of this extremely exclusive development vision sustained by a 'rentier' state which favoured exclusion of the *many* for the profit of the *few*. However, in Chapter 8, I shed some light on the basic 'items' of an alternative development view based on *participation*, *local organizations* and *social learning*, and showed how this view made development actions more responsive to the needs and preferences of the beneficiaries. It is thus time in this chapter to round-up the research process by answering the general research and sub-research questions I formulated in Chapter 3. Moreover, I shall sum up the insights that I derived from this work in the form of recommendations, and highlight the main differences between these two development visions.

The motive of writing this chapter in a way so that the implications for policy and planning should be highlighted is motivated by my conviction that something needs to be done about the instrument of development, i.e. the project, not only as a concept but surely as a development tool. This is even more important for the research process itself in order to avoid an open-end story, given that "analysis of pressing practical problems without producing a workable prescription seems academically epicurean" (Smith, 1988).

In this order, after answering the research question and sub-questions enunciated in Chapter 3, I shall revisit some concepts which constitute the conceptual framework I designed in Chapter 2. Finally, I shall conclude this chapter with a general discussion on the post-development era, given that significant evidence exists which supports that the conventional development thinking of post-independence Algeria, as an absolute view of progress and modernism, is gone obsolete.

9.1 Rounding-up the research process: The answer of the research questions

9.1.1 Recalling the research questions

Insofar as I mentioned in Chapter 3, the main condition of making the outcome(s) of a development action as sustainable as possible remains the fulfillment of the four pre-requisites mentioned in sections 2.2.3 and 3.2 and their related conditions. However, I underscored that the sustainability of the outcomes of a given development action is posited here as being in line with the interests of the 'excluded', the disadvantaged segments of the population that are supposedly labeled the 'development beneficiaries'.

Hence, I mentioned in Chapter 3, the pre-requisites and conditions of sustainability rely to a large extent on the centrality of the beneficiaries' knowledge, and the importance of participation of these beneficiaries in their (self-)development. It was thus opportune to problematize how the lack of beneficiaries' participation and their knowledge in steering a given development action towards their needs and preferences can have a negative impact on the sustainability of development's outcomes. Thus, I proposed a reformulation of a primarily-suggested research question as follows:

How can beneficiaries' participation and knowledge improve their steering of a development action toward the target of yielding sustainable outcomes?

However, although I considered that beneficiaries' participation and knowledge was a necessary condition for a sustainable (self-)development, it was not a sufficient condition yet, given that the so-called beneficiaries are not completely independent yet *vis-à-vis* other potential actors acting in the development theater. They are, in fact, still strongly depending on actors that were - and still are - self-referent for being self-impressed by their rationality and the 'scientificity' of their knowledge, such as planners, researchers, and development staff. Availability and consideration of beneficiaries' knowledge in the process of planned development would mean very little if its importance is not really acknowledged, and its use in the development field is not considered, by these latter actors. In general, I suggested that without learning from the past failures they planned, implemented, and evaluated, and/or from on-going development actions, it proves elusive to open a debate with these actors on issues like beneficiaries' participation and knowledge. In this context, I stated that beneficiaries' participation (either individually and/or collectively through local organizations) and knowledge, as essential features in the development theater, cannot much improve the present situation of development actions if not sustained by a social learning process that is acknowledged and supported by all actors whose interests are at stake in the development theater.

Hence, I suggest the final formulation of the research questions as Box 9.1.1(1) below shows:

Box 9.1.1(1) - The general research and sub-research questions of the study

GQ. How can the (direct and indirect) participation of the beneficiaries and the social learning ability of diverse actors acting in the development theater secure sustainable achievements of a people-centered planned development action?

Q1. To what extent and when is participation of the beneficiaries required in order to steer development actions towards their (self-)development?

Q2. Which role(s) can local organizations play in the beneficiaries' steering of development actions?

Q3. Which mechanisms are required to make monitoring and evaluation play the role of a learning process in steering development actions?

Q4. Can the design of a practical methodology be proposed according to the issues advocated in this study, such as participation, local organizations, and social learning?

Q5. What might be the shortcomings of this methodology and what political, institutional, and socio-cultural pre-requisites are needed for such a methodology to work?

9.1.2 Answering the sub-research questions

9.1.2.1 To what extent and when is participation of the beneficiaries required in order to steer development actions towards their (self-) development?

Before answering this question, I first need to mention that a large community of development practitioners and thinkers would agree on the three following 'facets' of the conventional thinking of development as it has been applied during the 'age of development' (Sachs, 1992b) by the post-independence Algerian state, and which can be characterized as follows:

1. When development created wealth (mostly derived from the oil rent), the poorer and weaker segments of the society were excluded from the distribution of this wealth, or, as in very few cases, benefited very little from it.
2. When the 'screw' of public expenditures was turned, supposedly because of debt crisis and austerity, but really because of bad governance, the richer and more powerful segments of the society were 'protected' from the austerity programme, or, as in very few cases, withstood it with very limited damage.
3. When popular uprisings took place against the injustice of the distribution of wealth, since October 1988, or the austerity measures, it was solely the populace that was the first and the last to pay the tribute.

These so-called facets introduce one of the basic contradictions found in the development philosophy applied by the post-independence state in Algeria. The distribution of the created wealth concerned only the *few*, while the support of the austerity measures implied by the Structural Adjustment Programme mostly

concerned the *many*. A slight measure of ethics and equity would have dictated that the ones who benefited more from the conventional development thinking should have been the ones that would have supported the required austerity more.

In this order, I dare to suggest that a genuine sustainable development that met an appropriate trade-off of the "critical triangle of sustainability" (Oram *et al.*, 1998: 1), as mentioned in section 2.2.2. in this book, would have surely yielded better outcomes by being more responsive to the needs of this society and benefited equitably to all members of this society. Hence, it would not only have made the 'developing society' of Algeria autonomous towards the IMF and the World Bank, but it would have also engendered a fair distribution of whatever result the development process produced, i.e. the created wealth would have been equally distributed among all members of society and austerity, if any, would have been equally supported by all members too.

However, this 'model' would have been easier to apply if mechanisms of participation, among others, were set up in order to allow each member of the society to have, either directly or indirectly, a say in decisions that affect his/her present life and future.

Why, however, did participation become so important in the post-independence Algerian context? As the comparison of the two sets of the development actions presented in Chapters 5 and 7 demonstrated, participation would have taken the following different connotations that I shall try to review hereafter.

First, in the context of post-independence Algeria, a self-proclaimed, authoritarian state adopted not only a political monopoly by setting up a one-party system in 1962, not taking the dissenting opinions of its constituencies into consideration, but it also established, as a consequence, an economic and social monopoly that carried out the process of development. A logic of clientelism, rent-seeking and opportunism was thus developed as the culture of the state apparatus, with all the waste of national wealth that it induced. As a result of this 'culture', according to Quandt (*ibid.*: 116-117),

What was once a relatively egalitarian society with a strongly egalitarian ethos has become much more differentiated and stratified. . . . During the 1980s estimated income distribution showed that Algeria's lowest 40% of households received about 18% of its income. The top 20% was almost seven times better off than the bottom 20%. . . . Other countries with less wealth actually did better in producing 'human development' with their resources. . . . It also shows a typical pattern of oil-rich countries' failure to translate that wealth into social progress.

In such a context, a process of genuine participation in the design, implementation an evaluation of development actions, which would have undeniably born an expansion into the sphere of public affairs, would have sustained transparency and thus accountability of the state apparatus towards its constituencies. It would have helped to avoid transforming the 1970s welfare state into the 'black decade' rentier one.

Secondly, in the context of post-independence Algeria, policy-makers and planners made themselves stubbornly self-referent, having no need to evaluate their policies or to listen to other opposing views. This arrogant behaviour prevented a real learning process from taking place, and produced a Structural Adjustment Programme with an inherent austerity in a country that can easily be labeled as one of the richest ones of the African continent. A genuine participatory mechanism in this context would have facilitated a better steering of development towards the needs of all members of the society, especially when acknowledged and supported by politicians, policy-makers and planners.

Third, in the context of the post-independence Algeria, the agricultural R&D system developed and implemented its development agenda in an extraordinary amnesia and ignorance of what characterized the agricultural sector in Algeria. The cases of cereal seed improvement (Case No. 2) and of collective rangelands improvement (Case No. 3), presented in Chapter 5, describe how these development actions started and where they ended up. The slight participation of the clients of the seed system, and/or the populations living in the rangelands in setting up the research agenda would have helped avoid such distinguished failures and a waste of public resources.

Fourth, in the context of post-independence Algeria, and especially during the 'black decade', the authoritarian, 'rentier' state, having disrupted dialogue with its constituencies and undermined by the interests of its different clans, developed exclusion either as a development model and as a culture of behaviour towards its constituencies. This was the 'summit' of the negation of the citizenship concept. In this frame, participation, as the consecration of citizenship as a unique reference to state-society relationships, is synonymous with taking part in any political decision-making arena, as suggests Quandt (1998: 4),

It is through political action that trade-offs among competing values are made in societies. And it is through political institutions that the rules for acquiring and using power are established.

The establishment of participatory mechanisms would have been made possible only if the two most dominant rationalities in the development decision-making arena, that are the *political* and *technical* ones, allied together to evaluate their development philosophy. In doing so, they could have considered the limitations of their own vision, and showed their willingness to reinterpret their own reading of reality in the light of alternative readings (Goulet, 1986: 305) that such genuine, sincere participatory mechanisms would have allowed. Consequently, this would have meant more room for the third rationality – the beneficiaries' *ethical* or *humane* one – to play its required role for a more successful, sustainable development. By reversing the reductionism and abdication that generated poor development decisions, the equilibrium of the three rationalities in the decision-making arena tends to promote, as Goulet (ibid..) suggests,

An active examination of the epistemological assumptions, procedural preferences, and criteria for norm-setting which place their stamp on all disciplines or special rationalities.

In the Algerian context, participation became an unavoidable mechanism at the moment the gap between the rich and the poor, although relatively insignificant at independence, increased drastically, as mentioned earlier in this section and section 4.3.1, and became unbearable. There is no doubt that this gap was an outcome of the conventional development thinking adopted and implemented by the post-independence state. The underlying process of widening this gap took the form of a social deprivation of the *many* through an irresponsible management of natural resources, in addition to the problem of degradation, and the exploitative use of national economic growth through an unfair distribution pattern imposed by the *few*. The call for participation was made louder during the popular uprisings of October, 1988, but the *pouvoir* remained deaf to this call.

In fact, the *pouvoir* in Algeria, blinded by the interests of its different lobbying groups, remained unwilling to change its policy and carried on controlling any participatory attempt that would give voice to the 'hitherto excluded', enforcing its stance through intimidation and reprisals. Instead of true popular reforms, it adopted in 1989, under the pressure of the reformist clan in the regime, a democratization process that would, in the sense of the *pouvoir*, set up a 'window-dressing' multipartism which would maintain the status quo. According to Quandt (1998: 149), widening of its 'popular' base through a 'manipulated' democratization, the regime thought it might be able to survive longer and thus stand any upheaval.

Genuine participation has to be embedded in a self-sustaining process not only to liberate one's self from the so-called complex of dependency, passivity and assistedness, but also to consolidate the process of self-promotion. It is propitious to recall here how the spontaneous popular action undertaken by the agricultural labourers in the summer of 1962, solidifying participation in their own way by proclaiming '*autogestion*' without the guidance of any political leader, made the ruling body worrisome about such an initiative. It did not take long for the same ruling body to find a way to wrap this action in a legal frame - the famous decrees of March, 1963 - in order to better control it. Genuine participation could not match with the 'ambition' of most of the clans that were controlling the post-independence state.

It is then from this sole perspective that I recommend viewing and applying the concept of participation in its wholeness. Any other conceptualization of the concept outside this vision would maybe borrow the name of genuine participation but neither the content nor the meaning. As a matter of evidence, the way participation had been truly conceptualized in the Agrarian Revolution Charter (see Case No. 1) had nothing to do with the way it was implemented in the field, taking the form of manipulating a given social group in order to reinforce the political power of a given clan in the ruling body.

It is very important to identify one unique conceptualization of participation, given that such a concept, like many others that can be found in the development jargon, is a ship that sails under different flags. According to my attempt to operationalize participation [see section 2.6.1 and Table 2.6.1(1)], the fact that beneficiaries decided for their destiny from the first step of appraising a problematic situation that needed a development intervention - that is, the diagnosis of the nature and causes of this problematic situation they faced - gave participation in the field of development its true sense, its genuineness. Consequently, thus established, participation will not only help steer development towards yielding an efficient, sustainable outcome, but induce the development of a feeling of ownership of the development action by the beneficiaries, who have not hesitated since then to mobilize additional resources and invest their own.

9.1.2.2 Which role(s) can local organizations play in the beneficiaries' steering of development actions?

The debate about genuine participation and its positive effect on development does not need to be further demonstrated, especially if we agree that it is a basic human right to decide one's own destiny within a given social order. However, organizational and functional mechanisms to bring genuine participation into being still need to be devised.

It is obvious that direct participation of any actor involved and/or concerned by a development action is the best requirement in a context of equity and social justice, especially under authoritarian regimes such as the post-independence Algerian one. However, this cannot be the appropriate way everywhere, all times. Even if it were the most appropriate, it is certainly the most costly and thus the less sustainable. So the need for collective bodies that represent a group of actors having and/or sharing similar interests remains, and the issue of local organizations remains necessary to be considered in a logic of participation.

The issue of local organizations in the sense of this book was not seen in the light of the so-called mass organizations that developed under the one-party system to pass on and disseminate the political and ideological discourse of the ruling regime. Rather, it was perceived in the light of professional interest groups that constitute, in civil society, one of the major linkages between the government and the governed, between the state and the society. In the case of Algeria, such groups boomed after the 1990s as an outcome of the popular explosion of protest in October 1988 against the politics of exclusion and bad governance since independence. As Quandt (1998: 10) puts it:

It is often believed that the key to democracy is the existence of intermediate groupings - beyond the family and tribe, but short of the state itself - where people with common interests can come together to pursue their goals. These voluntary associations, it is argued, create trust, educate in the ways of coalition building, and provide a laboratory for nurturing values conducive to democratic governance. . . . Civil associations develop once restraints are lifted and can play an important role in shaping a new order. The existence of a relatively free press in Algeria is one of the most impressive examples of how these new groups can forge strong sense of their identity.

It is in this sense that farmers, taking advantage of the democratic opening that took place in the early 1990s, created their new, independent professional associations that freed them from the supremacy of the *Union Nationale des Paysans Algériens* (UNPA). This was a general movement that took place among segments of the population seeking to reinforce and strengthen their participation in the political, economic and social life of their society. In this particular situation, Quandt (*ibid.*: 155; quoting Przeworski, 1991: 58) argues that:

Wherever authoritarian regimes have begun to liberalize, 'the first reaction is an outburst of autonomous organizations in the civil society. Students associations, unions, and proto-parties are formed almost overnight' . . . The authoritarian regime can try to prevent such autonomous groups from forming, but it cannot crush the underlying sentiments that give rise to them. As soon as the opportunity to organize and express oneself arrives, hundreds of thousands of people are ready to take advantage of the new environment.

It is thus evident that to actively participate in their own (self-)development, it was of utmost importance that farmers were made aware of and convinced that "the kingdom of freedom is within them" (Goulet, 1979: 565). As a consequence, they needed to liberate themselves from the complex of assistedness, passivity, and self-depreciation which reinforced the position of the adepts of conventional development thinking, and perpetuated the 'culture of development-as-state-charity', as cherished by the UNPA leaders. As Goulet (1979: 555) suggests:

Within the special context of development, liberation connotes a victory over privilege, stagnation and dependency. . . . A second feature of liberation is the sustained effort to overcome the political and economic constraints which block a people's creativity. Creativity is frequently stifled to such a degree that a community comes to depend on outside groups to define its own needs or goals.

But liberation in itself has no meaning *per se*. The important issue then becomes not freedom *from* what but freedom *for* what? The only alternative answer is freedom to fulfill oneself, either personally or collectively, in order to pursue human development. Ultimately, therefore, liberation is *for* development: for full, comprehensive human development (Goulet, *ibid.*: 556; his italics).

It is in this perspective that farmers and pastoralists decided to create their own organizations in order to strengthen their partnership with the development administration system and participate in steering the process of development. These

associations were freed from the systematic, strict control of the state by putting them away from the UNPA control, and were set for the sole professional purpose of carrying out their own development activities.

Farmers' associations are a "powerful instrument of action" (Alexis de Tocqueville, quoted by Heywood, 1997: 252), as they offer an opportunity to people to come together to pursue shared values, interests and norms. Their main task is to exert pressure and influence over the policy-making and planning process, as regards the interests of their own constituencies. Since 1992, they have developed into a stronger 'federative' body which possesses a legitimate representation at the national level. The government has become inclined to consult them for their specialist knowledge and information that assists in the formulation of a workable policy (Heywood, *ibid.*: 255).

The case of the common rangelands is one that is relevant to the debate about local organizations and their role in development. For many centuries, indigenous arrangements played a role in common rangelands management, use, and conservation, arbitrating access rights and mediating conflicts. By means of complementary interventions and a continuous process of de-legitimization, the colonial state, as well as the post-independence state in Algeria, attempted to dismantle these indigenous arrangements in order to pacify colonized Algeria for the former, and to avoid sharing power with its constituencies, for the latter. The results of these policies are well known [see sections 5.3 and 6.2.2]:

- Transformation of most common rangelands into open access reserves, where degradation and sometimes desertification reached a worrisome level;
- Increase in land conflicts that are no longer mediated by indigenous arrangements because of the lack of recognition from both the state and the individuals inside and outside the communities living in these areas. The mediating power was strongly competed, and thus negated, by the judicial courts settled in the cities before and after the independence;
- Design and settlement of new, imported (cooperativist) arrangements for the management and use of these areas, which appear to be inappropriate and often clash with the indigenous settings. The result is an institutional/organizational void which leaves the rangelands without a real owner and/or manager.

The success of the new pastoralists' associations that were created within the context of Cases Nos. 5 and 6 presented in this study (Chapter 7), can be attributed to the respect of the tradition of the pastoral communities, among other things, which showed deference to a more community-oriented organization. It was the key element in the rangelands regeneration and conservation project (Case No. 5) not only in the process of expansion and adoption of the fodder shrub plantation technology and cheap feed production improvement, but also in the mobilization of additional resources to carry out development activities. Such organizations owe their strength to the successful, ingenious merging between two types of interest groups. These are, according to Heywood (1997: 253):

- The communal groups: Embedded in a social fabric, in the sense that membership is based on birth, rather than recruitment, such as families, tribes, castes and ethnic groups.
- The associational groups: Characterized by voluntary action and the existence of common interests, aspirations or attitudes.

Again, the case of the common rangelands in Algeria pleads for establishing local organizations and investing them with power to manage these resources. This is true, as the state property regime in this case shows a perfect example of what Bromley and Cernea (1989: 25) call "the state's reach exceeding its grasp". It shows how the state had taken on far more natural resource management authority than it could be expected to effectively carry out, but with its own hidden reasons, of course. Such a type of tenure regime has consequently eroded the ability of the traditional structures and turned down efficiently managed territories into degraded pastures.

Given the immensity of the Algerian territory, I assert there is no way a centralized state based in the central capital, sometimes thousands of kilometers away from the place where natural resources are degraded or subjected to conflict, can manage, and more importantly, conserve these natural resources. It is thus pleading for recognition by state officials of what benefits these areas, and the people living in these areas, can get out of reviving the traditional structures or institutional arrangements empowered by acknowledged regulations to manage and conserve these areas.

9.1.2.3 Which mechanisms are required to make evaluation play the role of a learning process in steering development actions?

Answering this question requires me to first reformulate it as another pair of questions: (1) *Does evaluation sustain social learning in development actions?* (2) *How does evaluation as a social learning improve the planning and administration of development?* Before referring to the empirical material I presented in both Chapters 5 and 7, I will first take a short cut on the available theoretical meanings I have at hand.

It is opportune to begin by recalling that, in development actions, evaluation aims to mobilize valid, timely, and relevant information and knowledge about the implementation of the activities, the effectiveness of resource use, and the appropriateness of the theory¹ [see section 2.5.2] designed for the evaluated development action. It should be seen, in my opinion, as an appropriate means to support learning and help devise corrective measures. However, evaluation has been used in too many development actions as solely an administrative procedure. It

¹ The theory of a development action encompasses, I suggest, the substantive, procedural and, to a lesser extent, social theories developed during the design of the action and the production of its document (McConnell, 1981:14).

never went further than writing evaluation reports based on the rate of realization of some basic indicators like the level of expenses in the allocated budget. In other cases, evaluation was conducted in respect to some format and method which did not produce the needed information to undertake corrective measures.

Having long been method-driven, evaluation did not meet the expectations of the different actors of a development action. Chen (1990: 18) acknowledges that evaluation became a set of predetermined steps of a research process applied uniformly and mechanically to any development action without reference or concern to the theory of the evaluated development action, its settings, its actors, etc. This "black box evaluation", as Chen calls it, focused mainly on the overall relationship between the inputs and outputs of a development action without concern for the transformation processes that occurs in the middle locus of this 'black box'. Above that, this type of evaluation was not sensitive to the political and organizational contexts of input and output it was embedded in and never questioned the relationship between the planned outcome and the achieved result.

In this context, a shift from a method-driven evaluation to a theory-driven evaluation is strongly recommended. The search for an approach that re-connects the design and planning phase within the development action cycle, on the one hand, and the implementation phase, on the other, is highly underscored. This can materialized through the provision of a substantive knowledge able to explain why and how the outcome of a given development action was obtained. I would say that, in this way, the utility of such evaluation, as Rossi explains in the preface of Chen's book, remains in bringing together, within a unified scheme, the concerns of all actors of a development action (Chen, *ibid.*: 9). The mechanisms of evaluation set by the three case-studies presented in Chapter 7 are appropriate examples of this conceptualization of evaluation. This should be seen, in fact, as a continuity of the process of beneficiaries' participation in the phase of setting up the development objectives. In this view, the diagnosis of the situational problems and the setting of the development objectives (or agenda) can be assimilated as basic elements of the development action theory Chen mentioned in his conceptualization of evaluation.

Chen (*ibid.*: 39) argues that a development action represents a purposive and organized effort which intervenes in a given social process in order to solve a problem or to provide a service. How the efforts should be organized and how these efforts lead to the desired outcomes imply a general guidance or theory, as a set of interrelated assumptions, principles, and/or propositions, frequently implicitly and unsystematically stated, to explain or guide this development action. As I already mentioned in section 2.5, this theory has two dimensions: (1) A descriptive (or scientific/causative) dimension; and, (2) A prescriptive (or practical/normative) - dimension. Given that any development action gathers together different actors, having different interests, preferences and concerns, it is obvious that this diversity is likely to be found in the process of evaluation (Chen, *ibid.*: 42).

Hence, incorporating the theory of a development action into the process of evaluation can improve the sensitivity of this action to planning, goal clarification,

implementation, beneficiaries needs, and even social change theories in general (Chen, *ibid.*: 29). In this context, any method devised for evaluation should not be seen as an end, but rather as *a means for facilitating knowledge development* (Chen, *ibid.*: 30; my italics).

In a similar vein, Guba and Lincoln (1989) go further in their proposal of what they call the "fourth generation evaluation" paradigm which corrects the vision of evaluation as being a mere *scientific* process. Conceptualized in such a scientific manner, evaluation misses completely its fundamentally social, political, and value-oriented character (Guba and Lincoln, 1989: 7). Instead, a new approach based on the key dynamic of *negotiation* is strongly recommended (Guba and Lincoln, *ibid.*: 8; authors' italics).

Inspired by a constructivist orientation, some basic principles that characterize the proposed approach are as follows:

1. The *full participative* involvement of all actors in the entire process of evaluation.
2. All actors are welcomed as equal partners in every aspect of the evaluation process (design, implementation, interpretation, and resulting action).
3. All actors are accorded a full measure of *political parity and control*.
4. All actors are accorded a full measure of *conceptual parity* as they are all free to share their constructions and work towards a common, consensual, and more fully informed and sophisticated *joint* construction.
5. All actors are treated as humans, *not* as subjects of experimentation or objects of study (Guba and Lincoln, *ibid.*: 11; authors' italics).

Moreover, the role of the evaluator induced by such a conceptualization is larger, as he/she facilitates the setting of a dialogue between all actors, and is seen, according to Guba and Lincoln (*ibid.*: 10), as "the orchestrator of the negotiation process".

After having presented the theoretical meanings of evaluation as conceptualized in the sense of this study, it is opportune now to reinforce the links that exist between evaluation and social learning. According to Kolb (1984: 1):

Human beings are unique among all living organisms in that their primary adaptive specialization lies not in some particular form or skill or fit in an ecological niche, but rather in identification with the process of adaptation itself - in the process of learning. We are thus the learning species, and our survival depends on our ability to adapt not only in the relative sense of fitting into the physical and social worlds, but in the proactive sense of creating and shaping these worlds.

In the sense of this book, evaluation, as a mixture between a Chen's theory-driven conceptualization and a Guba and Lincoln's fourth-generation one, is an appropriate means of social learning in the sphere of development. It sets, in fact, the learning environment in which different actors interact in a free and open atmosphere, and "where inputs from each perspective could challenge and stimulate the other" (Kolb, *ibid.*: 10). Dialogue and mutual learning take their place in such a context and bring different ideas and visions into being that can merge into consensual constructs, as

the three case-studies Nos. 4, 5 and 6 showed. Potential conflicts that might exist between different actors must not be perceived as obstacles in the process of evaluation as I have defined it above.

It is in this context that appropriate corrective measures to adapt or reorient development actions are taken, given that, according to Kolb (*ibid.*: 11):

Learning can occur only in situations where personal values and organizational norms support action based on valid information, free and informed choice, and internal commitment.

The differentiation of the proposed empirical material presented in this study into two distinguished sets of case-studies was meant to present first material (Chapter 5) where evaluation was completely neglected or sometimes, when considered, focused on some particular quantitative indicators, such as the level of expenses, or what we used to call '*objectifs - réalisations*'. It was also meant to compare the effects of evaluation on development actions in the other set of the empirical material (Chapter 7), and how it permitted the undertaking of corrective measures at the right time. In bringing all actors involved in these development actions together, and by shortening the phases to be evaluated, the three case-studies showed the positive effects of embedding the chronological evolution of a development action into a permanent and repetitive process of evaluation and social learning.

In other words, evaluation is a provider of knowledge at the right time in order to undertake the right action. It thus substantiates that social learning is the surrender of knowledge to creation.

9.1.2.4 Can the design of a practical methodology be proposed according to the issues advocated in this study, such as participation, local organizations, and social learning?

The three case-studies presented in Chapter 7 support, to a large extent, the basic foundations of an alternative development view seeking sustainability, based on the three advocated 'building blocks', i.e. *participation, local organizations and social learning*. However, it must be said that the results of these three single cases cannot provide much more than a modest, tentative contribution to improve development planning in Algeria. By no means does this indicate a pretension from the author to extract some theoretical generalizations in the form of a methodological approach, at least not for the time being.

Nevertheless, I will derive from the elements of these cases some general features on how to make development planning more responsive to local populations in order to improve their livelihoods and living conditions at the least cost. Yet, these propositions still need to be worked out in the field of development in order to arrive at the point of designing a proper methodology, which I proposed to name the *Participatory Organismic Multiphase Project* (POMP). The basic elements of this 'package', that I propose to call the *Ten Commandments* of an alternative development view with the ALTERNATIF motto, are presented in Box 9.1.2.4(1) below. These

would represent the basics of a planner who adopts social learning as a philosophy of planning and transactive planning as his/her professional approach.

Box 9.1.2.4(1) - The Ten Commandments of an alternative development view

- C1. *Allow your clients all needed room to bring in their experiences.*
- C2. *Learn from your clients their preferences before you set the development objectives.*
- C3. *Turn long-term plans into many successive short-term phases.*
- C4. *Elaborate the plan of action of each phase in the light of the evaluation of the previous one.*
- C5. *Respect and acknowledge the legitimate representatives of your clients.*
- C6. *Notify your clients in concrete ways that their views are always considered.*
- C7. *Allocate resources on the basis of the planned actions and observe their fair distribution.*
- C8. *Turn your profession into planning with your clients instead of planning for them.*
- C9. *Incite your clients to evaluate the phases of development actions they are involved in.*
- C10. *Formulate, with your clients, a clear and understandable theory on which you base your action.*

The three 'building blocks' mentioned above are not new in the human history, in general, and/or in the Algerian history, in particular.

Concerning participation, and local organizations as means for indirect participation, one does not need to dig very deep into the Algerian history, nor to dive into the memory of the indigenous settings, such as tribes, fractions, villages, and so on, to find the existence of many participatory patterns of decision-making, resource management, access and regulation, conflict management, etc. In fact, the *foggara*, a management system of indigenous irrigation schemes that can be found in the Saharan oases; the *jemaa*, an indigenous governance and conflict resolution system that could be found in almost all Tell tribes and villages; and the *touiza*, an indigenous system of mutual help in the community are few examples among many others of such patterns where genuine participation occurred before the modern state took place after the colonial period.

Again, social learning was the predominant philosophy that guided the progress of human-beings since the appearance of the first man on this planet. One can recall that it is the fire in the forest that gave the enjoyable taste of cooked meat to the prey man used to eat raw. When he discovered the flint (firestone) and could light a fire, man made use of his new knowledge and started cooking his prey instead of eating it raw.

These statements, although bearing a philosophical content, support the three 'building blocks' of an alternative, sustainable development as being highly compatible with the human nature. This nature relies on an agency that, I suggest, stands sometimes far from a strict scientific-rational model of behaviour that impinged upon the conventional development thinking adopted by the post-independent state in Algeria. That is why my ambition - although being a legitimate ambition of a development practitioner rather than of a pure academician - to call for a *re-humanized development* thinking is made stronger by the aforementioned

compatibility. This call should thus be seen as a fair '*re-sourcement*' of development into the origins of human-beings and human nature.

Because of this, it seems that development actions need to be embedded in a very integrative, indeterminate process of human emancipation, based on a permanent and efficient mechanism of social learning. This process can only be made of a recurrent flow of events that sustain the complete humane development in such a way that any action must aim to achieve a part of the global objective of this process, that is **transforming human beings into active actors making their own decisions**. In other words, the global objective of this process should aim to teach people how to move from their position of being Objects - which are known and acted upon - to a new activist position of being Subjects - who know and act upon (Freire, *ibid.*: 20).

Accordingly, any development action which aims, either explicitly or implicitly, to perpetuate the passiveness and/or assistedness of its beneficiaries cannot achieve development, and creates instead a situation of non-development. New approaches need to be devised, of course, but any prescription should consider the necessity of helping disadvantaged (because oppressed) groups to free and to emancipate themselves from the triple bondage of misery, dependency, and passivity. This is far from being an easy endeavour and can only be realized if planning moves diversity to the center. In other words, this means that the planning philosophy and methods that emerged with the industrial era need to be revisited and adapted, and democratization of the society and social life considered.

According to Boukrouh (1995), taking advantage of their experience with the industrial era and its results, societies and their populations that adopted the current development thinking some decades ago are preparing themselves to walk into the Third Millennium with a complete new vision. Thanks to the efforts, discipline, and perseverance of millions of human-beings, humankind is marching towards a new era where man will again sit in the center of the universe, more than he did in the past. In this context, global planning that promoted quantitative methodologies in international circles, should stop confusing the ultimate beneficiaries of development actions - people - with numbers (Cleaves, *ibid.*: 294).

Hence, as much as the industrial era required massification, centralization, standardization, and uniformization, the post-industrial world needs variation, adaptation, flexibility and *dé-massification*. This reinforces the diversity of opinions and visions, and thus the necessity of participation.

As much as the industrial universe was the effect of a deterministic vision based on order, synchronization, repetition, mechanization of processes and 'robotization' of behaviours, the post-industrial world needs to be founded upon a vision of freedom which induces initiative and entrepreneurship, fluidity, exchange, communication, rapidity, and increased information. This reinforces the centrality of knowledge, and thus the necessity of social learning.

As much as the industrial era required encapsulation of populations in megalopolitical cities, fabric-schools, huge factories, mass organizations and political parties to better control their movements, the post-industrial world needs more

individual responsibility in self-promotion, more free choice, more adapted education and information, more personalized leisure, and more convivial organizations and political parties whose strategies will essentially be based on communication. This reinforces the necessity of dialogue and mutual learning, and thus the required reform of the planning system.

As much as the industrial era was characterized by heavy - or hard - technologies (mining, mechanics, chemical industries, etc.) and needed a disciplined, docile, well-ordered and impecunious man, the post-industrial era will be characterized by light - or soft - technologies (computer, communication, biotechnologies, etc.) and will require a better-informed, creative, open-minded, precise and highly-competent man. This reinforces the dialectical link between development and human emancipation.

For these reasons, bureaucratic organizations in "closed systems" (Cleaves, 1980: 284; Heywood, 1997: 340; my italics), such as the post-independence Algeria case, need very deep reforms. These needed reforms would help public organizations devise means and ways to assimilate new information while designing and implementing development actions, and to learn from its beneficiaries, who should no longer be seen as objects but as active subjects with a great strategizing capacity.

Having said this, I suggest that keeping the conventional development thinking adopted by the post-independent Algerian state alive, in addition to the socio-political features of Algeria as mentioned in this book, in order to keep intact the interests of the *privilegentsia* intact, would lead the whole country into a tremendous chaos, more harmful than the one that this country has experienced during the last years.

Thus, it is for these reasons that I believe it is extremely necessary to design an appropriate methodology aimed at realizing the assumed alternative development view.

9.1.2.5 *What might be the shortcomings of this methodology and what political, institutional, and socio-cultural pre-requisites are needed for this methodology to work?*

Before answering this question, I shall first refresh the memory of the reader by recalling the linkage between the sphere of development and the practice of politics in general. According to Heywood (1997: 381; my italics),

In a sense, policy is the *aspect of politics* which concerns *most people*. In crude terms, policy consists of the 'outputs' of the political process. It reflects the *impact of government on society*, that is its *ability* to make things better or to make things worse.

This statement makes it clear that development planning is a field where it is impossible to draw a distinct, discernible boundary between politics and development. More importantly, it makes clear that whatever approach and methodology we adopt for development, it does not change the fact that

development planning and policy-making remain embedded in a process that is, to a great extent, political. For any approach and methodology that is adopted, most shortcomings lie in the political sphere that 'envelop' the planning system, without overlooking, of course, the inherent weaknesses and shortcomings that lie in the conceptual foundations of the adopted approach or methodology.

Thus, I shall first draw a parallel between the three rationalities that must set up an equilibrium within the development decision-making arena and their different constituencies, on the one hand, and the substantive, procedural and social theories *in, of and for* planning, elaborated earlier in section 2.5.2 in this book, that shape the planning process, on the other hand [see Figure 9.1.2.5(1) below]. This will allow me to highlight where the required adjustments lie in order to make this alternative development view work.

Figure 9.1.2.5(1) - Linkages between actors involved in the decision-making arena and their influences over the planning process

Source: this study

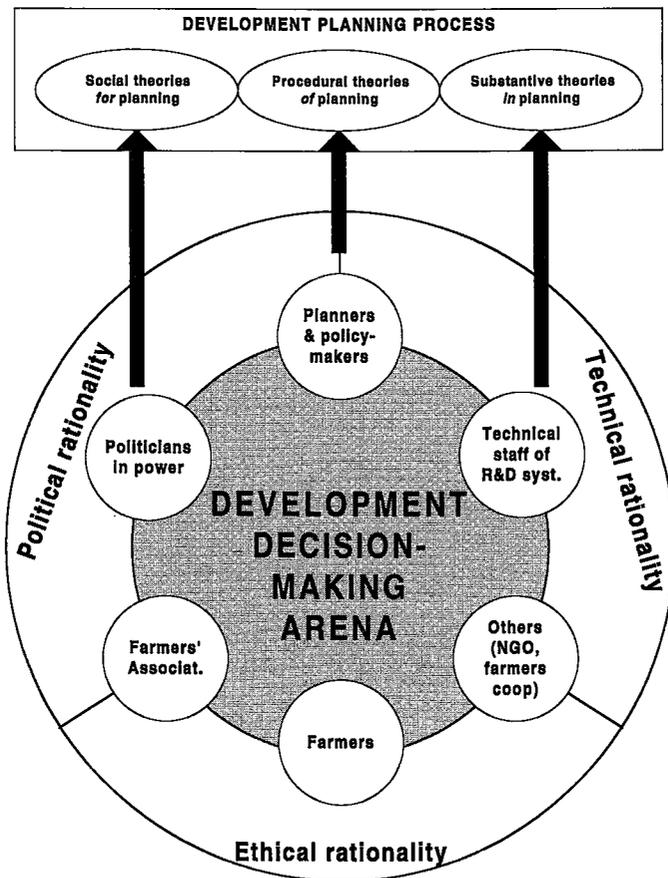


Figure 9.1.2.5(1) highlights the interrelations between the actors involved in the development decision-making arena and the influence they exert(ed) on the different theories *in*, *of* and *for* planning. The initial image of the development planning process under the post-independence regime exclusively concerned three main actors or groups of actors that provided the essential elements of the theories needed in order to put the planning process into motion. These are:

1. The politicians in power (or the political regime) which determined the issues related to the social theories *for* planning.
2. The planners and policy-makers (or the planning system) which determined the approaches, styles, modes and procedures, and other issues related to the procedural theories *of* planning, for a system with a great political dimension.
3. The technical staff of development (or the R&D system) which determined the content of development actions or the substantive theories *in* planning.

Having this said, the major adjustments in the political-institutional sphere for the alternative development view to work particularly concern these groups of actors. In the following, I introduce some recommended adjustments that are a minimum of prerequisites for this purpose.

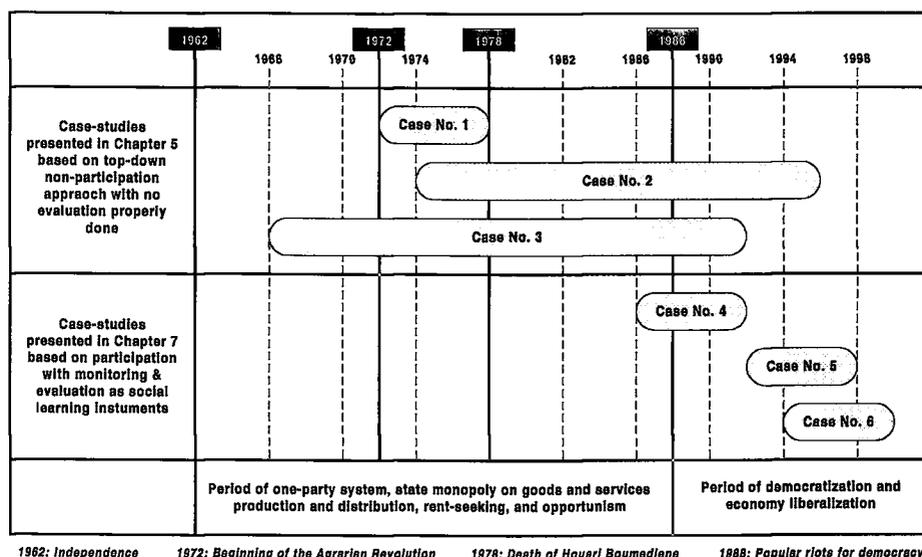
a) In the political sphere

In order to make the reader aware of the adjustments of the political sphere in order to make this alternative development view work, I attempted to map the different cases brought forward in this study and view them along the historical background of post-independence Algeria (see Figure 9.1.2.5(2) below).

Figure 9.1.2.5(2) presents the dichotomy existing between the case-studies presented in Chapter 5 and those presented in Chapter 7. The former represent the era of the one-party system and the 'black decade' (before 1988), while the latter represent the democratization era in post-independence Algeria (after 1988).

This figure bears some features that highlight the relation of the political sphere to the development decision-making arena and the supremacy of the political decision over the orientation of development, especially in the one-party system era (before 1988). For instance, the agrarian revolution policy (Case No. 1) had been immediately terminated after the death of Houari Boumediène, a charismatic political leader who was in favour of this policy. Meanwhile, the two other cases of the same era continued for a relatively longer period without any opposition, given that it was mostly in favour of the landed and pastoral elites.

Figure 9.1.2.5(2) - Relating the presented case-studies to major political events in Algeria
 Source: this study



In Chapter 2, I attempted the conceptualization of a development action and its context as the *development theater* [see section 2.8]. Given the results of the investigations undertaken in the frame of this study, I introduce hereafter a configuration of the development theater during both the one-party system era, as well as the democratization era. Figures 9.1.2.5(3) and 9.1.2.5(4) hereafter present the main features of these configurations.

As Figure 9.1.2.5(3) shows in abstract terms, the political system, given the post-independence state formation, established centralization as a model for the political, economic and social life of the country. Consequently, the supremacy of the *political* rationality in the development decision-making arena become an unquestionable issue, strongly backed by the *technical* rationality of the planners and the technical staff of the R&D system. Thus, the system looked like a "closed system" (Cleaves, 1980: 284; Heywood, 1997: 340; my italics).

The process of democratization that started with the 1989 constitution allowed for new political parties to exist and associations to be created. Freedom of press and of association was recognized as a fundamental right. There is undeniable evidence that, within the last decade, the socio-political landscape in Algeria moved far away from a strong monolithism which favoured allegiance to the *pouvoir* and subdued freedom of thought, and changed into a pluralist opening, which is in line with the expectations of the 'free' citizens and the 'transmogrification' of Algerian society, yet the regime tried vainly to control this process to its benefit.

Figure 9.1.2.5(3) - The development theater before democratization (before 1988)

Source: this study

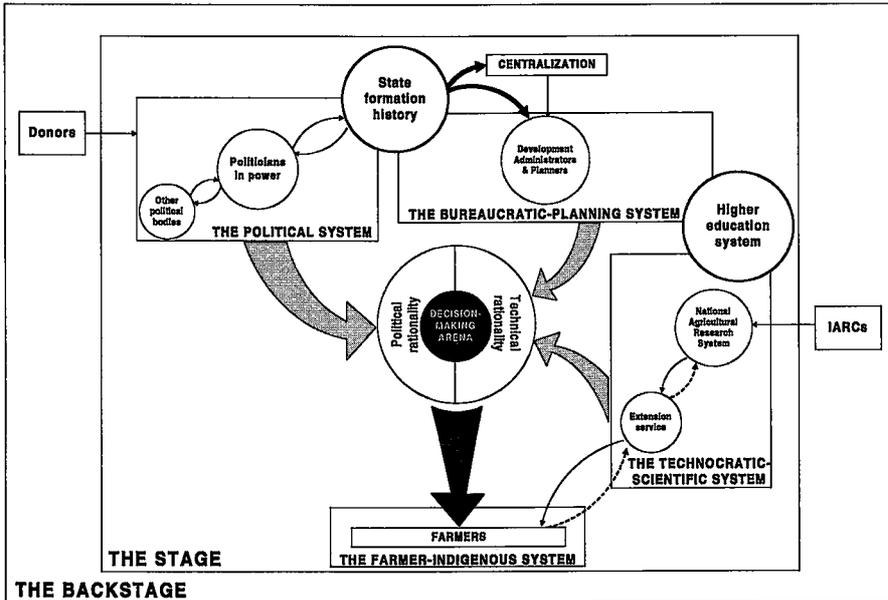
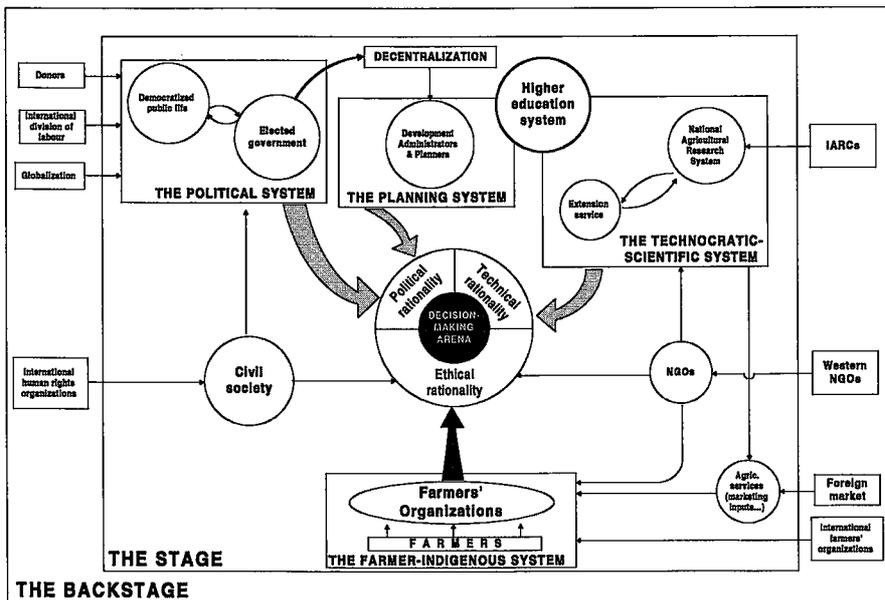


Figure 9.1.2.5(4) - The development theater after democratization (after 1988)

Source: this study



As Figure 9.1.2.5(4) shows, a substantial transformation occurred in the configuration of the development theater. Thanks to the organizations created by farmers and pastoralists, which developed into an associative pyramid from the grass-roots to the national level, farmers (and their *ethical* or *humane* rationality) are now well represented in the development decision-making arena at any level of aggregation, although the experiment is yet too recent to be objectively evaluated.

So, the major adjustment required to occur in the political sphere for the alternative development view to work resides in a process of true democratization of social life and protection of basic human rights induced by citizenship. This process will help linking decentralization to participation as being parts of the interwoven nature of social and spatial structures in the development process (Brohman, 1996: 226). Of course, nobody can assert that what is going now in Algeria is a true democratization process but at least it is setting the rules of the democratic game. As Quandt (1998: 11) suggests,

If, as some have argued, democracy is always preceded by a hot family feud that neither side can win, leading to codification of rules of the game for sharing power, then Algeria may be setting the stage in its unhappy present for a more hopeful future.

b) In the development planning system.

As Figure 9.1.2.5(3) above shows, the central planning system imposed by the one-party system, and their inherent rationalities imposed the supremacy of political decision on the decision-making arena of the development theater. In such a context, beneficiaries (farmers and pastoralists), seen as passive people, recipients of development, had no role in the decision-making arena of their development theater. Consequently, development decisions, objectives and actions were not made *with* them but made *for* them. This way of thinking, sustained by the development philosophy adopted by the regime since independence, has demonstrated its shortcomings with disastrous results.

Planners were self-referent, assuming that no one other than themselves could plan, and that there could be no planning without them. Because of their professional training or the particular positions they occupied in the development administration system, *professional planners* had a special role to play in the planning process (Conyers and Hills, 1984: 13; authors' italics). However, evidence has shown that many planning exercises can be practiced by a wide range of individuals and groups and organizations.

In fact, according to Conyers and Hills (*ibid.*: 14), other people, in addition to planners, are involved *de facto* in the planning process, and this should be acknowledged by the planners themselves. Moreover, the three cases presented in chapter 7 to a great extent showed that when beneficiaries (or the planning-object) are involved from the first step of the development action cycle, not only planning of activities improved but implementation was made with less distortion. What then, is

the necessity and efficiency of planning if it does not guarantee a less distorted implementation? Nevertheless, the involvement of the beneficiaries in evaluation, as these cases show, yielded valuable information and knowledge for planning.

In this context, the planner, without being differentiated from the implementers and evaluators acted, according to Conyers and Hills (*ibid.*: 14), as

A co-ordinator, collecting and analyzing the information and proposal of actions provided by the others, rather than actually making all the decision himself.

Activities of the development actions were planned and evaluated by the main stakeholders in some of these three mentioned cases, without a real presence of professional planners. As the achieved results speak for themselves, the absence of professional planners did not harm much the planning process, especially if it is admitted that the rate of realization was not only high but also realized on the basis of an adequate rationale and logic of sustainable development. According to Conyers and Hills (*ibid.*: 14),

Planning can, in fact, take place without any professional planners, although their existence can enhance the planning process in many ways.

In spite of this, planners took advantage of the rules of the game set by the authoritarian regime, produced the illusion of an omnipotent intelligence (Friedmann, 1973: 59), and settled in fact the supremacy of their scientific knowledge, which impinges upon their functional (*technical*) rationality. The results of this endeavour perfectly match the outcome that Scott (1998: 6) suggests, that is:

Authoritarian solutions to production and social order inevitably fail when they exclude the fund of valuable knowledge embodied in local practices.

The basic adjustment that is required at the planners' level is to open their systems up to their clients and make it more participatory. Moreover, they should acknowledge the evident fact that efficient planning can only occur when it is embedded in the undifferentiated process of the action itself (Friedmann, 1984: 192), where the planner, especially the professional one, behaves like a co-ordinator, as depicted above by Conyers and Hills (*ibid.*: 13).

Here, the specific case of the rangelands deserves special attention. Most development actions in these areas were planned with the objective of bringing about sedentarization, or were based on 'imported' cooperativist arrangements which did not live long. The anti-drought campaigns transformed transhumant systems from semi-sedentary to sedentary ones and undermined the tracking strategies used by pastoralists for centuries.

Compared to the requirements of the "critical triangle of sustainability", these actions might have achieved economic growth in these areas in terms of quantity of meat produced, but it is evident that it was to the detriment of poverty alleviation

(poverty increased because such policies benefited more the rich, big pastoralists.), and environmental conservation (degradation is there).

A more participatory, flexible planning process for these areas that incorporates short-term anti-drought actions into long-term plans of pastoral development is highly recommended, taking into account the particular specificities of these areas.

What planners should be aware of is that any planned development action planned at the central level is subject to a process of re-planning that occurs at the local level. This process is sustained by either the discretionary space allocated to local implementers, or a process of negotiation that takes place between beneficiaries and the local implementers.

c) In the Research & Development system.

The agricultural R&D system deals with 'constructing' technological solutions to tackle constraints encountered in the farming field. It should start from a real *problématique* ratified by the ones experiencing the problematic situation. However, embedded in a top-down linear model of technology transfer, strongly backed up by IARCs, this system was based on 'the' farmer as a unique and standardized vision of practicing agriculture. Uniformity of the HYVs promoted by the R&D system brought monoculture onto the farm. And monoculture, in its turn, helped planners to virtually produce the 'mono-farmer', a metaphor that sees all farmers cultivating the same crop as similar.

This consolidated the supremacy of scientific knowledge and considered farmers as passive recipients, assumed to be waiting for technologies generated by the R&D system to undertake the development of their farms.

As some of the three cases presented in Chapter 7 show, the setting up of a dialogue process between the R&D system and farmers (or pastoralists) helped to devise a pattern of *développement à la carte* which seemed more responsive to the needs and preferences of the beneficiaries. "Necessity is the motherhood of invention", says an old adage. In this context, the process of generating new technologies starts from a *problématique* that is not only real (not assumed), and appropriate for the agro-ecological and socio-economic conditions of the beneficiaries, but that requires that this *problématique* is to be approved by the beneficiaries themselves. Moreover, new technologies are presented to farmers differently than in the case of the Green Revolution. Given this orientation of *développement à la carte*, the development agent introduces to the farmer a 'basket of alternatives' and lets the farmer choose the alternative that fits his/her own conditions.

The major adjustment that is required in the R&D system is the responsiveness of the process of technology generation to the diversity of its clients. This can be sustained by an efficient development interface between two different worlds, two different types of knowledge, and two different rationalities that have to work together for a common purpose: The development of the farm and the increase of its productivity on an ethical and sustainable basis.

9.2 Summing up: Do participation and social learning improve development?

In this study, I formulated some criticisms to the conventional development thinking adopted by the Algerian state in the post-independence period. I asserted the failure of this philosophy to fit the 3Es - i.e. efficiency, equity and environment - of the "critical triangle of sustainability" (Oram *et al.*, 1998: 1), and proposed some concepts in order to introduce change in this development philosophy. Hence, I set myself to answer whether *participation*, either directly (individually) and/or indirectly (*via legitimate local organizations*), and *social learning* could altogether develop a potential alternative view capable of challenging the so-called conventional development thinking.

Looking back to the results of this investigation, I am tempted to declare that *participation*, *local organizations* and *social learning* can be set as the 'building blocks' of an alternative development view seeking sustainability in the context of Algeria, having always in mind the "critical triangle of sustainability". Some results are worth to be summed up here.

In some of the case-studies I presented in this study (see Chapter 7), a process of participation of the beneficiaries was set up in order to steer the development process. According to van Dusseldorp's (1981: 36-55; my emphasis) typology, participation was **free** (maybe facilitated), **spontaneous** and **not induced** [especially by the state]; it took both **direct** and **indirect** forms, although the latter was the most privileged; it was **complete**, **organized**, **intensive**, and **unlimited**, as it helped the beneficiaries gradually develop a sense of ownership of the development process; it involved especially the 'hitherto excluded', the **disadvantaged** members of a community and targeted **social action** in order to move the so-called beneficiaries (or 'target groups') from the position of passive recipients of development (being objects) to a partner *in* development (being subjects). However, it is needed to underscore that, in most cases presented in Chapter 7, participation took place at the first step of the development action cycle (problems identification and objectives determination). One case where participation did not start at the onset (Case No. 4) developed a phenomena of re-planning through the shortening of the phases of this development action, and the process of evaluating each phase before planning the next one.

To strengthen their participation in the development process, farmers resorted to the creation of their own organizations, independently from the state-led organizations. This not only helped to improve their access to public resources they were 'hitherto excluded' from, but engendered also a fair equitable distribution of these resources to be respected. The summit of this process of participation is that farmers, feeling the trustful and fruitful collaboration they were experiencing with some public organizations, started mobilizing additional resources for development in addition to the public ones.

In a similar vein, embedding the implementation phase of these development actions into a learning process, in a form of a regular, permanent and efficient

monitoring and evaluation process, had given a certain flexibility to the management of the development process in a context of uncertainty. Corrective measures were devised upon knowledge generated by the learning process and applied in true time, saving time and reducing the waste of resources.

Needless to say that all these features improved to a large extent the design and implementation of development actions, but this could never be achieved if some "circumstances" were not there. I shall hereafter recall the most important ones:

First, the transitory process of democratization launched in Algeria after the popular uprisings of October 1988 made it possible for farmers, as for other segments of the population, to organize themselves as professional interests groups and claim the participation in the process of making decisions that might affect their lives.

Second, some civil servants were not happy with the conventional development thinking and took advantage of the state opening of social life to apply new concepts in the field of development. Being in contact with the new developments overseas academicians and practitioners were making in development theories, mostly due to their contact with international development co-operation, they applied some concepts that were not new at the international level but certainly innovative enough in the Algerian context.

Third, the good morale and values of certain civil servants that conceived and implemented these development actions, opposing the mainstream culture of arrogance and disdain of Algerian bureaucrats towards rural populations, were also prerequisites for a genuine participation of participation to take place.

However, some shortcomings appear and need to be addressed. Participation is 'a ship that sails under different flags' and can thus be manipulated for a given purpose, as shown in the agrarian revolution policy (Case No. 1). "True participation is about power, and the exercise of power is politics", argues Dudley (1993: 160). The replicability of any successful participatory scheme is difficult to secure, given it is hard to mobilize the same conducive environment which made it possible for this innovation to be successful.

Moreover, the good morale and values of the civil servants mentioned above is not a characteristic that can be found in every corner among Algerian bureaucrats. This would worsen the problematic replicability of participatory schemes developed earlier.

These statements present the alternative development view as not being a 'robust' theory. However, although it looks fragile, almost like a spider's tiny web, it needs to be considered and taken seriously. If viable conditions for genuine participation are not mobilized, and consequently participation strengthened by an ordinary practice, then exclusion will expand and do more harm than it already did. In this perspective, the alternative can be at least considered as the less worse development philosophy in comparison to the conventional thinking adopted by the state in the context of post-independence Algeria. So, will it be better to put into practice this alternative or leave the conventional thinking expand exclusion?

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SUMMARY

This study concerns agricultural development planning and policy-making in the context of post-independent Algeria, which went unquestioned for more than three decades. Algeria won its independence in 1962 after 132 years of French colonization. A post-independence State was formed, taking over the colonial power, and set a centralized planning for economic and social development.

In the agricultural sector, the effects of this planning model were far-reaching and turned a potential agricultural country *par excellence* into one of the most net importers of food in the developing world.

The onset of this study stems from the questioning of whether planning, as a fundamental item of the development process, and in addition of being inspired by de-humanizing philosophy and methods, can still be seen as a mere technical discipline. The response of this study is that development planning and policy-making is not only a technical discipline but certainly a political process. By deduction, the development process was and could never be apolitical.

The study tries to describe how the influence of different political actors, in particular, and the political system, in general, shape the outcomes of the development process. To achieve this, the study compares two sets of development actions (policies, programmes and projects) planned and implemented under two different political perspectives: the first set represents the authoritarian regime era (1962-1988), based on the one-party system and an arrogant interventionist bureaucracy; the second introduces some development actions conducted during the transitory process of democratization (1988-1998). The study describes in parallel the changes introduced by the process of democratization and how these influenced the conventional development vision adopted by the state in post-independent Algeria.

In more a detailed explanation, the study starts first by describing the shortcomings of the conventional development thinking and the different influences that the Algerian development planning system underwent since the independence time. Then, it develops the research hypotheses which will orient the comparison of the two set of development actions presented in this book. Finally, it reflects on the advantages offered by an alternative development view, based on *participation, local organizations* and *social learning*, and their effects on the issue of sustainability. In this study, the conceptualization of sustainability refers to the "critical triangle of sustainability" (Oram *et al.*, 1998:1).

The basic assumption of this study is that the main condition for a development action to secure some substantial and sustainable outcome resides in the fulfillment of the four following prerequisites formulated by van Dusseldorp (1992:12):

1. The possibility of **formulating** a consistent, realistic and durable **set of objectives**, which is **acceptable** to all, or at least to a **large majority of the people** who will be involved in/or and affected by the planned development;
2. The availability of knowledge of all the relevant processes and their interrelationships which have to be influenced to change the present situation in such a way that the objectives will be realized;

3. The **availability of the means and power** to influence these processes;
4. The **political will to use the available means and power**, to influence the relevant processes in order to realize the desired objectives.

In most development actions designed for and implemented in Third World countries, these prerequisites were never completely fulfilled, especially in people-centered development actions. More clearly put, in some development actions, some prerequisites might have been fulfilled to some extent, but others have never been fulfilled, even to a very small extent. In fact, in the general case, objectives were ill-defined and top-down decided; knowledge was mobilized in a very reductionist way - most of time supposedly rational/scientific - with a complete denial of people's knowledge; means and power were never sufficiently made available, and when available, were not fairly distributed among the needy ones; and finally, the political will was never concretized unless the development action in concern aimed to incorporate, encapsulate and increase control over rural populations, or at sustaining an actual status quo in benefit of the powerful actors.

In this context, the study suggests that integration of some features, such as *participation*, either directly (individually) or indirectly (through *local organizations*), on the one hand; and *social learning*, (either as a flexibility in the project design and implementation and/or as a monitoring & evaluation mechanism), on the one hand, increases the probability of fulfillment of the aforementioned prerequisites.

At the level of operationalization of the basic concepts on which the study bases the present work, it faced a dilemma with the concept 'sustainable development'. To which actor or group of actors should development be sustainable in the context of this study? As the implicit and explicit assumptions of this study may suggest, the sustainability of the outcomes of a given development action is posited here to be in line with the interests of the 'hitherto excluded', the disadvantaged segments of the population. Hence, in the context of this study, the pre-requisites and conditions of sustainability rely to a large extent on the centrality of the beneficiaries' knowledge, and the importance of participation of these beneficiaries in their (self-)development. In this order, up till now and for not less than three decades, development actions in Algeria were designed without consultation of their supposed beneficiaries, and yielded a huge gap between the *priviligentsia* and the disadvantaged. It was thus important that the study focuses more on the impact of beneficiaries' participation and knowledge in steering a given development action towards their needs of development.

However, although the study considers that beneficiaries' participation and knowledge is a necessary condition for sustainable development, it is not a sufficient condition *per se*. This is true given that the so-called beneficiaries are still strongly interacting with other actors that hold a great power of decision, and are extremely self-referent and self-impressed by the rationality and 'scientificity' of their knowledge, such as planners, researchers, development staff, etc. It is, thus, important that the availability of the beneficiaries' knowledge must be

acknowledged by these latter actors. Moreover, all this must be supported by a real social learning process whose importance for sustainable development is acknowledged and supported by all social actors who have some interest at stake in a given development action.

Consequently, the study aims at answering the following general research and sub-research question:

GQ. How can (direct and indirect) participation of the beneficiaries and the social learning ability of diverse actors acting in the development theater secure sustainable achievements of a people-centered planned development action ?

Q1. To which extent and when is participation of the beneficiaries required in order to steer development actions towards their (self-) development?

Q2. Which role(s) can local organizations play in the beneficiaries' steering of development actions?

Q3. Which mechanisms are required to make monitoring and evaluation play the role of a learning process in steering development actions?

Q4. Can the design of a practical methodology be proposed according to the advocated issues in this study, such as participation, local organizations and social learning?

Q5. What might be the shortcomings of this methodology and what political, institutional, and socio-cultural pre-requisites are needed for such a methodology to work?

The results of the study shows that:

- Participation since the first step of the development action cycle (problems identification and objectives determination) improved the design and the implementation of development actions. Participation helped the beneficiaries not only to develop a sense of ownership of the development process, but to mobilize their own resources when needed, in addition to public ones.
- Creation of farmers' organizations independently from State-led organizations helped the 'excluded' to improve their access to public resources they were hitherto excluded from. It sustained participation of the beneficiaries towards a more democratized development and turned it into a means of sustainable development.
- Embedding the implementation phase of development actions into a learning process, that is a regular, permanent and efficient monitoring and evaluation process, gives a certain flexibility to development. Corrective measures were devised upon knowledge generated by the learning process and applied in true time, saving time and reducing the waste of resources.
- The 'building blocks' of an alternative development view for Algeria were defined and a methodology needs to be designed its application.
- A process of democratization of social and political life, on the hand, and a reform of the mentality and procedures of the development planning and policy-making system, on the other, are necessary conditions for the application of the alternative development view.

RÉSUMÉ

La présente étude concerne la planification et l'élaboration de politiques de développement agricole dans le contexte de l'Algérie d'après-indépendance, qui est resté sans questionnement profond durant les trois dernières décennies. L'Algérie a recouvert son indépendance en 1962, après 132 ans de colonisation française. Un Etat d'après-indépendance a pris forme, prenant le relais du pouvoir colonial, et a adopté un modèle de planification centralisée pour les besoins du développement économique et social.

Dans le secteur agricole, les effets de ce modèle de planification ont été d'une grande portée, transformant un pays agricole par excellence en l'un des pays les plus radicalement importateurs de biens alimentaires dans le monde.

L'étude trouve son ébauche dans la question de savoir si la planification, en tant que rudiment fondamental du processus de développement, et en plus du fait qu'étant inspiré par une philosophie et des méthodes "dé-humanisantes", peut encore être considérée comme uniquement une simple discipline technique. La réponse de cette étude est que la planification et l'élaboration de politiques de développement est non seulement une discipline technique mais en plus, et certainement, un processus à grande connotation politique. Par déduction, le processus de développement n'a jamais et ne pourra jamais être apolitique.

L'étude s'est assignée de décrire comment l'influence des différents acteurs politiques, en particulier, et le système politique, en général, donne forme aux outputs du processus de développement. Pour atteindre un tel résultat, l'étude compare deux groupes d'actions de développement (politiques, programmes et projets) planifiées et exécutées sous deux perspectives politiques différentes: le premier groupe représente l'ère du régime autoritariste (1962-1988), basé sur le système du parti unique et une bureaucratie interventionniste et arrogante; le second introduit quelques actions de développement conduites durant le processus transitoire de démocratisation (1988-1998). L'étude décrit en parallèle les changements induits par le processus de démocratisation et comment ceux-ci ont-ils influencé l'approche conventionnelle de développement adoptée par l'Etat d'après-indépendance en Algérie.

De manière détaillée et plus explicative, l'étude commence d'abord par décrire les insuffisances relevées dans la bibliographie concernant l'approche conventionnelle de développement et les différentes influences auxquelles a été sujet le système algérien de planification du développement depuis l'indépendance. Ensuite, elle développe les hypothèses de recherche qui orienteront la comparaison entre les deux groupes d'études de cas présentés dans cet ouvrage. Finalement, elle élabore les avantages offerts par une vision alternative de développement, fondée sur la *participation*, les *organisations locales* et l'*apprentissage social (social learning)* ainsi que leurs effets sur la question de la durabilité. Dans cette étude, la conceptualisation de la durabilité repose sur le concept du "triangle critique de la durabilité" (Oram *et al*, 1998:1).

La supposition fondamentale de cette étude est que la condition majeure pour qu'une action de développement puisse atteindre un quelconque résultat qui soit durable, il est nécessaire que soient réunis les quatre préalables (van Dusseldorp, 1992:12) qui suivent:

1. La possibilité de **formuler un ensemble d'objectifs** consistants, réalistes et durables, qui soient **acceptables** pour tous, ou du moins pour la **majorité large** de la population qui sera impliquée et/ou affectée par l'action de développement envisagée;
2. La **disponibilité** du **savoir** concernant tous les processus liés à l'action de développement envisagée ainsi que leurs interrelations, et que la dite action doit influencer afin d'arriver à un changement de la présente situation de telle manière que les objectifs assignés à l'action de développement en question soient réalisés;
3. La **disponibilité** des **moyens** et de la **force** nécessaires à l'influence par l'action de développement envisagée des différents processus dans le sens de l'atteinte des objectifs fixés;
4. L'existence d'une **volonté politique d'utiliser les moyens et la force disponibles** afin d'influencer les différents processus de manière à atteindre les objectifs assignés à l'action de développement envisagée.

Dans de nombreux cas d'actions de développement conçues et exécutées dans les pays du Tiers-Monde, ces préalables n'ont jamais été totalement réunis, particulièrement dans celles centrées sur le développement humain. En clair, dans certains cas, quelques préalables ont été réunis jusqu'à niveau jugé satisfaisant, alors que d'autres ne l'ont jamais été, même pas à un très faible niveau. En général, les objectifs sont mal définis, et imposés d'en haut (planification centralisée de type "ascendant"); le savoir est mobilisée de manière réductionniste, mono-disciplinaire dans son unique forme dite "scientifique", et sans aucune reconnaissance du savoir populaire; les moyens et la force ne sont pas suffisamment disponibles, et même quand disponibles, ne sont pas répartis équitablement parmi les plus nécessiteux; et le dernier mais non moins important, la volonté politique n'est jamais suffisamment mobilisée sauf dans le cas où l'action de développement envisagée viserait à "incorporer" des populations rurales et/ou élever leur contrôle, ou alors renforcer un statu quo existant au bénéfice de clans forts au sein de la société.

Dans ce contexte, l'étude suggère que l'intégration, dans l'approche de développement, de certains éléments, telles la *participation*, autant directe (individuelle) que indirecte (par le biais d'*organisations locales*), d'une part, et l'*apprentissage social* (que ce soit en termes de flexibilité dans la conception et l'exécution de projets ou à travers la mise en place de mécanismes de suivi-évaluation), d'autre part, améliore la probabilité pour que les préalables ci-dessus évoqués soient réunis.

Au niveau de l'opérationnalisation des concepts de base sur lesquels repose cette étude, il été fait face à un dilemme quant au concept de "développement durable". Pour quel acteur or groupe d'acteurs doit le développement être durable dans le

contexte de cette étude? Comme les suppositions aussi bien explicites qu'implicites de cet ouvrage peuvent bien le suggérer, la durabilité des résultats d'une action de développement donnée doit être en accord avec les intérêts des "exclus auparavant", des couches défavorisées de la population. Ainsi, dans le contexte de cette étude, les préalables et conditions de durabilité repose sur la centralité du savoir des bénéficiaires, ainsi que l'importance de la participation de ces mêmes bénéficiaires dans leur processus de (auto-)développement. Dans cet ordre, il est aisé de dire que, jusqu'à maintenant, et pendant pas moins de trois décennies, les actions de développement conduites en Algérie ont été conçues sans la moindre consultation de leurs supposés bénéficiaires. Le résultat en est un fossé énorme entre la *privilegentsia* et les couches défavorisées. Il était apparu alors important que l'étude focalise plus sur l'impact de la participation des bénéficiaires et de leur savoir dans l'orientation d'une action de développement donnée vers la satisfaction de leurs propres besoins en développement.

Cependant, bien que l'étude considère que la participation des bénéficiaires et de leur savoir demeure une condition nécessaire pour le développement durable, celle-ci n'est pas pour autant suffisante à elle seule. Ceci est d'autant plus vrai que ces présumés bénéficiaires du développement entretiennent des rapports permanents avec d'autres acteurs, tels que les planificateurs, les chercheurs, les agents de développement, etc. Ces derniers détiennent un grand pouvoir de décision dans le domaine du développement, et sont quelque peu autistes, parce que impressionnés par leur rationalité et la "scientificité" de leur savoir. Il est, en fait, de toute importance que la mobilisation du savoir des bénéficiaires ainsi que sa disponibilité soit une nécessité reconnue par ces derniers, et supporté par un réel processus d'apprentissage social (*social learning*) dont l'importance pour le développement durable devrait être partagée par tous les acteurs sociaux qui dénotent un intérêt quelconque dans le contexte d'une action de développement.

En conséquence, l'étude tente de répondre à une problématique générale d'où sont dérivées les questions de recherche qui suivent:

Problème général:

Comment la participation (directe et/ou indirecte) des bénéficiaires ainsi que la capacité d'apprentissage social des différents acteurs agissant dans le domaine du développement peuvent-ils garantir une durabilité des résultats d'une action de développement centré sur le facteur humain?

Questions de recherche:

- Q1. *Jusqu'à quel niveau et quand la participation des bénéficiaires est-elle requise afin qu'ils puissent orienter les actions de développement dans le sens de leur (auto-)développement?*
- Q2. *Quel(s) rôle(s) doit(vent) jouer les organisations locales des bénéficiaires dans la perspective d'orienter les actions de développement dans le sens de leur (auto-)développement?*
- Q3. *Quels mécanismes sont requis pour que puissent le suivi et l'évaluation jouer un rôle d'apprentissage social dans la perspective d'orienter les actions de développement dans le sens de la durabilité?*
- Q4. *Est-il possible de proposer la conception d'une méthodologie sur la base des concepts défendus dans cette étude, tels la participation, les organisations locales et l'apprentissage social?*
- Q5. *Quelles pourraient être les éventuelles insuffisances d'une telle méthodologie et quels préalables politiques, institutionnels et socioculturels sont préalablement requis pour qu'une telle méthodologie puisse fonctionner correctement?*

Les résultats auxquels aboutit l'étude sont comme suit:

- La participation dès la première étape du cycle d'une action de développement (identification de la problématique et définition des objectifs à atteindre) a considérablement amélioré la conception et la réalisation des actions de développement. Celle-ci a permis aux bénéficiaires non seulement de développer un sens d'appropriation du processus de développement, mais aussi de mobiliser leurs propres ressources en vue de supporter les actions de développement, en sus des ressources publiques.
- La création d'organisations professionnelles, autonomes par rapport à celles "commanditées" par l'Etat, a permis aux bénéficiaires d'améliorer leur accès aux ressources publiques allouées au développement, bien qu'étant auparavant exclus de la distribution de ces ressources. Ceci a consolidé la participation des bénéficiaires en vue d'un développement plus démocratisé et affirmé que la participation est un moyen réel pour le développement durable.
- Le fait d'envelopper la phase d'exécution des actions de développement dans un processus d'apprentissage social (*social learning*), en la forme d'un processus permanent de suivi et d'évaluation, a donné une certaine flexibilité dans la gestion de ces actions de développement. Des mesures correctives ont pu être prises en temps réel sur la base de l'information et du savoir générés par ce processus d'apprentissage social, épargnant ainsi le gaspillage inutile des ressources.
- Les "pierres angulaires" pour une approche alternative de développement agricole pour le cas de l'Algérie ont été définies et la conception d'une méthodologie pour sa mise en application demeure nécessaire.
- Un processus de démocratisation de la vie politique et sociale, d'une part, et la réforme de la mentalité et des procédures en vigueur dans le système de planification et d'élaboration de politiques de développement, d'autre part, sont les préalables nécessaires pour la mise en application efficiente de cette approche alternative de développement évoquée dans cette étude.

SAMENVATTING

Deze studie betreft de ontwikkelingsplanning en beleidsformulering in Algerije na de onafhankelijkheid. Gedurende drie decennia heeft deze plaatsgevonden zonder ter discussie gesteld te worden. Algerije verkreeg z'n onafhankelijkheid in 1962 na 132 jaar van Franse kolonisatie. Een post-onafhankelijkheids Staat werd gevormd, die de koloniale macht overnam en een gecentraliseerde planning opzette voor economische en sociale ontwikkeling.

In de landbouwsector waren de gevolgen van dit planningsmodel zeer ingrijpend en veranderde het een land met een enorm agrarisch potentieel in één van de grootste netto importeurs van voedsel van de ontwikkelingswereld.

De aanzet tot deze studie is de vraag of planning, als een fundamenteel element van het ontwikkelingsproces, en geïnspireerd door een de-humaniserende filosofie en methoden, nog steeds gezien kan worden als een zuiver technische discipline. Het antwoord van deze studie is dat ontwikkelingsplanning en beleidsformulering niet alleen een technische discipline is, maar vooral ook een politiek proces. Hieruit volgt dat het ontwikkelingsproces nooit a-politiek was en kan zijn.

De studie beschrijft hoe de invloed van het politieke systeem in het algemeen, en van verschillende politieke actoren in het bijzonder, de uitkomsten van het ontwikkelingsproces vorm geven. Om dit te bereiken worden twee series ontwikkelingsactiviteiten (beleid, programma's en projecten) vergeleken die gepland en uitgevoerd zijn onder twee verschillende politieke regimes. De eerste serie vertegenwoordigt de periode van het autoritaire regime (1962-1988), gebaseerd op het één-partij systeem en een arrogante interventionistische bureaucratie. De tweede introduceert enkele ontwikkelingsactiviteiten uitgevoerd tijdens het overgangsproces van democratisering (1988-1998). De studie beschrijft tegelijkertijd de veranderingen die geïntroduceerd zijn tijdens het proces van democratisering en hoe deze het conventionele ontwikkelingsdenken beïnvloedden dat was aangenomen door de Algerijnse post-onafhankelijkheids Staat.

In een meer gedetailleerde analyse, begint de studie met het beschrijven van de tekortkomingen van het conventionele ontwikkelingsdenken en de verschillende invloeden die het Algerijnse systeem van ontwikkelingsplanning heeft ondergaan sinds de onafhankelijkheid. Vervolgens worden een aantal onderzoekshypothesen ontwikkeld die richting geven aan de vergelijking van de twee series van ontwikkelingsactiviteiten die gepresenteerd worden in dit boek. Uiteindelijk wordt stil gestaan bij de voordelen van een alternatieve ontwikkelingsvisie, gebaseerd op *participatie*, *lokale organisaties* en *sociaal leren*, en hun effecten op de kwestie van duurzaamheid. In dit werk refereert het concept duurzaamheid aan de "critical triangle of sustainability" (Oram *et al*, 1998: 1).

De basisgedachte van deze studie is dat de belangrijkste voorwaarde voor een ontwikkelingsactiviteit om te leiden tot een substantiële en duurzame uitkomst ligt in het voldoen aan de volgende vier vereisten, die zijn geformuleerd door van Dusseldorp (1992: 12):

1. De mogelijkheid een **serie doelstellingen** te **formuleren** die consistent, realistisch en duurzaam zijn en die **acceptabel** zijn voor alle, of ten minst voor een **grote meerderheid van mensen** die betrokken zullen zijn bij en geraakt zullen worden door de geplande ontwikkeling.
2. De **beschikbaarheid van kennis** van al de relevante **processen** en hun onderlinge verbanden, die beïnvloed moeten worden om de huidige situatie zodanig te wijzigen dat de doelstellingen gerealiseerd zullen worden.
3. De **beschikbaarheid van de middelen en de macht** om deze processen te beïnvloeden.
4. De **politieke wil om de beschikbare middelen en macht te gebruiken** om de relevante processen te beïnvloeden, om de gewenste doelstellingen te bereiken.

In de meeste ontwikkelingsactiviteiten die werden ontworpen en uitgevoerd in Derde Wereld landen, was aan deze vereisten nooit volledig voldaan. Dit was met name het geval in *people-centered* projecten. In ander woorden, in sommige ontwikkelingsactiviteiten was misschien aan sommige voorwaarden voldaan, maar aan de andere voorwaarden was zelfs niet in geringe mate voldaan. In het algemeen kunnen we stellen dat doelstellingen slecht geformuleerd zijn en top-down worden besloten, kennis wordt gemobiliseerd op een reductionistische wijze - veelal zogenaamd rationeel/ wetenschappelijk - met een complete ontkenning van de kennis van de mensen zelf. De middelen en macht worden nooit in voldoende mate beschikbaar gesteld en wanneer ze al beschikbaar worden gesteld, dan worden ze niet eerlijk verdeeld over de mensen die ze het meest nodig hebben. Tenslotte is de politieke wil nooit aanwezig tenzij de betreffende ontwikkelingsactiviteiten ten doel hebben om de rurale bevolking te incorporeren en in te kapselen en de controle over hen te vergroten, of de huidige situatie te continueren in het voordeel van de machtige actoren.

In deze context stelt deze studie dat de integratie van sommige kenmerken, zoals aan de ene kant *participatie* - direct (individueel) of indirect (door middel van *lokale organisaties*) - en aan de andere kant *sociaal leren* (in het ontwerp en de uitvoering van het project en/ of als een mechanisme van monitoring en evaluatie) het waarschijnlijker maakt dat aan de hierboven genoemde voorwaarden wordt voldaan.

Op het niveau van de operationalisatie van de basis concepten verkeert de studie in een dilemma met betrekking tot het concept 'duurzame ontwikkeling'. Voor welke actor of groep van actoren zou de ontwikkeling duurzaam moeten zijn in de context van deze studie? Zoals de impliciete en expliciete veronderstellingen van deze studie reeds suggereren, wordt er hier vanuit gegaan dat de duurzaamheid van de resultaten van een bepaalde ontwikkelingsactiviteit in overeenstemming moet zijn met de belangen van de 'tot nu toe uitgesloten', de minder bedeelde segmenten van de samenleving. In deze studie hangen de vereisten en voorwaarden voor duurzaamheid dus in grote mate af van de centrale plaats van de kennis van de begunstigden en het belang van de participatie van deze begunstigden in hun

(zelf-)ontwikkeling. Tot aan de dag van vandaag en gedurende meer dan drie decennia, werden ontwikkelingsactiviteiten in Algerije ontworpen zonder overleg met de begunstigen en dit leidde tot een enorm gat tussen de geprivilegieerden en de minder bedeelden. Het was daarom belangrijk dat deze studie meer aandacht gaf aan de gevolgen van de participatie en de kennis van de begunstigen in het richting geven aan een bepaalde ontwikkelingsactiviteit voor hun eigen behoeften aan ontwikkeling.

Hoewel deze studie stelt dat de participatie en kennis van de begunstigen een noodzakelijke voorwaarde vormen voor duurzame ontwikkeling, is dit echter niet voldoende. Het punt is dat de zogenaamde begunstigen in hoge mate contacten onderhouden met andere actoren die een grote macht hebben in de besluitvorming en dat ze zelf extreem veel refereren en onder de indruk zijn van de rationaliteit en "wetenschappelijkheid" van de kennis van mensen zoals planners, onderzoekers, ontwikkelingsstaf, etc. Het is daarom van belang dat de beschikbaarheid van de kennis van de begunstigen wordt erkend door deze laatsten. Bovendien moet dit alles gesteund worden door een echt proces van sociaal leren en moet het belang daarvan voor duurzame ontwikkeling worden erkend en ondersteund door alle sociale actoren die belangen hebben bij een bepaalde ontwikkelingsactiviteit.

Daarom heeft deze studie ten doel de volgende algemene en afgeleide onderzoeksvragen te beantwoorden:

- AV. Hoe kunnen de (directe en indirecte) participatie van de begunstigen en de sociale leer mogelijkheid van de diverse actoren die optreden in het ontwikkelingstheater de duurzame ontwikkeling van een people-centered geplande ontwikkelingsactiviteit garanderen?*
- V1. In welke mate en wanneer is participatie van de begunstigen vereist om ontwikkelings activiteiten te sturen in de richting van hun (zelf-) ontwikkeling?*
- V2. Welke rol(len) kunnen lokale organisaties spelen in het sturen van ontwikkelings- activiteiten door begunstigen?*
- V3. Welke mechanismen zijn vereist om monitoring en evaluatie de rol te laten spelen van een leerproces in het sturen van ontwikkelingsactiviteiten?*
- V4. Kan het ontwerp van een praktische methodologie worden voorgesteld overeenkomstig de zaken die in deze studie worden bepleit, zoals participatie, lokale organisaties en sociaal leren?*
- V5. Wat kunnen de tekortkomingen van deze methodologie zijn en welke politieke, institutionele, en sociaal-culturele vereisten zijn nodig om zo'n methodologie te laten werken?*

De resultaten van de studie laten zien dat:

- Participatie vanaf de eerste stap van de ontwikkelingsactiviteit (identificatie van problemen en bepalen van doelstellingen) het ontwerp en de uitvoering van ontwikkelingsactiviteiten verbeterde. Participatie hielp de begunstigen niet alleen een gevoel van zeggenschap over het ontwikkelingsproces te ontwikkelen, maar ook om naast de publieke middelen hun eigen middelen te mobiliseren wanneer dat nodig was.

- De vorming van boeren organisaties, onafhankelijk van door de Staat geleide organisaties, hielp de "uitgesloten" hun toegang tot publieke middelen, waar ze to dan toe van uitgesloten waren, te verbeteren. Het ondersteunde de participatie van de begunstigen in de richting van een meer democratische ontwikkeling en veranderde het in een middel tot duurzame ontwikkeling.
- Het vastleggen van de uitvoeringsfase van ontwikkelingsactiviteiten in een leerproces, dat wil zeggen, een regelmatig, permanent en efficiënt monitoring en evaluatie proces, geeft een zekere flexibiliteit aan ontwikkeling. Corrigerende maatregelen werden ontworpen op basis van de kennis die gegenereerd was door het leerproces en werden toegepast op het juiste moment, waardoor tijd werd gespaard en de verspilling van middelen werd verminderd.
- De "bouwstenen" van een alternatieve ontwikkelingsvisie voor Algerije werden gedefinieerd en een methodologie dient te worden ontworpen voor de toepassing hiervan.
- Een proces van aan de ene kant de democratisering van het sociale en politieke leven en, aan de andere kant, een hervorming van de mentaliteit en procedures van ontwikkelingsplanning en het systeem van beleidsformulering, zijn noodzakelijke voorwaarden voor de toepassing van een alternatieve ontwikkelingsvisie.

CURRICULUM VITAE

Mustapha Malki was born in El-Harrach near Algiers, Algeria, on October 20, 1955. He studied agronomy at the *Institut de Technologie Agricole* (ITA) at Mostaganem (West Algeria), and graduated as BSc in Crop Production in June 1980.

After having worked for 6 years as a State farm manager, he joined the *Institut Technique des Grandes Cultures* (ITGC), his actual employer, in November 1986, where he occupied different positions.

From November 1986 to July 1988, he was the Head of Breeding Service in charge of setting up the National System of Statutory Variety Testing and the management of the National Register of Varieties and Species.

In July 1988, he was promoted as the Head of Planning Department and occupied the position until January 1997.

Since this last date, he occupies the position of Secretary General, in charge of coordinating the technical and scientific activities of ITGC.

In September 1992, he started his post-graduate studies with the MAKS MSc programme at Wageningen Agricultural University. In January 1994, he graduated with distinction, and was granted a sandwich programme fellowship to carry out a Ph.D. research which started in January 1995 at the Department of Sociology of Rural Development.

Since 1993, he conducted two short-term consultancies for international organizations, and participated in many courses as a free-lancer trainer in computer use and project preparation.

Since October 1995, he participated in the Mashrek-Maghreb Project entitled Development of Integrated Crop/Livestock Production in West Asia and North Africa, in which 8 Arab countries (4 from the Mashrek and 4 from the Maghreb) participated with ICARDA and IFPRI, and funded by IFAD and AFESD. He was part of the Algerian team that worked for the Policy and Property Rights component.

One of his interests in social sciences is the collection and interpretation of popular sayings, songs and proverbs in relation to farming practices.

