

# Privatization of wetlands; re-defining rural livelihoods and food

## Privatization and land acquisitions in the wetlands of eastern Uganda

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# LIST OF ABBREVIATIONS

- BADEA: Arab Bank for African Economic Development
- CBO: Community Based Organization
- DORSEFA: Doho Rice Scheme Farmers Association
- DRS: Doho Rice Irrigation Scheme
- EDF: European Development Fund
- EPRDF: Ethiopian People Revolutionary Democratic Front
- FAC: Co-operation Aid Fund
- FAO: Food and Agricultural Organization
- FDI: Foreign Direct Investment
- FoEI: Friends of the Earth International
- GDP: Gross Domestic Product
- GFCC: Gannet Fleming Corrdry Carpenter
- GoU: Government of Uganda
- IDA: International Development Association of the World Bank
- IFAD: International Fund for Agricultural Development
- IIED: International Institution for Environmental Development
- IMT: Irrigation Management Transfer
- IRIN: Integrated Regional Information Network
- IRRI: International Rice Research Institute
- JICA: Japan International Cooperation Agency
- KISACS: Kibimba Savings and Credit Scheme
- LC: Local Councilor (LC1: village, LC2, parish, LC 3, sub-county, LC4 county, LC5 district)
- LRAN: Land Research Action Network
- MWLE: Ministry of Water, Lands and Environment
- MV: modern (seed) varieties
- NAADS: National Agricultural Advisory Services
- NAPE: National Association of Professional Environmentalists
- NDP: National Development Plan
- NEMA: National Environmental Management Authority
- NERICA: New Rice for Africa
- NGO: Non- Governmental Organization

NIB: National Irrigation Board

NWP: National Wetlands Conservation and Management Program

OC: officer in charge

OIC: Organization of Islamic Countries

PEAP: Poverty Eradication Action Plan

PIU: Provincial Irrigation Unit

PIV: Périmètres irrigués villageois (village irrigation parameters)

PLA: Platform for labor action

RDC: Regional District Commissioner

SAED: Société d'Aménagement et d'Exploitation des terres du Delta Fleuve Sénégal

UAE: United Arab Emirates

UIA: Uganda Investment Authority

ULA: Uganda Land Alliance

UNDP: United National Development Program

URA: Uganda Revenue Authority

USAID: US Agency for International Development

VODP: Vegetable Oil Development Project

WBG: World Bank Group

WID: Wetlands Inspection Department

WMD: Wetlands Management Department

WSSP: Wetland Sector Strategic Plan

WTO: World Trade Organization



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# PREFACE

My background in nutrition studies combined with an interest in the more political, social and economic aspects of food and food production have led me to the wetlands of eastern Uganda to study the rural sociology of rice production. During the process I have come to realize the complexity and multi-faceted nature of the production of food in a globalized and neo-liberal oriented system. In critically analyzing current processes of privatization and land acquisitions for the commercial production of rice, in the wetlands and irrigation in eastern Uganda, this thesis touches upon the problematic of our current food system and the discussion on its future and potential alternatives. This problematic should be tackled as a socio-technical problem which requires interdisciplinary research recognizing the complex interactions between the social, political, economic and ecological aspects of the problem and the various actors involved.



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# ACKNOWLEDGEMENTS

The process of writing this thesis has learned me that things will sometimes take more time than I wish them to take and that no process can ever be forced. I have experienced that sometimes things will cross your path that might at first seem an obstacle to what you wish to achieve, or to the process or work that you are currently involved in. I have now, at the end of my thesis process, come to the point where I have realized that it might have been just the combination of the thesis process and the perceived 'obstacles' that came along, that have learned me a whole lot more about myself, my pitfalls and my strengths. Most importantly, experiencing that lacking a sense of control, does not mean that things will not work out. By having taken the time and space needed, this thesis has eventually rather unfolded itself, in the moments that I was able to surrender more to the process, rather than trying to rigidly control this analytical process.

Therefore I would like to thank the people that have supported me in this process. I want to sincerely thank my supervisor, Paul Hebinck, for having given me this time and space and for not putting any pressure on me, while stirring the process in the right directions at the right times, showing confidence and most of all, bringing lively inputs and enthusiasm into the process. Thanks to IITA, for having supported me with the fieldwork in Uganda and for their analytical inputs and kind, comforting support and patience. Special thanks to Sylvia and Antony for our team work! Thanks for the Netherlands Embassy in Kampala, for having given me the time to organize and conduct this fieldwork within my internship and for having helped me initiating the first contacts that catalyzed this research.

Thanks to all those people who were willing to let me interview them. In the writing process, I felt like I was partly writing this thesis for them too. I hope I have given them a voice and have been able to present an honest picture of the situations described in this thesis.

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Thanks to all my fellow students of the MDR master program, who have showed me that passion for life, nature and human kind can translate itself into new, confronting, lively, interesting, valuable scientific research. May our work be tiny little contributions to a world in which life, of all kinds, is honored, appreciated and respected.

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# SUMMARY

This thesis examines the processes that favour land acquisitions for irrigation purposes in the wetlands of eastern Uganda. Conditions that have facilitated land acquisitions have been explored. Privatization is a key amongst many other processes. Land acquisitions in wetlands are interesting economically as it connects land and water. Water makes the land a very valuable resource, and thereby an interesting object for private investors and agricultural development initiatives of the state.

Three case studies have been analyzed, all located in the wetlands in eastern Uganda. The first case concerns the Kibimba Rice Irrigation scheme, constructed by a Chinese company in co-operation with the Ugandan government. The wetland was enclosed by the government, whereby some wetland was transformed to make way for the irrigation infrastructure. The scheme used to be operated as a public enterprise. Local community members worked on the scheme land or produced rice as for the public enterprise as outgrowers. Outgrowers were organized and received advisory services from state employed agricultural extension workers. In 1996 the scheme was sold to a private investor, scheme workers were laid off, the conditions for outgrowers have become unfavorable and working conditions at the company turned out very poor, this led to a very tense relationship between the company, its workers and surrounding communities.

The second case concerns a wetland area which has recently been acquired by a private company, which has plans to, in co-operation with the government of Uganda, construct a large scale irrigation scheme including three large dams on the land. The land was sold to the company by the district government. This despite the National wetland policy of Uganda stating that wetlands are held in trust by the government for the people of Uganda and should not be sold to individuals. Local wetland users have been persuaded to sell their land to the company; they were deceived with false promises and were threatened. The loss of wetland implies for most the loss of their most important livelihood resource: land. Only a small number of farmers is allowed to produce for the company and just as few are employed by the company. Besides, conditions are very unfavorable to the outgrowers.

The third case concerns the Doho Rice Irrigation Scheme. Like Kibimba, Doho is constructed by the same Chinese company in co-operation with the Ugandan government. In contrast to Kibimba, plots have been allocated to farmers on a 99-years lease basis after construction of the scheme was completed. The scheme is co-managed by government staff and a farmers' association. The rehabilitation of the scheme has just been completed and the farmers' association has been turned into a co-operative, in the hope that this co-operative will be able to manage the scheme more efficiently and develop it into a productive commercial rice production scheme. It remains to be seen if the farmers co-operative will succeed, as the scheme has not been very productive for a long time. It is feared that if the co-operative is not going to turn out successful in the future the government might decide to privatize this scheme. Rural livelihoods at this scheme are more autonomous compared to the previous two cases, the rice on the scheme is being produced by local farmers as tenants and thus more embedded in the local context.

The land acquisitions as a result of privatization in the first two cases have undermined customary land rights and claims to the land. Peoples customary land rights are overruled by new private land tenure rights. The government, at district and national level facilitates this for the sake of agricultural development. This happens despite policies in place to protect wetlands and customary land rights. This shows the power of a dominant development discourse which assumes that privatization and modernization is the path to commercial development of the agricultural sector. Furthermore it reflects the power of the state in their interactions with local communities over land rights.

One of the outcomes of land acquisitions in the Ugandan wetlands is that the autonomy of local farmers is being undermined, in turn setting in motion processes of de-peasantization. Not just food security and sovereignty is undermined, rural livelihoods are transformed and food re-defined; the production of rice has been and will become detached from local conditions relying on the use and import of external inputs including seeds, fertilizers and pesticides, new techniques and expert knowledge. Land acquisitions in this way do not present themselves as socially neutral. Rather unfavorable conditions for food and development for smallholder farmers emerge with food production progressively managed, controlled by larger corporations for the benefits of a group of unknown shareholders. The land acquisition discourses that inform current agricultural and food production policies need to be critically examined and compared with alternative discourses that, for instance, hinge on to more autonomous forms of food production, based on locally adjusted land tenure systems and sustainable agro-ecological practices. Such analysis goes a step further than merely criticizing unfavorable consequences of the current land acquisition dynamics.

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# 1. TOWARDS A RESEARCH PROBLEM

Introduction and Theory

The processes which are encountered in the 'field' while conducting research, are rarely linear. Likewise, the analytical process that has taken place in my own head from the moment I had written down a research proposal, until the moment I felt I had finally made sense of all I had read and encountered in the field, was nothing like a linear process either.

I departed to Uganda in September 2012 with the intention to explore and analyze donor or state supported agricultural development intervention projects. I decided to focus on objectives of Ugandan government policies and donors' projects, to support smallholder rice production in the East of the country. In February 2013, I found myself in a devastated community in eastern Uganda, that was just recently denied access to their wetland plots as these were acquired by a company to start commercial, irrigated rice production. In the same region I visited an already vested commercial rice producing company and a state supported rice irrigation scheme currently under rehabilitation. Three irrigation schemes in the Eastern wetlands of Uganda in different stages and manifestations. In each case, local smallholder farmers had a different position or role in the rice production process and with regards to access and rights to land. The bitterness and anger of recently dispossessed communities, the strained relationship between local communities and the private commercial company and the enormous amount of money which the government had just invested in the rehabilitation of the state supported irrigation scheme, triggered me to explore the processes that led to privatization and land acquisitions in wetlands and irrigation.

African farmlands in general have been the object of extensive debates, since the outset of the global food and energy crisis which dramatically increased the prices of crude oil and staple grains (Makki: 81) These 'soaring grain prices and fears about future food supplies' (Pearce 2012: 1) have triggered the unfolding of large scale land acquisitions in various parts of the world, with Africa being the 'cockpit of the greatest land grab in history' (Pearce 2012: XI). These large scale land acquisitions have been widely discussed in academic spheres, often under the term 'land grab'. Fred Pearce defines this phenomenon as 'any contentious acquisition of large-scale land rights by a foreigner or other 'outsider', whatever the legal status of the transaction. In many cases, privatization of farming lands violates local land rights, as customary tenure is often not regarded as full 'property'. For this reason 'African farmlands are the cheapest in the world' (Peters 2013: 545) The impacts of land acquisitions on local economies and the agricultural sector is heavily debated. Pearce concluded after a year of exploring land acquisitions across the globe, that 'it is not all bad, but it all merits attention'(Pearce 2012: VIII) . The motivations of land acquisitionists and governments or other actors facilitating these acquisitions, vary from mere financial to philanthropic ambitions. There are mega-farms with considering managers who offer jobs, food and basic social services to their workers and families. There are also out-grower schemes which do support surrounding peasants in buying up their produce. At the other side of the coin there are farmers and pastoralists having lost access to their lands, malicious land deals and food exports from food deficit regions to wealthier nations (Pearce 2012: IX). Regardless of the exact consequences of a land acquisition for former users of the land, it will in any case lead to a transformation of existing structures. The process and outcomes of land acquisitions depend on the particular circumstances and the specific configuration of actors involved.

One of the many actors involved in the privatization and acquisition of African farm land, are African governments. After a long time of overlooking the importance of agriculture, they seem keen to facilitate and stimulate investments in the sector again in order to solve various economic, political and social problems in their nation. In this light, they tend to welcome foreign investments with open arms, few questions are asked and in case needed, government financial support, in the form of, for example tax relief, is given. Governments believe, the investment will bring food and employment to their people. This approach reflects a discourse encompassing privatization and commercialization as the means to achieve (economic) development. In supporting such investments, national or local governments might act in contradiction with other policies and laws in place to protect the environment or local peoples land rights. Laws and policies in place might even contradict each other, leaving 'loopholes' for land acquisitions to take place. The expectations policy makers have of such investments, rarely work out, according to Pearce(2012), due to various social, environmental, economic and geopolitical reasons, or a combination of the four. The overall problem in many cases is, that the majority of investors in Africa are interested in commercial 'Western-style' agriculture, while 80% of sub-Saharan Africa's farm produce comes from the 60 million smallholder farmers on the continent (Pearce 2012: X) who usefully combine production for home consumption as well as for the market. Although African farming thus does include elements of commercialization, African farming is seemingly not considered a 'path to development', unlike privatization and 'Western-style' commercialization. This is a critical but specific aspect of land acquisitions by private investors; their reasons to invest in agriculture are based on commercial aspirations, which policy makers do not expect to achieve with African, 'peasant' like, smallholder farming. According to Collier, 'peasant farming is not well suited to innovation and investment' (Collier in Pearce 2012: 343). However, others argue that it is a matter of interest and perspectives, large scale agriculture might be more efficient in terms of capital and bringing food to the market, though investing in peasant farming has been indicated by the World Bank's 2008 Development Report, as 'the most effective and efficient way of raising people out of poverty'(Pearce 2012).

According to several authors, such commercially oriented private investments in rural Africa, will in many cases lead to smallholders being dispossessed of their access to farmland, or those working on outgrower schemes being gradually transformed into laborers(Li 2011) (Ansneeuw 2013), a process which redefines farming, understood by some as 'de-peasantization'((Makki 2012) (van der Ploeg 2013)). The surplus produce generated typically ends up in the hands of a few elite farmers. 'Peasants' are in many aspects not seen as worthy partners in a commercial agricultural enterprise, instead they are displaced from their lands and either kept out of the enterprise, or integrated as laborers or outgrowers. As such, rural livelihoods are being re-defined, food is being commoditized and the production of food is being taken out of its local ecological, social and political context, thereby undermining local farmers' autonomy and food sovereignty. Larger scale commercial private investments on African farmlands are thus perceived by some as the means to economic development and criticized by others for their negative impacts on African agricultural livelihoods

The cases discussed in this thesis are centred around irrigation and wetlands, which brings in a another crucial element in agricultural development apart from land. Irrigation and wetland also implies water supplies, and water resources appear a crucial factor in land acquisitions; 'most economies have enough land to be potentially food self-sufficient. They lack, however, the water resources to produce enough food to make them food self-sufficient. The world is not land scarce. It is short of land with water' (Allan 2013: 3). Mehta et al. (2012) argue that the focus of the debate on land grabbing, has largely ignored the implications of land acquisitions on water resources. Most land acquisitions do not explicitly mention the water requirements. However, the land that is acquired is rarely dry, marginal land, but rather irrigated land or land with the potential to acquire water. Such lands are usually already used by small or larger producers. Land acquisitions thus in many cases also include water acquisitions, or water grabs (Metha 2012: 194) Due to this water potential, wetlands and irrigation have since long been central in

agricultural development initiatives. Investing in the combination land and water is thus not new and typically involves irrigation. Irrigation has had a central role in governments agricultural policies since colonial times both in terms of supporting rural livelihoods and often related to political objectives (Griffith 1983) 'Modern irrigation schemes epitomize the zenith of state engineered attempts to modernize African agriculture' (Bolding 2004: 8). Bolding confirms that water has always had a central role in efforts to intensify and modernize existing agricultural practices, hence wetland cultivation and irrigation constitute the two most intensive forms of agriculture practices in sub-Saharan Africa (Bolding 2004: 8). Moris (1987) argues that irrigation structures in Africa have long enjoyed the status of privileged solution, 'they seem the obvious solution for modernizing production, minimizing food imports, removing food deficits and ameliorating the impacts of drought' (Moris 1987: 99). However, in general, such schemes have not proven to be cost effective nor efficient, costs are very high and performance has been proven poor in Sub Saharan Africa (Moris 1987: 99). Part of the explanation according to Scott(1998) is that such formal schemes are based on a simplification of reality, missing out informal practices that can never be codified, but are crucial for any production process (Scott 1998: 6). Griffith (1983) adds that the arguments in favor of such schemes are based on their potential rather than actual performances, which is a view that sees peasants as obstacles to efficient performance of irrigation schemes(Griffith 1983: 98), who need to be organized and disciplined.

Today investments in irrigation continue and are recognized by international organizations including the World Bank as a priority. Many irrigation schemes founded by colonial or post-colonial governments are being rehabilitated with support of international donors and new schemes being created by governments or private actors. In two of the three main case studies of this thesis, investments in irrigation led to land acquisitions, resulting in previous land users being denied access to irrigated land or wetland plots.

This thesis will explore land acquisitions in the wetlands of eastern Uganda centered around empirical data from three case studies. It will describe and analyze how African land rights and policies, the characteristics of wetland and irrigated land, the increasing commercialization of agriculture and neoliberal processes, especially privatization, have led to land acquisitions in the east of Uganda, and might lead to more in Uganda and sub-Saharan Africa in general, in the future. Hence, the impacts on the local rural communities will be discussed and how rural livelihoods and food are being re-defined as a result of these processes.

The narrative of this thesis is captured and visualized in the analytical framework below.



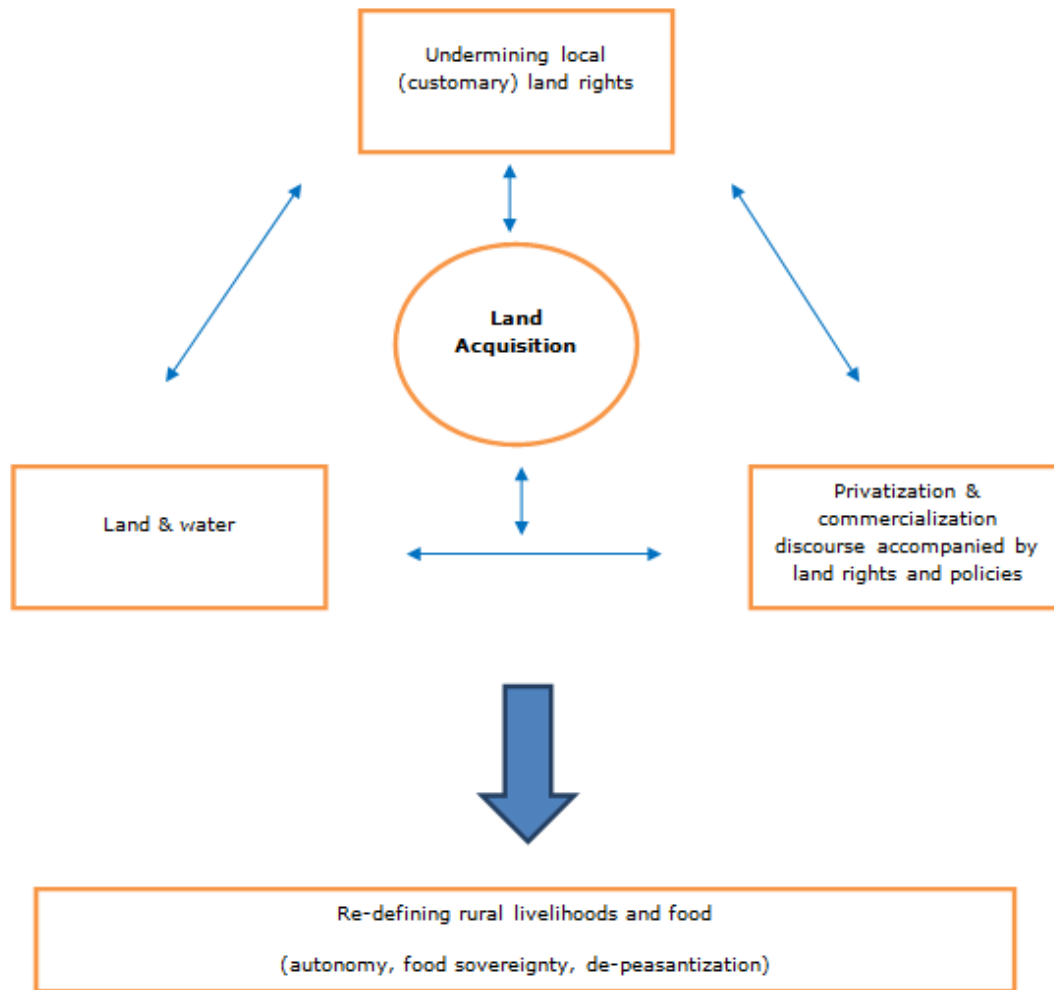


FIGURE 1, ANALYTICAL FRAMEWORK

This framework shows how land acquisitions are facilitated in a context where local customary land rights are being undermined as a result of two mutually reinforcing processes captured as; 'land & water' and 'privatization & commercialization discourse accompanied by land rights and policies'. The sections below further elaborate on the framework.

### 1.1. LAND AND WATER RIGHTS, AGRICULTURAL DEVELOPMENT AND PRIVATIZATION

In African countries, customary tenure rights<sup>1</sup> 'predate the existence of the state' (McAuslan) and have always been a foundational element in land laws of African states. Over time, new land tenure laws have been added on and imposed on societies, to support a discourse in which privatized, individual land

<sup>1</sup> In this thesis, customary land tenure is being discussed and analyzed in relation to privatization processes and land acquisitions. The ins and outs of customary land rights are thus not extensively discussed in this thesis, though it is recognized that customary land tenure in itself is complex, multi-faceted and not necessarily beneficial under all circumstances or for every social group. In depth analysis of the nature of customary land rights lies beyond the scope of this thesis, but will be identified as a next step to take in the discussion of this thesis.

rights are promoted. It is assumed that customary tenure creates tenure insecurity and therefore inhibits investments (Meinzen-Dick 2007: 22). For this reason, many land tenure reform programs aspire 'Western-style private property with cadasters and title'. Due to these processes, plus the often contradictory role and power of states, mentioned before, customary land rights are increasingly being undermined.

It has thus been widely assumed that customary land tenure needs to change into a direction of individualized, private land tenure, either by a drastic public intervention or through autonomous processes. Some argue that a drastic public intervention is needed to reform customary land rights, another approach argues that customary, indigenous land rights, are capable to autonomously evolve into the preferable direction, 'under the impulse of market forces' (Platteau 2008: 30). Grounded on the observation that indigenous land tenure arrangements in sub-Saharan Africa have proven considerably flexible, this second approach assumes that pressures of population growth in combination with an increasing commercialization of agriculture, will initiate autonomous processes leading to new property rights, directing towards 'enhanced individualization of tenure' (Platteau 2008: 32). The first approach ignores or devalues this dynamic potential of indigenous African land systems (Platteau 2008: 33), which results in instances whereby customary tenure systems are radically reformed by imposing new private property rights. Although supporting autonomous evolution of land tenure systems, Platteau criticizes the perceived suitability of private property rights in the African context. In many sub-Saharan African countries, full private property rights are avoided. Instead, land owning rights are vested in the state, who grants long term land leases to individuals or groups, under the condition that land is brought under cultivation (Platteau 2008). Furthermore, land titling will not necessarily increase land tenure security for all customary land holders (Platteau 2008: 73). Platteau argues that it is often 'the ability to use both the statutory and the customary law, a situation of legal pluralism - to the extent that customary laws are not extinguished with the introduction of freehold tenure and the registration of individual title - that enables powerful individual groups to enhance their interests' (Platteau 2008: 44). Customary law is then manipulated by those individuals or groups in such a way that they claim tracts of land to be registered under free hold tenure (Platteau 2008: 45).

Water rights are intrinsically linked to land rights in Africa. (Meinzen-Dick 2007). In wetlands, the control over land also gives control over water, land is in this case scarcer than water. 'Even in irrigation systems, land rights are key to obtaining water'. Meinzen-Dick argues that in many cases, the development of irrigation projects has disrupted existing land tenure arrangements by 'expropriating land to be irrigated and reassigning plots in the new system' (Meinzen-Dick 2007: 19). This may strengthen water rights, but undermines local customary tenure security. Land tenure for the local users shifts from holding customary rights to land to merely being 'tenants' on land owned by government, from which they can, in theory be evicted if they fail to meet specific cultivation requirements for example. Due to their water potential, wetlands are interesting sites for agricultural activities and thus, private investors. This makes wetlands a target area for privatization processes (Nsabagani 1997).

In the dominant discourse facilitating land acquisitions, privatization is considered key in economic and agricultural development processes. Privatization is an aspect of neo-liberalism and concerns the 'process of limiting access to resources through enclosure, in which things are made into property that can be owned, controlled and transferred' (Mansfield 2008: 1). Transferring ownership from the public to private sector of for example, public enterprises or lands is a variant of the general process of privatization. Both the processes of enclosure and the shift from public to private, are about resource allocation 'through practices of ownership and control, in particular control vested in private entities' (Mansfield 2008: 1). Property has become the central mode in regulating multiple forms of nature, whereby ecosystems, livelihoods and identities are remade by 'efforts to create and impose new private property regimes' (Mansfield 2008: 1). The state has a central role in privatization processes,

according to Mansfield, as ‘privatization does not just happen through some natural, evolutionary process, as is often implied by “free-market” proponents. States must not only enforce property rights, but they participate in creating and defining the property they are going to enforce’ (Mansfield 2008: 3).

The elements in the above framework thus mutually reinforce each other. Customary land rights are being undermined or put aside legitimized by a neo-liberal discourse favoring privatization in combination with the power of states to act contradictory to policies or laws that are to protect customary land rights. The combination land and water enforces these processes, as land becomes an economically interesting resource if water is available.

### 1.1.1. DISCOURSE ANALYSIS AND THE POWER OF A DOMINANT DISCOURSE ON LAND

Land acquisitions are considered in this thesis as taking place in an arena where actors meet, struggle and/or align. The interactions between all actors involved, including the state, local farmers, private investors, donors and NGO’s, are a key aspect besides the more structural processes described above, in understanding privatization and land acquisition processes as well as their impacts on rural societies. The processes taking place in this arena have been analyzed in this thesis by means of discourse analysis; collecting and analyzing discourses from the various actors involved. Discourse analysis seeks the meanings behind language and its use, it treats words, both written and oral, as ‘having meaning in a particular historical, social and political condition’ (McGregor 2003). Words in this understanding are never neutral, they are politicized as they ‘carry the power of the interests of those who speak’ (McGregor 2003). The perceived legitimacy of a discourse greatly depends on the political power of involved actors as ‘the words of those in power are taken as “self-evident truths” and the words of those not in power are dismissed as irrelevant, inappropriate or without substance’ (van Dijk 2000). Critical discourse analysis is aimed at uncovering ‘the ideological assumptions that are hidden in the words of our written text or oral speech’, this in order to ‘reveal the discursive sources of power, dominance, inequality, and bias and how these sources are initiated, maintained, reproduced, and transformed within specific social, economic, political, and historical contexts’ (van Dijk 1988).

Scott in his ‘Seeing like a state’ (1998), describes the dominant discourse over land which is based on the relation between land tenure rights and the imposition of structure or order upon social elements in order to control a society. This dominant discourse reflects the ability of forces including states or capitalism, to impose an administrative ordering based on modernistic ideas and political interests on nature or society. Scott argues that large scale capitalism nowadays has the same features as ‘pretentious states’ which existed in the past. Capitalism is based on simplifications as the market promotes standardization. To impose administrative structures, the complexity of a societal reality needs simplification, the ‘raw forms of social patterns’ are too complex to administratively manipulate and need to be reduced to ‘manageable dimensions’ (Scott 1998: 26). The problem with simplification is that in the process, informal practices are typically missed out as these can never be codified. This results in the exclusion of valuable knowledge which is embodied in these informal practices. As put forward before, this partly explains, according to Scott, why many modern irrigation schemes in sub-Saharan Africa have not turned out cost effective nor efficient. Land tenure plays a central role in these structuring practices, as ‘the cacophony of local land tenure systems is a night mare to state planners’ (Scott 1998: 26). Land tenure reforms typically aim at facilitating economic and agricultural development and usually go hand in hand with state or private interventions. The dominant discourse over land is thus based on privatization, which is the central doctrine analyzed in this thesis.

According to Scott, there is a danger in such interventions imposing a structure or order upon nature and/or societies, lying in the power and dominance of expert knowledge regarding land rights,

agricultural and economic development. The danger of reliance on expert knowledge over practical/tacit/local knowledge is reflected in the four 'ingredients' that will lead, according to Scott, to 'failed state engineered plans to modernize society and improve the human condition' (Scott 1998: 4). The first one is the 'administrative ordering of nature and society'; making various areas subject to different administrative (tax) and governance regimes. Secondly, the efforts to order nature and society are based on a 'high modernist ideology'; build upon scientific and technical progress. It combines political interests with a faith in science and technology. The third ingredient is 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' followed by the fourth, 'a prostrate civil society that lacks the capacity to resist these plans'. This is not to say that such projects to modernize societies, or aspects of them, are not resisted. However, in cases where a 'prostrate civil society' lacks the capacity to resist such plans, the types of resistance that take place are less obvious and described by Scott as 'everyday forms of resistance' (Scott 1984 in Greco 2013: 463), which have been discussed above.

## 1.2. RE-DEFINING RURAL LIVELIHOODS AND FOOD

Apart from analyzing land acquisitions and all the processes facilitating these, this thesis will also explore the impacts on the rural communities, the food production and the nature of food. Land acquisitions in practice result in land that is being taken out of the control of farmers. In many cases this implies that farmers lose access to the land that has been acquired (Li 2011). As land is the most important resource in rural livelihoods (van der Ploeg 2010), farmers are forced to look for wage employment, either at the company that has acquired their land or elsewhere. As a result, farmers lose autonomy by becoming dependent on external factors to secure their livelihood and losing control of the means of production, thereby food sovereignty is undermined.

### 1.2.1. RURAL LIVELIHOODS, AUTONOMY AND FOOD SOVEREIGNTY

Livelihoods, based on Scoones (1997) definition, are understood in this thesis as the capabilities, assets, including material and social resources, and activities that are required for a means of living. Complementary to the concept of livelihood in analyzing transformations in African agriculture and irrigation, is the concept of 'autonomy' and related 'food sovereignty' paradigm. Farmers are constantly balancing between operating autonomously and in dependency relations. 'Peasant' farmers are typically directed towards autonomy, either because they consciously opt for operating autonomously, or have no real alternative. Neo-liberal processes including privatization, undermine farmers' autonomy and 'food sovereignty'. In the period after WW II, agricultural production has in nearly every part of the world transformed from a subsistence economy to a vertically integrated market economy of food (McMicheal 2009 in Patel 2009). The decision making power concerning land, seed and food supplies is nowadays concentrated in the hands of national states, supranational organizations and transnational corporations (Patel 2009). Furthermore, neo-liberal trade mechanisms have interfered with state led initiatives to support agricultural producers. These processes have created dependency through the commodification of food; farmers have increasingly become dependent on external inputs, seeds, techniques and commercial food corporations (Patel 2009). As a result, farmers are, to a greater or lesser extent, subject to surplus extraction. This surplus extraction refers to elites reaping most benefits of production, or can be referred to the current day neo-liberal ideology underpinning the current 'agri-business' climate. According to critics, this ideology 'exploits rural resources in direct conflict with the peasantry and other rural peoples over the social and economic appropriation of nature' (Rosset 2013: 3). Due to surplus extraction, peasant agricultural development stagnates, as they lack 'the means to invest and develop farming further' (van der Ploeg 2013: 61). The politico-economic context in which peasant units of production operate thus affect rural development. Farmers respond to influences from their environment, thereby mediating the effects. Understood as such, the peasant condition, according to

Ploeg, could be defined as ‘a struggle for autonomy and improved income within a context that imposes dependency and deprivation’ (van der Ploeg 2013: 61).

Undermining farmers’ autonomy implies the undermining of local food sovereignty as well. Food sovereignty refers to ‘the right of people to define their own food and agriculture’(Windfuhur 2005: 1), thereby counter posing dependency relations. Food sovereignty can be defined as follows:

*‘Food Sovereignty is the Right of peoples, communities, and countries to define their own agricultural, labour, fishing, food and land policies, which are ecologically, socially, economically and culturally appropriate to their unique circumstances. It includes the true right to food and to produce food, which means that all people have the right to safe, nutritious and cultural appropriate food and to food-producing resources and the ability to sustain themselves and their societies.’ (Windfuhur 2005: 12)*

Defending land and territory is a key element of food sovereignty, which is referred to in a more extensive definition of food sovereignty, ‘it ensures that the rights to use and manage lands, territories, water, seeds livestock and biodiversity are in the hands of those of us who produce food’ (Rosset 2013: 7).

Food sovereignty has emerged as a counter discourse or counter movement to the current trend of large scale enterprises taking more and more control of the food production systems, rather than farmers themselves. After a few years of ‘structural adjustments and other policies that had the effect of ‘de-peasantising’ rural area’s’, La Via Campesina, argued that a discussion of the internal political arrangements should be a necessary part of the ‘substance’ of food security. They declared food sovereignty as a ‘logical pre-condition’ of the existence of food security (Patel 2009: 665). Shaping food policy should be a right of all people, rather than a privilege of some (Patel 2009) . Currently the food system has been architected by a few privileged people. These have built monopolistic food regimes which have created new global patterns in which spaces of poverty are linked with spaces of wealth through food produced in poor regions and marketed and consumed in wealthy regions (van der Ploeg 2010: 10).

A loss of land tenure security, modern irrigation structures which do not function solely on local knowledge and internal inputs, modernized farming inputs and production contracts with commercial companies all impose a certain degree of dependency on farmers, undermining their autonomy and hence food sovereignty. Besides, these factors initiate processes of de-peasantization.

### 1.2.2. DE-PEASANTIZATION

Mansfield argues that an ‘obvious’ manifestation of private property is a form of dispossession, which separates individuals from the means of production and forcing them into wage labor (Mansfield 2008: 3). She refers to the process of de-peasantization, in which land plays a crucial role. Before the influences of modernization, peasants simply lived from the land, farming used to be ‘the coproduction of people and living nature’ (van der Ploeg 2013: 53). With modernization, land was converted into a commodity and farming according to the modernization script became more a ‘conversion of commodities into other commodities’ as opposed to the condition of the peasantry, ‘living from the land’ (van der Ploeg 2010: 4). This development has altered the meaning and value of land, land has become a less self-evident condition in a peasants’ livelihood(van der Ploeg 2010). This has resulted in processes of de-peasantization in which peasants opt or are being forced into other livelihoods

Makki (2012) argues that the neoliberal orientation of the past decades with regards to agriculture has had ‘draconian’ impacts on agro-food systems, as it dismantled national agricultural programs and eliminated subsidies to smallholders. De-peasantization and the global south turning into a ‘world farm as a result (Makki 2012: 82). These processes have caused a complete reorganization of the worlds’ division of labour, ‘to the advantage of transnational corporations’ (Makki 2012: 82). Based on his

observations in Ethiopia, Makki further argues that incorporation of Ethiopian farmers into the corporate food system, will in the end lead to rural dwellers having lost access to land, seeking for alternative livelihoods in the city slumps.

Li (2011) further explores this process of de-peasantization from a labor perceptive. She argues that a common problem mentioned by subjects of large scale land investments, is that few jobs were provided and most of them filled with migrant labor(Li 2011). Based on her experiences in Asia, Li argues that most communities' lands are taken but their labor is not needed. Reasons for this are twofold, migrant labor is preferred over 'the lazy native', plus local community members do often still have access to some small pieces of land nearby (Li 2011: 286). They thus still have other activities which might conflict with work on the plantation. 'The optimal configuration, from a profit making perspective, is one in which labor is superabundant, hence cheap and easily disciplined'(Li 2011: 287). In colonial Sumatra, this 'optimal configuration' was realized by importing families from Java and settle them in 'squatter settlements', whereby they were given some land as well. As the number of settlers gradually increased due to new children, the land they were given became un-sufficient, resulting in a sort of 'overpopulation' of the squatter settlements(Li 2011). Hence, leading to poverty and a group of 'surplus' people in need of work, in other words, an ideal labor base for the plantations. 'These settlements had a superficial resembles to peasant villages, but their function was that of a labor reserve, from which the plantations could draw as needed, but for which they took no responsibility'(Li 2011: 287). I would argue such a situation is comparable to villages with farmers having lost land to an investor. Land is scarcer, insufficient to feed the whole community, the new investors do not take the responsibility for these villages, hence villagers are in need for paid work. The competition for work which arises in such a situation, provides the investors with 'control' over this 'labor' reserve.

### 1.3. ACTORS, KNOWLEDGE AND POWER

As mentioned before, land acquisitions are considered to take place in an arena where all actors involved, including the state, local farmers, private investors, donors and NGO's, interact in complex ways influenced by more structural processes described earlier. These interactions are treated by Long as taking place in an 'interface', and described by Ploeg as arena's where actors 'meet, struggle, align and/or negotiate' (van der Ploeg 2013: 9). Ploeg explains how peasants in their interactions with other actors are guided by a set of balances, linking the peasant unit, its operation and development to the context in which it operates. Peasants constantly seek to optimize the balance between a family's consumption demand with the existing labor force, the benefits of production increase, with the efforts it takes to achieve; people, and living nature; production, and reproduction; internal, non-commoditized, and external, commoditized resources; autonomy, and dependency; and scale and intensity. The balances act as 'ordering principles', 'shaping and reshaping the way fields are worked, cattle are bred, irrigation works are constructed and how identities and mutual relations unfold and materialize' (van der Ploeg 2013: 5). They interact in complex ways, influenced by different actors with each their own sets of interests, including the peasants, their families, communities, interest groups, traders, banks, the state, agro-industries, NGO's etc. By treating these arena's where farmers and other actors meet as social interfaces, types and sources of social discontinuities or linkages among actors can be identified, plus the means to reproduce or transform them. Besides, it can create a better understanding of the differential responses of local groups to processes of privatization and land acquisition. Last, treating interactions among farmers and external actors as interfaces, can elucidate how interactions between these different actors in a particular locality shape the outcomes of a 'development project', hence influencing patterns of change at regional, national and even international levels. (Long 2001: 65-66).

Agency is central in any actor oriented approach and defined by Long, as the ‘room for manoeuvre’, a space in which actors find their agency, and can act as they intent (Long 2001). In other words defined as ‘the ways in which people deal with, or manipulate, certain constraining and enabling elements, through the use of discursive and organizing practices in an effort to enroll each other in their various endeavors or “life-projects”’ (Long 1999). Closely related to agency, power is the other key concept in actor oriented analysis. Understanding power dimensions, as argued by Wolford below, contributes in creating a complete picture of land acquisitions and their impacts.

*‘Departing from a relational understanding of power in which host state representatives, local and regional elites, paramilitary organizations and smallholders, indigenous and marginal communities are also critical actors in land deals. Certainly there is unevenness in power relations, but the particular forms, practices and effects of power must be understood in geographically and historically specific terms if we are to adequately address the multiple and diverse practices of land grabs, and the heterogeneous modes and forms of dispossession they generate.’* (Wolford 2013: 207).

The definition of agency and power are closely related in Long’s argumentation. As actors attempt to enroll others in their ‘projects’ they need to make them accept particular frames of meanings and ‘win’ them over to their point of view. If they succeed in this, they gain a certain power over the other actors. The outcomes of these struggles over knowledge, in which aspects of power, authority and legitimation play an important role, lead to a power related issue entailing ‘whose interpretations or models prevail over those of other actors and under what conditions’ (Long 2001: 183). This directly relates to Foucaults understanding of ‘discourses’, I would argue. Discourses encompass, according to Foucault, ‘the history of ideas, or of thought, or of science or of knowledge’ (Foucault 1969/1972: 21). Discourses uphold particular ‘regimes of truth’ which can have significant legal, social and political consequences (Foucault 1998). Discourses ‘construct hierarchies of knowledge’, knowledge in this understanding is a process that relies on particular social structures and at the same time contributes to maintaining those structures ((Foucault 1963/2003) (Foucault 1961/2001)). As mentioned, dominant discourses tend to reflect the interests of powerful actors within a society and undermine the voices of marginal groups. All groups or individuals in society can find agency and create ‘room for manoeuvre’ though, as all the involved actors will try to change certain conditions or components of a situation while trying to maintain, or get the best out of others. The difference can lie in covert, or ‘back stage’ rather than overt, ‘front stage’ actions.

Such ‘covert actions’ may be pursued by farmers, in order to resist or undermine existing systems of resource appropriation, while avoiding institutionalized policies and forms of resistance. Scott has identified these as ‘everyday forms of resistance’ (Scott 1984 in Greco 2013). These everyday forms of resistance are defined by Scott as a ‘set of low-profile actions and disguised practices put in place by the lower classes of society’ and emerge ‘in contexts where risks of open protest largely exceeds potential benefits’ (Scott 1984 in Greco 2013: 463). Most common expressions of everyday forms of resistance among agricultural workers include foot-dragging, petty theft and pilfering, illegal night harvesting, non-compliance with rules, arson and sabotage of machinery. Then, in and around the reserved area: smuggling of goods and silent encroaching on the land. Scott explains that overt and covert resistance often share the same goal, covert resistance is not politically confrontational in contrast to overt resistance. Scott argues, that these diffuse practices of everyday forms of resistance, if persistent, can achieve considerable results, which are unnoticed when single actions of resistance are considered. These acts of resistance are often considered by estate managers as a result of an ‘inferior moral background’, such as ‘a lack of workers’ work ethic and a dearth of moral integrity among supervisors’. In the long run, everyday forms of resistance of agricultural workers can lead to large losses of the company and put forward the underlying message that the investment is not appreciated by the local population. In order for everyday forms of resistance to achieve actual results, there is a need of a certain degree of ‘silent co-operation’ from the wider group of resisters. (Scott 1984 in Greco 2013: 464)

## 1.4. PROBLEM STATEMENT AND RESEARCH QUESTION

Irrigation and wetland in sub-Saharan Africa, are, and have for a long time been, important in rural livelihoods and have taken a prominent role in government policies directing at agricultural and economic development. States have always had a key position in the development of irrigation and wetlands for agricultural purposes. Over time, international organizations, donors and private actors tend to take more and more prominent roles, though supported by national and local governments. In these developments, customary land tenure rights have often been ignored or 'overruled' by new, 'added-on' land tenure laws, legitimized by a discourse advocating privatization to develop agriculture. The impacts, successes and efficiency of many large scale, modern irrigation development projects in sub-Saharan Africa, have been criticized ((Moris 1987) (Griffith 1983) (Degeorges 2006)); many schemes have turned out rather unproductive, despite their high financial costs, and left clear marks on existing farming communities and ecological conditions.

In the wetlands of eastern Uganda the development of wetlands for agricultural production has initially been developed by the state as well, which included the enclosure of wetland areas for irrigation development. The management of these irrigation schemes changed over time and lately, irrigation and wetland in eastern Uganda, have been subject to privatization processes whereby public land, an irrigation scheme and a public enterprise have been transferred to private investors. These processes of privatization led to land and water acquisitions, whereby local customary land tenure rights have been violated thereby dispossessing farmers from wetland they used to use. The government seems to support these private commercial investments, as they bring economic development. These land and water acquisitions are being understood in this thesis as taking place in an arena in which the complex interactions between various actors shape the processes facilitating land acquisitions. The dominant discourse on land typically reflects the interests of powerful actors, thereby legitimizing privatization and land acquisitions. The impacts on rural livelihoods and food are disputable; privatization and land acquisitions in irrigation development and wetlands re-define rural livelihoods and food, thereby undermining farmers autonomy and food sovereignty, initiating processes of de-peasantization and thereby disconnecting food production from local conditions.

### Objectives

To understand the importance of irrigation and wetland in rural livelihoods and agricultural policies and its development in sub-Saharan Africa

Understand and explain the processes of privatization and land acquisition in wetland and irrigation by putting them in their historical and political context.

Understand and explain the impacts of privatization and land acquisition in wetland and irrigation development on rural communities, food sovereignty and the meaning of food

### RESEARCH QUESTIONS

The main question this thesis addresses is whether and how privatization creates conditions for land and water acquisitions in the wetlands of Eastern Uganda.

Three sub research questions emerge as key to answer the main research question:

1. What is the importance of wetlands and irrigation for rural livelihoods and national politics in sub-Saharan Africa and Eastern Uganda specifically.
2. What is the role of national and local government institutions in land and water acquisitions in Uganda; what is the nature of past and present agricultural and land tenure laws and policies that have facilitated such acquisitions.



3. What are the impacts of privatization and land and water acquisitions in irrigation development and wetlands on rural livelihoods and the meaning and value of food.

## 1.5. METHODS

The general theme of the thesis is based on three case studies in the wetlands of eastern Uganda. Past developments of these case studies and current processes combined, have provided the relevant information for this theses. The first two cases have given rise to questioning current developments in the third case, which will become apparent in the introduction to the cases below and in the course of this thesis.

### 1.5.1. INTRODUCTION TO THE CASES

The case studies will be analyzed in time and in 'stage of privatization'. The first case, the Kibimba Scheme, was constructed in 1966 whereby a wetland area was enclosed and made public land. Ownership of the scheme was handed over to a private investor in 1996. The second case, the Naigombwa swamp, has only recently been subject to privatization as a commercial company acquired the wetland area to start commercial rice production. The third case, the Doho Scheme, was constructed in the same period as Kibimba. This scheme has thus far stayed under government ownership.

The cases are all located in the same region in Eastern Uganda, in the districts of Iganga, Namatumba, Butaleja and Bugiri.



MAP 1, LOCALITY MAP, ILLUSTRATING THE REGION IN WHICH THE THREE CASE STUDIES OF THE THESIS ARE LOCATED

### KIBIMBA RICE IRRIGATION SCHEME

The Kibimba scheme started off as a development project of the Chinese, from 1968 to 1988, then it turned into a state operated scheme under the Kibimba Rice Company. Since 1997 it is a privatized scheme, run by an UK/Indian investor (Baumgartner 2013).

In the 1974 Ugandan rice farmers appealed to the government for assistance, as the production of rice had remained very limited since the start of rice production in the country in 1942 (Ministry of Agriculture, Animal Industry and Fishery (MAAIF) 2009). In response, the government appealed to the Chinese, who constructed the Kibimba rice scheme in 1966 as a rice technology development scheme

and the Doho Rice Irrigation scheme in 1976 for seed multiplication and popularization of production (Bayite 2011: 12). The Kibimba rice scheme in Bugiri district covers over 600 ha. The scheme was originally fully owned by the government of Uganda, and managed by two of its ministries, the Ministry of Agriculture Animal Industry and Forestry (MAAIF) and the Ministry of Finance Planning and Economic Development (MOFPED). The Chinese provided the technical staff and expertise, thereby taking the role of the actual managers of the scheme. After its closure in 1982, a governmental parastatal was founded which took over the management of the scheme: the Kibimba Rice Company. Under this company, farmers were organized in an out growers scheme in order to access credit and agricultural input. Besides, a joint platform was created for these outgrower farmers to bargain for fair prices. In 1996 the Kibimba Rice Company was privatized. Tilda Rice (Uganda) Company, a British/Indian agribusiness venture, was licensed to grow and process rice at Kibimba and thus took over the ownership and management of the Kibimba Rice Company (Bayite 2011).

#### NAIGOMBWA SWAMP

The second case study concerns a wetland area which was used for rice cultivation by local farmers. A part of this wetland area has currently been acquired by a private company to start commercial irrigated rice production. This company started off in the Naigombwa swamp in January 2009 to produce, mill and market rice. The wetland area has not been put under modern irrigation yet, although some (improvised) irrigation structures have been put in place and plans are there for the construction of three large dams. Pearl Rice Ltd. has proposed to invest in an irrigation project in partnership with the government of Uganda under the Public Private Partnership Act, the Naigombwa Rice Irrigation Project. The projects main purpose is the *'establishment of commercialized production of lowland rice (paddy rice) in Naigombwa wetland in Iganga district. It is the desire of Pearl to develop the wetland to its full potential as fully-fledged rice production area from which it can reap profit as well as well as strengthening the countries food production capacity and balance of trade position since the rice will also be exported. It's a step towards the realization of governments' vision for a poverty free nation.'*

To achieve this goal, the website of the company states that this involves 'the creation of reservoir dams, distribution channels and paddy rice fields development'. Currently, the wetland is heavily cultivated with subsistence rice with a low productivity due to the use of 'rudimentary agricultural techniques' and the inability to control and drain water (pearlrice.co.ug 2010).

Today, 1500 ha on the nucleus estate, supported by 3000 ha of out growers fields produce rice for Pearl Rice Ltd.

#### DOHO RICE IRRIGATION SCHEME

In 1976, having created the Kibimba Rice Scheme, the Chinese government started constructing another irrigation scheme, the Doho Rice Irrigation Scheme (DRS). Construction of the scheme was completed in 1989. The DRS is the largest irrigation scheme in Uganda, covering 1000 ha of paddy fields where over 4000 farmers cultivate rice. Most of these farmers live in nearby villages and cultivate various crops on their upland fields besides rice on their wetland plot in the DRS. Since a few decades, these farmers have been engaged in double cropping thanks to the bimodal rainfall pattern in this region. The management of the scheme is in hands of two bodies, a Technical team, provided by the government, and the Rice Farmers Cooperative Society, the former Doho Rice Scheme Farmers Association (DORSEFA). The government does not financially support the scheme any more, except for the salaries of the technical team staff members and the financing of the rehabilitation of the scheme. The management of the scheme has been problematic, the technical, government supported staff, has downsized over the years to just two people left currently and DORSEFA has not functioned efficiently. The DRS currently is in a stage of transformation, it is still officially owned by the government and just recently rehabilitated.

DORSEFA has recently transformed into a farmers co-operative, which is to take over complete management of the scheme in the near future.

#### *Justification of the choice of cases studies*

I have selected the cases based on practical and analytical considerations. To start with, I had already been introduced to the Doho Scheme via my internship at the Netherlands embassy. The embassy was considering financial support to a project aiming at supporting commercial rice production among smallholder farmers. One of the project target area's included the wetlands in Eastern Uganda, the project was exploring potential groups of rice farmers and private actors to link up with to support rice production and marketing of smallholder farmers. One such group that was considered were the tenants of Doho. The situation at Doho turned out rather complex and opinions considering its future, divided. Some seriously doubt the potential of Doho to develop into a functioning rice farmers' co-operative, others perceive it as brining new opportunities. Either way, the recently created cooperative will receive support from the above mentioned project. This transformative phase made Doho an interesting case, although it would have been interesting as well if this research had taken place at a later stage, to see in which direction Doho develops after the rehabilitation, especially in relation to the Kibimba scheme, which has been privatized unlike Doho. However, past developments can be just as interesting and proof valuable in understanding current and future developments and processes, especially since deeply rooted patterns are bound to influence and steer current new development plans.

In the first phase of fieldwork, I made an exploratory visit to the region. We visited Doho, Kibimba, the Naigombwa swamp and a rice farmer association formed with help of the Japanese International Development Association (JICA) in 1995, and receiving occasional support and trainings from them. This last group has not been included for further research, mostly due to time constraints. Besides, based on an exploratory interview with the chairman of the group, I concluded that the issues that were raised broadly resembled, though on a smaller scale, the concerns raised at Doho. Interesting to keep in mind was the mentioned fear of the farmers, initiated by a handful of association members who scared the others, that JICA would take away their land. This led to serious suspicion and problems. JICA left the area and only resumed their activities in 2005, when farmers realized JICA was not after their land and would only be beneficial to the farmers as they offered free trainings and advice on rice cultivation.

During this exploratory visit, the Kibimba scheme, currently owned and run by a commercial rice company, was visited as well. An interview was conducted with management and a block leader. After these interviews we decided not to conduct further research at Kibimba, as we felt management was not very eager nor pleased with our presence and the type of questions that were asked. It also became clear that the relationship between fieldworkers and farmers producing for the company, and the company management was very tight. Conducting interviews could potentially cause problems and would probably be difficult, as many people feared to talk. The Kibimba scheme has been included as a case study though, as quite some information could be obtained from other informants and literature. The case provides an interesting example of a government owned irrigation scheme that has been privatized and now run by a commercial company, hence transforming the nature of, and re-organizing, local 'African' agricultural practices. Exploring and analyzing the developments of the Kibimba scheme can provide useful insights in analyzing the other two case studies in the same region and possible future scenario's.

The last case study concerns the Naigombwa swamp. During the exploratory visit this seemed an interesting place for fieldwork as a fairly new commercial company had started off irrigated rice production in the swamp. At this first visit, during which we talked with management and a rice farmer in the swamp, it became clear that land issues and conflicts were there as a result of the privatization of

a part of the swamp. The atmosphere seemed less tight compared to Kibimba and conducting interviews more feasible.

For practical reasons, I decided to limit the research to this region in Eastern Uganda and centered around rice production. Besides, as all three cases share these two characteristics, they are comparable in some aspects.

The three cases together create a picture of conditions and developments that have led to privatization and facilitated land acquisitions. Doho is still an exception, as it has not been privatized and land is still managed by farmers. Privatization of Doho could be a future scenario though, which will become clearer in the course of this thesis. Also, as a 'contrasting case', it can provide useful insights in conditions that do or do not lead to privatization/land acquisitions. By comparing farmers livelihood, practices and autonomy in contrasting cases, the key differences and impacts of privatization/land acquisition can be more clearly identified.

### 1.5.2. DATA COLLECTION

I have attempted to use multiple sources of data for this thesis including analyzing documents, conducting literature studies, interviewing policy makers, staff or international organizations, company managers, board members of farmer organizations, village chiefs, farmers, millers, scheme workers, men, women, younger farmers and elderly.

#### LITERATURE REVIEW

Data collection started by gathering information on the situation and activities in the wetlands in Eastern Uganda through analyzing documents (including the project proposal for the above mentioned project), searching information on the internet and talking to embassy colleague and staff of organizations involved in this and other projects targeting the area.

#### FIELDWORK AND ACCESS

After the exploratory visits to case study sites, I have conducted extensive fieldwork at the Naigombwa Swamp and the Doho Rice Irrigation Scheme, assisted by a Ugandan women, I will call her Grace in this thesis, and a terrific driver. Grace has acted as a very valuable adviser, translator and 'communicator', she advised me on the appropriateness of my interview questions, on appropriate ways to communicate with the local population, she informed me on local community structures and manners. She addressed local government chiefs to inform them on my research and introduced us to village chiefs. As most local people did not speak English, Grace conducted the structured interviews and translated whenever I conducted in depth-interviews and some of the structured ones. Explanation on the type of interviews conducted can be found below.

In preparing my own fieldwork I collaborated with two organizations I had become acquainted to during my internship at the Netherlands Embassy in Kampala. This helped me to acquire contacts of the Officer in Charge (OC) of Doho, which I had already met ones, the management of Tilda and Pearl, before-hand. This helped me a lot in accessing the field, as I could thereby introduce myself beforehand through the phone, and ask their assistance or permission for visiting the company, the surrounding villages and conducting interviews. In order to visit the company Tilda at Kibimba which could be rather difficult as I was told, I contacted the general manager, who gave me permission. During the exploratory visit contacts were made who later on helped me accessing the field and finding informants during fieldwork. At Tilda, this was rendered unfeasible, as explained above. At Doho, the OC has assisted me and in the Naigombwa swamp, the rice farmer we interviewed during our exploratory visit turned out a very useful, willingness 'assistant'. I experienced that it is crucial and very useful to receive assistance from a knowledgeable community member who is able to mobilize people, lives on good ground with

his fellow community members and has contacts with village leaders in his own, and surrounding communities. Our 'assistant' in the Naigombwa swamp would introduce us to whomever we asked for. Furthermore, as we approached informants via him, they gained trust in us and were very willing to talk to us. We would always first talk to the village chief, to get his consent to interview some villagers. Our 'assistant' was well acquainted with most village chiefs of the surrounding villages and could thus in most cases easily get us in touch with them. Usually we brought him along to introduce us for the first time, which was a very successful strategy, in this way we gained immediate trust and commitment of the village chiefs. Also, our assistant would already mobilize and inform informants the day before we would interview them, in this way they were prepared and we were informed on the time that suited them best. In the Naigombwa swamp, we did not face any difficulties in getting access to the field and informants, apart from some misunderstandings when it came to mobilize 'scheme workers'. 'Scheme worker' was understood in a much more broader way by the communities than our definition of a mere 'wage laborer'. Besides, it appeared wage workers were very few among the local communities, as most wage labor was probably migrant labor. As a last effort, we approached the management of the company asking if we could speak to a few scheme workers, they replied that the season had not yet started, there were no scheme workers on the land currently.

At Doho, contacting relevant informants turned out a little more difficult. We were mostly relying on the OC to introduce us to informants and village chiefs of targeted villages. He faced a bit more difficulties in mobilizing villagers compared to our assistant in the Naigombwa swamp. He would for example promise us to mobilize informants for a focus group discussion a day after. The day after, it appeared he had requested another man to mobilize people, however had not informed this other man well. This led to situations whereby informants were mobilized at the last moment, interviewees were thus less well informed and prepared. For the individual interviews, we used the same strategy of informing village chiefs, getting their consent and often letting them mobilize informants from the village. However, some village chiefs appeared unreliable, as they would only introduce members of their family, even though they would not fit our criteria. We would for example be introduced to an elderly man, while we had asked for a younger man. This elderly man turned out mentally disturbed. We concluded that people were eager to be interviewed as they expected some reward, village chiefs would then send their own family members, hoping to share in the reward. Because of this experience, we changed our approach and asked a village chief to give us the names of, for example, all the rice growing young men in the village. Based on this list we could pick respondents who were not family members, or at least did not share the same family name. In some instances we asked interviewees to introduce us to a next interviewee, if we felt the person was sociable, knowledgeable and to be trusted, or had talked about an interesting person could be valuable for our research. In such cases we thus used snowball sampling. We were unable to get into contact with a person from an outgrower association, this was arranged but the appointment was cancelled, which according to Grace and my driver could also point towards some feelings of suspicion. Arranging an interview with the chairman of the board of DORSEFA was troublesome as well, but we managed to in the end. This will be further elaborated on in the last chapter of this thesis.

## INTERVIEWS

### *Sampling*

Throughout the fieldwork, we picked informants through purposive sampling most of time or snowball sampling in some cases. I opted for purposive sampling based on the knowledge I had already obtained of my 'research population' both at Doho and the Naigombwa swamp from the exploratory visit and additional sources. At the Naigombwa swamp, for example, I planned to interview an equal number of farmers who had 'sold' land to the company and farmers who had not, from different communities. Additionally I planned to interview some wage workers, working for the company. Within this sample I

aimed for a balance between men and women , younger and elderly persons, village chiefs and 'ordinary community members'. At Doho, the research population included the tenants of the irrigation scheme. As the scheme was made up of several blocks with different characteristics, I aimed at sampling interviewees from different blocks. As it was not possible to interview a number of farmers from all the 6 blocks, I picked one block located close to the main channel, one block located further away from the main channel and one block that was split in two parts, tenants of part A in general came from further away, while tenants of part B came from the local communities. Then I planned to include some block and strip leaders in my sample, plus one or more interviews with the chairman or other members of the board of DORSEFA, the farmer association at Doho.

### *Structured and in-depth interviewing*

I have used different types of interviews, including structured, semi-structured/ in-depth, next to focus group discussions and participant observation. The structured interviews were designed for specific groups of informants, for example for Doho I designed different versions for tenants, block leaders and strip leaders. The questions were mostly qualitative and open ended. These structured interviews were mostly conducted by Grace. This type of interviews was used to gather information from a larger group of people in order to get a general picture of the situations. Additionally, I conducted a number of in-depth interviews myself to get a deeper understanding of the issues that were brought up by informants. After some days of fieldwork I usually came across persons which I rendered interesting for an in-depth interview.

Before hand, I talked the structured interviews through with Grace so she understood the purpose and meanings of the questions and could give her advice and opinion on the appropriateness of the questions and the formulation. In consultation with the organization which facilitated this research, I decided to design structured interviews who could be conducted by Grace. In this way we would be able to gather information from a larger group of people. I honestly had some doubts about this strategy, as in this way I would not be able to 'guide' the conversation in the direction as I was interesting in, or ask further on something interesting mentioned by the interviewee. For this reason, I made sure to conduct a number of in depth interviews myself as well. I would also read through the interviews she had conducted, so that I could immediately discuss any unclear answers. In this way I was able to check if her way of interviewing provided valuable data. Based on the first few interviews conducted I explained and instructed her to interrogate some on particular topics. She was very motivated and incorporated any feedback very well. After some days I felt we understood each other way of working and she understood the type of conversations I liked her to have with our respondents. I also realized that there were many positive aspects as well to her conducted some of the interviews. As she could easily, without interruptions, and with much more feeling for the culture and type of people we spoke to, conduct the interviews, interviewees seemed to feel at ease with her. They might have talked more to her, than they would have done to me. Her presence, and A.'s as well, also contributed very much in approaching interviewees and making them feel comfortable and trustable.

Approaching women was a little more problematic than men in most cases. Some men would argue they could tell us more, their women did not know much about the subject. Others' wanted to be present when we talked to their wives, and some women act very shy and insecure to talk to us. Due to Grace presence and her feeling for approaching these situations, we did manage to talk to a reasonable number of women and most of them felt at ease to talk. As with any group of interviewees, we also talked to women who were very willing to talk, knowledgeable and active within their community, as chairman of an association for example.

In between interviews and after each day, usually in the car or over diner, we would talk over our experiences of the day with the tree of us, me, the driver and Grace. These were very useful moments for

me as well, as my interpretations of certain situations could be very different from Graces' and the drivers', as we all looked at the situations or interpreted answers of respondents through our own 'window', shaped by our cultural background, live experiences etc. As Grace and A. were both Ugandans themselves, although from different regions, they would sometimes pick up certain small comments or intonations in interviewees' voices which I would not have grasped. Besides, by discussion our thoughts, ideas and interpretations, we could make sense of certain situations together, which would be more difficult to have done by myself. A. gathering additional information by just wondering around, talking/sitting with men etc.

Apart from discussion research related issues, I gained a lot of additional knowledge on Ugandan culture, people, the differences between regions, politics, life and son on by talking with them. I have been very lucky to have received help by these two experienced, diligent, enthusiastic, honest and kind people. As we felt like friends after a few days of fieldwork together, the communication went very well, which, I believe, contributed a lot to valuable research data.

### 1.5.3. THESIS ORGANIZATION

This introduction has captured the problem to be addressed in this thesis and the theoretical framework through which the problem will be addressed. Besides, the three main cases of this thesis have been introduced, the Kibimba Rice Scheme, the Naigombwa Swamp and the Doho Rice Irrigation Scheme, all three located in the wetlands of eastern Uganda. These cases make up the starting point of this thesis, they are complemented with literature on comparable irrigation projects in sub-Saharan Africa, and land acquisition cases in Uganda.

In chapter 2, the first sub-question will be addressed by providing analytical considerations on the importance and role of irrigation in sub-Saharan Africa in a historical context. This is complemented with examples of irrigation development projects in various countries in sub-Saharan Africa, to get an understanding of the development of modern irrigation in African countries, its political significance, and impact on African agriculture and local rural populations.

Chapter 3 addresses the second sub-question, by discussing the transformation in the meaning and value of land since colonial Africa and Uganda in specific, over time, in which the basis of privatization and land acquisition processes lie. It continues discussing the policies and approach of the Ugandan government regarding irrigation, wetland and agricultural investments. By discussing the role of the government in privatization and land acquisition processes which have taken place in the three main case studies of this thesis, the contradictions between 'what is on paper' and the role and position of national and local government in practice become clear.

The fourth chapter discusses the impacts of privatization and land acquisition in irrigation development in eastern Uganda on local peoples' livelihood, autonomy and food sovereignty and the value and meaning of the food product that is subject to these struggles; rice.

In the conclusion, the main findings of this thesis are presented guided by the analytical framework presented in the introduction, which addresses four mutually reinforcing elements, in which privatization is central, that facilitate land acquisitions. Hence it will be discussed how these processes re-define rural livelihoods and food or food production in the broader context.

In the discussion, I will discuss my thoughts and considerations concerning future developments within the three main cases of the thesis. Besides I will present and discuss alternative discourses concerning the future of agriculture and suitable land tenure systems in the African context which challenge certain aspects of current dominant discourses based on large scale, privatized commercial agriculture and neo-liberalism.





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## 2. IRRIGATION IN SUB-SAHARAN AFRICA

### 2.1. HISTORY AND DEVELOPMENT OF IRRIGATION IN SUB-SAHARAN AFRICA

As mentioned in the introduction, water has always had a central role in efforts to intensify and modernize African agriculture (Bolding 2004: 8). Wet land cultivation and irrigation have been the two most intensive forms of agriculture practiced in sub-Saharan Africa. Irrigation ventures have been classified based on their scale, type of water control, type of management and ownership of infrastructure or stage of technological development. In 1982, based on estimations of the FAO, 5 million hectares was put under controlled irrigation in sub-Saharan Africa, of which 52% classified as modern, large scale systems (>500 ha) and the other 48% predominantly traditional, small scale systems. 61% of the large scale schemes were government controlled settler schemes, 20% government estates and 19% private individuals or estates. Of the small scale schemes, 8% was classified as community run modern schemes, the other 92% as traditional schemes (Bolding 2004: 9, footnote).

Over the years, irrigated farming in sub-Saharan Africa has known various settings, varying from indigenous irrigation practices, to so called, 'irrigation factories', defined by Diemer as 'grand settlement schemes that were initiated and constructed by both colonial and post-colonial governments aiming at an industrial mode of irrigated production' (Bolding 2004: 9). A chronological overview of modern irrigation development in sub-Saharan Africa is given, based on 'In hot water' from A. Bolding (2004: 10-13), complemented with analytical comments of various authors and examples of various schemes in different sub-Saharan countries. This gives a general picture on when and how industrial irrigated practices have been introduced in an African agricultural context, in which irrigation was practiced, next to rain-fed agriculture, livestock and other livelihood strategies, in locally evolved ways.

**In the early 1920's** the first large scale irrigation settlement schemes were designed and constructed in Africa. The first major scheme, and still the largest settlement scheme was the Gezira scheme in Sudan. These grand settlement schemes were initiated by colonial officers with grand objectives of transforming the rural social and material landscape and thereby kick starting a process of 'development'. They were seen as 'vessels of modernity laboring through a sea of superstition' and later as icons of independent African national states.

These early colonial schemes were not, in the first place, designed to radically transform African agricultural systems, but were mostly the outcome of political or humanitarian motives (for example to evacuate population in areas infected with sleeping sickness). Exceptions included the Gezira scheme and Office du Niger, which were designed to produce cotton, and in situations where the stability of African agriculture was at stake, for example in drought prone areas susceptible to frequent famines.

**The 1930's/40's** are considered the conservationist era's as the main concerns regarding rural Africa, included soil erosion and overpopulation. These concerns triggered the design of interventions to change African agricultural practices. However, due to shortage of funds and qualified colonial staff, the scale and intensity of these interventions were minor.

**After WWII**, the popularity of irrigation settlement schemes was thriving. There was more capital available in British and French colonies, colonial administrative services and staff were expanded and there was a general sense that new policies for underdeveloped countries were required. Three varying types of schemes persisted, based on different motivations or ideologies. The first type was meant to tackle the problems of erosion and overpopulation to relieve pressures on densely populated lands. In

Kenya and southern Rhodesia this included the re-organization of land tenure and the settling of expelled Africans that otherwise formed a political threat. The second type of irrigation schemes were aimed at the promotion of group or co-operative farming, based on either ideological or technical grounds. The third type was meant to serve a metropolitan interest of exporting food to the colonizers home countries.

The enthusiasm for major settlement schemes declined in the late colonial era due to the spectacular failure of some schemes.

With the wave of **independence**, a new found belief arose in the capacity of development administrations combined with a model of radical change through agricultural modernization. This triggered a new wave of settlement schemes and irrigation in particular. Funding at this time came from international and bilateral development agencies. Especially in the period of the Green revolutions, investments in irrigation rose dramatically. The emphasis shifted though from hardware investments including dams and channels, to non-hardware investments including rural credit, extension, trainings and marketing.

By **1982** a wave of criticism concerning the negative effects irrigation schemes, plus the fall in world staple food prices resulted in the World Bank lessening its emphasis on irrigation in general. The focus turned to cost-recovery and rehabilitation of existing schemes.

By this time, the 'irrigation factory bubble' burst, 'irrigated settlement schemes became tainted and notorious for their low performance and negative socio-economic as well as environmental impacts'(Bolding 2004: 12). Irrigation factories drained development countries of resources that could have been used for alternative investments in rain-fed agriculture, argued Moris (1987: 100-101). The policy response to this wide spread criticism, was to lessen the influence of corrupt irrigation bureaucracies and liberalizing the market to provide for hard needed incentives to produce more efficiently. This proved difficult as existing bureaucracies resisted any policies that would weaken their status. They reacted by strengthening their position through rehabilitation projects, promising to improve efficiencies by using better technology.

Meanwhile, the life of the population living within the schemes was hard, most of them had high debts, due to unequal distribution of water, the benefits were unequally distributed and in general settlers were worse off in terms of wealth and food security than before. This resulted in the evasion of settlers and settlers practicing a variety of livelihood strategies including off scheme businesses, the development of parallel markets and the expansion of irrigated, rain fed and livestock production outside the scheme. As a result, settlers were allowed to control their own decisions and activities, they were provided better security of tenure and better prices for their produce by liberalizing agricultural commodity markets. In fact, industrial irrigation was partially transformed to better fit the characterizations of the African irrigation paradigm; to slightly better align with the perceptions, needs and wants of the African irrigators.

**Today**, irrigation has lost much of its status of a 'privileged solution'. However, due to the recognized potential for irrigation development in Africa and a renewed policy emphasis on food security for rural populations, there is still space to extent and invest in irrigation. Three scenario's to extent and invest in irrigation have been promoted thus far (Bolding 2004: 13). The first entails the further development of private irrigated estates by either large scale commercial farmers or transnational agro-business corporations. This scenario is grounded by the proven track record in production and profitability of estates (Moris 1987, Adams 1990). The second scenario is based on the 'small is beautiful' movement and advocates for the development of small-scale schemes based on existing, indigenous African irrigation practices. The third scenario promotes reforming existing irrigation factories by creating financially

autonomous irrigation service agencies and decentralized management by establishing water users associations and introduce water pricing through modernization of irrigation infrastructure.

### 2.1.1. OVERVIEW SUB-SAHARAN IRRIGATION DEVELOPMENTS

To complement the general overview of industrial irrigation development given above, with literature on actual cases, a clearer picture can be Formal irrigation schemes in Sudan, Nigeria, Kenya, Senegal, Mali, Ethiopia, Zimbabwe and the cases in Eastern Uganda will be discussed based on available literature and fieldwork data. General trends and common characteristics will be discussed in combination with analytical considerations of a handful of authors.

#### *Sudan*

In Sudan, (1,700,000 hectares have been put under irrigation, which is 10 times more than any other sub-Saharan country(Ertsen 2008). The first major irrigation scheme was the Gezira scheme, constructed on behalf of the British colonial administration by a British engineer. The British perceived the Gezira plain as 'empty', as only very few permanent settlers were found and local farmers only used the plain in periods with sufficient rainfall. Before WWI, some smaller flood and pump irrigation systems were installed, which 'allowed the Sudanese government and commercial growers to lay the foundation for their future co-operation in the Gezira'. After WWI, the major, larger scheme was constructed(Ertsen 2008: 216). Local farmers who became tenants in the scheme had to adapt their agricultural practices, they refused however to manage water flows during night times, hence technical adaptations were needed (Plusquellec 1990 and Gaitskell 1959 in Ertsen 2008: 217). The scheme has been expanded several times and combined with another scheme, the Managil scheme. Together they total 865,000 hectares and by the 1970's the scheme produced 75% of Sudan's staple cotton and constituted 12% of the total area under cultivation in Sudan (Barnett 1977:6 in Moris 1987: 107). The scheme was put predominantly under gravity irrigation(Ertsen 2008: 216). Land tenure reforms followed the development of irrigation infrastructure in the country. As a result, tribes no longer had the ultimate authority to allocate lands, but land could be acquired by the state for irrigation and other 'public purposes' (Zarough 2000) .

After independence, 'any land, unoccupied or occupied, which had not been registered before the commencement of the Act should be the property of the government' (Zarough 2000). In the 1960's/70's, two other, smaller schemes were constructed, as Gezira was perceived as a success story. In the 1980's the Sudanese government requested the World Bank for funds to rehabilitate these major schemes. Although, the schemes were still portrayed as successful by the government, their impacts were not always positive, explained by Moris (1987) . First of all, the modern irrigation technology had never been farmers' own choice. Second, the production parastatals paid little attention to farmers interests and for example dictated farmers to grow cotton as a main crop at Gezira, whereas, cotton provided the lowest return from all 4 crops grown in the scheme and consumed most water. Thirdly, tenants on the newer schemes lacked tenure security as they were only given an annual production license and were chronically indebted, The situation on the New Halfa Scheme in 1985, has been described by the anthropologist Sorbo, who argues that this description could be broadly applied to the whole Sudanese irrigation sector;

*'Production was low, absenteeism was high, there were repeated shortages of water, vehicles and fuels, pests and weeds invaded the fields... required inputs of seeds, fertilizers and pesticides rarely arrived on time, poor storage facilities caused deterioration and losses and tenant incomes were low and extremely irregular. As in the Gezira scheme, a sense of helplessness pervaded the scheme and the loss of moral and deteriorating operating conditions were mutually reinforcing' (Sorbo 1985: 14 in Moris 1987: 107)*

## *Nigeria*

As a result of the oil boom in the early 1970's and the severe Sahel droughts in 1972-74, modern irrigation schemes were being constructed in Nigeria, including the Bakalori irrigation project, Chad irrigation scheme and Kano River Project. The Bakalori project was originally proposed by the United Nations Development Program (UNDP) and the FAO in 1969 (Yahaya 2002: 420). The project was executed on behalf of the (independent) Nigerian government by a Nigerian firm and its Italian associate and construction started in 1975. Forty to fifty thousand, mostly peasant families would be provided with irrigation water. The peasants in the Sokoto valley used to account for the bulk of vegetables and spices produced in the area, including onions, garlic and tomatoes, 'the economic significance of farming in this part of Nigeria can not be overemphasized' (Yahaya 2002: 420). The farmers engaged in both rain-fed and traditional irrigated farming. The large scale irrigation scheme should have led to an enormous increase in farmers' output, encouraging agricultural and economic development in the region and counter food imports.

Land acquisition for the project turned out problematic due to a lack of trust among the farmers. Land had been alienated for project infrastructure including a large dam, without consulting nor compensating the farmers on the land. 13,000 families were allocated alternative plots of land by the government. The alternative plots of lands were considered useless by the farmers due to their location and bad soil condition. In the end, most farmers never received any plot in the scheme due to the loss of farmlands to irrigation infrastructure, and those who were fortunate enough received a plot drastically reduced in size (Yahaya 2002: 425). A formal re-allocation process at Bakalori turned out to be too complex and time consuming and was hence abandoned to be replaced by informal re-allocation (Bird 1983) which was characterized by bribes and patronage according to Masdar (1979 in Yahaya 2002:425). Several reasons including the absence of land compensation and a fair allocation procedure, the destroying of economic trees and crops for construction works and the enforcement of fixed cropping patterns without consultation with farmers, led to violent uprisings of farmers. Police and military forces were mobilised by the Government, they burned villages considered recalcitrant and in addition shot and imprisoned unclear number of protestors ((Ken 1985 in Yahaya 2002: 425) and (Griffith 1983)). Farmers responded with more violence again, including home-made deadly weapons (Beckman 1985 in Yahaya 2002: 425). The dictated cropping pattern conflicted with farmers own preferences and priorities, their traditional crops, including sorghum, were for example not included, instead they were forced to grow wheat, which led to economic problems among farmer households (Masdar 1979 in Yahaya 2002:425). Some other problems that were observed at Bakalori included the inappropriate, Italian design of the irrigation infrastructure, the lack of space for livestock, disruption of existing tracks between villages for people and livestock, health problems including malaria and bilharzias, no water supplies for villages leading to villagers using the irrigation channels as water reserves and latrines. The last problem concerned the problematic participation of farmers in dry season irrigation, as farmers were often engaged in other, more profitable activities in the dry season (Bird 1983: 83).

After the violent uprisings, the government decided not to officially acquire land for enlarging irrigation infrastructure anymore, but return it to the farmers after construction. 20% however was alienated for infrastructure. The Government now had no legal rights to dictate farmers to follow a cropping calendar, water schedule and farm co-operatively, they could encourage the farmers to do so. Without co-operative farming, few options would be left for mechanization, increased productivity and efficiency, the initial aims of the project (Griffith 1983: 9).

In 2010, USAID committed to rehabilitate a section of the Bakalori scheme and 'train stakeholders in the operation and maintenance of the scheme'. According to the managing director of USAID, irrigated agriculture significantly contributes to food security and agro-industrial development (Aluyi 2010). In August 2012 a tender was put on the internet for 'the rehabilitation of and procurement of equipment for Bakalori Irrigation Project, NIGERIA' (Tendersinfo 2012).

## *Kenya*

Moris (1987: 103-104) described the development of major irrigation schemes in Kenya. Despite surveys reporting poor soil quality and the un-favorable remote location of the area, the colonial government in Kenya started constructing a pilot irrigation scheme of 600 ha, named Hola, in the Tana Basin in Kenya. By the early 1960's, construction started for the Bura West scheme, supported by the FAO and UNDP. 100,000 ha of land along the East and West banks of the Tana River were rendered 'underutilised', 'semi-arid' land that was to be 'reclaimed'(Moris 1987: 104) and had irrigation potential. In practise the area supported 15 000 farmers and 6000 semi-nomadic pastoralists. An initial scheme of 14 000 hectares was proposed and funded by the World Bank, six other donors and the Kenyan government. Due to financial constraints, new insights of delayed feasibility studies and the withdrawal of one donor, the size of the proposed scheme was reduced by the government in 1983. Parts of the infrastructure to cover the initial size were already in place at the time. Obstacles and problems that were faced over the years included several pump breakdowns, delays in land preparation due to managerial problems, disappointing yields, health problems among tenants (Vainio-Mattila 1985 in Moris 1987: 105) and 45% of tenants appearing unable to meet their basic needs. From 1990 until 2005, little or no crop at all was harvested due to inadequate amounts of water and frequent breakdown of a pump station. In 2003, under the new president Kibaki, one pump was revived, seeds and fertilizers were distributed to farmers free of charge and maize growing resumed (Moris 1987: 105).

The scheme was initially managed by the Ministry of Agriculture. In 1966 a National Irrigation Board was founded to manage all government initiated irrigation schemes in the country (Ruigu 1988: 10) . As the NIB faced too many difficulties in managing Bura West, including including enormous financial deficits, management was temporarily taken up by the Ministry again in 1985 and handed back to the NIB in 2005(Ruigu 1988: 10). By 1986, the Kenyan government, though not putting a major emphasis on irrigation anymore, committed to rehabilitating existing schemes and completing the Bura Irrigation Project (Ruigu 1988: 9 )

Like Hola and Perkerra, the Mwea irrigation scheme in Kenya was constructed with the use of detainee labour from the anti-colonial Mau Mau revolt in 1952. A major factor for revolting concerned land ownership. Mwea was intended to create employment for detained Kikuyu and settle landless Kikuyu (Ertzen 2008:220). By 1986, from all large irrigation schemes in Kenya, only Mwea was actually making a profit, the generated surpluses used by the government to subsidize other schemes (Ruigu et al. 1984 in Ruigu 1988: 18) . A factor contributing to the profitability of the scheme was the use of a gravitational instead of pumping system, which is cheaper, less susceptible to breakdowns and thus more reliable ((IBRD 1981 in Ruigu 1988: 17).The borders of the Mwea plain used to be inhabited by groups of different origins who used the plain for various purposes including honey collection and livestock grazing (Ertzen 2008: 219), however the plain was portrayed as 'empty' by irrigation planners(Ertzen 2008: 220). Political pressure for constructing the Mwea scheme in order to settle landless Kikuyu, overtook technical constraints, as available hydrological data available were few, and no detailed soil surveys had been carried out yet by 1954, when land settlement began (Chambers 1973 in Adams 1990: 1314). The management of the scheme has, from the beginning, been 'rather harsh', from 1966 to 1998 it was under control of the NIB. From 1960 all tenants were required to sign an agreement, which gave management the power to punish farmers who did not honour the agreement (Ertzen 2008: 221) . 110 tenants between 1961 and 170 lost their license to produce in the scheme as they were unable to honour the agreements (Ertzen 2008: 223). The 'harsh' and strict measures of centralized control in the initial stages of the scheme contributed, according to Veen (1973 : 127 in Ertzen 2008: 222) , to the status of successful post-independent African irrigation scheme. However, revolting farmers in 1998 demanding control over their own produce, changed matters and the management of the scheme was taken over by the Mwea Rice Farmers Cooperative Society. They also expanded the area under paddy rice production with 4000

hectares, which had negative effects on water availability according to the NIB (National Irrigation Board 2013). As the Cooperative failed to manage the scheme, the NIB took up the responsibility over infrastructure, the cropping program and land administration again (Soft softkenya.com 2010). Farmers stayed involved in the management of the scheme though and are supposed to take over management of the scheme in the future through Irrigation Management Transfer (IMT) (Swallow 2007: 198). The marketing of the rice used to be channeled through the NIB, but is currently left to market forces (National Irrigation Board 2013)). The scheme faced problems of water shortages and infrastructure breakdowns, therefore it has been rehabilitated with support of the World Bank. Besides, the Japanese government has funded a project to expand the scheme with 3500 hectares, to be completed in 2016. Farmers pay a fee to contribute to scheme maintainance, however, this is not sufficient and government or donor support is thus still needed, according to the NIB.

On Bura West and all other NIB schemes, tenants are given a one year production license and all receive equally sized plots. If performing to the satisfaction of the NIB, the license is prolonged. Besides, tenants need to sign an agreement stating strict rules and regulations. Few tenants fail to adhere to agreements but the rate of dissention of tenants is high (Ruigu 1988: 12). Tenure insecurity is a big problem contributing to dissatisfied tenants. They would prefer freehold land titles (Migot-Adholla 1982 in Ruigu 1988: 12). Besides livelihood options of tenants on NIB schemes are few, the income of most families fall below the poverty line and capable young men therefore move out of the area, worsening the situation (Swallow 2007: 205). Quality of life has been reported as dissatisfactory on all NIB schemes including Mwea (Migot-Adholla, 1982; Ruigu et al., 1984; Ileri, 1986 in Ruigu 1988: 24). Due to several factors including a competitive world market and high costs of unsubsidized inputs, many NIB schemes have collapsed.

Tenants at smallholder irrigation schemes in the same area, supported by the Provincial Irrigation Unit (PIU), face a lower level of poverty and appeared more resilient to a sudden collapse of the scheme. These schemes are based on individual plots of land based on customary land rights for which the tenant is responsible for labor and farm inputs and is in control over the produce. This gives, according to Swallow, the tenant incentives to invest more time and money (Swallow 2007: 205). In times of crisis or collapse of scheme infrastructure, these smallholders could quickly turn to cultivation of other types of crop, whereas tenants on NIB schemes could only turn to non-agricultural strategies as they were not obliged to use scheme land for different purposes (Shah et al. 2002 in Swallow 2007: 207).

During the past few years, the NIB has focused on rehabilitating existing schemes, through, for example food-for-work programs in 2004-2005 to desilt channels. Rehabilitation of major schemes is supported by the Kenyan government and other organizations including the Arab Bank for African Economic Development (BADEA), the World Bank and the OPEC fund (Marsgroupkenya.org accessed on 27-02-2014) (NIB 2013) The NIB still aims to eventually hand over scheme management to farmers groups through Irrigation Management Transfer (IMT) projects. Meanwhile, plans for new irrigation schemes are pending. One in West Kenya, supported by the World Bank, directed at supplying water for both high value crops such as fruits and vegetables and staple foods for the Kenyan farmers themselves, including soybeans, cereals and other legumes (World Bank 2013) The other scheme is planned in a pastoralist area in the north- East, where the Kenyan government has set ' a million acres aside for irrigation' (IRIN 2013).

There is large private irrigation sector in Kenya which has been profitable and commercially successful. According to Adams, international agencies as the World Bank have noticed this as well and might therefore support the privatization of schemes as an alternative to 'bureaucratic, governmental, smallholder schemes', as they argued in their mid- term appraisal of Bura. The nature of its bureaucratic management is one of the major problems of Bura (Adams 1990: 1321).

## *Senegal*

In Senegal, various attempts have been made to replace indigenous flood recession irrigation with modern irrigation along the Senegal river. Farmers along the Senegal river traditionally did not cultivate rice but grew short-cycle millet, cow peas and flood recession sorghum (Craven and Truly in Moris 1987: 110). French colonials introduced modern, large scale irrigation in the Senegal delta, however problems were faced with annual salt water intrusion and salinity in the underlying sediments. Post-independence projects were directed at mechanized, medium sized polders, but encountered so many problems that the large scale units were abandoned by the government. Instead their support shifted to locally evolved small scale irrigation units, managed largely by farmers themselves though supervised by an overall parastatal the SAED (Société d'Aménagement et d'Exploitation des terres du Delta du Fleuve Sénégal). Though bureaucratic at first, the parastatal learned to work with farmers communities in developing a system suitable for small scale perimeters. By 1983 the parastatal was supervising 19,000 hectares under small scale irrigation, named 'villager irrigated parameters' (PIV in French) (Degeorges 2006: 636) involving 35,000 tenants (Bloch 1986 in Moris 1987: 110). Moris states that this example could be Africa's most successful officially sponsored, smallholder irrigation, mean rice yields went up to between 3,5 and 6 tons per hectare per year (Moris 1987: 110).

Meanwhile, the Senegalese government supported the development of modern irrigation along the whole Senegal river basin, in co-operation with Mali and Mauritania, including two large dams, the Diama and Manantali dams, which were inaugurated in 1992 (Degeorges 2006: 635). These dams destroyed the traditional flood recession irrigated practises of local farmers, as artificial floods covered only a part of the initial area under flood cultivation and were released irregularly, thereby destroying crops (Adams 2000 in Degeorges 2006: 636). Besides the Manantali dam effected some vital functions of the traditional fishing methods practiced (Degeorges 2006: 638). Marine fish has been imported by the project, but will not be able to make up for the loss of traditional fishing systems combined with an increasing population. It has also been estimated that the Manantali dam will cause the loss of commercially valuable forests providing fire wood, charcoal and food for livestock and wildlife (Gannett Fleming Corddy and Carpenter (GFCC) 1980 in Degeorges 2006: 639).

Some policy measures concerning irrigation management have led to various land issues. In 1976 the Senegalese government intervened in the management of the PIV's to develop centralized controlled rice producing PIV's. Tenure control was handed over to the ruling Fouta oligarchy in the Middle valley and Soninké oligarchy in the Upper valley, which contradicted the 1964 land law in which 'traditional landholders' were abolished in order to prevent peasants' dependence on the rural elite. Nevertheless, after 1976, the rural elite were in control of the PIV's and hence were the ones that benefited from credit and subsidized agricultural inputs instead of the peasants. The PIV's proved out unviable and producer subsidies were withdrawn due to structural adjustment policies. The PIV's were eventually abandoned (Boone 2003 in Degeorges 2006: 637). In combination with the disrupted flood recessions by the dams, many farmers were now depending on rotational migration to Dakar, commercial activities and wage employment in the Delta large scale irrigation scheme (Boone 2003 in Degeorges 2006: 637).

When the Senegalese government pulled back from managing the large-scale rice estates supervised by the SAED, this led to a speculative land rush by Dakar officials, Mouride Marabouts, merchants and SAED technicians all eager to make a profit. Requests for land were made by local and urban elites and later on also by peasants associations, who whoever, were largely neglected because of a lack of political power (Boone 2003 in Degeorges 2006: 637). Besides, farmers were in some cases forced to take on sharecropping arrangements with 'prosperous outsiders' (Degeorges 2006: 673).

Due to organizational problems including the lack of farmers autonomy, technical problems including salinization of groundwater, operational problems including farmers refusing to reimburse depths, delays in delivery of inputs and poor maintenance of infrastructure, financial issues and a competitive

world market, irrigation in Senegal never fulfilled intended goals and transformed the traditional agricultural sector (Adams 2000 in Degeorges 2006: 637). According to Adams, 'both the land and the people involved in traditional agriculture will cease to be' as a result of the dams and irrigation' (Adams 2000 in Degeorges 2006: 636).

### *Mali*

In 1932, the French colonizers established the Office du Niger in Mali, a parastatal corporation to implement their plans to cover the huge inland delta along the Niger with irrigated cotton and rice production (Fresson et al. 1985 in Moris 1987: 108). Only one twentieth of initial plans have actually been achieved. Furthermore, rice yields have remained stagnant for over 40 years (between 1935-1980), by the end of 1980's, 31% of the area under irrigation structures was abandoned and many tenants were deeply indebted. Over one third of the tenants did not receive anything for their work during the season, because of deduction of the services provided by Office du Niger to farmers (Fresson et al. 1985 in Moris 1987: 108).

Nevertheless, the perception that irrigation was the technology to bring Mali prosperity, persisted among several subsequent regimes. In the 1960's, the socialist Keita regime took over the plans of the French colonial government and brought nearly 100,000 hectares under polder irrigation. However this project has later been described as 'an economic, political and technical failure which destroyed Mali's plans for rice self-sufficiency and its dreams for rural socialism' (Bingen 1985 in Moris 1987: 109). Irrigation projects continued, slightly adapted and through different regimes. In the early 1970's, the Traore regime established 'Operation Riz', 12,000 hectares of rice polders were developed with assistance of the French (FAC) and the European Development Fund (EDF). When rice yields turned out not as high as expected, Operation Riz was split in two projects, funded by the EDF and World Bank. The project aimed to substitute indigenously cultivated with Asian varieties and partial water control. Due to failure of the rains in 1983 and 1984, the yields from both polders turned out catastrophic. The World Bank still portrayed Operation Riz-mopti as a success, although rice yields had remained at 926 kg/ha, compared to indigenous African rice yields of 500-700 kg/ha (FAO 1986 in Moris 1987: 109). A detailed study of Operation Riz-Segou documented relatively poor performance as well (Bingen 1985 in Moris 1987: 109).

Thus, despite the huge amounts of efforts, time and money that have been invested in Mali's irrigation sector since the 1930's, neither Office du Niger, nor both Operations Riz, have been able to realize expectations. On the website of the International Development Association (IDA) of the World Bank (World Bank 2007), this is recognized as well, *'the agency mainly responsible for irrigation management-Office du Niger- dates back to the colonial era, and functioned in ways that added to farmers costs and lowered production of rice and other food staples'*.

Therefore, the World Bank and other donors, including the German, French and Dutch, have financed a project to *'Restructure the Office du Niger and reform its irrigation policies. Modernize and rehabilitate irrigation canals. To improve farmers' incomes, liberalize markets in rice and push for land tenure reform. The IDA states that the project has been successful thus far, having been able to increase yields and productions of rice and other crops, and higher incomes for Malian farmers. One of the strategies the IDA states are needed to ensure sustainability is to seek for long-term financing from would-be private investors'*

### *Ethiopia*

This paragraph on Ethiopia is based on an IIED (International Institute for Environmental Development) Climate Change Working Paper by Behnke and Kerven (2013).



Until 1960, pastoralists from the Afar ethnic group, had unlimited access to the Awash River Valley for their livestock to graze. In the early 1960's these riverine grazing lands were transferred by the then imperial Ethiopian government to hydroelectric projects and international agricultural companies to develop land into irrigated cotton and sugar plantations (Cossins, 1972; Bondestam, 1974; Emmanuel, 1975; Flood, 1976; Kloos, 1982; Gamaledin, 1993, 1987 in Behnke 2013: 9). Today, these former pastoralist grazing lands are either irrigated or abandoned fields, whereby a large part is damaged by soil salinity or bush encroachment. Although the Awash Valley will never convert back into its former pastoralist nature, according to the authors, it provides an example of 'what lies in store for pastoral areas if African governments pursue a policy of modernizing agriculture by displacing mobile livestock production in favour of irrigated crop agriculture' (Behnke 2013: 9). Based on an economic analysis, Benke and Kerven argue that pastoralists farming is comparable or even more advantageous to either sugar cane and cotton cultivation in Ethiopia without the negative effects on income stability, risk, and the environmental situation. Violent resistance by Afar clans to the expropriation of land to irrigated agriculture increased in the late 1980's, including livestock encroachments onto cotton fields and physical violence towards employees on the cotton fields (Getachew 2001 in Behnke 2013: 20) .

In the period between the fall of the Derg regime and the current regime Ethiopian People Revolutionary Democratic Front (EPRDF), many of the irrigated cotton fields were abandoned, and later handed back to Afar clans by the new government. One of such Afar clan was handed back a cooperative farm and decided to form a cooperative themselves and farm the land. This operation turned out surprisingly successful, due to a combination of factors. The management of the cooperative turned out very committed, fields had been laid unused for several years and just cleared by the new regime, leaving them very fertile. As cooperative, no taxes need to be paid to government and government still maintained the irrigation infrastructure, and had already covered the initial costs of land development. The irrigation infrastructure, led to a loss of grazing and water resources, environmental degradation. Many Afar pastoralists had to leave their river-watered lands into less fertile areas, became more dependent on rainfall patterns and caused overpopulation of the less-fertile areas to which they had to move, hence leading to overgrazing, starving livestock, smaller herds and malnutrition (Bondestam 1974 in Behnke 2013: 26). Combined with changing market prices and unpredictable weather conditions, agricultural stability has not increased as a result of the irrigation network.

As contractual conditions have been unfavorable for outgrowers and government passed most risks to these farmers growing for the estates, the government benefits from these large scale agricultural enterprises, on the detriment of rural producers, according to Behnke and Kerven (2013: 31). For example in case fields are destroyed by flood water from upstream government managed dams, farmers needed to pay for replanting them. Outgrower contracts state, among other regulations, that farmers may only grow the dictated crop and have to sell all the produce to the estate at a price set by the estate.

As the large scale sugar and cotton plantations are not significantly more profitable compared to pastoralist farming, the actual benefit of large-scale agricultural plantations might not be its efficiency or productivity but rather the making of money which is accessible to the Ethiopian state. For example the Metahara Sugar Factory, of which the government was both the owner of the estate and the collector of taxes, makes a lot of money for the government. Pastoralists by contrast have never provided the state with such financial benefits due to their nomadic, and thus tax 'escaping' nature, although they have been as or more important to Ethiopia's national economy.

Irrigation development for sugar cane projects on pastoralists lands in Ethiopia continue along the Awash River valley and Omo valley, in the western highlands (Markarkis 2011: 298 in Behnke 2013: 31). Agro-pastoralists in the Omo Valley have been violently dispossessed of their lands, according to Human Rights Watch (in Behnke 2013: 32). The prime minister is content about the achievements of the

project thus far and accuses critics of wanting to keep the pastoralists as a 'tourist attraction' rather than creating the circumstances for pastoralists to have a 'modern life' (Meles 2011 in Behnke 2013: 32).

In 2008, the government of Ethiopia gave an Indian company some of the best grazing lands in the Awash Valley for expanding the production of sugar, according to Pearce (2013)

### *Zimbabwe*

The information in this paragraph comes from 'In hot water' by Bolding (2004).

Colonial government initiated and controlled irrigation schemes in Zimbabwe arose by 1934 as a result of a drought in 1912 followed by several famines. Irrigation became a central object in government intervention for several decades, though the focus shifted over the years from the initial objective of famine relieve, to settling Africans in Reserves, to maximizing and modernizing African agricultural production in the 1960's/70's. The scheme has been under control of the government until 1995. In 1945 there were plans to hand the scheme over to the users, however due to financial depths and difficulties in increasing productivity (Bolding 2004: 26), government control was increased on the contrary (Bolding 2004: 151). Besides, administrators feared the influence of the growing group of African entrepreneurs on the scheme, a growing African elite group would be an obstacle to the ideal of a 'gradual, egalitarian development of African people'. These African entrepreneurs who had been attracted to Nyanyadzi, were disappointed as the administrators were reluctant to provide business licenses, because of the above mentioned fears for this group of elite Africans. This led to an African nationalists inspired resistance movement in the 1960's (Bolding 2004: 165).

The colonial regime responded by getting more involved in the management of the scheme and transforming it into an actual 'factory scheme'. Due to political unrests in the period leading to national independence, the scheme closed down for some years. After independence, the nationalist government pursued a more neoliberal style of management, giving in to the former nationalist resistance of African entrepreneurs. However, the scheme management still maintained a 'factory scheme' view, which led to frictions between management and scheme users. Management also turned out incapable of equally distributing water, one factor being the discrepancy between registered plot holders and actual plot holders.

In 1995, the scheme was abruptly handed over to the farmers due to a general reluctance of farmers to mobilize resources needed to maintain scheme structures, neo-liberal policies and a shortage of government budget (Bolding 2004: 337). Initially, farmers failed to manage the scheme. Later, three different 'organizational modes of appropriation' arose, which reflected existing political differences (Bolding 2004: 252). The first included the traditional farmers, originating from Nyanyadzi. They were mostly located in Block C and were traditionally organized based on clan networks. They were polygamous and plots were constantly divided among children. They invested mostly in women and cattle and were economically depended on unskilled jobs in nearby towns. The strength of this group lay in their kin and trust based relationships and the traditional authority of the kraalhead. Block C was thereby managed as a community irrigation scheme and they had split off their part of the water network from other blocks. Their weaknesses including social differentiation patterns between leading and other clans and few opportunities for women. Besides they were unable to cope with siltation and degradation of the main canal, as the adjacent area belonged to a rival clan. These farmers practiced irrigation complementary to other livelihood activities in a non-capitalistic way.

The second group included modernist, Christian, plot holders originating from Harare or other urban areas. Their children were highly educated, some found lucrative jobs in Harare or other urban areas, others became professionally involved in irrigation and formed an NGO to recruit donor funds to

maintain the irrigation infrastructure of the scheme . They politically supported the African nationalist opposition. These irrigators were capitalist, professional farmers.

The third group illegally claimed land using political patronage and violence. One case included the heirs of an evicted plot holder violently forcing another plot holder from his land (Bolding 2004: 338).

The Nyanyadzi scheme had some fundamental impacts on the environment and local society (Bolding 2004: 152-153). Traditionally, low land communities exchanged salt, fish, mats and baskets for grains produced in the highlands. This traditional barter exchange, which helped local communities in coping with droughts, shifted to exchanging cattle and cash through labour migrations for grains now produced in the irrigated low lands. This sale of grains led to a transfer of wealth from rain-fed agriculture practicing Africans to irrigating Africans in the wetlands. The transfer of wealth to irrigated areas also led to a concentration of livestock on the surrounding cattle grazing areas, which created pressures and resulted in problems. In dry periods, Africans relying on rain-fed agriculture used to buy grains from European traders, but could now buy them from African irrigators, leading to changing in wealth distribution patterns.

### 2.1.2. HISTORY AND DEVELOPMENT OF AGRICULTURE AND IRRIGATION IN UGANDA

Compared to many other sub-Saharan African countries, there is little documentation available on irrigation development in Uganda from colonial times. An article in the *Geographical Review of East Africa* of 1970, on irrigation development in Uganda (Carruthers 1970), gives some insights. In this article, Carruthers concluded based on potential evaporation and transpiration of crops grown in Uganda, that in Uganda at the time, there was a 'theoretical irrigation requirement', despite a favorable bimodal rainfall pattern. Carruthers argued that this moisture deficiency is a 'necessary, but not a sufficient condition for irrigation investment', as there were plenty of alternative methods to tackle this moisture deficiency. However, research upon such alternative methods has, according to Carruthers, been a neglected area in the whole of East Africa.

Carruthers (1970: 12) argues that prior to World War II, the British protectorate placed low priority on irrigation, in annual reports until 1947, nothing is mentioned concerning irrigation, except for swamp-planted rice. Swamp rice has traditionally been grown in the wetlands of Eastern Uganda, without controlled water. During the war time, production of rice was expanded to an area of 59,000 acres by 1945. Due to several reasons, which are not mentioned in the article, production fell until by 1953 less than 2500 acres were under cultivation. The main reasons mentioned are a fungus disease and the difficulties in controlling water levels of the swamp and lake.

Swamp drainage has long been more important than irrigation, especially in the area around Kigezi, however Carruthers (1970: 12) argued that drainage of such a large area would economically be unfeasible, as there were still well watered lands that were undeveloped, capital was scarce, engineering resources limited and uncertainty regarding the demand for potential production. It would only lead to additional land, not necessarily water control, which would still make production on these lands at risk. Carruthers (1970: 12) further argues that irrigation has not been indigenous to Uganda as it has been in for example Kenya and Tanzania, except for one small area near 'Agoro in Acholi'. This area was improved by the agricultural department in 1952 and has since been a valuable area for local production of sweet potato. Additionally, two other small schemes were set up in Acholi, to maintain planting material, while in Eastern Bugisu 'a small amount of stream diversion and furrow irrigation' had been developed, mainly by Kikuyu settlers, in the end of the 1960's.

The first significant public investments took place in the region Karamoja and concerned flood diversion structures. These projects faced some problematic circumstances including 'catastrophic floods', a great deal of interest at first followed by a drop of interest resulting in all plots taken up at first and spare plots in the end, drought, long intervals between floods, the stealing of cattle, a heavy storm and failure of rains. In 1955 one scheme was closed down and another abandoned in 1969. Similar problems occurred with dams, pumps and windmills that were constructed in Karamoja; by 1966 108 small dams and tanks were constructed, of which only 9 were in a satisfactory state at the time. (Carruthers 1970: 13)

## 2.2. ANALYTICAL CONTRIBUTIONS

Irrigation development in Africa has been extensively analyzed by several scholars. These analytical considerations give more insights in why irrigation has always had such a prominent role in agricultural policies and how, through irrigation, states gained more control over rural areas and populations.

### 2.2.1. IRRIGATION AS 'PRIVILEGED' SOLUTION

Modern irrigation has long been promoted as a logical and necessary alternative to traditional cultivation methods, which were regarded as being inefficient and high risk. Moris (1987) argues that irrigation projects in Africa have long enjoyed the status of 'privilege solution' to a 'privileged policy problem', namely the drought induced famines in Africa at a time when Europe and America held 'huge amounts of food rotting in storage' (Moris 1987: 99). A privileged solution is described as a 'material and organizational technology which seems self-evidently suited for dealing with problem needs' and 'is not thought to require testing and modification'. This becomes apparent in the various cases that have been described throughout this thesis, whereby expensive irrigation technologies have been implemented without prior thorough research of the environmental, social, and political situation and existing economic and agricultural activities in the target region. Huge investments have been made in modern irrigation in poor African countries which have the option of rain-fed agriculture. Strikingly, widely used rain-fed agriculture has never received such investments made in modern irrigation (Moris 1987: 101). Even today, African governments continue investments in modern irrigation despite the general poor performances of existing schemes and high costs of the technology (Moris 1987: 101).

It is assumed that farmers themselves would be glad to participate in modern irrigated farming thereby excepting the external finance, bureaucratic controls and guided production regimes, including in most cases, dictation of the crops to be grown (Moris 1987: 102). In Kenya for example, Moris argues that knowing 'the solution' in advance, made it unnecessary to explore local soil conditions, existing land and water use, optimal crop combinations and farmers' interests. Policy makers were already committed to irrigation before local costs and impacts had been evaluated and carried on irrigation projects despite the adverse effects observed in practice (Moris 1987: 106).

In an article in the East African Geographical Review of 1970, Carruthers argued that there are many alternative methods for improving 'water relations' other than irrigation, including growing short term crops, adapting cropping schedules to dry periods and cultural practises as tie-ridging and contour ploughing. However, he stated that 'research upon methods of meeting difficulties associated with water deficiency, other than irrigation, is, with one or two notable exceptions, a neglected area in East Africa'. Before turning to irrigation, Carruthers advised to '*establish the effect upon yield of moisture stress of various levels and at different stages of growth. The technical advantage of avoiding these losses has than to be weighed against the costs incurred by utilizing irrigation.*' (Carruthers 1970: 11)

### **Political Considerations**

Based on research in Nigeria, Griffith (1983) argues that political considerations are often as important, or more so, than technical aspects in the development of irrigation networks. The construction of major schemes in Nigeria have been legitimized by technical motivations to develop the water resources of the drier northern regions of the country in order to upscale agricultural production and eventually reduce imports of especially rice and wheat, which fed the urban sector. Besides, the schemes could potentially increase agricultural exports, whereby foreign exchange would be earned. However, according to (Griffith 1983) and also recognized by Yahaya (2002), underlying political reasons have been as or even more important as these technical/economic reasons. Political reasons for action followed from petroleum revenues which had to be spread to the less advantaged northern regions of the country, plus the fact that the agricultural sector at the time, was considered the largest political vote provider, 'contracts for the extensive works needed must have offered substantial opportunities for continuing Federal Government patronage in the States'.

Another political related consideration mentioned is the taxability of populations, which played a role in Ethiopia where an irrigation network was constructed on pastoralist lands. Pastoralists do not provide the government with taxes, contrary to estate farms. This phenomenon has also been described by James Scott, who makes a distinction between gross domestic product and state accessible product, related to a distinction between the total population and the population, or the portion of the economy, which is 'administratively legible'(Scott 2009: 91). In other words, only those who are 'taxable' make money which is accessible to the government. In the same way, Scott makes a distinction between actual cultivated (or in other ways 'used' land) and total trade compared to registered 'fiscal' landholding and 'fiscal' trade. In pre-modern political systems, the difference between fiscal resources and inaccessible resources was substantial, unlike in modern political systems today.

In Kenya political pressure for constructing the Mwea scheme in order to settle landless Kikuyu, overtook technical constraints as well. Available hydrological data available was few, no detailed soil surveys had been carried out yet by 1954, and yet, land settlement already began (Chambers 1973 in Adams 1990: 1314).

## 2.2.2. LAND ACQUISITION, LAND POLICY AND THE MANAGEMENT OF IRRIGATION IN SUB-SAHARAN AFRICA

### *Land acquisition for Irrigation*

According to Moris and Chambers (1973 in Moris 1987: 102), irrigation planners have typically insisted that land and water required for the construction of formal irrigation schemes were not productively used, implying they were unoccupied and did not serve a productive purpose to local communities. Most often though such areas were in fact used by farmers employing simple, traditionally evolved techniques. Lands where large scale irrigation systems have been developed in Africa have been typified as 'alluvial soils with a high clay content near rivers'(Moris 1987: 101). According to Maltby (1985 in Moris 1987: 101) such lands already were a critical production resource, supporting livestock populations in the dry seasons and occasionally house inland fisheries. For example the 'unoccupied' lands along the Kenyan southern border, which were to be used for expanding the Kenya's Mwea Irrigation settlement in the 1950's, were in fact used by private operators, employing landless households to grow Indian dry-land legumes, which were more suited to famine relief than the wet rice cultivated in the Irrigation Settlement (Chambers and Moris 1973 in Moris 1987: 102). In the 1970's, the Kano scheme in Northern Nigeria was constructed in a floodplain area that used to be 'the most important rice and cropping producing area in Kano State' (Stock 1978 in Moris 1987: 102). In several cases, the number of people evicted for the construction of such formal irrigation schemes exceeded the number of people that were eventually given a plot in the scheme (Moris 1987: 102). Upon eviction, compensation was regularly,

although not always paid when land was recruited for the construction of irrigation schemes according to Griffith (1983:7). In practice, the amounts paid were often low and payment delayed. In some cases compensation was not paid at all, as was reasoned that the irrigation structure would only bring improvements and farmers' land would be returned after construction. However, due to the irrigation structures, returned land is always less, thus farmers receiving tinier plots, or non at all. (Griffith 1983: 8)

Land and water are needed in order to construct an irrigation network. Land acquisition for irrigation structures other than those locally evolved, led to re-organizations of local land tenure systems and in many cases to adoptions in formal land laws and policies. These were no smooth processes and often led to problematic situations and dissatisfied farmers.

### ***Land policy and management***

Land policy should ideally be fixed before any surveys of land acquisitions take place, according to Bird (Bird 1983: 76), based on his observations in Northern Nigeria. This is rarely the case though. Engineering criteria in most cases have already been laid down, before a land policy is even considered. Other constraining factors to efficient land policy include land laws, political factors, financial costs, the ease of project operation and socio-economic factors (Bird 1983: 76). According to Bird (1983: 76), engineering criteria have in the past been over emphasized, thereby undervaluing socio-economic factors.

Bird (1983: 80) considers the two main land policy options for irrigation schemes to be either acquiring full land rights/ rights of occupancy or re-allocation of land back to the farmers after construction of the irrigation structures. In the first option, farmers should receive either cash compensation or be allocated an alternative piece of land. In the second option, 'disturbance compensation' should be paid to compensate loss of growing seasons due to constructions work, and land should be re-allocated back to the former users after completion. Both options are problematic though. Acquiring full rights of occupancy implies that the project authorities have full control over the land and can hence determine which types of crops are to be grown, land preparation and planting and water schedules. However, it is politically often difficult to acquire land from 'peasant farmers who have occupied them for a significant time, especially if they losing all their farm lands' (Bird 1983: 80) and it implies considerable financial costs to pay compensations. Besides, cash compensation will probably create local price inflation and is not likely to alleviate long terms problems resulting from dispossessing farmers from their lands and hence livelihoods. Allocating farmers alternative land plots outside the scheme is most likely problematic as well, as land pressure is usually significant in areas which are 'technically suitable for formal irrigation schemes'(Bird 1983: 80). In terms of managing the land under the first option, the land can be either operated by the state, worked by a commercial operator or be leased out to small holder farmers(Bird 1983: 81). State operated schemes do not have a good record however in Africa, partly due to, Bird argues, the use of wage labour, who are less committed to the outcome of their work compared to small holder farmers, which leads to decreased productivity (Bird 1983: 81). Handing over a government scheme to a commercial operator can be difficult to politically justify. Although some problems of low productivity can be overcome, the central commercial goal of making a financial profit does often not exactly align with state designed development objectives including agricultural development and/or poverty alleviation (Bird 1983: 81). The last option to manage the land under full land rights, is to lease the land out again to small holder farmers. In this case, existing local agricultural skills would still be utilized, thereby alleviating the State which often has scarce resources to work the land, while the State (or Authority in charge of the land in name of the state) would still have the overall control over the land, which gives them the power to remove peasants from the land who do not perform well. Existing farmers would be given a resembling livelihood back and it could be a foundation for the development of co-operatives or other farmer associations. However, efficiently operating such a lease and water distribution system is complicated, and not always legally possible(Bird 1983: 81).

If the managing authority pursues a policy of re-allocating land back to farmers after construction works, thus not acquiring full rights of ownership, either informal or formal re-allocation could be carried out. Informal re-allocation could be carried out by local government village heads. It is usually a rather quick way, but most often contrasting to national Land Acts and open to corrupt practices. Formal re-allocation is complex, time consuming, expensive and prone to error (Bird 1983: 81).

If government control is withdrawn and not replaced by private actors, local groups are 'free' to appropriate the irrigation network. Based on a comparison with other irrigation schemes in Zimbabwe and south sub-Saharan African, Bolding (2004: 340 + 394) concludes that in such cases, land appropriation in water networks usually take place in two different ways, by traditionalist, local farmers who practice irrigation complementary to other livelihood strategies and by modern, capitalist irrigators with educated children who re-invest in agriculture through urban networks. A common ideology or background unites farmers in a group, either based on culture or political directions, which makes organization and co-operation of and within the group possible without any formal registrations or rules. Another common characteristic in locally emerging groups, is the tendency to minimize and avoid dependency on expensive, modern irrigation technology like dams, which acquire outside agencies for repairing.

Griffith (1983: 7) acknowledges that in Northern Nigeria, land issues are one of the most troublesome aspects of irrigation schemes. He argues that customary tenure might have worked well in colonial times, but does not provide land security in times of population pressure and large scale agricultural developments, for which the state or other investors require land. In these times, only formal land rights turn out to provide actual land security, however, formal land rights still are a privilege for which one needs to pay heavily. The general acceptance of customary land tenure according to Griffiths is fading and will most probably slowly change into a system characterized by registration and land titling.

### ***Privatization/commercialization***

Due to processes of market liberalization and structural adjustment policies, the privatization of lands is becoming more prevalent. For wetlands and irrigation schemes which have in many cases been under government control, privatization is considered an alternative to state managed irrigation schemes and one of the three scenario's for further irrigation development mentioned by Bolding (2004: 13). A more commercial approach in irrigation would allow lower capital investments, quicker implementation and a greater profitability aligning with the 'narrow goals of greater productivity and output, and lower costs' (Adams 1990: 1321). However, as Adams puts it, even if privatized irrigation schemes turn out profitable, the question remains to what extent these narrow goals would meet wider development objectives (Adams 1990: 1321). This question directly relates to the research question this thesis aims to answer, and will thus be further discussed based on the case studies in Eastern Uganda.

### **2.2.3. A 'QUEST FOR CONTROL'?**

According to Barnet (1984 in Adams 1990: 1319), managers of large scale irrigation schemes have typically perceived greater central control as a means of risk response. Clayton (1981 in Adams 1990: 1319) found that enforced discipline through measures as warning letters, fines and expulsion of tenants at the Mwea scheme, were 'less effective in producing settler cooperation than were good yields and high returns'. Efforts to control tenants even proved to be counterproductive, as Barnet (1984 in Adams 1990: 1319) argues that tenants who are enforced to follow certain rules and regulations going against their reasoning, schemes may become 'so riven by explicit tensions and passive resistances that they are inefficient and constantly produce problems which are tackled by a management increased quest for control'. Adams terms this phenomenon as 'the bureaucratic urge to greater control' (Adams 1990: 1320). Moris and Thom (1987 in Adams 1990: 1320) argue that instead, effective irrigation planning should

'harness the skills and innovations of farmers, not "control" and hence, stifle them'. Bolding (2004: 343) adds to this that technologies to control water, fitting an engineering paradigm, paradoxically introduce a dependency to the same technologies, leading to risk and unpredictability and undermining the control that was aspired. Water is very difficult, if impossible, to control, therefore, the management of sub-Saharan irrigation factories focus on land, labour and crop commodity chains rather than water. The users of irrigation networks hence tend to manipulate water resources.



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## 3. POLICIES AND GOVERNMENT

This chapter will give the context in which agricultural investments and land appropriations have, and are taking place in Uganda. The chapter starts with the development of African, and specifically Ugandan, farmlands into a commodity, a process that started in the 19<sup>th</sup> century and continues changing the perception and nature of African farmlands up to today. In section 3.2., the current approach of the Ugandan government and related policies facilitating privatization for agricultural purposes will be discussed, followed by the role of national and local government in land acquisitions in Uganda in section 3.3..

### 3.1 HOW AFRICAN FARMLANDS BECAME A COMMODITY; A HISTORICAL OVERVIEW

Land acquisitions for agricultural development purposes including irrigation networks have been made possible by certain lines of thinking which rendered land to be ‘property’, as a commodity with a productive purpose. This line of thinking has influenced land acquisitions in many colonial African countries in the past and present day, and is valuable to analyze in order to better understand past and present land acquisitions for agricultural purposes, how they have been and are legitimized and how they re-organize existing land tenure and agricultural networks. The focus lies on British colonial Africa, as Uganda has been a British protectorate from 1984 until 1962 (nationsencyclopedia.com 2014). As every country has its specific history, Uganda will additionally be discussed in more detail.

In analyzing land tenure and ownership developments over time, the often key role of colonial and independent African government in land deals, becomes clear. As Peters (2013) argues, African governments often have an important role in facilitating and encouraging land deals. Besides the prevailing focus on the role of foreign actors in large scale land deals, the influence of national actors and particularly national governments is therefore important to consider (Palmer 2010 and Wily 2012 in Peters 2013: 546).

According to Peters (2013: 546) the incentives for government officials and persons acting in the name of government to facilitate or encourage land deals include first of all loan and aid packages that often accompany large scale land leases, secondly direct and indirect personal benefits in the form of fees and payments (bribes) or benefits from the investment itself. Lastly, various levels of governmental authorities claim, or in other words compete over, the right to allocate land, realization of this claim is regarded as a political pay off.

#### 3.1.1. “PROPERTY” IN COLONIAL TIMES

As a result of a combination of events which took place in the 19<sup>th</sup> century, including the penetration of Africa by the world economy and colonial rule, a new concept was introduced in existing African struggles and competition over land that has built the framework through which land struggles are viewed today; ‘property’(Peters 2013).

According to(Peters 2013), based on Chanock (1991a), colonial thought and practice regarding property were based on the idea of a universal evolution from barbarism to civilization, in which the concept of property rights emerges when population pressure leads to processes of sale, mortgage and lease of land, giving it an exchange value. This stage of ‘civilization’ naturally follows the previous phase of barbarism, in which (unoccupied) land is controlled by the chief who holds it in trust for the common good of the ‘tribal’ peoples. In this view, ‘property’ thus emerges when land gains an exchange value.

In British colonial Africa, the conversion of land into private property was seen as the necessary stage to civilization. However, colonial control has long left the native, communal form of land holding in place, as they feared that a property regime based on individual land rights would lead to individuals separating themselves from their tribe, thereby disturbing social relations and native polity (Peters 2013:539). Besides, by not titling African landholdings as property, the colonial regime prevented any legal challenge to conquering African territory, it could serve as a 'proof that Africa was unowned' (Wily 2013:18). Land ownership through conquest could then be claimed by conquerors according to international law then in place, without affecting native land rights, as these were 'not the kind of individual rights of ownership recognized in English law'(Chanock 1991a). Land gains an exchange value when it is perceived as productive, therefore property has been directly related to productivity in European understanding and practice of property. This understanding led to processes of 'enclosure' of the English commons in the name of 'improvement', in other words, increasing the productivity of land and labour (Woods 2011 in Peters 2013: 540). The British colonial regime used this concept of improvement in efforts to force Africans to adopt modern farming. Programs of agricultural modernization and resettlement, set up by the British colonial agriculturalists in the 1950's, included improved techniques like deep ploughing, mono-cropping and a rotation based model and forms of land titling to increase 'security of tenure'(Peters 2013: 540).

In the last decades of colonial rule, many colonial agricultural officers were convinced that freehold titling was needed to get African farming and life out its 'backward state'. However, fears of the political dangers and social disruptions these measures would provoke once again prevented them from being implemented. Another important argument preventing land titling stated that individualizing land rights would 'tie the hands of government in all schemes of agricultural advance'(Chanock 1991a:79) it would be in other words, an obstacle for European settlers and companies in acquiring land for their purposes (Wily 2013: 18). Jorgenson adds that in Uganda the British colonial state felt that freehold estates would lead to 'undesirable autonomy such estates afforded chiefs' (Jorgensen 1981: 80). By the 1950's, also local African elites themselves utilized the arrangements set by the colonizers whereby 'administrations are the de jure or de facto owners of African lands', which enabled them to allocate large pieces of land to themselves (Ghai and McAuslan 1970 in Wily 2013: 19). Hence, land concentration and sales in the customary land sector advanced, benefitting mostly those 'in positions of authority in the ubiquitous native councils around the continent' (Wily 2013: 19). Protecting communal landholdings was seen as an impediment to agricultural growth; individual English freehold titling was aspired as this would 'enable energetic and rich Africans to acquire more land and bad ones less land thus creating landed and landless classes... a normal step in the evolution of a country' (Swynnerton 1954 in Wily 2013: 19).

## COLONIAL UGANDA

In Uganda, the transformation of land into a commercial commodity, was initiated by the Bakungu chiefs, even before Uganda had turned into a British protectorate. With the penetration of the Ugandan economies by African, Egyptian and Arab traders, starting around 1800, Uganda started building direct links with the external world economy, with ivory turning into the major export product from Southern Uganda (Jorgensen 1981: 37-38). This external trade strengthened the already strongest states of Uganda by then, Buganda and Bunyora, located in the South of Uganda(Jorgensen 1981: 37). These states became the center of economic activity in Uganda, especially Buganda still is up to date. A period of unrest caused by 'the Egyptian threat and the influx of explorers, traders and missionaries' increased internal instability, resulting in a period of revolution (1988-1900) in which the current ruler Kabaka Mwanga II, was deposed by the 'bakungu' chiefs of the Buganda kingdom (Jorgensen 1981: 39). According to J.J. Jorgenson, 'the revolution transformed relations of production in Buganda by making land a commercial commodity, whose market value depended on its suitability for production of commodities for the world

market'(Jorgensen 1981: 39). Although this transformation had been influenced by external factors including British overrule (before Uganda was declared a British protectorate, the Imperial British East Africa Company was authorized by British rule to administer and develop East Africa (Gascoigne 2001-present) and completion of the railway to the Indian Ocean which reduced transport costs, it was the Bakungu chiefs who were most influential in land tenure changes between 1890 and 1900(Jorgensen 1981: 39), which eventually led to '1000 chiefs and private landowners winning control over half the land in Buganda, including the better agricultural land' (Jorgensen 1981: 49). In practice, this implied 1000 chiefs and an additional amount of private landowners, taken together around 4000 were allocated land under this agreement between local (Kabaka's) regent and the protectorate British administration (Nicholas 2011). This type of land was named 'mailo' land. Johnston argues that it thus was not British colonial officers who 'misunderstood the traditional form of land tenure in Buganda and for having imposed a Western capitalist system of land tenure on a traditional society', but rather the Bakungu chiefs 'who imposed their bourgeois concept of land tenure' on the rather weak British colonial state at the time (Jorgensen 1981: 50). Nicholas (2011), phrases it more simply by stating that although the dominant land tenure structure under the Colonial state was based on 'small peasant agriculture under the prevailing customary tenure', it was accommodated by new tenure systems to 'appease the local chiefs and get local political allies in the effective administration of the country'.

Official colonial land tenure policy developments Uganda, can be captured in three major phases. In the first phase, as much land as possible was reserved by the colonial state for forest reserves, mineral concessions and future alienation to European planters and settlers, 'while allowing collaborative chiefs substantial autonomy in extracting surplus from subjects both for themselves and for the pressing financial requirements of the colonial state' (Jorgensen 1981: 92). In the second phase, the number of European owned plantations reduced from 204 to 146 due to world market fluctuations in 1920-1922, while the peasant agricultural sectors appeared resilient. For this reason, the privileges landlords had thus far enjoyed were restricted in order to remove the 'real or imagined' bonds landlordism placed on peasant production. This resulted in a law in 1928, which provided land security to tenant cultivators and restricted the amount of fees they had to pay to the mailo land owner. This prevented the development of a landless peasant class (Nicholas 2011). In the third phase, around 1950, the road was cleared for peasants to buy and sell land, stimulating the 'capitalist, or yeoman or progressive farmer'(Jorgensen 1981: 92). In this phase, the lease hold and free hold tenure was introduced, whereby 'customary land became subject to market forces and individualized dealings' (Nicholas 2011). Apart from colonial policies, Jorgensen indicated four other elements affecting land tenure at the time. First, the diverse traditional land tenure patterns across Uganda formed by an interplay between social and environmental forces. Secondly, the incorporation of Uganda into the capitalist world economy, particularly the commercialization of agriculture and formation of wage labor. Third, variations in colonial policy from district to district and over time. Fourth, the diverse responses of different African groups in society to 'opportunities and obstacles presented by variations in colonial policy'. Note for example that Buganda region has always enjoyed a privileged 'treatment' due to its nature of economic center of Uganda (Jorgensen 1981: 93).

### 3.1.2. POST-INDEPENDENCE

All text cited after Wily 2013 refers to sub-Saharan Africa.

At independence, this British colonial concept of 'improvement' and the idea that land rights should serve the 'priorities of development' were inherited by the new independent African regimes, 'The usefulness of the...customary law of land tenure [in preventing full ownership rights over land] was not lost on the rules of the postcolonial states' (Meek [1946] 1968, 6-8, cited in Chanock 1991a: 79) Most countries claimed overall land sovereignty or declared land national. Peters confirms that independent

African governments continued to treat customary land as not being an actual property that could be 'owned' by individuals, but rather as a mere possession of the state. In practice this implied that customary land, perceived as being their property by its local inhabitants, was often taken for agricultural development or settlement projects, irrigation, forestry, parks and reserves. Besides expropriation of customary lands by the state in the name of 'development' and for the 'public interest', national elites as well appropriated land for their own benefits, in some cases selling it off to outsiders (Wily 2012 in Peters 2013: 546)). From the 1960's until early 1980's, a new wave pro -land rights proliferated, resulting in land policy reforms that were heavily promoted and funded by multilateral agencies including the World Bank, and bilateral donors. Just like the colonial agricultural officers, it was felt that 'security of tenure' by means of registration and titling would provide 'incentives to invest' and thereby improve productivity. Meanwhile, roughly between 1965 and 1990, state driven commercialization schemes were launched (Wily 2013:19). Besides the foreign investors involved in these schemes, local elites gained substantially, therefore these instances of land alienation to outside investors was secured, even though most of these schemes did not turn out successful in terms of production improvements or job creation (Golan 1990, Niamir-Fuller 1994, Galaty 1999) (Suliman 1999). The policy reforms thus did not seem to achieve the intended goals according to critics (Peters 2013: 541) as they failed to increase agricultural investments and productivity, did not facilitate the use of land as collateral for small farmers, and seemed to facilitate the acquisition of land by outsiders, thereby displacing the small farmers, who were supposed to benefit from land registration and titling. This resulted from an ignorance of the multiple rights and uses of the land and reinforced existing patterns of unequal access to land based on gender, age, ethnicity and class, illustrated by the example above regarding local elites. On top of these critiques, others argued, based on observations in West Africa where smallholder farmers had taken up cash cropping including cacao production, that customary tenure did not by itself inhibit investments and commercial agriculture. Broader socio, political and economic factors should be considered as well. Nevertheless, by 1990, millions of rural Africans found themselves in a position with even less tenure security than they had possessed before colonization (Wily 2013:20). Although laws regarding land dispossession had not significantly altered along the 20<sup>th</sup> century, in practice, the risk of losing land, especially customary owned land, had grown exponentially due to a combination of factors including 'population explosion, agrarian crises, sharp rises in consumption and polarizing interests of majorities and elites, the latter aided and abetted by the state and manipulated claims of public purpose' (Wily 2013:20). As a result, the value of land and water had significantly increased and a fear of land enclosures by foreign commercial companies had developed (Peters 2013: 544) .

### 3.1.3. THE 1990'S AND BEYOND

From the 1990's, land law reforms were put back on the agenda, with the Ugandan Constitution of 1995 as the starting point in acknowledging customary land rights (Wily 2013: 20). The Ugandan Constitution of 1995 was perceived as a radical stance against the dispossession of peasants from customary land, however less than one third of the states on the sub-continent followed the example of Uganda. Besides, these land reform initiatives were contradictory to the strong intentions of market liberalization as part of the structural adjustments required by the World Bank in return for poverty alleviation programs. Then, related to this issue of land market liberalization, even a land policy which acknowledges customary land rights often leaves loopholes, resulting again in 'lawful if involuntary land loss' (Wily 2013:20). The Ugandan Constitution of 1995 was followed by the Land Act of 1998 (USAID 2009: 1). They were designed to 'redefine land rights, resolve old conflicts and provide an institutionalized framework for land management with decentralization a key feature of that framework' (USAID 2009: 1). Coldham (2000: 67) explains that although the Constitution and Land Act recognized customary tenure as one of the four ways in which land could be owned in Uganda (mailo, freehold, leasehold and customary), the general policy in Uganda aimed at individual freehold tenure in the long term. An institutional

framework has been created through which customary land owners can acquire a certificate of ownership, which would protect tenure security. Acquiring such a certificate involves a rather complex procedure though involving the parish Land Committee, the District Land Board, the Land Tribunal and High Court, it is voluntary and based on individual initiative. Coldham (2000: 68-69) argues that this approach reflects 'a compromise' between promoting a free market on the one hand and protecting customary land rights on the other, as the Act also makes provision for the conversion of customary to freehold tenure. The Act thereby admits that freehold tenure might not be appropriate in areas where land is communally owned and managed. In such areas, Communal Land Association may be formed by a group (Coldham 2000: 69). Coldham argues that it is questionable if such a 'parallel registration system', where individuals or groups can acquire either a customary or freehold title, is sensible, given that the two types of tenure are rather similar according to Coldham. Besides, in both types of tenure, 'third-party rights' are included, to make sure that not only the rights of the actual owner of the customary land are secured, but also of additional persons using the land, including women, absent persons, minors or disabled persons. This according to Coldham, impedes the development of a free land market as it puts 'a major restriction on the freedom of the title holder (whether customary or freehold) to deal with the land' (Coldham 2000: 72). Clear is, that finding a balance between aiming at a free market approach and protecting customary land rights can be rather contradictory and difficult involving moral considerations. For wetlands, a specific policy has been put in place, in which all wetlands in Uganda have been vested in the state. This will be further discussed in section 3.2.3. of this chapter.

Despite these intentions in some sub-Saharan countries, including Uganda, to protect customary land rights, the free market approach as a counter pose has paved way for land acquisitions legitimized by defining them as private investment that would aid the economy for the public purpose. As 'underdeveloped' or in other words, unfarmed community land is considered less worthy as permanently farmed land, the price for investors of 'unfarmed' community land appears very attractive, even if customary owners need to be compensated. This encourages national governments to facilitate investments in ways that often times overrule citizen rights. They for example limit the number of persons an investor needs to consult in order to secure 'local consent to developments on community land' or by limiting the protection to previous set land rights to housing and farm land (Wily 2013:20). So even if land laws are in place that in principle protect customary property, in practice the laws rarely play out to the advantage of the poor peasant, the customary land owner.

In 2008 a National Land Use Policy was approved, providing guidelines for effective use of land development, followed by a draft National Land use Policy in 2009 and a Land (Amendment) Bill which was passed in November 2009 (USAID 2009: 1). This Amendment has been rather controversial, it was designed to prevent eviction of tenants and squatters, opponents however argued that it would 'weaken the property rights of land owners' (USAID 2009: 1).

Land appropriations seem to have increased over the past decades. Peters describes some reasons which have contributed to this increase. First of all, states have found themselves competing for 'mobile global capital' (Kalb and Halmai 2012 in Peters 2013: 546). Secondly, Woodhouse (2012 in Peters 2013:546) argues that an 'inescapable part of the context of land deals' is the perceived impossibility by most African states to provide necessary enabling investments in agriculture, such as infrastructure, without foreign funding. Third, an intensifying class formation, combined with politically unaccountable regimes, leads to relatively powerful citizens accumulate wealth at the expense of the poorer and more vulnerable (Wily 2011, 2012 in Peters 2013: 547). A case study in Malawi reported in a newspaper article (newspaper 'The Nation', 16-7-2010 in Peters 2013: 547) illustrates this last argument and reveals, thereby linking back to the before mentioned definition of 'political pay off', that it is not always the national government that closes land deals without proper consultations of locals.

In this case a former government minister purchased 286 hectares of land in the far south of the country. The District Commissioner (DC) authorized the purchase at the dissatisfaction of its inhabitants and local village chiefs. A similar situation has been observed in the second case study of this thesis, the Naigombwa swamp. The role of the Ugandan government in land acquisitions in the country will be further discussed in this chapter, after exploring Uganda's policies concerning wetlands and other economic and agricultural oriented policies in Uganda which affect the position the government takes, and decisions it makes, concerning land acquisitions and investments.

## 3.2. POLICIES IN UGANDA INFLUENCING AGRICULTURAL INVESTMENTS AND LAND APPROPRIATION

### 3.2.1. LIBERALIZATION AND PRIVATIZATION REFORMS

In a report from the Norwegian University of Life Science, (Sjaastad 2007), Ugandan privatization and liberalization reforms in the agricultural sector have been explored. After 15 years of civil war and unrest in the country, the new regime of Museveni, who took over state control in 1986, was to carry out immediate stabilization measures and public reforms. The NRM government pursued a three fold reform and stabilization plan that included: stabilization, liberalization of markets and structural adjustments and public expenditure reform (Sjaastad 2007:44). In 1991, the Uganda Revenue Authority (URA) was established as a semi-autonomous authority, which initially proved successful. Public mismanagement was combated and revenues increased from 7 to 12% of GDP in the period between 1991-1997. However, after this initial period performance fell, due to corruption within the organization. Then, from the early 1990's Uganda liberalized its markets in all key sectors of society, including the financial sector, foreign exchange and the coffee market. To increase government expenditure efficiency, the number of civil servants was reduced from 352,000 in 1990 to 158,000 in 1997. These and other reforms have been, according to McCourt et al. (2001: 86) implemented under 'pressure from the IMF and the World Bank, to implement privatization of commercial parastatals and agreed to do so under the wider reform program linked to IMF, ESAF and World Bank support'. The privatization of commercial parastatals, which will also be reflected in the first case study, was a crucial part of the economic reform programs of Uganda. More than 150 parastatals were privatized, including over 30 000 employees. According to (Tangri 2001) many governmental officials within the NRM were not in favor of this measure, partly due to the weakness of the indigenous business sector and the lack of capital among Ugandans, implying that mostly foreigners and Ugandan Asians, were the ones to take over the privatized parastatals and hence dominate crucial political, economic and social sectors (Sjaastad 2007:45). The positions of Asian in Uganda will be further elaborated in the next section, as this relates to the case of Kibimba. However, President Museveni still committed his regime to privatization, 'in order to maintain the support of the multilateral organizations, which were providing his government with considerable financial assistance'(Tangri 2001).

The reforms did not impact equally across various groups in society. In general, the reforms generated macroeconomic stability and substantially reduced inflation. Poverty levels decreased from 56% in 1992 to 31% in 2006. However, poverty levels in rural areas only slightly decreased, compared to levels in urban areas. Besides, development of Uganda's domestic private sector remained low, due to the weakness of this sector and a lack of capital to invest. Foreign investors and Ugandan Asians, on the other hand, became to dominate crucial economic sectors. A study of the Makerere University Institute of Economics(Dumba-Ssentamu 2001), confirmed that the profits of privatization fell mostly in hands of the managers of the process. The government had not provided guidelines to make sure local communities were well integrated in the privatization process, there was a lack of public support,

domestic equity markets have only slowly evolved. As a result, 'the general public has not yet been able to participate fully in the privatization process'(Dumba-Ssentamu 2001: 50) .

The liberalization of Uganda's trade regime has led to an increase in FDI, mainly in the manufacturing sector, which contributed to continued economic growth of the country (WTO 2001). Although FDI flows in Uganda increased, they remained relatively low compared to Latin America and Asia. FDI flows in agriculture and the food industry increased substantially in Latin America and Asia between mid-1980's and mid 1990's, in sub-Saharan Africa investments remained very low because of structural and institutional constraints including poor infrastructure, a lack of supportive institutions and a supportive regulatory system (McCullough 2008: 8).

In 1995, at its last Trade Policy Reform, Uganda eliminated all quantitative restrictions. It has remained most of its non-tariff restrictions to protect health, security, the environment and for moral reasons. Tariffs have now become Uganda's main trade policy instruments, concerning rice as well(WTO 2001).

In 2005, the EAC member states, including Uganda, agreed to a common external rice import tariff of 75%, aiming to stimulate regional rice production. This lowered rice imports into the country, from countries as Pakistan, which led to a decrease in per capita rice consumption and increase of rice prices(Hammond 2013). The exact impact of the EAC tariff on rice imports is thus not completely clear, as it is said to suppress the true market size for rice in the region, which may actually have a depressive effect on investments (Imani-Development 2013: 11).

To a certain extent, Uganda has thus seriously liberalized its market following global trends of globalized trade and FDI liberalization, although remaining some control by imposing tariffs, including a 75% tariff on rice imports. Although FDI flows in the manufacturing sector have been indicated to have increased substantially, it is still assumed that, like other sub-Saharan African countries, the environment for capitalist agribusiness investments is not yet rendered very favorable. Despite these less than optimal circumstances, investors have started to recognize the potential of Uganda, especially in oil and agri-business (NAPE 2011) (FoEI-NAPE 2012) (Zeemeijer 2012). Land acquisitions for these purposes have been reported, in which the government in many cases has had a facilitating role (own findings, (NAPE 2011) (FoEI-NAPE 2012) (Zeemeijer 2012) . The position the government takes towards investments in oil and agribusiness is partly based on the objectives it has formed concerning economic growth, poverty eradication and agricultural development in the country.

### 3.2.2. UGANDA'S 'QUASI MARKET APPROACH' AND AGRICULTURAL INVESTMENTS

The backbone of the approach of the Ugandan government is stated in its National Development Plan (NDP) for 2010/11 to 2014/15 (GoU 2010). The predecessor of the NDP was the PEAP, Poverty Eradication Action Plan, in which poverty eradication was stressed and which prioritized social services. In the NDP the government states that it maintains the vision of poverty eradication of the PEAP with an additional emphasis on economic transformation and wealth creation, thereby combining economic growth and poverty eradication (GoU 2010: 3). Clearly emphasized in the NDP is the growth in GDP that Uganda achieved over the years. An overview is given of GDP growth over the years from independence up to now thereby stating that 'the impressive GDP growth performance' has contributed to a significant decline in poverty levels, with a decline in the percentage of people living below the poverty line from 56% in 1992/1993 to 31% in 2005/2006 (GoU 2010: 2-3). Despite this 'impressive' growth in GDP, the Ugandan government feels the country could have achieved faster economic growth and socio-economic transformation. The NDP states that the country has not yet achieved significant productivity growth in agriculture and still remains with excess labor in the agricultural sector. It indicates some structural bottlenecks in the economy that have constraint significant productivity growth in agriculture which the

government is aiming to address the coming years. The formulation of these bottlenecks reflects a strategy that is very much based on economic performance, assuming that economic underperformance is the main 'problem' in the country. The bottlenecks they identify include (GoU 2010: 3) :

- Primary commodities are still dominating industrial products, implying that the industrial, value adding sector, that is supposed to penetrate global markets with high value products, is still small
- Growth in the agricultural and industrial sector has been slower than desired
- New sectors are not absorbing the rapidly growing labor force
- Capital markets are not effectively intermediating capital
- Infrastructure for production, including energy and transport is still insufficient

By addressing these bottlenecks, and encouraging the export oriented industries to penetrate and capture international markets with high value products, the approach of the government is named a 'quasi-market approach' (GoU 2010: 4). This includes a mix of government investments in strategic areas and private sector market driven actions. Furthermore, it specifically states to be encouraging to foreign investments. This approach of the Ugandan government reflects a widely spread vision of some western experts including the World Bank and IMF, arguing that 'small scale farming will not be able to feed the world', the farming sector has to turn to agribusiness and should be properly managed by large companies is in general their argument (Pearce 2012: 343). Thus the government of Uganda seems to welcome foreign investors as a strategy to economically develop the country.

As a result of this strategy of the government, and wider processes of liberalization, globalization and changing agri-food systems, tens of thousands of people have been evicted of farmland in Uganda in the past 10 years for international oil, biofuel, forestry, sugar and gold mining companies. NGO's including Oxfam Novib and the Ugandan Land Alliance (ULA) and the National Association of Professional Environmentalists (NAPE 2011) are concerned with these foreign investments and malicious land deals (Vidal 2012). On its website the ULA states that the need for large expanses of land in Uganda nowadays for local and international investors is a common threat to its inhabitants. As there is not much unoccupied or idle land left in the country that is large enough for these investors, land deals most of the time go hand in hand with evictions of the inhabitants, in most cases without prior consultations and fair compensation (ULA 2012). Besides, the companies that settle, usually only provide low paid, occasional wage labor (Scott 2010 in Global Land Grabs: Investments, risks and dangerous legacies 2011: 6) which does not substitute for the lost productivity. These impacts of land acquisitions on rural livelihoods will be further discussed in chapter 4, based on the case studies of this thesis.

As this thesis focuses on investments in the wetland area of eastern Uganda, the following sections will more specifically discuss government policies and management strategies for wetland in Uganda.

### 3.2.3. WETLAND POLICY AND MANAGEMENT

Uganda's wetlands cover 15% of its land area, spread across the country, in almost every subcounty, pieces of wetland are to be found. The economic and ecological importance of wetlands are recognized by Uganda's people and leaders of the country. According to the WID (Wetlands Inspection Department), wetlands provide 37 valuable services and products and contribute hundreds of millions of dollars per year to Uganda's economy (WID 2001 in Wetland Management Department (WMD) 2009: 1). A valuable resource thus. The main purposes wetlands are used for are, water collection, livestock grazing and natural tree harvesting. Besides, wetlands play a key role in filtering pollutants and regulating water flows.



Ugandan wetlands are state owned, and thus do not fall under customary land rights. However, they are often perceived as customary property by the users. The wetland policy includes the statement that wetlands are held in trust, 'for the common good of all citizens' and they should not be leased out to individuals nor be drained for large scale agricultural purposes. However, just like customary land rights, this policy appears to have some loopholes too, through which land acquisition for large scale agriculture, thereby dispossessing rural farmers, have taken or are still taking place.

#### WETLAND MANAGEMENT IN UGANDA

The management of wetlands in Uganda has been depending on the regime in place and has greatly changed over time (Glass 2007). Under colonial rule, wetlands were targeted for agricultural purposes, as the Gibb study (1954 in Glass 2007: 8) advised to drain wetlands for agriculture. Influenced by this same study, the Obote and Amin regime, continued to encourage Ugandans to convert wetlands for agricultural purpose. Their policies also favored large scale land investments for cattle grazing and agriculture, therefore issuing leases to land tycoons. This resulted in farmers being disenfranchised as they were denied access to these wetlands. Museveni, who came into power in 1986, took a different stand, and put a (temporarily) halt on large scale wetland drainage. Under his rule, a wetland program was developed on how to manage and conserve the wetlands (Glass 2007: 8).

As a result of this realization in government circles and civil society on the importance of wetlands for the national economy and rural livelihoods, the first policy concerning wetlands was established in 1989 (WID 2001: 1). The National Wetlands Conservation and Management Program (NWP) was established 'to develop policies and implementation strategies for the sustainable management of Uganda's wetlands'. The NWP has been instrumental to assist the Government of Uganda in decision making concerning the wetlands, and has been followed up in 2001 by the WSSP, the Wetland Sector Strategic Plan for the period 2001-2010 (WID 2001: 1). This Strategic Plan has been developed with support of the IUCN, International Union for Conservation of Nature, and the Netherlands Government. In 1994, Ugandan parliament adopted the 'National Policy for the Conservation and Management of Wetland Resources'. Uganda became famous for its wetland conservation policy, as it was the second in the world and the first of its kind in Africa (Glass 2007: 8). Amongst 11 others, the policy outlined the following specific stipulations, 'No further drainage of wetlands' and 'Government ownership of wetlands for people of Uganda; no leases to individuals'. This policy has been codified into several pieces of the Uganda legislation. The constitution of Uganda now states that, 'Wetlands are held in trust for the common good of all citizens' (Glass 2007: 9), thereby referring to communal tenure of wetlands. Then, in the National Environmental Statute of 1995, it is asserted that it is illegal to reclaim or drain wetland without written approval of the National Environmental Management Authority (NEMA) (Glass 2007: 9).

In the Wetland Sector Strategic Plan (WSSP) for the period 2001-2010 (there has not been a new version), it is stated that the WSSP aligns with 'other key national development policies and priorities. It will first of all, contribute to the major goals of the Poverty Eradication Plan (PEAP), especially to the third and fourth pillar of the PEAP, being 'increased ability of the poor to raise their income' and 'increase quality of life of the poor' (Ministry of water 2001: 3). Secondly, the WSSP fits the decentralization policy of the government, as the management of wetlands is attributed to district governments (Ministry of Water, Lands and Environment 2001: 3). Third, the Plan for the Modernization of Agriculture is taken into account, it is argued that wetlands have the potential to be used more productively, in the light of Uganda's dependency on agriculture and its rapidly increasing population which 'puts ever great pressure on natural and economic resources available for agricultural production'. The use of wetlands, it states, must be 'wise use' (Ministry of Water, Lands and Environment 2001: 3), the vital functions and natural functions of the ecosystems must be maintained. With this objective in mind, the National Wetland Program (NWP), works together with the Ministry of Agriculture, Animal

industry and Fisheries on, for example, rice production (Ministry of Water, Lands and Environment 2001: 3).

#### IMPLEMENTATION OF WETLAND POLICY

In the NDP of 2010/11 to 2014/15 (GoU 2010), it is admitted that ‘the complex and multiple land tenure systems have severely limited land use planning and utilization’ (GoU 2010: 28). Currently only about 10% of the total land area is titled, and alterations of land titles have resulted in a number of land disputes. Besides, it is stated that ‘the management of the environment (including wetlands), is not effective and remains relegated to few institutions that face significant challenges in enforcement’, by 2005 for example, 7% of the total wetland area had been reclaimed, which is illegal (GoU 2010: 28). The specific challenges that are faced in implementing the wetland policy have been studied by S. Glass in Kabale district. Although from another district, I believe her findings are relevant and in general fit the situation in the eastern regions of the country as well.

The management of wetland is a decentralized function of the local government, ‘the Constitution (1995) allows local government to manage their wetlands on a day to day basis, while central government line ministries retain the role of policy formulation, setting of standards and guidelines; supervision and monitoring; technical support; and resource mobilisation’ (Ministry of water 2001: 3). In 1997 the Local Government Act was enacted, confirming that local district authorities were rendered responsible for overseeing wetland management (Glass 2007: 17). Glass (2007: 16) explains that local governments are supported in this task, and given advice by organizations as the Wetland Inspection Department (WID) and the National Environmental Management Authority (NEMA). By directly engaging wetland stakeholders, NGO’s and CBO’s contribute to the implementation process, as well as foreign governments and agencies, including the Royal Netherlands Government and the Government of Belgium, which have financed activities from the National Wetlands Programme (Glass 2007: 18). Furthermore, educational and religious institutions support the wetland programme by acting as sensitizers and occasionally organize wetland projects like a fishpond (Glass 2007: 18). The Wetlands Inspection Department (WID) is considered the ‘lead agency of wetland management in Uganda’ and was founded in 1998 (Glass 2007: 17). NEMA is the authority which has the responsibility for issuing permits to developers after sound environmental inspection has taken place. Without such a permit from NEMA, draining or reclaiming of any wetland is illegal (Glass 2007: 17).

There are many factors that have made the implementation of the wetland policy problematic.

- Due to a lack of funding, most organizations and institutions involved in the implementation of the policy can not adequately carry out their work (Glass 2007: 21). Due to high transport costs, remote wetland areas are rarely monitored or surveyed by the WID, resulting in a spatial bias. The WID depends on donors which effect their autonomy; donors might commit money for trainings, while the WID actually needs it for monitoring and surveillance. District authorities rely on the federal government for money. However, only small amounts are reserved for wetland programs, as politicians fear losing popularity if they start advocating for wetland conservations, which is a sensitive issue in Kabale. Glass argues that ‘the severe lack of funding inhibits the implementation of nearly all thirteen policy stipulations’, and thus, the “National Policy for the Conservation and Management of Wetland Resources” is then reduced to ‘mere words’ (Glass 2007: 21).
- The institutions that should control wetland management are not always functional and may conflict with each other, formulated by Glass as . ‘bureaucratic competition and disharmony of policies’ (Glass 2007: 21) . Besides, although the WID, NEMA and local governments are officially in charge of the management of wetland, other parties may involve and give out contradictory statements. In Kabale there has been an instance whereby the Ugandan vice-president told

encroachers that they could stay on the land, while NEMA had told they would be evicted. This is an example of a government official adapting his opinion on the matter in order not to lose political support from a majority. Also local Councilors sometimes fear punishing people encroaching wetlands as they might lose popularity as a result (Glass 2007: 23).

- As wetland is a rather new field of research in Uganda, there is not much thorough scientific research yet, and a lack of specialists in this field. Most recommendations and knowledge is based on speculations (Glass 2007: 23).

Then, there are several reasons why people keep turning to wetland areas in search for cultivatable land, even in cases whereby communities are educated and sensitized on the value of the wetland and 'wise uses'.

- Pressure on land has in general intensified due to an increasing population (Glass 2007: 24).
- Wetland cultivation is a very profitable business, although it is known that it is not a 'wise use'. 'Wise uses' of the wetland include for example fishing, bee-keeping and crafts making, which are often less profitable compared to cultivation (Glass 2007: 25). Some wise uses can be beneficial, like fishponds if natural conditions are suitable and the ponds are well managed. As an example, there was a community in Kabale, whereby community members relied on a representative of the department of fisheries who oversaw the management of their fish pond. When he left, the pond was not maintained well anymore, and the communities no longer benefit from the pond (Glass 2007: 26)
- Wetland users are often poor communities who lack the resources to invest in alternative (non-wetland) enterprises such as animal husbandry or economic trees. Donations such as fruit trees and animals only work short term and can not reach everyone. Glass argues that unless communities are capable to independently invest in alternatives, the pressure on wetlands will stay. Besides, some of these alternatives are environmentally harmful. (Glass 2007: 27)
- Communities often still perceive the wetlands as their land. A community in Kabale for example set up a petition to resist the enforcement of wetland boundaries. The petition was signed by more than 1100 community members and stated that they are entitled to the land as it was passed down by their ancestors to them, they may thus cultivate wherever they desire. Communities like these often do not want to participate in wetland programs, as these restrict the use of wetland. (Glass 2007: 28)
- As a result of modernization, local communities have become less dependent on wetlands for housing material, medicine and fishing gear, among other things. Hence, they do not see the purpose of conserving wetlands for traditional resources, as they do not rely on them anymore. Instead they start using the wetland for cultivation (Glass 2007: 29).
- Due to pre-existing laws and leases, several entrepreneurial Ugandans have leased wetland from the government in the 1960's/70's and encouraged by government to cultivate wetlands and increase productivity. Most of these leases are still valid with local authorities. This in turn, encourages other people to encroach on wetlands as well (Glass 2007: 30).

#### 3.2.4. ASIANS IN UGANDA

To better understand the case of Kibimba and Naigombwa, the position of Ugandan Asians in the Ugandan economy, and the way they are sometimes treated by the Ugandan government, shall be explored in this section. The largest part of this section concerns Indians, related to the Kibimba case. At the end, the relation between Uganda and the United Arab Emirates (UAE) will be shortly discussed, relating to the Naigombwa Swamp case. The owner of the investing company in the Naigombwa Swamp is a successful business man of mixed race, partly Ugandan, partly from the UAE.

The presence of Indians in Uganda dates back from colonial times. Indians were originally taken to East Africa in the 19<sup>th</sup> century by the British as labour to construct the Uganda Railway. After termination of their contracts, most Indians returned to India again, only 6724 stayed in Uganda. The returned Indians framed East Africa as a region with immense opportunities, which led to a new influx of Asians into the country. Under colonial occupation, the British used the Indians as a sort of political and economic middlemen between themselves, the colonizers, and the black Africans, the colonized. The Indians in Uganda economically prospered, being involved in trade, manufacturing, agriculture and later public service, including administration. They were considered as the 'backbone' of the Ugandan economy, as around 90% of Ugandan economy was in hands of the Indians (BBC) at the time they were expelled from the country by Amin in 1972(Hooker 2007).

In September 1972 Amin expelled all Indians, most likely because of economic considerations. At the time Amin came to power, after overthrowing Obote's regime, he had promised Ugandans peaceful lives, development and economic prosperity. However, after a year, Amin had not been able to fulfill any of these promises, which has probably turned him to the one community in the country with money and property that he could plunder to give to his people; the Indian community. Their wealth and the fact that the Asians community tended to keep very much to themselves, refusing to integrate with the Africans, had fuelled a traditional hatred of the Asians by the African population (Mutibwa 1992: 92). On top of these considerations, the act of expelling the Indians, both with a British and Ugandan passport, was also a statement directed to Uganda's former colonizers and in general against imperialism and colonialism. (Mutibwa 1992: 94). 50 000 Indians were expelled, paving way for the state to acquire the assets they left behind, which added up to half of the country's wealth. The country was left behind in a state of 'Economic War', a state of war declared by Amin that concerned the taking over and nationalizing of British and other foreign property and businesses, for the sake of 'giving Uganda her economic independence'(Mutibwa 1992: 96). Contrary to the hopeful expectations of its citizens, the regime of Amin had a devastating effect on Uganda's economy(Mutibwa 1992: 96) .

In 1997, Museveni, president of Uganda up to today, asked expelled Ugandan Indians to return to the country and take up their businesses again, in an effort to boost the collapsed Ugandan economy. Today, returned Asians have settled and have taken their place in society again. They reclaimed property and re-established business empires, which again dominate the Ugandan economy. Today, the Asian community even enjoys a sort of political insurance as Museveni is very keen on foreign investors and expertise (Hooker 2007). The relationships between Asians and Ugandans are still strained, as many Ugandans feel that Asian and other foreign businesses and investors are being prioritized and given a special treatment by the current government(Horner 2012). Among the majority of the African population, Asians still have the reputation of being exploitative, greedy and feeling superior to the Africans (personal field notes). This tension between black Africans and the Asian population became noticeable after having spent some time in the country. Whenever I would ask Ugandans after their thoughts on the Asians, I would get answers accompanied by facial expressions, that revealed their rather negative feelings towards them. 'Those Indians', shaking their heads and sighing, was a very common reaction. My gardener in Uganda (a bright, very friendly, 'flexible' Moslim, as he is about to marry a Christian woman, always curious and up to date on politics), replies as such; *'Indians are the worst, they are rich, they have all the big companies, their workers make very long days and have to work very hard, but when it comes down to paying....(shaking his head) they get paid very little. Then they also abuse their workers, even the women, they beat them. I have friends who work for Indians, it is not ok, I never want to work for them.'*

Another man commented on their economic prosperity; 'They know how to do business'. He explained that Indians help and support each other, creating a sort of safety net, which, according to him is a clever thing to do. However, in this way they do dissociate themselves from black Ugandan and express

their distrust towards them, which in turn is not appreciated very much by black Ugandans. During a visit to an Indian company, producing cooking oils among other things, a distrust of black Ugandans, based on bad experiences, was spoken out by the manager of the company. He stated that the reason why they fly in relatives from India to manage or supervise their businesses, is because Ugandans can not be entrusted with such a position (personal field notes). During a walk around the company, I noticed a hierarchical, tense atmosphere, in which the managers and supervisors limited their communication with the workers to shouting commands. The workers themselves, men and women, just shyly giggled when I greeted them, unused to normal, affectionate attention it seemed. Just before leaving, I was able to have a look at the payroll of the casual workers, giving me a clue about their average salaries, which according to my colleagues, were extremely low. This visit thus lived up to the general 'stereotypical' reputation of the Asians in Uganda, according to black Ugandans. This reputation and related behavior of the 'stereotypical' Asian in Uganda, might however, also be fuelled by the historically rooted 'Indophobia' amongst black Ugandans. On the other hand, Ugandans do recognize the importance of Asian investors to their economy, however, 'they are suspicious of a community which worships, educates and lives apart'(Hooker 2007). In 2007, this tension came out in the form of a violent, anti-Asian protest. BBC World news reported the event(Hooker 2007). The protest started as a reaction to an announcement of the Ugandan government that it had given permission to an Indian owned company to start a sugar cane plantation on land that was part of Mabira national park, a protected forest. Ugandans argued that the government favors Asian business above those of black Ugandan. Besides, many Indians, according to the protestors, who do not have a right to vote, often donate money to political campaigns of Ugandan friends. These arguments reflect as well the role of the president and government, which currently seem to feed the resentment of black Africans towards Indians.

The owner of the investment at the Naigombwa Swamp is of mixed race, partly Ugandan, partly from the United Arab Emirates (UAE). The relationship between the UAE and Uganda dates back to 1830, when Arab traders first entered Uganda (Africa-Business.com). Ugandan has been on good ground with the Arab world ever since. Uganda is a member of the Organization of Islamic Countries (OIC) and is considered an 'ally and friend by all Arab countries', according to the website. In an article of 2007 on the website by the Ugandan Ambassador of the UAE (Kisuule 2007) states that trade between Uganda and the UAE, has been growing in the years prior to 2007. Emirates Airlines, who contributed to the development of trade relations between Uganda and Dubai by providing direct flights, reported an 'overwhelming increase in traffic' between Uganda and Dubai in the years prior to 2007. Furthermore, the growing trade became apparent at the third Afro Business Trade Fair in Uganda, when there was an 'overwhelming participation' of UAE based companies. In the article, the ambassador encourages UAE based companies to explore the possibilities for trade and investment in Uganda.

### 3.3. NATIONAL AND LOCAL GOVERNMENT IN LAND ACQUISITIONS IN UGANDA

In this section, I will discuss the position and role of the Ugandan government, both national and local, in recent land acquisitions for agri-business or oil purposes. The role and position the government takes in reality, contradicts in many cases with governments statements and policies, as will become apparent. The examples discussed in this thesis come from reports of FoEI Uganda and NAPE, a master thesis of Ezra Schraven, a master thesis of Ilse Zeemeijer and my own findings of the three case studies I have introduced before.

#### 3.3.1. CASES REPORTED BY NGO'S AND RESEARCHERS

Zeemeijer describes several new corporate land acquisitions in Uganda and classified them into three categories(Zeemeijer 2012: 130-140): (1) strong involvement of the government of Uganda, (2)

privatization/take over and (3) outgrower schemes. The first category included Oil palm Uganda Ltd., Kaweri Coffee plantation and Amuru Sugar works Ltd.. It should be considered that in both Oil Palm Uganda and Kaweri are located in the more central regions of Uganda, in which *mailo* land tenure is more common. The last case is located in the north of Uganda, where land tenure patterns are different, 90% of land tenure in the north is customary tenure.

### *Oil palm Uganda*

Oil Palm Uganda was established as a partner in the public-private partnership the 'Vegetable Oil Development Project' (VODP), a partnership between the Government of Uganda (GoU), International Fund for Agricultural Development (IFAD), the World Bank, the private sector (including Oil Palm Uganda) and some NGO's. BIDCO Ltd., a Kenyan company, is the parent company of Oil Palm Uganda (Zeemeijer 2012: 149) (FoEI-NAPE 2012). The project aimed at developing the vegetable oil sector, IFAD was involved to 'finance the participation of small farmers' (Zeemeijer 2012: 116). The World Bank withdrew in 2004 however, as it feared that the expanded project would not comply with its 'internal forestry safeguard policies' (Zeemeijer 2012: 145). . The government committed 6500 hectares of land to Oil Palm Uganda on a 99-years lease basis through the Uganda Investment Authority<sup>2</sup> (Zeemeijer 2012: 131) of which 3000 hectares were formerly public land, the other 3500 still had to be acquired through private land purchases and the degazetting of public secondary forest. The 6500 hectares were to be the nucleus estate, additionally, 30,000 hectares in other areas were foreseen to be developed in the future for oil palm, by BIDCO and the government, outside the VODP project. A special Land Acquisition Taskforce was set up to acquire the additional land needed for the project (Zeemeijer 2012: 131). Acquiring the additional hectares for the nucleus estate already proved difficult. First of all, it appeared that it was not allowed to degazette public forest land. Secondly, parts of the land has spiritual or cultural meanings and purposes to the communities, and other parts were too rocky or sandy. Third, for the land that had to be privately purchased, the permission of current owners was needed. This process turned out complicated and time consuming, due to complicated local land tenure structures and disputes among families which resulted from the realization that 'there was a market' (Zeemeijer 2012: 132). Furthermore some landlords refused to give away their land to the investment. (Zeemeijer 2012). According to an LC<sub>1</sub> and some villagers, some of the villagers lost their land in 2006/2007 and were evicted from their land with force. In the beginning they were not compensated, later some were compensated with help of an NGO, other have not been compensated (Zeemeijer 2012: 154). FoEI confirms in its report on land grabbing in Uganda that local land rights were violated in the acquisition of land for this project (FoEI-NAPE 2012: 11).

### *Kaweri Coffee*

In the second case, the Kaweri Coffee plantation, Kaweri leased 2512 hectares of land through the Uganda Investment Authority (UIA). The way in which the land was acquired by the UIA is questioned though by several NGO's. The land was sold to the UIA by the former owner, Kayiwa. The piece of land included a plot of land of around 500 hectares that originally belonged to another owner and where people have lived on for decades (Zeemeijer 2012: 133). The people living on this plot of land were told to leave their land before a set date. A human rights activist and headmaster of a primary school in the area, acquired a map which proved the land belonged to the people that were living on it and advised the tenants to seek legal assistance. A court case was planned as the Regional District Commissioner (RDC), who represents the government, and the Kayiwa did not come to a solution. However, they

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<sup>2</sup> The Uganda Investment Authority is a 'semi-autonomous government agency operating in partnership with the private sector and government to drive national economic growth and development. The Authority was established by the Investment Code Act, Cap 92 Revised Edition 2000 Laws of Uganda' Retrieved from [www.comesaria.org](http://www.comesaria.org) on 4-2-2014

never made it to the court case, as the RDC deployed the army that same afternoon to forcefully evict the people from their land, thereby using 'plunder, physical torture and looting of people's property (p. 143). The human rights activist was arrested. President Museveni praised this action of the RDC, 'In his words he praised the effort and commitment of the district officials they had shown in the process of acquiring land' and argued that the peasants already were 'adequately compensated'(Zeemeijer 2012: 134).

#### *Amuru Sugar Works*

Amuru Sugar Works Ltd. is located in the north of Uganda where the customary land tenure system are 'secure tenure, because it is known and understood' and the values are 'appreciated by the owners and users'. Even though most land is still regarded as common property, in reality communities perceive 'threats of individualization and appropriation'(Zeemeijer 2012: 135). Amuru Sugar Works is a proposed project by the Madhvani Group in a joint venture with the Government of Uganda(Madhvani 2012) The Madhvani family, 'the Madhvani Group of Companies is a well-known business conglomerate in Uganda which include companies involved in large scale sugar production in Central and Eastern Uganda', including the well-known Kakira Sugar works(Owich 2014). The story goes that the Madhvani group approached the president with their plans for a sugar factory in the north of Uganda. A feasibility study was published, arguing that the project would be viable and that Madhvani could start negotiating with 'the people about the land' (Zeemeijer 2012: 135). However, the local population complains that they were never consulted, Madhvani is instead 'busy with meeting the top officials. They are using the big shots in government'(Zeemeijer 2012: 135). Since 2009, the Amuru Sugar works project is halted, 'due to resistance from leaders and locals in Amuru district demanding that the government enter into negotiation with the land owners and not grab the land by force'(Owich 2014).. According to the Madhvani group, the concerning area of land is owned by the Amuru District Land Board. Others, including the Acholi parliamentary group, argue that the land is held under unregistered customary tenure, privately owned by local clans. A local community argues as well that the land is customary land, they feel government officials are only there to 'grab their land and sell it to investors'(Zeemeijer 2012: 136). The case is still unresolved, an online newspaper article of 2/2014 states that 'following enormous pressure from local communities and leaders from Acholi sub region, the government now says that it is willing to engage landowners in the disputes 40,000 hectares of land in Amuru district, in order to allow the implementation of the proposed Amuru Sugar factory project'(Owich 2014).. The Madhvani Group argues that 'the proposed land for the Amuru Sugar project is currently totally free of inhabitants and is extremely isolated with no infrastructure such as electricity, water or proper roads'(Madhvani 2012).

#### *Mukwano Group*

In the second category, 'privatization/takeover', Zeemeijer describes the case of Ziwa Rancher Ltd. and Kiryandongo farm, both owned by the Mukwano Group, another well-known business conglomerate in Uganda and located in Masindi district. The Kiryandongo farm was acquired from the government, by purchase or lease, in 2009. It was used by the Ugandan military. As the farm was not fenced, around 100 squatter were found on the land, in the past there used to be 500 families on the land. According to the manager of Mukwano, the squatters knew that the land belonged to government and they were compensated at governments rates. (Zeemeijer 2012: 139). Ziwa Ranchers was bought from the landowner, who had bought the ranch in 2002 when it was privatized. As he had abandoned the ranch, he sold it to Mukwano. After the purchase however, Mukwano found that there were many encroachers on the land with cattle. 'With help of the district security committee, we managed to evict all those people and today we are fully operational' (Zeemeijer 2012: 139). The land office in Masindi and the LC5, revealed, according to Zeemeijer, that initially there was the plan that local communities would lease the ranch. The district would buy the ranch on behalf of the people, the business community agreed to take care of the payment. However, the communities did not hear from the district anymore, and found

out later that the ranch was suddenly sold to Mukwano, at a far lower price than was initially settled between the district, on behalf of the communities, and Ziwa Rancher (Zeemeijer 2012: 140).

Under the third category, outgrower schemes, Zeemeijer mentions a Mukwano investment in Lira. Here, land has not been purchased, as, according to the manager, 'acquiring land is a problem, the system in Uganda is difficult'. Instead they work with about 22,000 outgrowers in the regions to grow sunflower. In this case, no involvement of government is mentioned.

#### *Mount Elgon National Park*

Apart from the Vegetable Oil Development Project (VODP) described above, FoEI reports several land grabbing cases for carbon offsets in Uganda, in which the government had a role. The first concerns a partnership between 'Forest Absorption Carbon Emission'(FACE) and the Uganda Wildlife Authority (UWA) (FoEI-NAPE 2012: 4), which is a semi-autonomous government agency(UWA 2012). They planned to plant 25,000 hectares of trees in Mount Elgon National Park. According to FoEI (2012: 14), 'local people were evicted from the site when the planting started, infringing their human rights'. The government was sued by people who had land titles to their land and they won the case. Communal land users lost out as they did not have 'customary land ownership certificates'.

#### *Bukaleba forest*

In the second case, Tree farm and the Norwegian Deforestation Group, planted pine and eucalyptus on more than 80, 000 hectares of the Bukaleba forest. According to FoEI(2012), 8000 people from 13 villages were displaced by the company. It was claimed some of the local people were encroachers, according to FoEI, 'the communities were surprised that the government evicted them and gave the land to one investor'. Besides they argue they could have planted trees, instead of the company. They would have planted indigenous species though, rather than pine plants.

#### *Mabira Forest*

Third, the well-known case of Mabira forest is discussed, in which the government has planned, since 2007, to hand over more than 7000 hectares of the forest to an investor to grow sugar cane. Due to strong resistance from civil society, the plan has until now successfully been halted. The president still intends to push his plan through, this will, according to FoEI, 'deprive communities of their access to the forest and consequently deprive them of their livelihoods'(FoEI-NAPE 2012: 15). The company was Indian owned, which fuelled a violent anti-Asian protest in 2007, described in section.. on the position of Asians in Uganda.

#### *The New Forest Company*

The last land grab for carbon offset reported by FoEI (2012: 15), concerns the UK firm, 'the New Forest Company', which is said to have evicted around 20,000 people from natural forests and cleared forest ground to replace it with a monoculture of pine trees. FoEI reports that 'the UK firm used government officials to grab the 20,000 hectares peasants' land'. The company closed down in 2012 and the case is now under investigation.

### 3.3.2. THESIS CASE STUDIES: KIBIMBA, NAIGOMBWA AND DOHO



The information below is based on personal fieldnotes, unless another reference is given.

### *The Kibimba Rice Irrigation Scheme*

The Kibimba rice scheme is the first case study of this thesis. Although I have visited the scheme, I have not done extensive field work at the site, for reasons described in the introduction. The information below and in section 4.1., is thus mostly based on literature, supported by my own findings.

In 1966, the Kibimba rice scheme was constructed as a rice technology development scheme and the Doho Rice Irrigation scheme in 1976 for seed multiplication and popularization of production (Bayite 2011: 12). They were constructed by the Chinese in co-operation with the Ugandan government. During this time, there was no policy in place yet to protect and regulate the use of wetlands, the government at the time was still in favor of draining the wetlands for agricultural purposes, therefore encouraging leases to land tycoons claiming land for large scale agriculture and cattle grazing (Glass 2007).

For the creation of the scheme in 1966 as a public venture, the government at the time acquired wetland in eastern Uganda to implement irrigation structures, which hence affected the previous users and occupants of the land. As land issues have only recently become objects of study and debate, such events in the past are poorly documented. Based on testimonials from elderly, which can be read in chapter 4 (Bayite 2011: 17-19), it can be concluded that people were evicted from their land and were not well compensated. Besides, communities lost the land as site where they used to carry out spiritual rituals. According to a study by the Centre of Development of the University of Bonn, of the drivers to convert wetland into rice fields, included the perception that the wetlands were only used for grazing and cultivation in dry periods, and were thus of 'little value' (Baumgartner 2013).

During the first few years, the scheme was managed by the Chinese. After temporal closure of the scheme in 1982, a Ugandan governmental parastatal was founded which took over the management of the scheme, the Kibimba Rice Company. In 1996 the Kibimba Rice Company was privatized. Tilda Rice (Uganda) Company, a British/Indian agribusiness venture, was licensed to grow and process rice at Kibimba and thus took over the ownership and management of the Kibimba Rice Company (Bayite 2011). The scheme was leased out to Tilda, on a 99 years lease basis. With the conversion of the scheme from public to private 'property', another re-organization of existing structures took place and the position of local users of the scheme again changed. Tilda received financial support from the World Bank Group to develop agribusiness in Uganda. The National Association of Professional Environmentalists (NAPE) has published a report in which they investigated World Bank Group (WBG) investments in agribusiness in Uganda (NAPE 2011). The report states that many initiatives in agribusiness, supported by WBG in Uganda have been involved in large scale land acquisitions, defined as land grabs by NAPE. NAPE argues that in the context of Uganda, large scale land acquisitions most often can be defined as land grabs, as their definition of a land grab (in the Ugandan context) comes down to: 'the buying or leasing of large pieces of land by domestic and transnational companies, governments and individuals in a non-transparent manner using trickery manipulation of the law and the Constitution' (NAPE 2011). Tilda Uganda Ltd., according to NAPE, is such an agribusiness initiative in Uganda supported by WBG that is involved in land grabbing. In 1998, Tilda received \$3.35 million from MIGA (Multilateral Investment Guarantee Agency) and \$2.4 million as a loan from the IFC (International Finance Corporation), both agencies of the World Bank Group. By supporting the investment of Tilda, WBG aimed to 'help the country attain its goals of self-sufficiency in rice production and to become a significant exporter to East and Central Africa' (NAPE 2011: 9). NAPE does not give a further description or explanation of the case, as the main case study in their report concerns another WBG investment in Uganda (BIDCO Ltd.).

Details of the actual land deal made between the Ugandan Government and Tilda lack, which supports the argument of defining this case as a land grab, as land grabs inherently take place in non-transparent manners (Bayite 2011: 2). An interview was conducted with a plant breeder at Tilda who spoke with us on behalf of Tilda management, stated that Tilda bought the land from the government of Uganda in 1986. He states that they faced no problems or disputes with the surrounding communities in acquiring the land, 'as the land was already owned by the government, not by the communities'. Furthermore, he reveals that the government had offered Tilda the Doho Rice Irrigation scheme as well (case 3). Tilda did not accept this offer however, as according to the plant breeder, 'there, people still owned the land and we do not want to get involved in land issues'. At Kibimba, most of the scheme land was not cultivated by individual plot holders, but worked by inhabitants from the surrounding communities as wage labor. The produce was sold to the Kibimba Rice Scheme Company. This conditions has probably facilitated the land acquisition, as the company would officially not have any obligations to compensate land users, as they were mere wage workers and not land owners.

More details of operations at Kibimba, and the impacts of irrigation development on the local communities can be found in chapter 4.

### *Naigombwa Swamp*

As mentioned in the introduction, Pearl Rice Ltd. is the company that started off commercial rice production in the Naigombwa swamp and has proposed to invest in an irrigation project in partnership with the Ugandan government, the Naigombwa Rice Irrigation Project. In order to get a feeling of the investment and the potential political/economical position of the owner of the investment in Uganda, some information on the companies origin and its owner is given below. The chairman of Pearl Rice Ltd., Alwi Hassan, is the owner of several companies active in and outside Uganda. He is of mixed race, being partly Ugandan and partly from the United Arab Emirates. He comes from Kampala (Uganda) and lived and studied in Dubai. All the companies he owns also have the same managing director and finance managers, namely Godrey Sekyewa (Ugandan, graduated from Makerere) and S. Petchiappan.

Apart from Pearl Rice Ltd. A. Hassan is the chairman of the following companies/enterprises in Uganda:

- Falcon Estates, a real estate developer. The company has constructed 10 petrol stations of Hass Petrol and the police forensic laboratory at Naguru, Kampala, among other projects. Besides, a building of Falcon Estates accommodates the International University of East Africa. (falconestates.co.ug 2010)
- Pearl Oil Ltd. incorporated in Uganda in 2004 'The company imports oil from overseas and transports it using its own fleet of tankers. It functions as a separate entity from its parent company Yusta Ltd, a Russian oil company (pearoils.co.ug 2014).
- SAFAHA Ltd., a sister company of Pearl oil. construction company incorporated in Uganda, has constructed all the filling stations for Pearl oil, and now constructs for other companies. (pearoils.co.ug 2014)
- Alfarnas Petroleum F.Z.E. (Sharja, United Emirates) carries out all business activities on behalf of Pearl Oil in the Middle East(worldtrade.com 2014)
- YUSTA Ltd (Uganda) engaged in distribution of relief food aid for WFP (pearoils.co.ug 2014)

These investments, including Pearl Rice, are officially Ugandan investments, as the owner has an Ugandan nationality. However, even though certain investments in Uganda could be defined as Ugandan companies, they are often considered by the local population, as foreigners. National or foreign investments can be a rather grey area, for example considering the Asian population in Uganda. The investors themselves very likely still have ties with their country of origin, financially, economically or politically.

In order to start irrigated rice production, land had to be acquired by the company on which the Naigombwa Wetland Rice Irrigation Project could be implemented.

According to Pearl, land has been 'bought' from the government, the legal owner of all wetlands in Uganda. Hence, the peasants who were cultivating it, were approached to 'sell off' their plot of wetland to the company, thereby receiving financial compensation per acre. Peasants were compensated for 'the efforts they have made in maintaining and cultivating the land', according to the plant breeder that was interviewed at Pearl and represented the company. Pearl states they did not exactly buy the land from the farmers, as farmers were not the official owners. Instead they just paid them some compensation. It was a difficult process though, as it appeared hard to sensitize the farmers on the advantages of selling their land, according to Pearl. By now, six villages have sold their plots in the wetland, Namatumba, Lubira, Butyabule, Nsozibiri, Bupala and Nkombe. There are still some villages though who up to now have refused to sell the land, because 'they want to use it themselves' (interview pearl management 2). Pearl is still trying to make these villages sell the land as well, as it very inconvenient for them to have acquired land 'right and left, while in the middle there is still some land that farmers refuse to sell'. It becomes clear that acquiring land can be a complicated process. In practice, it could be said that there currently are three parties who claim ownership over the wetlands, the government, Pearl and the peasants using it or who used to use it. This leads to a situation whereby the investor has to acquire the land from two parties, after permission from government, the farmers need to be convinced or forced to sell off the land they had been using.

The farmers in the villages who have 'sold' their land, feel they have been forced to give away their land, deceived with false promises. Farmers testimonials reveal that the management of Pearl has made agreements with the local government at district and subcounty level to acquire the land. According to one interviewee, the investors were sent to the district government, negotiated and came to an agreement. Then they moved on to the subcounty councilors, who also agreed that Pearl could acquire the land. The investors have paid these district and subcounty councilors and hence told the farmers in the villages that they bought up the land from the government. According to the farmers the company threatened them by saying the government would take away their land anyway in case they were not willing to sell it to the company. Only if they would sell it to the company, they would receive financial compensation. According to the Platform for Labor Action (PLA), '1800 farmers had been deprived of the use of the swamp by the company Pearl Rice Ltd.'(attachment email 22/7/2013 'Update on the Naigombwa Swamp Issue, personal communication). The mean land holding amongst interviewed farmers was 4 acres, in case the farmers with exceptionally large landholdings ( 7 out of 27 farmers had land holdings above 10 acres) were excluded, and 8 acres, in case these farmers were included. One farmer who had a 100 acres has been excluded from both calculations. The average amount of acres that was sold to Pearl based on the 11 of the 27 interviewed farmers that had sold land, was 6 acres. 6 of these 11 farmers sold more land to Pearl than they have left now.

The 'powerful' position of the owner of Pearl in the Ugandan economy might have resulted in a situation whereby the Ugandan government tolerates potential violations of local peoples' rights for the sake of economic development/stability. The role of the national state remains a bit vague in this case, as the land was sold to Pearl by the district government, though it seems national government was partly involved as well. According to Ebong, a rice specialist whom I interviewed, working for an organization currently supporting rice production in eastern Uganda, the government is planning to build 3 large dams for irrigation, 'the design of the dams and required money is there'. The government promised people another plot of land if they would give their land to Pearl, or had to leave their land to make room for the dams, so 'the government also played part in the negotiation of this land'. The government has not yet fulfilled this promise, according to Ebong, 'we are yet to see' if they will.

The contract or agreement which farmers were made to sign after they had received cash compensation for their plot of land, stating that farmers agree on the amount of compensation, is not a formal contract. It is informal, according to Ebong, 'the lawyers will tell you that the agreement is not binding because it was not formally registered'. The Platform for Labor Action (PLA), to whom I showed the picture below which I had taken during fieldwork, of one of the contracts, confirmed that this contract was void since the concerning plot of land was not well specified in the contract, the contract did not contain the specific location nor size of the plot.

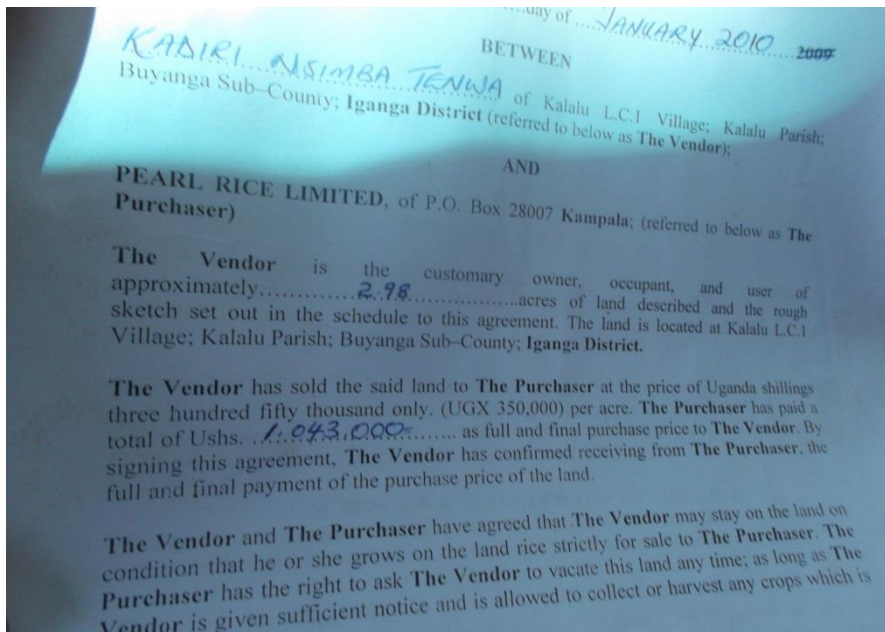


FIGURE 2, ONE OF THE CONTRACTS OF THE LAND SALES

A notable difference thus between the Naigombwa case and the Kibimba Scheme is that in the Kibimba case, it was clear that the national government, mainly the president himself, has leased the land to the company Tilda. In the Naigombwa swamp, the land acquisition has been settled through the local, district government. This confirms the decentralization policies of the Ugandan government, according to which the district government has the function of managing the wetlands. It also reveals the complexity of the situation as a result of decentralization processes; local government perceived to have the authority to sell of a wetland area to investors, even though the National Policy states that wetlands are not be leased out to individuals.

#### *Doho Rice Irrigation Scheme*

The Doho Scheme differs from the other cases, as there is no involvement of a commercial investment in this case and it is local farmers who are the users and tenants of the scheme. Local communities have thus not been deprived of the use of the wetlands. However, for the irrigation scheme to be constructed, land had to be acquired by the government of Uganda. Farmers were made to leave their plots in the wetland, after completion of the scheme, the land was handed back to the local communities by allocating plots in the scheme to individual tenants on a 99-years lease basis. This process is described below.

Originally, the wetland that has been converted into the Doho Rice Irrigation Scheme, belonged, according to several farmers interviewed, to the peasants of the local communities and was communally owned. In the past people used to live on the now called wetlands. After floods of river Manafwa, the wetlands became inhabitable, people moved up to higher areas and instead started to grow rice in the wetlands. As far as the farmers know, their leaders at the time, requested government to help them control the water, as they were regularly bothered by either droughts or floods. The government responded by relocating some people and sending Chinese experts who surveyed the land and constructed the irrigation structure. Relocated farmers have been compensated by the government at the time, it remains unclear however if all farmers forced to leave have been compensated, as one interviewee stated, 'for some, they have been compensated, for others I don't know'. This interviewee also talked about 'some minor complaints' that arose from reallocated people. These complaints considered farmers who used to cultivate 20 up to 30 acres in the wetland, while after construction of the scheme, people would only be allocated 1 or 2 acres. This was confirmed by another interviewee (6/3) who complained about how he was chased from his 20 acres of wetland by the government at the time. He was allocated 2 acres in another part of the wetland after completion of the scheme.

The re-allocation of plots to farmers after completion of the irrigation scheme in 1985, was done by an Allocation Committee. A committee of 15 members was formed, including local counselors from village, parish and subcounty levels and some technical staff members. Farmers could apply for a plot at the subcounty and would be allocated one based on their capacity and family size. According to several interviewees the allocation process was not always fair and in some cases corrupted. Details and perceptions of locals are described in chapter 4, as well as the impacts of the development of irrigation on local communities practices, livelihoods and autonomy.

At Doho, the central government has, up to now, been involved in the management of the scheme by paying the salaries of technical, government staff and financing the rehabilitation of the scheme.

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## 4. IMPACTS OF IRRIGATION DEVELOPMENT ON LOCAL PEOPLES' LIVELIHOOD AND THE PROPERTIES OF RICE

In general it is argued that the rural poor are particularly vulnerable to ecosystem degradation because of their dependency on 'many ecosystem goods and services for their livelihoods'(Barbier 2012: 3). Wetlands is such a valuable ecosystem, rural communities rely on them for subsistence and income generating services, and as a source of water and traditional medicine. In a study from 1997, Nsabagasani (1997) argues that wetlands 'have been the most affected by privatization of lands' in Uganda, it has intensified swamp reclamation in eastern Uganda due to wet rice cultivation, and also in other regions of the country most wetland has been reclaimed. This has resulted, according to the author, in to an 'ecological crisis' and led to 'poor peasants' being 'pushed to the marginal hillsides which are always dry'. Besides, locals were deprived of access to fishing grounds and fuel wood and building materials(Nsabagasani 1997: 53).

Nowadays the dependency on wetlands for its traditional resources like traditional medicine and housing material might have lessened due to modernization, as described by Glass in chapter 3. However, based on my own observations, I would argue that wetlands, if accessible to them, play a key role in the livelihoods of the local communities in eastern Uganda. The conditions of wetlands and the way they are managed, are, in that case, still directly related to the livelihoods of the rural communities.

For these reasons, the state claims to aim at combining poverty reduction efforts and wetland management interventions, stated in both the PEAP (Poverty Eradication Action Plan) and the WSSP (Wetland Sector Strategic Plan) of the government of Uganda. However, in practice it appears difficult to achieve this goal, as became apparent in Glass findings on the obstacles of implementing wetland policies in Kabale district, and in the discussion of the role of Ugandan national and local government in land acquisitions in the country. All of the three case studies of this thesis contradict with wetland policies in Uganda, for reasons similar to those described by Glass. The government has proved to take contradictory actions regarding wetland management in the country, claiming to protect the wetland ecosystem, while at the same time supporting private investments in irrigation commercial rice production in the wetlands, resulting in land acquisitions.

This chapter will go deeper into how the local rural communities in the east of Uganda, perceive the investments in irrigation and related land acquisitions and how these re-define their livelihoods and rice and the meaning and value of rice as a food product.

#### 4.1. KIBIMBA RICE IRRIGATION SCHEME – TILDA UGANDA LTD.



FIGURE 3, THE DAM OF THE KIBIMBA RICE IRRIGATION SCHEME

##### **Tilda Uganda Ltd.**

Tilda Uganda Limited is a commercial agricultural company growing rice at the Kibimba Rice Scheme in Bugiri district, Uganda. Tilda Uganda Ltd. is a branch of the British company Tilda Rice. Tilda Rice was established in the 1970's by an Ugandan Indian family. After the expulsion of Asians from Uganda, part of the family settled in the UK, part in India. It started its business selling Basmati rice imported from India, to the Asian community who immigrated into the UK in the late sixties and early seventies(www.tilda.com) (www.tilda.com). Tilda Uganda Ltd. is a British owned company managed by Indians (bba-uganda.org).

Tilda Uganda started producing rice at the Kibimba Rice Scheme in Bugiri district, Uganda, in 1996, after the Ugandan government sold the scheme to the company(Bayite 2011).

In 2004 Tilda started a rice contract (or outgrowers) farming scheme to supplement its own production(Elepu 2009).

The scheme covers a total of 4000 hectares, of which 1200 are currently cultivated with irrigated rice. The other 2800 hectares are still unproductive as a result of a lack of water. (interview Dr. Rattan) According to Zeemeijer, the total area of the scheme plus outgrowers, covers 14,000 hectares(Zeemeijer 2012).

#### 4.1.1. IMPACTS OF THE CREATION OF THE IRRIGATION SCHEME

For the creation of the scheme in 1966 as a public venture, the government at the time had to acquire land to implement irrigation structures, which hence affected the previous users and occupants of the land. The process of land acquisition has been described in general in chapter 3, this section discusses the event in more detail from the point of view of the local communities. As (Bayite 2011: 17) states, based on interactions with elders from communities surrounding Tilda, 'The land was originally owned by the community, which worked it for their daily survival' and 'The creation of the scheme left some natives dispossessed'. The elderly reported that many community members lost land and were not well compensated. Besides the importance of the land for daily survival, it also carried a spiritual meaning to the community as it had a site where rituals were carried out, which was razed to the ground as well (Bayite 2011). Although the creation of the scheme left some natives dispossessed of land they used to use, as a public venture at the time, the government did ensure that surrounding communities benefited from the scheme by providing schools, medical services and having standing contractual agreements with smallholder farmers producing for the company, 'contract farming'.

##### **Contract farming in Uganda**

Contract farming is defined by the FAO as, 'agricultural production carried out according to an agreement between a buyer and farmers, which establishes conditions for the production and marketing of a farm product or products'. The terms of the contract specify how much produce the contractor will pay and the price that will be paid for it (Bayite 2011). In many cases the contractor will also provide essential inputs including credit and technical advice.

Contract farming in Uganda is a common phenomenon in areas around large-scale commercial agricultural ventures.

Contract farming can be beneficial for smallholder farmers as it can improve farmers access to agricultural input and output markets, promote market development initiatives and rural development. However, it is also indicated that smallholder farmers often face contractual problems in dealing with large agribusinesses (Bayite 2011) (Elepu 2009)

Under the governmental parastatal farmers growing rice for the Kibimba Rice Company were organized, and had standing contractual agreements with the company (Bayite 2011: 16), which put smallholder farmers in a strong bargaining position. The contracts that the smallholder farmers had with the former public enterprise, Kibimba Rice Scheme Company, were 'resource providing in nature, specified which crops to be produced, the production practices to be used and the crop output quality and standardization' (Bayite 2011: 16). The company hence provided all inputs to achieve these requirements stated in the contract, including seeds, fertilizer, irrigation water, credit, extension services and trainings. The farmers were not involved in the final marketing of the output. According to the farmers interviewed by Bayite, 'these resource providing contracts enabled them to learn new rice production technologies which they use to date' (Bayite 2011:17). They were free to sell a share of the produce to other traders.

For this thesis, an elder man was interviewed, who had been working as a field supervisor at the Kibimba Rice scheme since 1975, just after the creation of the scheme by the Chinese. He will be referred to as 'the elderly field supervisor'. He explains that in the beginning the scheme was owned by the government of Uganda with the Chinese providing the technical staff and expertise. He talks friendly about the Chinese, they found a way of communicating with each other, 'with a bit of this language and a bit of that' and the Chinese taught him a lot about rice growing. After some years (he tells us 1996, then 1992, so it is difficult to judge if he still remembers the exact year> probably it was 1982, when the



scheme was closed down)), the contract with the Chinese ended. According to him the government gave the Chinese another 3 years, but they failed to retain the scheme. He did not mention exact reasons. The Chinese left and the scheme was in full control of the Ugandan government. At this point the Kibimba Rice Company was founded and farmers got organized in a union, as described above, which gave them benefits. 'In the time of the union you had the power of collective bargaining'.

Despite these benefits under government control and ownership, the production of rice in the scheme was low, due to poor management and misappropriation of funds (interview elderly field supervisor). This low productivity and poor management has probably led to the decision of the government to privatize the scheme in 1996. A commercial company, Tilda Rice Ltd. took over management and ownership based on a 99-years lease, of the scheme.

Apart from commercial rice production, Tilda also has a rice research department, in which it works together with the International Rice Research Institute (IRRI) for example in developing improved rice varieties, for both wetland and upland rice cultivation. A lot of activity is taking place in Uganda concerning the development of improved upland rice seed varieties, 'New Rice for Africa' (NERICA). Tilda for example works together with IRRI in developing NERICA. These NERICA varieties for upland rice cultivation are introduced in Uganda, legitimized by, amongst other reasons, arguments concerning wetland conservation; 'it could save the wetlands, as people do not have to encroach on wetlands anymore, they can be preserved'(Kyalimpa 2008) The plant breeder we spoke with at Tilda explained that Tilda is involved in developing upland varieties to 'help the local people', besides they have plans to in the future take up some upland rice production as well. According to him, Tilda has already provided some workshops and demonstrations to bring them 'education and knowledge' in new skills and practices concerning upland rice cultivation.

Contrary to Doho Rice Irrigation scheme, in which the government allocated plots to individuals after construction of the scheme, the Kibimba Scheme was not rented out to individual plot holders, as it was run by a public enterprise, the Kibimba Rice Scheme Company. This Kibimba scheme was not 'handed back to the local farmers', by allocating plots to them. Instead, part of the public land was rented out to individuals to grow rice (Email from Bayite 17/1/2014) and part of the scheme land worked by wage labor. Today, this practice still holds, land which is not used by the private, commercial company, is rented out to individuals on the condition that they grow the crops agreed upon by the company. The transition from public land to 'individualized ownership' by Tilda Rice Ltd. has however had implications for the position and role of local smallholder farmers. Former users of the land lost most of the favorable conditions they enjoyed under public management when the scheme got privatized. This will become more apparent in the next two sections on contract farming and working conditions. Broadly, farmers were integrated, both under the public venture as the private venture today, in two different ways, by either producing for the company on 'outgrower' land, in other words, contract farming, or working on the companies land as wage laborers. Below, contract farming under the public and private venture is discussed, followed by a discussion of the working conditions under the private venture today. These can not be compared to working conditions under the public venture, as available data on these lack.

As a result of the creation of the scheme, which left some natives dispossessed of their land, the increasing population in the area, the influx of migrant workers and the large area reserved only for Tilda's cultivation and research activities, arable land has become a valuable but scarce resource in the area. According to Bayite (2011), land is the most important source of livelihood for the entire population in the study area, and has increased in (economic) value over time. Baumgartner concludes that the investment at Kibimba, has led to a 'scramble for wetland' and 'increased transfer in an emerging land-rental market'(Baumgartner 2013). Furthermore he states that 'the traditional rights over wetland are still in place but are currently being challenged' (Baumgartner 2013). As a result of the investment,

farmers have lost the land as a resource for grazing cattle, fishing, water and other resources. Tilda restricted the communities to access and use the Kibimba River (BirdLife International 2012). Tilda management also forbids anyone to fish in scheme canals, persons who do, may end up in prison, though, according to the farmers, there is a lot of fish in the canals of the scheme (Bayite 2011). Hereby, farmers lost another potential livelihood resource for nutrition and/or income. On the land that now belongs to the company, there used to be a primary school. Tilda knocked this school down. Although build up again outside the estate, this move has not been appreciated by the community, and another factors that contributed to the strained relationship between the company and the surrounding communities.

According to Baumgartner, production and income have increased in the area, as a result of the investment, this growth however is not pro-poor, he argues (Baumgartner 2013).

#### 4.1.2. CONTRACT FARMING UNDER THE PRIVATE VENTURE

As a reaction to the recent inflow of foreign investors in Uganda, Bayite investigated if large scale land investments have win-win situations for both the smallholder farmer and the large scale land investor. The study focuses on contract farming and thus on the interactions between smallholder farmers from the local communities and the large-scale land investor.

Bayite argues that the change from public venture to commercial investment, negatively impacted smallholder farmers in several ways and drastically changed the nature of the scheme. To start with, the services the government used to provide to the communities, including agricultural training and inputs, public schools and medical service, were no longer provided by Tilda. Continued provision of these services had either never been discussed in the agreement between the government and Tilda, or Tilda just never implemented them (Bayite 2011:19). Secondly, under the governmental parastatal farmers growing rice for the Kibimba Rice Company were organized and had standing contractual agreements with the parastatal, they thus enjoyed a stronger bargaining power. Last of all, smallholders producing for the government parastatal, were not obliged to sell 100% of the produce to the company, Tilda only rents out land to outgrowers, on the condition that 100% of the produce is sold to the company. Farmers are thus unable to benefit from competitive market prices (Bayite 2011: 18). These favourable conditions for smallholders producing for the government parastatal all ceased when Tilda took over the scheme (Bayite 2011: 16). By the time Bayite conducted this research in 2011, official 'contract farming' at Tilda was phased out. At the time of Bayite's research, there were thus no standing contractual agreements between Tilda and the smallholder farmers producing for them, apart from the obligation to sell a 100% of the output to the company. This lack of contractual agreement, 'puts the smallholder in great risk and disadvantage compared to the investor' according to Bayite (Bayite 2011: 20). Tilda did have contractual agreements with some 600 smallholder farmers from 2004 onwards, when Tilda started to supplement its own production with outgrower's produce (Elepu 2009). In 2009, 'Tilda was phasing out contracted farmers who were using company land as the necessary irrigation infrastructure was being installed' (Elepu 2009: 20). The plant breeder, representing Tilda management, confirmed in the interview with us, that Tilda currently does not support a group of outgrowers. They have done so in the past, but became disappointed with the outgrowers, 'we have tried, but if we provide a group with inputs and services, they don't come back and just sell their produce somewhere else'. In a discussion with Tilda personnel reported by Bayite, several factors were named that impeded Tilda to have standing contractual agreements with smallholders. These included; the need to enforce farmers to adhere to the terms of contract, the uncertain nature of production due to the weather, the 'division of value' added between the smallholder farmer and the company and the costs of monitoring and managing the outgrower farmers (Bayite 2011: 17). The company does still take in produce of outgrowers who bring their produce to the company, but it is only a negligible share of their total production. According to the plantbreeder, 'everybody can bring in their produce, either milled or unmilled. At Tilda we check the

quality and pay the market price'. The information the elderly field supervisor provided concerning outgrowers and contract farming, confirmed to the above, as he stated that there had been an outgrowers department at Tilda in the past, which provided some services including trainings and extension service. Today, this department is no longer in place, it fell out, 'I don't know why, you know, here is a lot of bureaucracy, you never know what exactly is going on'. Based on this information, it can be concluded that Tilda does process produce from 'outgrowers', this is however a negligible share of their total production and they do not have standing contractual agreements with outgrowers at the time this research was conducted.

Bayite (2011) and Elepu & Nalukenge (2009) (students from Makerere University, Kampala), agree that contract farming can only be beneficial for smallholder farmers if favourable conditions exist for smallholders. These favourable conditions according to Bayite include first of all, that interactions between farmer and investor should be formalized with a contract specifying the rights and obligations of both parties. Secondly, farmers should have the means to negotiate fair trade arrangements with the investor. Third, farmers should have access to vital inputs including improved seeds, fertilizers, extension services and credit. Fourth, farmers should be assured access to a market. Lastly, access to land should be secured. Both reports conclude that not all of these conditions are in place at Tilda. First of all, contracted farmers were obliged to sell 100% of their produce to Tilda, whereas they would fetch a higher price for their produce at the domestic market. Under the Kibimba Rice Company farmers producing on the companies land were not obliged to sell all the produce to the company (Bayite 2011: 17). Besides, as mentioned before, under the public venture farmers producing for the company were organized in a union, so to bargain for a better price and sell collectively. Under the private venture, most farmers sell individually (Bayite 2011: 18). Among the contracted rice farmers interviewed by Elepu and Nalukenge in 2009, more than 80% stated they had received extension services from Tilda (Elepu 2009: 17). These were probably farmers using companies land at the time there was still an outgrowers department in place at Tilda. By 2011, Tilda had stopped supporting an outgrowers department with inputs and trainings. In 2009, 85% showed they accessed some form of credit, according to the study by Elepu and Nalukenge, though not from Tilda. They belonged to the Kibimba Savings and Credit Scheme (KISACS), from which they accessed small loans from the Centenary Rural Development Bank (Elepu 2009: 17). Bayite's findings confirm that Tilda does not provide credit to smallholder farmers producing rice (Bayite 2011: 21).

When smallholders produce for a company while not receiving any agricultural inputs, extension or credit nor a favorable price for their produce, development of smallholder agriculture is impeded as they will lack the means to invest in their farms. Even though local markets are volatile, and the prices of rice very unstable, smallholder farmers will not be in a more favorable position in an outgrower scheme in which they 'lack means to negotiate fair trade agreements with the investor'(Bayite 2011: 21). This, according to Bayite, might lead to a reluctance among smallholder farmers to adopt new technologies or improve production efficiency on their farms, which is unfavorable for Tilda as well, as they do have 'a vested interest in the productivity of smallholder farms'(Bayite 2011: 21).

Whereas farmers are obliged to sell 100% of produced rice to Tilda, other crops grown on Tilda land, including maize and soybean, may be grown without any preconditions. Landless farmers can grow crops on Tilda's land under an arrangement whereby Tilda provides land to the landless under a land rental market arrangement. Landless people can rent land at a rate of 50 000 shilling per acre to grow maize and soya to sell to external buyers (Bayite 2011: 17). It remains unclear if they are prohibited to grow rice on this land, or if they are allowed, if they sell 100% of the produce to Tilda. Maize and soya fetch, unlike rice, low prices on the market, which is probably the reason Tilda has no interest in these crops.

#### 4.1.3. WORKING CONDITIONS AND ITS INFLUENCES ON RURAL LIVELIHOODS

At the time of privatization, when ownership and management of the scheme was handed over to Tilda Uganda Ltd., the workers on the Kibimba Scheme were 'laid off', according to the informants of Bayite (2011: 12). Tilda employs permanent and casual workers.

Workers at Tilda have appeared to be far from satisfied with the working conditions at the company. In November 2010, more than 2800 workers at Tilda Ltd. went on a strike. Heavily covered in Ugandan media, 'every Ugandan knows about this conflict', according to our interviewee. Ugandan media (Uganda-Radio-Network 2010) Derived from ugandaradionetwork.com on 20-10-2013) reported that 'employees camped outside the office hurling abuse at their bosses and anyone of Indian descent who passed along the Bugiri-Tororo highway'. They blocked the entrance to the factory, making it impossible for their 'Indian bosses' to leave the office. They stole drugs and furniture from the factories health centre and destroyed property worth millions of shilling. Workers reported several reasons for their grievances and dissatisfaction. Workers reported poor wages and working overtime without being paid for. Furthermore they reported being routinely beaten and abused by their bosses, women report regular sexual harassment by their supervisors. Besides these claims on poor working conditions and poor payments, workers were frustrated as Tilda management prohibits them from joining a workers union. According to the plant breeder we spoke with, the strike was provoked by outsiders, politicians who try to convince workers that they should form a union, 'The idea to form a union did not come from the workers themselves'. These politicians are only after money according to him, 'but we are not going to spend our money on these unions. We tell our workers that these people will only take money from them. They provoke them.' The president helped Tilda to control the strike by making sure the police supported Tilda. 'Luckily, the president was with us, he also knows that these unions will spoil workers. They don't want to work, they just want money.'

A hint of the other side of the story was given by the elder field worker. Making him feel comfortable enough to speak to us, took some efforts too. We took him for lunch to the market place, however, some other Tilda workers came in, which stopped our interviewee to talk. We went back to the field to find a quieter place, as 'here I can just say to people I was just explaining you about fertilizers.' He explained that workers knew it would be beneficial for them to form a union. The idea to form a union came from 'individuals well knowledgeable about the importance of unions', which he referred to as 'planters'. Workers were willing to join the union and the planters had started registering workers. There had even been elections already, to elect leaders of the union. However, as discussions on the union continued, Tilda management came in and dismissed all persons who had a crucial role in these discussions, 'they fell victims'. So in the end, the establishment of the union failed, which according to our interviewee is a shame as workers now do not have anyone to talk to if they have a problem. 'There is no way you can stand up as a worker because the union, it failed. And as a poor worker, who are you?'

Then we touch upon the issue of gender related abuse, specifically sexual harassment. Although not explicitly, he admits it happens and points out the large size of the fields with its dam and some trees, spots from which 'you sometimes hear some noises and later you see the lady very quietly walking away'. These issues are generally kept quiet, as woman are ashamed and afraid to talk about it. If their husbands would find out, they usually blame and abandon her.

Ebong, who has worked for Tilda for 1 year, touches upon another problem female workers face concerning their working times for weeding tasks. Weeding is a task that needs to be done very precisely, therefore, unlike other tasks where you can leave once the task is finished, workers are obliged to stay until 1 pm. This to prevent they rush to go home early. Husbands of the female workers usually demand that their wife prepares their lunch, which is not possible if she has to stay in the field until

1pm. When the women return home, they get beaten by their husbands for this reason, which has been a serious problem for a long time now and still is.

Furthermore, both the elder field worker as Ebong identify poor payments and getting paid too little as being major problems. 'The wages are much lower than the wages outside the company. That alone discourages surrounding communities'. For a weeding task for example, workers have to stay longer and are paid 50% less compared to what people outside would pay. In the end, a field workers receives 2750 shillings for a weeding task, which has kept him occupied for 8 hours. Workers are contracted per task, a task can for example be to plant seedlings on a plot of land. The plant breeder explained Tilda works with contractors who supply them with labour workers. They work with 10-15 different contract firms, 'for competition of course, so they compete'. The field supervisor records the amount of tasks done by a field worker and reports this to the management. Then every week, in the experimental fields, workers are being paid by the field supervisor, who receives the payments from management. However, field supervisors, can 'at times make up reasons to underpay the field worker', according to the elderly field worker, leaving the remaining in their own pockets. In the commercial fields on the other hand, the contractors pay the workers. The field supervisor reports the task done to management, they put the requested amount of money on the contractors account, who withdraws it and pays the workers. According to Ebong, this prevents conflicts and problems related to payments between field workers and supervisors, however also contractors regularly cheat workers by underpaying them, keeping the remaining money to themselves. Because of the low payments, casual workers have to work 7 days a week to make ends meet, hence having nothing left to potentially invest in their own farms (Bayite 2011: 18).

The company thus, does not have a positive reputation concerning the working environment and working conditions. They do not seem to feel the need or have an incentive to change the current situation, probably because casual labour will keep coming anyway as, 'the workers around Tilda are too poor, although they are unsatisfied, they have no other choice'. Bayite confirms this lack of a competitive rural labor market. The population of the surrounding communities does keep coming, despite the low wages and poor labor conditions, as there are few other employment options in the area. Besides he indicates the stagnating effect this has on the development of local smallholder farmers, 'from a rural transformation point of view, wages paid to workers should be adjusted to tally with the quantity of labor they hire out to large scale investors' (Bayite 2011: 22). Tilda does faces severe labour constraints though, especially during the rainy season, when casual workers first have to attend to their own garden before taking on tasks at Tilda fields (Bayite 2011: 19). A major reason for this is that most of the workers are females, who have to combine work with running their own household. Other instances that effect Tilda's labour reserve are times when other companies nearby offer higher wages to casual labour. Ebong reveals, that this happened in 2012 when a small company, dealing in sugarcane, nearby was paying more to casual labours as Tilda did. Tilda paid 3000 shilling per task, this company 8000 shilling per task. Tilda reacted by petitioning the company, arguing it was disturbing the labour market. Tilda contacted the management of the company, making clear their dissatisfaction. After negotiations, the company lowered its payment to 5000 shilling per task. Ebong does not exactly now why the company gave in and lowered their payments, 'I think Tilda negotiated well'. Such a situation might also cause conflict between Tilda and Pearl Rice Ltd. (case 3) according to Ebong, 'It is not happening yet, but it could definitely lead to issues between Tilda and Pearl'. At the moment already workers have left Tilda for Pearl, as it pays slightly higher wages for both supervisors as casual field worker. Additional to local labor, Tilda employs migrant workers. The influx of migrant workers has contributing to the decline in arable land in the region (Bayite 2011: 17). Local labor is problematic in the sense that most still own their own upland, they have thus not completely been forced into a 'de-peasantized' livelihood and if taking on work at Tilda, they need to combine this work with working their own gardens.

Apart from working conditions among casual field workers, those permanent staff at Tilda are not that positive either it seems. Ebong felt 'limited', after having worked for some time at Tilda; 'you don't have opportunities to grow any further'. He worked for Tilda as an agronomist and was block leader of 3 blocks in the scheme. Ebong's supervisor, and Indian man, was, according to Ebong good, 'the working relationship was not that bad. We could go to him with complaints.' There was one issue though, they could never bring up, 'what you could not talk about was the payment of workers, any other issue from the field you could talk about, but not payments. They would tell you that you are spoiling workers.' In the beginning, the job was still fine, but they did not provide any opportunity to advance his career. Besides, Ebong, and others with comparable positions, were supposed to stay within the compounds of the company, where they were also housed, 7 days a week, 24 hours a day, 'being it a public holiday, being it a weekend, you could not go and do your personal things, you had to stay'. After 11,5 months of full time working weeks, you could get 21 days off. This is not normal in Uganda according to Ebong, 'I'm not sure why they do that, they only want to move on and get as much work done as possible, that is the only thing on their minds'. The rate of turnover is very high at Tilda, 'even Indians, who are brought in all the way from India, might just leave without informing anyone.' 'The conditions are just not good, for all people who work there. You work there when you don't have another option. Especially if you are not at the level of senior management.. if you are not an Indian, it is very hard to work there'. The most important reason why people leave, in the end is the lack of freedom. After leaving Tilda he worked at an Italian NGO for some time, after which he has worked at Pearl Rice Ltd. (case 3) as well for 3 years, before taking on his current job as a rice specialist.

#### 4.1.4. RICE GROWING DEVELOPMENTS

The creation of the scheme has encouraged local farmers in the cultivation of rice. As Baumgartner(2013) found that in the 1970's/80's, 'pioneers had acquired skills from Kibimba and started growing at their own fields'. They started cultivating rice on wetland fields close to their other fields. However, due to privatization of the state operated Kibimba Rice Company, the farm was restructured and workers were laid off. They continued cultivating rice on the remaining wetlands. Today, as a result of an increasing population, 'all land is taken', expanding rice cultivation is only possible through rental markets and is often located further away. Besides, the research of P. Baumgartner revealed that friends and family have always been the main source of knowledge for farmers concerning rice cultivation, rather than the Kibimba Rice Scheme or Tilda company. In the first phase of the scheme, under the Chinese development project, farmers did report the scheme and 'neighbors' as their source of knowledge on rice cultivation. The second generation of rice growers, reported neighbors' as their main source of knowledge, besides parents and the scheme. The third generation, at the time Tilda Ltd. had taken over management, reported only parents and neighbors' as their sources of knowledge. Parents and neighbors' have stayed the main source of knowledge, between 2004-2011 only 4% reported Tilda as a source of knowledge and 11% the scheme in general. This observation aligns exactly with moment that Tilda started to complement its own production with an outgrower farming scheme. Many interviewees did mention that they received knowledge from neighbors' who had been related to Tilda or Kibimba.

The rice produced at Tilda is a high quality product. Although sold at the domestic market, as well as the export market, it is mainly an upper class product, sold at the larger supermarkets in Uganda and exported elsewhere. Tilda rice is thus unaffordable to the average peasant in the country. Peasants of the surrounding communities do trade and consume rice that is of a lower quality, marketed at a lower price, produced on fields outside the company. This rice is sold at market places next to roads, as can be seen on the right picture below.

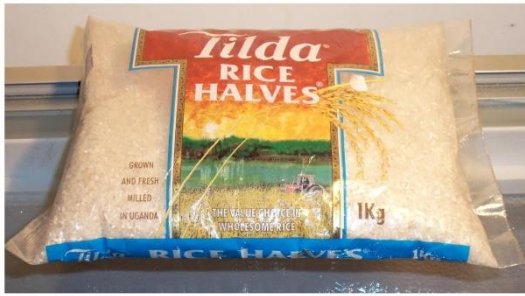


FIGURE 4, TILDA RICE SOLD IN SUPERMARKETS, LOCAL RIGHTS SOLD AT MARKET PLACE

## 4.2. THE NAIGOMBWA SWAMP

As mentioned in the introduction, Pearl Rice Ltd. is the company that started off commercial rice production in the Naigombwa swamp and has proposed to invest in an irrigation project in partnership with the Ugandan government, the Naigombwa Rice Irrigation Project. Land acquisition for irrigation development

In order to start irrigated rice production, land had to be acquired on which the Naigombwa Wetland Rice Irrigation Project could be implemented. The nature of this acquisition and the central role of local government institutions has been described in chapter 3. In this section, the perspective of the local communities on the land acquisition is further elaborated, followed by discussing the impacts of the investment in irrigation in the swamp.

Five villages have thus far sold land to Pearl, of which three have been included in the fieldwork for this thesis, Butyabule, Nsozibili and Kalalu B.

### 4.2.1. FARMERS' PERSPECTIVE ON THE LAND ACQUISITION

Below a testimonial of a villager from Butyabule, the first out of several villages Pearl approached, describing the circumstances in which the company approached local communities.

*'Representatives from Pearl (people Pearl had hired to acquire land for them), came to Butyabule during a very dry period, the villagers were having a difficult time and no money. In this situation these representatives were able to convince the people to give away their wetlands in return for cash compensation. Another time, they came during a time of flood, when some farmers were unable to use their land due to the flooding. Some of these farmers were convinced to give up their plot, and hence convinced other farmers again. There was a certain man who was moving with these farmers, he was just convincing them, convincing them, and when they were convinced, they made arrangements between the farmers and the investors, and paid the farmers' (17-1-2013)*

The interviewed farmers of Butyabule, whom seemed very agitated to me whenever the direction of the conversation turned to 'Pearl' and 'selling or losing wetland', told us about the night in which the representatives of Pearl for the first time surprised them.

*'These people came during the night, with agreements for us farmers to sign, stating that we had sold our piece of land. We were convinced that we had no other choice but to sell off our land, as the land officially belongs to the government. We could either voluntarily sell it off now and receive some compensation or*

*the land would be taken away later anyway, without compensation. We were forced to sign agreements written out in English, in the dark, which were read to us in the local language. We immediately received cash compensation, however were unable to check the amounts, as it was dark. Later we realized they paid us far less than was agreed upon. Even a picture of every farmer selling off his land was taken. Because we have signed these agreements and pictures were taken, there is no use of complaining at local authorities.'* (Focus group discussion 1, 4-2-2013)

Threatening the farmers that the government would come and take it if they did not voluntarily give away their wetlands, has been an important incentive for the farmers to sell off their land to Pearl, 'when we heard "government" we feared, and sold'.

The amount of compensation paid by Pearl per acre was 350 000 shilling in this village, compared to the price of 200 000 shillings for renting one acre for one season, this amount seems extremely low to me. Pearl has been inconsistent regarding several aspects, including the amount of compensation they have offered villagers and sharecropping arrangements, which will be discussed in the next section. Regarding compensation, interviewed farmers in villages Pearl visited after the first one, Butyabule, stated higher amounts of compensation offered by Pearl. For example in Namunyumya, a village Pearl approached, but refused to sell land, Pearl offered 450 000 shilling per acre according to one interviewee (5-2-2013). This villager argued that this amount was 'not healthy' compared to the 200 000 shilling for renting 1 acre per season. He refused to sell his wetland. Another villager argued Pearl did not even get the change to offer them an amount of compensation, as they did not show any interest in selling off their lands. The reaction of villagers to Pearls approaches to acquire land were thus rather varied per village. An interview with the local chairman of a village that had not sold land to Pearl, also revealed that the point of view of the village chairman greatly influences the decision of villagers to sell or not sell land. According to the chairman (of Kalalu B), they were approached by Pearl at the same time as other villages.

*'The villagers consulted me as their chairman on whether they should sell their lands or not. I advised them to first wait and observe the experiences of other villagers who did sell land. I observed that farmers who sold their land were deceived and regretted their decision to sell very much afterwards. I thus advised this village not to sell their lands. I believe that other villages have sold their land because of poverty. They must have thought they could gain some money by selling their land and then maybe start a small business, like a shop or becoming a boda boda driver. These plans failed however, and they even fell deeper into poverty.'*(Chairman Kalalu B, 7-2-2013).

The chairman of Kalalu A, who did not own wetland himself, told us how he perceived the intrusion of Pearl. At the time Pearl first visited his village, some groups of people were gathered together, however, he was not involved, which he found peculiar, as he was the LC1 of the village. He was told that he was not approached because he did not own wetland. One time, he saw a gathering of farmers on the wetland, who were discussing that Pearl had bought the wetland from the government, and was giving farmers 'some sort of appreciation for having taken care of the land all these years', this appreciation was 350 000 shilling per acre. At the time of the actual selling, he was invited to the house of the councilor (a female councilor who was married to a man in the village), where the transactions took place. They told him he should be a witness of everything, although he still did not really understand what was going on. Some villagers still refused to sell, others approached him for advice. He would advise them not to sell, 'as land is the only source of income for us farmers'. However, most farmers did sell and indirectly made each other sell. For example 'two persons at both ends of a line had sold, then the ones in between could not really refuse to sell their land as well'. So in the end, he accepted that his villagers were selling off land. According to him, the promised amount of 350 000 shilling was paid to farmers, 'there was no cheating on that'. However, he does not know what the contract states, as it was written in English. This



chairman keeps all the signed contracts of the farmers from his village, and allowed us to take a picture of one.

Another issues was mentioned concerning the measurements of the plots. The representatives from Pearl had a 'measurement computer' with them to measure the size of each plot. However, farmers argue that these measurement were false and undervalued the true size of their plot. As the villagers do not know how this computer functions, they do not trust its outcome. According to our interviewee, some farmers were 'honestly' convinced the size of their plot was bigger, others 'just wanted more money' (personal field notes).

#### FALSE PROMISES?

Besides threats, lots of nice promises were made as well to convince farmers to give up their land. The promises that were made to the farmers included the construction of roads, schools, a hospital, houses for elderly and a mosque. Then, electricity and water supply were promised and inputs and financial support to develop and improve their rice cultivation practices and increase farmers' incomes from rice production. Farmers were promised that they would still be allowed to cultivate the land after they sold it to Pearl, the rice they would cultivate on it should then be sold to Pearl. Farmers had hoped that Pearl would help them with providing inputs including financial support, seeds, fertilizers, pesticides, gumboots, pay them a high price for their produce and provide jobs.

However, currently, only ten families per village are allowed to produce rice for Pearl on land assigned to them, these farmers are called 'sharecroppers' by the villagers. Besides, according to the interviewed farmers, non of the above mentioned promises have been kept. On the contrary Pearl even makes things worse according to them, as they for example destroy roads with their large vehicles. According to Pearl management, farmers are impatient.

*'They do not understand because they don't see anything yet. If the company works out well, we will build them roads, hospitals, and schools in the future, it takes time however to get a company running. Farmers are just after their own stomachs, they do not want to see the company grow' (12-2-2013).*

The farmers were told that Pearl would work together with them, implying that after selling off their land, farmers would still be allowed to use it to produce for Pearl. The first season, farmers did. The second season, after farmers already had prepared the land and planted the rice, they were forced to leave. Pearl took all the produce and did not pay farmers anything. From that time on, they have not been allowed to work on their lands anymore, according to the local chairman of one of the local villages ( Kalalu A). Ebong, describes the situation from his perspective, as he worked at Pearl for the Ministry of Agriculture for three years. The outgrowers were given seeds and in return had to bring 50% of their produce to Pearl. Pearl would in return cover the costs of ploughing land, management costs and the costs for renting the land, as Pearl had bought the land from the government. However, farmers were not honoring the agreement and instead sold all the produce to other traders. According to Ebong, farmers did not realize that the services Pearl would provide, were not free services provided by government, but services that were to be extracted from the price paid for the produce. For that reason, they felt the price Pearl would pay for their produce was too low. Ebong does acknowledge that the price Pearl offered at the time for farmers produce was very low and not fair.

#### VILLAGES AND FARMERS WHICH DID NOT SELL THEIR LAND

Most villagers from the villages that sold land to Pearl, did sell their land. For example in Butyabule, eight out of 10 villagers sold their wetland to Pearl, according to our focus group attendees. Not all farmers owned wetland in 'the bigger part of the wetland', as it was termed by the communities, which Pearl was interested in buying. These farmers, who only have 'small small plots in the swampy area', have thus not been approached by Pearl. The minority of farmers who did not sell were either prepared,

as they were already informed by experiences from farmers in other villages or by local councilors, or just very determined to not give up valuable land for such a low price. For example, farmers argued that families who had a relative or family member in the city, were better informed and would be advised by this relative not to sell land, as these companies are just threatening farmers, 'but for the rest of us farmers, we did not have this knowledge'. One interviewee, who was a subcounty councilor in 2009, told us that all councilors were called into a meeting, in which the district authorities explained them about Pearl Rice. Hence, as subcounty councilor he consulted meetings in his own village (Namunyumya) as well, and the villagers came to an agreement:

*'We came to the agreement that we would agree to work with Pearl, but only as outgrowers. So when Pearl people came in here we told them we would not sell our land. We offered to be outgrowers. If we could be outgrowers, they could give us inputs, labor, recourses and then we would harvest and sell the produce to them. They would subtract the value of their inputs and would pay us the balance. It would be good, we could offer them land on a lending basis, and they could give us training and inputs, because we have the land, but no capital and they have capital but no land. Selling land is not a good culture, we can lend, but not sell.'* (5-2-2013)

However, they quickly came to realize that 'Pearl people were only after land', they were not interested in working together with the farmers, if farmers were not willing to sell off their land. Only in villages who have sold land, 10 farmers are allowed to sharecrop for Pearl. Farmers from other villages are currently renting land from farmers in Namunyumya, at an increased price, due to the high demand.

Another respondent told us that the LCs who refused to make their villagers sell land to Pearl, were called to the district office, and threatened by local government officials. Despite this, some LCs have up to today refused to let any of their villagers sell land to Pearl.

Farmers not owning wetland themselves, but instead renting from other farmers have also been severely affected by the acquisition of wetland by Pearl. Now that a lot of those wetland owning villagers have sold their land, land has become scarcer. The price of renting one acre of wetland has severely increased and the remaining wetland that is not from Pearl, is located far away. 'Walking over there every day will take me a lot of time'. About thirty families in Butyabule have, according to our interviewee, the same problem.

#### FRUSTRATED FARMERS AND ACTS OF RESISTANCE

The acquisition of land has led to many complains by the farmers and disputes between the communities and Pearl. In one village that we visited, villagers had even lost trust in their village chief, as they feel he should have protected them against Pearl and fear he has been bribed. The village chief tells us:

*'It was difficult and still is, to be the chairman of the village these days. I was not involved in any decision making concerning the selling of wetland to Pearl, I did not even know what was going on in the beginning. These people told the farmers that it had been an initiative of the government authorities to sell land to Pearl, as a local chief, I am also part of the government and farmers were suspecting that I had been part of this conspiracy as well, they figured I must have been bribed as well.'* (11-2-2013)

He does not know what to do about the current situations, and is unsure if local authorities at subcounty and district level will help the deprived farmers, 'they have the capacity to help farmers, but I'm not sure if they will'.

Deprived farmers have been complaining about the unfair land acquisition process and also admit that 'disputes were there'. Their first complaint to, what they call the 'farm manager'. This was a man who had approached the farmers to convince them to sell their land. This man could not however, take their

complains to top management, as he told farmers that they would tell them to forget about the issue, as the deal was already been made and farmers had signed. This was clearly a sensitive issue to discuss, as farmers requested us to turn off our recorder. As a reaction to all the complaints and riots, Pearl people had promised farmers a little more compensation, this promise had never been kept. All deprived farmers went to the offices of local government at subcounty level to take up their complaints, in vain. Subcounty councilors told farmers that there was nothing that could be done, as agreements were signed and photos were taken. They even threatened farmers that in case they would continue complaining and rioting, their uplands would be taken away by the subcounty as well. Farmers were sent off and felt embarrassed. They went to the RDC (Regional District Commissioner) as well, he told them the same thing, farmers had been stupid to sign these agreements, it has been their own fault. They realized that local government at subcounty and district was corrupted and had been bribed by Pearl. Farmers realized there was nothing they could possibly do without help of local government, they are still angry and have become very bitter. This anger and bitterness makes farmers turn violent whenever activities from Pearl negatively impact their communities. With their large vehicles, Pearl workers destroy the roads, which has resulted in communities attacking Pearl workers and vehicles. Another instance concerned the construction by Pearl of some dams near the road which causes a lot of accidents and even resulted in the death of two children, who attempted to catch fish near a dam. Villagers from the surrounding communities gathered and discussed how they should punish Pearl. The local village chiefs, LC1's were present as well. They informed the LC3 (sub-county chief) about these plans, who stopped farmers and promised them he would take care of the issue. However, Pearl has not done anything about it yet. Another attempt to attack Pearl trucks on their way to the fields, has been stopped as well by local village chiefs, as 'it makes no sense to riot, land has been sold, so farmers will have to let Pearl vehicles passing through, as they do not have airplanes to go there'. At the time of the fieldwork, farmers were blocking Pearls plans to construct a road to the fields, to construct the road, some pieces of land, which are not yet been sold to Pearl, need to be cleared. As long as farmers refuse to sell these plots, the road can not be constructed.

Just after we had left the field, a meeting was broadcasted on local television with the district council of Iganga and Pearl management. In this meeting, Pearl management was making their complaints to the district council as they wished to build a factory. However, the local communities were according to Pearl, 'not cooperating', making it impossible for Pearl to construct a factory. At this point, a councilor from the parish (there are different local government levels: village LC1, parish LC2, sub-county LC3, county LC4, district LC5), stood up and started accusing the LC5 of being corrupt, a thief and having contributed to Pearl 'stealing' land from the local farmers. 'You are a thief and you ate money'. Then he turned to the RDC (Regional District Commissioner) and told him he should 'as a commissioner of agriculture first go to the field and see what has been done to the people in the villages'. This accusation to the RDC was partly pointing back to the fact that at the time Pearl started approaching local government and villages to acquire land, another RDC was still in place. This former RDC had even advised farmers to not sell their land. However, this RDC was quickly replaced by the current RDC, who generally keeps quiet. The parish councilor accusing Pearl and the district chief (LC5) was calmed down and most people has just quietly left the meeting. After this meeting, we contacted a local village chief we had interviewed before. He had heard the meeting on the radio, and had immediately mobilized farmers from all affected villages and called them into meetings. They came up with the plan to all sign a petition and send it together with a letter to the LC5 and RDC.

#### ACTIONS TAKEN AFTER FIELDWORK

After the fieldwork for this thesis, Platform for Labour Action (PLA) was informed on the findings. They immediately went to Iganga to check my story based on my observations and interviews. The PLA decided to further investigate the case and provide legal aid to the deprived farmers if enough evidence was to be found. They found that '1800 farmers had been deprived of the use of the swamp by the

company Pearl Rice Ltd.’(email from PLA, 22-7-2013 ‘Update on the Naigombwa Swamp Issue’). Furthermore they found that Pearl had told farmers that they would be selling only swamp land by signing the contract. Swamp land, as opposed to wetland, is most of the time unsuitable for cultivating. However the sale agreements farmers were made to sign, stated that wetland was sold, not swamp. This is fatal fault in the contract was termed by the PLA as ‘mistake to the identity of the subject’, and makes the contract void, as mentioned above. Another accusation PLA made concerned ‘unconscionable bargain’, which implies that one of the negotiating parties is placed at a special disadvantage regarding another and ‘unfair and unconscious advantage is taken of the opportunity created’. The farmers have in this case been placed in a disadvantageous position as they were unable to read the contract and were uninformed about their legal rights.

The PLA has approached the land committee, which has been established by the Uganda president to deal with land issues, however, the PLA found that the committee had temporarily stopped their work and is unsure when their activities will be resumed. The PLA further aims to ‘empower the farmers with knowledge about their land rights to ensure that such unscrupulous dealings do not occur again’. In an email I received from PLA, they stated that ‘of recent the residents have started resisting individuals attempting to visit the community’(22-7-2013). I was unable to found out what exactly was meant by this, however, it seems to me that for some reasons farmers have started to distrust outsiders visiting their communities. Another possibility, which can be regarded as merely speculation from my side, could be that they have been threatened by either Pearl, local government officials or politicians.

#### LAND TITLES

Non of the farmers interviewed for this research carried a land title for the land they cultivate, as all land in these communities is inherited land. As one farmers stated, ‘I do officially own my land, though I do not have a land title’ (7-2-2013). Having a land title is very unusual and has thus far never been needed. However, when asked, most farmers did reply they would like to have a title, as one interviewee stated, ‘in Uganda now, things have changed’ (7-2-2013). The most important reason mentioned was that you need to show that you own something valuable in order to get loans from the bank. ‘The only thing of value we have is land, so a land title is the only thing that can provide us access to loans’ (9-2-2013). Besides, some farmers mentioned that they would feel ‘safe’ with a title, though others still felt that in their communities it is not necessary to have a land title and they are unaware of the importance of a land title. Acquiring a land title is difficult and most farmers do not have any idea how they should process for a title. Some are aware how to get one, but do not have the required amount of money.

*‘I would very much like to have a land title, but it costs 2 million shillings, which I can’t afford. Someone from the village went to the district offices to find out how to get a land title. However, they told him, he should pay them in return for their guidance and help to get him a land title. I went myself to the CAO (.... Agricultural Officer), who told me as well that I should give him money to help me get a title.’(7-2-2013)*

#### 4.2.2. CONTRACT FARMING: ‘SHARECROPPING’

As mentioned, in the villages that sold land to Pearl, ten villagers per village were given the opportunity to ‘sharecrop’ with Pearl, produce rice on Pearls’ land and sell a fixed share of the produce to the company. Whenever interviewees talked about this issue, they became very agitated and clearly expressed their frustration about the fact that only ten families in a village are given the opportunity to produce rice for Pearl. During the first focus group discussion for example, the participating men (women tend to keep more calm), were sitting up straight on the front of their chair, talking through each other, eager to let out all their frustrations. Also the women expressed their disappointment when asked. One elder man was not feeling well, but wanted per se to keep participating in the conversation, he laid down for some minutes and then got up again to take his place and tell us his thoughts on the matter. They felt deceived and villagers are frustrated and angry. Each season, ten farmers are selected

to sharecrop for Pearl. Each farmer, gets 1 acre and one of the 10 farmers is appointed as the chairman of the group. Some are selected each year again, others are replaced by other families after one year. Pearl management explains that farmers are selected based on their performance. If a farmer works well and is able to get the produce that one should be able to get from 1 acre, he is selected again the next season. If a farmer does not perform well, or for example steals some of the produce, he will not be selected again. Pearl is providing farmers with inputs and ploughs the land for them. These efforts will be subtracted from the price Pearl pays farmers for the produce. Some farmers steal produce in the middle of the night, 'they steal because they want to make more money'. Because of this, Pearl has put guards around the fields at harvest time, anyone who steals is 'arrested' and has to hand in the stolen produce. They are not taken to the police though, 'that would not help anything'.

According to Pearl management, the 'sharecroppers' have to sell 50% of the produce to Pearl, and may sell the other 50% to whomever they want. However, most interviewed farmers stated that the sharecroppers have to sell all of the produce to Pearl, and are not even allowed to take a tiny bit with them for home consumption. Other interviewees, from a village which had not sold any land, and was thus not involved in sharecropping with Pearl either, argued that they heard that some sharecroppers, from another village, were allowed to take a small part of the produce with them. Based on the interviews in different villages, I concluded that Pearl's regulations and way of working regarding land acquisition and sharecropping depended on the particular village. The first village that Pearl had approached to acquire land, seemed the worst off. As it was the first village to be approached, the villagers were completely surprised and unprepared. The people in this village probably have, in Pearl's eyes, rather easily sold their land. However, there have been a lot of complaint afterwards, particularly on the amount of compensation. In the other village, where Pearl had offered 450 000 shilling per acre instead of 350 000, people were less willing to sell their land and more difficult to convince. In this same village, the sharecropping arrangements are also somehow a bit more favorable compared to the arrangements made with sharecroppers in the other village.

In some villages, the 10 sharecroppers were appointed swampy land which later turned out unusable due to too much water. The sharecroppers were never appointed another part of land, though they regularly asked for it, and thus are unable to sharecrop for Pearl after all.

Another issue farmers mentioned is the low price they are paid for their produce by Pearl. According to Pearl management, the price is set based on the current market price, of which inputs and labor provided by Pearl and wetness of the produce are subtracted. Farmers argue the price they are paid per bag of rice can even decrease to half of the market price and feel that Pearl makes up reasons to legitimates this, '*they measure your back of produce and it might be 500 kg, then they pay you only for 300 kg, because they tell you the rice is still wet. On top of that they might pay less per kg because they argue the land we cultivate is theirs*' (4-2-2013). The price is set by Pearl and un-negotiable. Besides, payments are often delayed or not paid at all. A farmer who has harvested first, might be paid a week later, some who harvested a bit later, might have to wait for over two months to receive his money. At the time of fieldwork, some sharecroppers were still waiting for their payments, while they had harvested already two months ago. Sharecroppers are usually paid by the chairman of their group, who receives the money from Pearl and has to distribute it amongst the sharecroppers. At harvest season, guards are presents in the fields all the time to make sure farmers do not take any of the produce home and hand over a 100% to Pearl.

Farmers have complaint a lot about the fact that only 10 farmers per village are allowed to sharecrop for Pearl, and the unfavorable conditions. They are still angry, but Pearl has not made any concessions yet. According to the farmers, Pearl has a large turnover of employees, '*the person we talk to today, may be leaving the company tomorrow.*' '*First there was a good manager, where we would go to with our complaints. He used to listen and even came to burials of our family members. Now this person has left*

*and was replaced by another man, he does not care at all about us, and doesn't listen. So now we do not have anyone to talk to anymore (12-2-2013)*' The fact that farmers are only with ten per village, thus not put them in a strong position either. For this reasons, some farmers already refused to continue sharecropping for Pearl during the second season, as they felt conditions were worse and they were not in the position to change them. The group of sharecroppers of Butyabule have made a paper in which they have stated their objectives as a sharecroppers group. The objectives include amongst others, 'to be assisted by the company and visit other farms to get new technologies' and 'to fight against poverty by working together and sharing thoughts'. The implementation of these objectives is still problematic though, as Pearl does not cooperate with the farmers.

Despite the unfavorable circumstances under which the sharecroppers produce for Pearl, most farmers are very eager to sharecrop for Pearl, as it is perceived as 'better than not being able to produce any rice at all'. A lot of farmers are thus disappointed and feel angry. For this reason, Pearl has introduced a sort of fee, of 50 000 shilling, which each sharecropper has to pay for the current season (focus group 1).

It remains to be seen how the investment is going to develop in the future. On Pearls' website, the five villages that, according to this research, have 'sold' land to Pearl, are presented. Under each village the names are listed of 'outgrowers'. This could imply that Pearl perceives the farmers who gave up their wetland to the company as outgrowers of the company. This does not coincide with the current situation in which, according to the interviews with the local communities, only 10 farmers out of each village are allowed to grow rice for Pearl. It is possible, that Pearl is still planning to work with all the people that have sold land as outgrowers in the future. In that case it will depend on the conditions set for outgrowers how what impacts this will have on their livelihoods. On its website Pearl states that in the first three years, 1500ha of its nucleus estate have been put under production, supported by 3000 ha of outgrowers land. They aim at a total production of 60,000 Metric tons by the end of the fifth year, which will be sold 'locally and internationally' (Retrieved from [pearlrice.co.ug](http://pearlrice.co.ug) on 07-02-2014).

#### 4.2.3. LABOR AND EMPLOYMENT CREATION

Only very few locals have been provided with a job, to the disappointment of the communities. The majority of labor and employees at Pearl are from outside regions. *'The first season after farmers had sold their land, they were still allowed to cultivate on the land. The second season, after preparing the land, workers from other regions of the country, mostly Central Uganda, were brought in to continue planting and harvesting. Farmers were chased of the land and gained nothing.'* Another interviewees confirmed that Pearl brings in scheme workers from for example Hoima, *'Pearl people pick workers from outside, for example Hoima, and threat them as slaves. They threat them very very badly, two people from here, who were also workers for Pearl, even died. I really believe they died because of the harsh work, they work all day with just one small break for porridge'* (5-2-2013)

The fact that only very few people from the surrounding communities are employed by Pearl, became clear when we started searching for scheme workers to interview. The 'scheme-workers' village chiefs appointed to us, most of the time turned out to be one of the ten sharecroppers in the village. Scheme workers were very hard to find. We decided to visit Pearl management in their office, to ask if it would be possible for us to talk to some of their scheme workers. They were very hesitant, and told us that at the moment there were no scheme workers in the field, as the season had not yet started. In the end, we did find some of the few villagers who had done some paid work for Pearl. One farmer worked for Pearl after his brother had sold his wetland to Pearl, which they used to use as a whole family. This farmers ended up working for Pearl, as he had no alternative. The only advantage of working at Pearl that was mentioned, is the fact that it is nearby located, it is thus not necessary to leave home to work there, unlike jobs in Kampala or Jinja. Payments are very low according to the interviewees and not always complete. For example, one can work for three weeks and get paid for only two weeks. Besides, they are

not paid promptly and often have to wait for over a month to receive their payments. Some field supervisors are also from one of the local communities, and might thus be familiar with some of the workers in the field. Some interviewees stated that at times of payments, which are done by the field supervisor, some workers would get paid and others not. Interviewees are not sure why, but some figure that the supervisor might not receive enough money from Pearl to pay all of the workers. As it is very likely that the supervisor either gets too less money from Pearl, or keeps part of the received money himself, the supervisor might favor some of field workers, who could be friends or relatives, and not others. Farmers complain to their supervisors about payments, they are usually told that decisions on payments are made at management level, supervisors can not decide on that and are unable to approach management. Sometimes a supervisors might even fire a field worker if he keeps complaining.

Some of the payments mentioned are 40 000 shilling for working on 1 acre for 1 week. This work involved a whole family. Another interviewee states that for weeding or planting one acre she is supposed to get 30 000 shillings. However, she is usually only paid 10 000 or 20 000. Another one is paid 3000 shilling per day of work. One interviewee mentioned that occasionally, when payments are delayed or not paid, workers strike, going to the fields of the company they are supposed to work on, but then refuse to work, a 'sit down' strike, to demand for the money. Usually, management does promise to pay and in most cases then brings half of the amount of money the workers are supposed to get.

Besides casual field labor from Central Ugandan regions, Pearl also employs Kenyan's, mostly in engineer of management functions. The field office director at the time of field work was a Kenyan. The other farm managers were Ugandans. According to our interviewee, the farm management favors engineers. These engineers are usually sent by the managing director (A. Hassan, based in Kampala), from Kampala, and are mostly Kenyans. *'Just recently, they brought in two drivers from Kenya. The supervisor only listens to those engineers, but not to the workers from this area' (13-2-2013).*

#### 4.2.4. RICE GROWING DEVELOPMENTS AND PRACTICES

According to all respondents, rice generates most income from all crops they used to grow. Land in the area used to be very fertile, as already mentioned above by a respondent, 'land at the time of my grandparents was still very fertile'. Another respondents of 47 years old, mentioned that his parents came to this area from Matumbe district, because land here was very fertile, 'everything would easily grow here'. His parents bought land when they came here, which he inherited. His parents already cultivated rice before he was born, only for house consumption though, not as a cashcrop. Rice has been cultivated in this area since 1960, in the beginning only for home consumption. They cultivated rice in upland and wetland, as sometimes the water level in the wetlands was too much to grow rice. In drier periods, upland was unsuitable to grow rice. The respondent himself started to grow rice in 1985. By 1995, people from the village (Kalalu) build themselves a sort of drainage system based on the experiences of a man from the village who had been working at Kibimba scheme for a while. When he came back, he started to manage his rice field and the water like he saw it was done at Kibimba. Other villagers started copying him. It has not resulted in a collective irrigation/drainage system, each farmer manages his own plot. This has been copied by some other villages as well, who also owned plot in the smaller swampy part of the wetland. It was not used by the villages in which inhabitant lately sold their wetland, as these villagers owned bigger plots of wetland, which are unsuitable for this drainage system.

Indeed, respondents from villages which sold land state that since they started growing rice, they have never had a drainage or irrigation system. Before rice was cultivated as a cash crop, farmers produced coffee and/or cotton as cash crops. Both cotton and coffee became less profitable around 1985. In the 1980's, with market liberalizations, the Ugandan government stopped supporting the production of coffee and the state supported coffee co-operatives and coffee marketing board died. At this point, farmers instead turned to rice cultivation to generate cash. The area was very suitable for rice

production and government support is less needed for rice, as rice is both food and cash crop in the region, hence farmers can market their rice locally (coffee and cotton are not consumed locally, and thus need outside markets).

The farmers use a variety of seeds and either keep their own varieties or buy them from fellow farmers or even 'shops'. Most of the seeds come from 'around Kibimba scheme', once in a while people visit the area around Kibimba, and bring back seeds. Farmers try out the varieties and explore which one yields best. Sometimes it is needed to change to another variety since the soil uses its fertility or diseases destroy the crop, if one variety is too long grown on the same plot. Different varieties are also used as each variety has its own specialties, one yields much, the other can be sold at a higher price et cetera.

NAADS (National Agricultural Advisory Services) has been present in the area and has occasionally introduced rice seed varieties and fertilizers and pesticides. They take the fertilizers and pesticides to a model farmer, the other farmers can learn from this model farmer. Farmers have to buy the fertilizers and pesticides from NAADS, however, most of them can not afford this, in one village around ten out of 300 farming families could afford to buy. The perceptions of NAADS vary greatly, some interviewees are positive, others remark that NAADS has no budget to help all farmers, thus only a few benefit. Besides, NAADS used to personally come to farmers gardens to give them advice, currently, according to a respondent, 'NAADS officials are just after money, they leave their offices in the morning and come to the villages to get a stamp from the village chief. They are only interested in getting this stamp, as they receive their money by showing the stamp'. NAADS has also attempted to form groups of farmers who together would raise a cow or grow a seedling and then share the benefits (seeds, mild/offspring of the cow), however these groups failed because 'NAADS brought bad seeds, who were too old and not usable anymore, or a bad breed'.

The major share of the rice produced at Pearls' fields, does not end up in the hands or mouths of local community members. Except for the few sharecroppers from the villages who have been allowed to take a small share of the produce with them, plus the small amounts that are 'smuggled' to their homes by farmers working or sharecropping for Pearl. The rice instead is marketed as a higher quality product, and thus not affordable for the average local farmer. It is sold unpackaged at the field office in Iganga, and packaged rice is sold in a supermarket in Kampala.



### 4.3. DOHO RICE IRRIGATION SCHEME, 'THE MOTHER OF BUTALEJA'

The Doho irrigation scheme in Eastern Uganda started off as the younger brother of the Kibimba scheme. The Kibimba scheme was constructed in 1966 as a rice technology development scheme followed by the construction of the Doho scheme in 1971, aimed at seed multiplication and popularization of rice production (Bayite 2011). Unlike Kibimba, which was privatized in 1995, Doho has always remained a government owned scheme, with smallholder farmers as tenants of the scheme. The Kibimba scheme, currently in hands of the company Tilda, has turned into a productive and economically profitable scheme. Doho on the other hand, never took off as a successful commercial rice irrigation scheme. The development of the scheme and re-organizational impacts this has had on local agricultural practices are described below. The story ends with a rather large question mark, as the scheme is currently in a phase of transition and, I would argue, a phase of confusion. Based on past developments and the current situation in the region, country and continent, I will argue at the end of the chapter, that privatization of the scheme could very well be a future scenario and that a risk of land and water grab should be considered. Exploring Doho, as a scheme which is not privatized, in comparison with the other two cases, will give more insights in the conditions which hamper or facilitate privatization and land/water grabs and the different impacts on rural livelihoods.

#### 4.3.1. STRUCTURE AND CREATION OF THE SCHEME

In 1976, having created the Kibimba Rice Scheme, the Chinese government started constructing another irrigation scheme, the Doho Rice Irrigation Scheme (DRS). Construction of the scheme was completed in 1989. The DRS is the largest irrigation scheme in Uganda, covering 1000 ha of paddy fields where over 4000 farmers cultivate rice. Most of these farmers live in nearby villages and cultivate various crops on their upland fields besides rice on their wetland plot in the DRS. Since a few decades, these farmers have been engaged in double cropping thanks to the bimodal rainfall pattern in this region

The scheme consists of 13 blocks, irrigated with water from river Manafwa through a main channel, sub channels going to each block and tertiary channels providing water to strips, of which there are 5 to 15 within one block. Each strip consists of 20 to 30 plots. The tertiary drainage channel of one strip, is the tertiary irrigation channel for the next. Through the tertiary and sub drainage channels, drainage water is collected into the main drainage channel to end up again in river Manafwa.

Downstream, an area of 200 ha is cultivated and informally, collectively and voluntarily maintained by a group of farmers, which are called outgrowers. They use the drainage water from the DRS with channels that have similar structures as those in DRS (Nakano 2010: 5).

Due to siltation of the channels and other technical problems with the irrigation structure mainly caused by major floods of the river Manafwa, the scheme was under rehabilitation at the time this research was conducted. The rehabilitation was commissioned by the Ministry of Water and Environment. This rehabilitation process started in 2009 and was completed October 2013. Meanwhile, all activities in the scheme have been halted. Production of paddy rice in the scheme is to double from 6500 to 13 000 kg per milled rice per annum (Nampala 2013). As mentioned in the introduction, the management of the scheme is in hands of two bodies, the technical team consisting of government staff and the Rice Farmers Co-operative Society, which used to be the Doho Rice Scheme Farmers' Association until it was converted into a co-operative at the end of the rehabilitation. The government does not financially support the scheme any more, except for the salaries of the technical team staff

members and the financing of the rehabilitation of the scheme. Of the technical team staff members, only two staff members are still in place, the Mechanization Officer and the Officer in charge (OC), who at the same time now fulfills the position of Irrigation Officer and Production Officer. The other staff members have either died or retired and the government has not recruited new employees to replace them.

As the previous board of DORSEFA was said to be incapable of managing the scheme and representing the farmers, the OC has taken up the role of overall manager of the scheme, including hosting and keeping contact with numerous visitors, like international development organizations, researchers and school classes, for whom the scheme is a topic discussed during school classes. The OC has housed himself and his family in one of the buildings constructed by the Chinese as offices. The block councils, block chairmen and strip fell under DORSEFA. DORSEFA was formed on advice of the government after the Chinese who constructed and had managed the scheme had left, DORSEFA will be extensively discussed in section 5 of this chapter. As this research was conducted just before DORSEFA has been re-organized into a cooperative, the overview below visualizes the management structure of DRS at the time DORSEFA was still in place. As this research was completed in March 2013, and the Rice Farmers Cooperative Society had just been officially registered as a Farmers' Cooperative Society by November 2013 (Nampala 2013), the information in this thesis refers to the time during which DORSEFA was still in place.

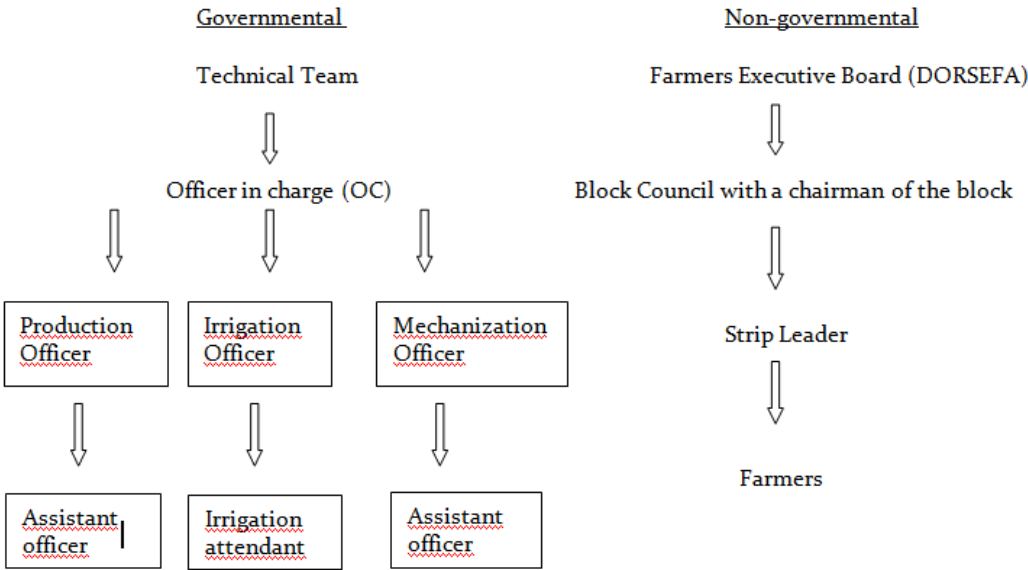


FIGURE 5, MANAGEMENT STRUCTURE AT DRS AT TIME OF RESEARCH

#### 4.3.2. LAND AND WATER ACQUISITION, LAND TENURE AND TITLES

##### LAND ACQUISITION FOR IRRIGATION DEVELOPMENT AND RE-LOCATION TO FARMERS

As described in chapter 3, initial users of the wetland were made to leave by the Ugandan Government in order to construct the irrigation scheme. After completion, plots were allocated to individual tenants. Some farmers left a considerable amount of wetland as they for example used to cultivate 20 or 30 acres in the wetlands, and were allocated only 1 or 2 after completion of the scheme. There are thus some that still feel a little regret about the loss of their plot of land at the time, however, as they put it, the time for complaining has passed.

Before construction of the scheme, the land was used to grow mostly other crops including cotton and millet. People at the time grew a little rice mostly for home consumption, both upland and wetland. Serious cultivation of rice only started after construction of the scheme, farmers who used to grow upland rice, changed to wetland rice cultivation.

After the irrigation structures were put in place, the land was reallocated to the farmers again in 1985. An allocation committee of 15 members was formed, including local counselors from village, parish and subcounty levels and some technical staff members. Farmers could apply for a plot at the subcounty. The subcounty then presented the applications to the Allocation Committee. In the application form farmers had to note down the number of wives and children they had to provide for and their level of education. A farmer who had to provide for a large number of wives and children, would be allocated a larger plot compared to farmers with less 'responsibilities' and capacity, as more wives and children imply more available labor to cultivate the land. However, in practice, this process of allocation went far from fair, according to the current OC, who became part of the allocation committee himself. Farmers related to any of the committee members, or the richer farmers being able to pay bribes, would get the bigger plots, 'there was a lot of corruption, a committee member would find any person that was related to him in any way more suitable'. 'Up to now this is still a problem', farmers still feel resentment towards the allocation committee. There are no open disputes or problems however, farmers have left it, as the decision has been made and can not be changed anymore. As there were many farmers who applied for a plot in the scheme, even coming from far, land was not enough and the majority was left out.

The interviewed farmers have divided thoughts about the land allocation process, some are content with their plot of land and think the allocation process went fair, others confirm there have been bribes, which is the reason why some farmers have bigger plots than others. The son of a well-known businessman in the area, confessed his father was allocated 20 acres of land, 'because he had a business mind', whereas most people were just given 1 or 2. According to him, people were given the amount of acres they asked for, if they showed to be capable and motivated to cultivate the requested amount of acres, for example by means of a business plan. According to him, many people initially feared to take a plot in the scheme, although many farmers, even from further distances, came to apply for a plot. People feared as they were uncertain of the plans of the government. They feared being turned into laborers without control over the produce. Farmers gained trust, as they saw the scheme turn into a farmers scheme, not at estate farm, with farmers having full control over their produce. He stated that a farmers scheme is much more beneficial for farmers compared to an estate farm. In a farmers scheme, farmers themselves are the beneficiaries instead of all profits going to the government or investor owning the scheme. Other farmers interviewed agreed that farmers should stay in control of the land and produce, however, a lot of them did suggest government should keep supporting the scheme with finance and technical expertise as farmers are incapable and lack the financial means to for example repair broken irrigation structures by themselves.

Farmers were allocated plots on a 99-years lease basis. Currently, most farmers cultivating rice in the scheme are descendants of the former plot owner or have either rented or bought a plot from a farmer who used to own one in the scheme and sold it to for example pay of depths or school fees. All farmers who acquired a plot in DRS were officially registered and received a proof of ownership. Not to be mistaken for a land title, as the official title still is with the government. Most farmers indicate to know that the official land title should be with the government, though they are not completely sure about it. Farmers on DRS can thus be perceived as the tenants of their plot, although they are not to pay any rent, besides in the form of water fees.

I would argue that the land allocation at Doho has been a mix of informal and formal allocation processes. Formal as it was initiated by government and executed by local government officials and technical, government irrigation staff. However, political and social motives including corruption, bribes and patronage, have been very influential in the allocation process, which are characteristic for informal land allocation processes (Bird 1983).

#### LAND SECURITY AND UPLAND PLOTS AS 'SAFETY NET'

The memory of the dubious land allocation process and the phase of transition in which the scheme currently finds itself due to the rehabilitation process, causes some unrest among farmers. Some feel insecure about the future of the scheme and their plot in it. For example, rumors are being spread saying that the government is thinking about re-allocating plots, so that everyone would get an equal amount of land in the scheme. This would, according to the OC, lead to conflicts, as some farmers paid for their acres, in the form of bribes, 'it is a too political issue'. Although it is not an open dispute yet, 'there is a general fear among farmers, a threat, it is something that is deep within farmers'. The government came up with this suggestion as some problems have arisen concerning farmers owning bigger or more plots. These farmers tend to monopolize the process of drying rice, as they occupy the whole drying yard, most of them do not pay the irrigation fees and never show up to do communal work. These issues will be further discussed in the section on 'bylaws'.

In general, most farmers are aware Doho land is hold in trust by the government and most of them are confident in the governments good intentions and trust the land will be kept for them to cultivate. This has been promised, according to an interviewee by 'the president and Minister of Agriculture' (2-3-2013), who ensured farmers that the land will be handed back to them after the rehabilitation of the scheme and that the farmers in the scheme, will receive a document confirming that the land belongs to them. Next to this, they have been promised, 'two slashes, an excavator, three motorbikes and three bicycles to maintain the scheme. Lastly, the government has promised to keep supporting the scheme. Other farmers have heard rumors telling the government would hand over control and management of the scheme to the farmers after rehabilitation, thereby withdrawing financial and technical support. On the other hand they feel government will not just step out, as they already 'invested billions of shilling into the scheme', and therefore will not give up the scheme.

One interviewee mentioned that one year ago, the current board of DORSEFA tried to encroach on land outside the scheme. This land belongs to 5 different clans and cultivated by the local community members, some also own a plot in DRS. The farmers refused this and eventually the LC5 intervened and solved the conflict. For this reason, this interviewee is unhappy with the current board of DORSEFA.

As can be noted, a lot of speculation is taking place among farmers on the near future of the scheme. Based on interviews conducted with the OC, local government and staff of a rice development project, the prevailing scenario at the moment is the one in which DORSEFA will be turned into a rice farmer co-operative. This co-operative will control and manage the scheme and act as an institution through which NGO's and international organizations can financially and technical support the rice farmers and functioning of the scheme. In this scenario the government will withdraw and hand ownership over to the farmers co-operative. This will be further discussed in section 5 of this chapter.

Although the rehabilitation of the scheme has caused severe problems and challenges to the users of the scheme, the fact that all have access to land outside the DRS as well has appeared to be a crucial safety net. Having lost 1 year and 3 months of rice growing now, resulted in the 'problem of poverty', many children are unable to attend school as their parents can no longer afford their school fees and food and nutrition security has decreased, some interviewees even talk of a 'famine'. Depending on the amount of land farmers have access to outside the DRS scheme, some can cope better than others. The average amount of land among interviewed farmers was 5 acres, of which 2.5 acres were wetland and 1.5 acres of the total amount of wetland located in the DRS. Crops that households produced besides rice included maize, millet, beans, soy beans, sweet potatoes, cassava, sorghum, banana's (Matooke) and on interviewee mentioned groundnuts. Most farmers indicated that besides rice, they normally do not sell the other crops they produce, these are mostly for home consumption, only occasionally surplus produce is sold. Without income from rice production, access to land is crucial for their survival, as most of them do not have any other sources of (off farm) income. One farmer indicated that at the beginning of the rehabilitation, the technical staff had called a meeting and advised farmers to take up alternatives like oranges and mango tree growing, and raising goats and cows, in order to overcome the rehabilitation period. However, among the farmers interviewed, only one interviewee indicated to have taken up this advice.

#### LAND TITLES

Land titles are very uncommon among the general peasants in the area. Concerning upland plots, of the 30 farmers interviewed, 1 farmer and rice miller was the son of a man holding a land title. The father of the rice miller is the before mentioned business man who received 20 acres in the DRS. He received a title from the government for 180 acres of wetland just outside the scheme, outgrower land. According to the rice miller, there are two more businessmen who officially own a large piece of wetland just outside the DRS, 400 and 350 acres respectively. These land titles were acquired as a result of the construction of DRS. When the government surveyed land in preparation of constructing the scheme, they came across these three businesses located in the wetlands. As they observed these were successful businesses, they decided to not include them in the scheme, and advised the owners to acquire an official title. His father's farm, being located just outside the scheme, has been able to benefit from the irrigation structure put in place as well, by tapping of water from the drainage channel of DRS, as more outgrowers tend to do. His father rented out a small part of his land and used the income to construct his own irrigation system. They used to grow sugarcane, but turned to rice after the floods of river Manafwa. Recently a conflict arose between his father and outgrower farmers, who encroached on his fathers' land. His father came from another region and bought this land from an old man. Back then, the farmers in the area had not imagined that that land, and rice growing, would turn out so profitable. When they realized the value of his father's land, they turned jealous. Encouraged and led by a politician looking for votes, people started encroaching on his father's land. The solution proposed implies to do include this land in the DRS, after the government having compensated the family. By including the land in the DRS it can be allocated again to 'community members', which includes the family itself. In this way they hope the land, or part of it will indirectly be allocated again to them, thereby keeping it under their use.

#### 4.3.3. RICE GROWING DEVELOPMENTS

In the 1940's, Ugandan farmers started to cultivate rice, as they did in Doho. Although the wetlands were already used to grow some rice before the scheme was constructed, serious cultivation of rice only started after the irrigation structure was put in place. Currently, practically all households in the surrounding communities are involved in rice cultivation.

After the allocation of scheme land to farmers, farmers received instruction and trainings by the Chinese experts on growing rice in the scheme. Farmers talked positively about the Chinese people, they were perceived as being knowledgeable and kind, during their presence the yields were high. According to them, the Chinese were always present in the fields to monitor and constantly regulate water flows. When they left, the scheme quickly collapsed, as the technical team was not able to successfully take over and manage the irrigation structures. The Chinese introduced suitable seed varieties and the right techniques for successful cultivation. Farmers were taught how to prepare nursery beds, how to build ridges, harvest quickly and were introduced to machines for harvesting. These machines quickly got broken after the Chinese left, and could not be repaired as the material was Chinese and there were no spare parts left behind.

All farmers indicated that rice has been their main or only source of income, until the rehabilitation halted the production of rice. The rehabilitation has 'brought the problem of poverty', farmers lost their main source of income leading to various problems including a lack of money to pay school fees and a poorer diet. This indicates the importance of the scheme to farmers livelihoods and their dependence on it. They use to call the scheme, 'the mother of Butaleja' and indicate their impatience for the scheme to open again, 'we just want to grow rice'. In the last week of the research, the first block was opened again, as rehabilitation work was finishing. This was celebrated by women dancing around, singing, laughing shouting and doing their laundry in the irrigation channels, which are probably not meant for doing laundry.

Most interviewees indicated rice to be both a cash and a food crop. They keep part of the produce for home consumption, and part of it is sold. The rice is sold through middlemen, who come to the area at harvest time to take farmers produce to traders in Mbale or even Kampala. Farmers do not speak positively about middlemen, according to them they take advantage of the farmers and lie about the actual market price of rice, they might pay 60 000 up to 80 000 for a bag of 100 kg of rice, while the market price lies at 1800-2000 shilling (in depth rice miller). Part of the problem is that farmers still sell individually, which does not give them a collective bargaining power. The OC hopes that by turning DORSEFA into a co-operative whereby farmers collectively sell their produce immediately to traders, this problem will be solved. Farmers (FG<sub>1</sub>) also indicated that some farmers borrow money from middlemen at the beginning of the season, as they lack capital to invest in rice farming. After harvest, the middlemen then decide the price they pay for the farmers produce, as they have already lend them money.

#### *Japanese International Cooperation Association (JICA)*

In 2003 the Japanese International Cooperation Association (JICA) started to get involved in the DRS. They provided trainings and took some farmers to a training centre in Tanzania (Kilimanjaro Agricultural Training Center) for more intensive training on rice cultivation techniques. The Japanese tried to introduce planting in lines to farmers producing in DRS. However this attempt eventually failed due to a combination of circumstances farmers mentioned in the interviews. Initially farmers adopted the new technique, according to the OC, a group of farmers refused to adopt the technique, arguing that it was labor intensive, costly and would not increase yields. Among these farmers were members of the board of DORSEFA, they discouraged farmers to adopt the technique. Most farmers were convinced and indeed stopped using planting in lines. It is said that discouraging farmers to plant in lines was a political act by the current chairman of DORSEFA, who used it in search for votes as he run for a position in a local political party. According to some, who were not discouraged by the DORSEFA chairman, the problem of lower yields was not due to the new technique of planting in lines, but was caused by floods. JICA had plans to build a rice research center at Doho, however, they changed their minds after being disappointed by farmers not adopting planting in lines, and have instead build the rice research center somewhere else. Later farmers realized they might have made a mistake not adopting

planting in lines, when they were better sensitized on the benefits of the technique. Today, some even accuse the board of DORSEFA from discouraging them, as a result some board members do not show up at meetings anymore 'out of fear' (OC). Most interviewees indeed state that now they are aware of the benefits of planting in lines, mainly because of sensitization by the technical staff, they are determined to adopt this technique after the rehabilitation. Planting in lines has now been set as a condition by the technical staff to grow rice in DRS, 'all farmers must adopt planting in lines' (OC). The benefits that are mentioned are easier weeding, the possibility of weeding with machines and eventually higher yields.

### *Drying and milling*

Initially farmers used to dry and store rice at their homes or in the streets. Today however, farmers bring their wet produce to millers and expect them to provide drying provisions, yards, tarpoline or 'cavera's' (plastics to put the rice on). Several reasons for this are mentioned. Farmers lack space at home, they do not want to show their relatives the amount of rice they have harvested, as relatives would then start to request for a portion of the harvest. It is also rendered more secure and better protected against thieves, if rice is stolen, it is now the millers responsibility. If a miller refuses or is unable to provide these things, farmers will just go to another one. At the beginning of the harvest, farmers request loans from millers or buyers, as mentioned before. As one miller states, 'the problem with farmers is, that they don't have money', they need a loan to arrange facilities for harvesting including transport and cavera's. These loan requests are perceived as a burden by millers, as one of them stated, 'it even causes me headaches'. Apart from these financial burdens, the prices of machinery spare parts have gone up too according to the millers. Farmers have divided opinions on the milling capacity in the area, some feel there are not enough mills and farmers have to wait long time in harvest season to get their rice milled. Others feel there are enough mills in the area, one miller even talked about 'competition' between millers. Then it is indicated that the available mills are poor in quality and most operators untrained. As a result, the rice gets broken, losing market value. One miller, the son of the above mentioned businessman, revealed his entrepreneurial plans for the future, which implied buying a grading and packaging machine, so he could make his own brand of rice. He would buy paddy rice from farmers, which would benefit them as well, as they would save the costs of milling and grading. The business would also create employment opportunities. However, at the moment, he lacks capital. He owns 4 mills, in different villages, milling rice and maize. He stopped milling maize in this village (Doho) as the turnover was too little, rice appeared more profitable. He started running his machines on Diesel, but this causes machines to breakdown all the time. He then applied for electricity and got a line from the former Chinese headquarters up to his mill, which is located across the street from the headquarters. Power is expensive though and not available everywhere, as the other miller has not access to power and constantly has to deal with broken machine parts because of Diesel use.

### *Seeds*

Farmers cultivating rice in DRS use modern seed varieties (MV's) or cross-bred varieties between local varieties and the MV's. These MV's, development by the International Rice Research Institute (IRRI) in the Phillipines, have been introduced by a Chinese aid agency at the time of construction of the scheme. Farmers indicate they acquire the seeds from other farmers or keep seeds for the next seeding, sometimes seeds are handed out by technical staff. These seeds are brought to DRS by farmers who went for trainings in Tanzania, or by government who occasionally provides subsidized seeds. All farmers in DRS have to use varieties that yield the same height and since some time varieties are changed every season to tackle the problem of a loss of soil fertility. The provision of modern seed varieties might lead to a loss of local seed varieties in the future.

Pesticides were introduced in 1987 by the Chinese, when rice diseases increased in the scheme, they spray with Booster and Sharper. Fertilizers were introduced at the same time, urea and NPK. Farmers only spray in case they observe a problem or disease, and use fertilizers if they can afford to do so.

In general farmers produce and sell their produce individually, fertilizers and sprays are also purchased independently. Within a household, husband and wife might even grow and market individually from each other.

#### 4.3.4. MANAGING THE SCHEME

Unlike Kibimba, which is strictly and efficiently managed by the company Tilda, management of the Doho Rice irrigation scheme has been complex. The scheme has been managed by technical government staff, the technical team, in cooperation with DORSEFA, the farmers' association. However, this type of management has not proven to be efficient, due to a combination of factors discussed below. For this reason, government has recently transformed DORSEFA into a cooperative, the Rice Farmers' Cooperative Society, which is supposed to manage the scheme in the future without further assistance of the government. To understand the current situation at Doho and possible scenarios for its future, the developments of management at Doho and the problems that were faced over time will be discussed, starting with the creation of DORSEFA. Most of the information below is based on the time before the scheme was being rehabilitated, as practically all activities in the scheme have been halted in the rehabilitation period. Information on the functioning of the cooperative is not included in this thesis, as it was not in place yet at the time fieldwork was conducted.

#### DORSEFA

When the Chinese left, only the technical officers in place, who were employed by the Ugandan government, stayed. Even the OC (Officer in Charge) at the time left and the irrigation officer (the current OC) took up his position. These technical officers could not effectively manage the scheme, as the government reduced their support to just paying their salaries. The technical officers thus had no funds to manage the scheme. The Regional District Commissioner (RDC) at the time, realized the scheme was breaking down and advised the farmers of DRS to form a Management Committee. This Management Committee could then collect a little money from all farmers growing in DRS, in the form of irrigation fees, that could be used to manage the scheme. This Management Committee was later turned into Doho Rice Scheme Farmers Association (DORSEFA). However, from the beginning, this Management Committee received little support from farmers, 'it was difficult to convince farmers', from 2000 to 2012 DORSEFA officially counted only 800 members out of the 3400 farmers having a plot in the scheme. Because most farmers, either member or non-member, failed to pay irrigation fees, there was still no money to clear the channels of the scheme. At some point the river Manafwa changed course because sand had blocked the course of the river, which led to floods and broken irrigation structures. Because the irrigation structures did not work properly anymore, many farmers were unable to grow rice, and therefore also failed completely to pay irrigation fees. Only some farmers who were growing in the still functioning areas paid irrigation fees.

Since the rehabilitation, more and more farmers have become member of DORSEFA, as the government has promised to hand over the scheme to the farmers, only if they are getting organized into a large, profit making organization which can manage itself, a co-operative. This has been advised by the consultant that was hired by government to explore options for improved management of the scheme. Therefore it has been set as a precondition that after the rehabilitation, all farmers growing in DRS must be registered member of DORSEFA/the Rice Farmers' Cooperative Society. Almost half of the farmers growing in DRS had registered at the time of the research, others however, still struggled to pay the requested entry fee. The District Commercial Officer will help them to create a co-operative, according to the OC.



DORSEFA/ the cooperative is supposed to manage all farmers growing in the scheme, either members of the association or non members. The entry fee that needed to be paid to join DORSEFA should not be mistaken for irrigation fees, which have to be paid by all farmers in the scheme. DORSEFA was responsible for collecting the fees. The fees were supposed to be spend on maintaining the channels and structure of the scheme, which includes desilting the channels. Both DORSEFA and the technical team were supposed to take care of the scheme structures and clearance of the channels. However, the technical team had no funds of itself, but had to apply for money at DORSEFA, they thus needed to co-operate. This has been a problem, especially with the last board of DORSEFA, as they have been financially completely unaccountable, nobody knows where the collected irrigation fees and the entry fees have been spend on. According to the OC, the biggest problem with the last board was a lack of education of the board members, specifically the chairman and secretary. The last chairman for example was not dedicated, he did not even participate in workshops that were organized for the farmers of DRS and was unable to speak in public. The last chairman, according to him, was elected by farmers because he convinced farmers that the previous board was 'eating their money'. Another reason mentioned why farmers elected a chairman, who has appeared to be incapable of managing DORSEFA, is that farmers felt more secure electing an 'uneducated' person, which they feel familiar too. Such an uneducated person will not have the capabilities to get into contact with powerful people, whom the farmers fear, as they might get the idea of buying and privatizing the scheme.

The OC hopes that the co-operative will turn out successful, as he fears the scheme might be privatized if the co-operative fails, 'sold out by the government to a private investor, it is very possible'.

Additionally, there was a Disciplinary Committee in place. In the past, each block had its own disciplinary committee to resolve conflicts, later they came together and formed one committee. The committee worked under DORSEFA and reported to DORSEFA board, but they could work independently and solve problems independent from the DORSEFA board. Members came from different blocks, they were elected, eleven in total of which 4 are women. Everyone in the scheme could report a problem to the committee. Every person who came to report a case or conflict paid 20 000 shilling (a kind of lawyer system), the person who won the case, if it was the one who reported it and paid 20 000, would get this money back, he would be refunded. For some cases no money would be charged, for example criminal cases, these would just be reported to the police. The money that left would be shared among the members of the Disciplinary Committee. This system is the same system as is being practiced in villages, in cases villagers report problems or conflicts to their local village chief. Most problems or conflicts that have been reported, were solved by the committee. In some cases, committee members were related to a person involved in the reported problem or conflict. As they would then be biased, such cases would be forwarded to the board of DORSEFA.

#### TECHNICAL TEAM

The technical team is employed by the government. As mentioned before, currently only two staff members are left, the OC, who at the same time has taken the place of irrigation and production officer, and the mechanization officer. The mechanization officer mainly deals with the rehabilitation at the moment. The OC reveals the many difficulties he faces in his work, including the difficult relationship he experienced with the last board of DORSEFA. Unlike the board of 2003-2005, which the OC terms as 'fairly good', the OC faced many problems with its last board. Since the OC does not have access to any funds, he had to request for money at DORSEFA if he wished to implement a 'workplan'. However, the last board would be reluctant to provide him with funds. After being elected in 2009, the last board started collecting irrigation fees from the farmers, but found farmers complaining and stopped collecting fees after having passed three blocks in the scheme. Since that time, no fees have been collected anymore, and the little money that had been collected has disappeared, no one from the last board is able to account for it. Due to the rehabilitation, elections for the new board of the co-operative,

were postponed until after the rehabilitation and organized and overseen, according to the OC, by the district government instead. In order to prevent unsuitable, uneducated people from being elected, everyone who wanted to run for board member has first been screened by the district.

#### BLOCK AND STRIP LEADERS

Block leaders have been elected by the farmers in a block, 'anyone who is capable of managing it'. The regulations stated that block leaders could be recalled, but this has never happened. Officially elections for block leaders should be carried out ones in very few years, but in practice a new block leader would only be elected in case the former would be unable to manage any longer. The block leaders were supposed to get allowances from DORSEFA, coming from the irrigation fees. As irrigation fees were no longer collected, block leaders have not received allowances for a long time and most of them had stopped doing their work at the time this research was conducted.

Strip leaders were elected to solve the problem of some farmers being reluctant to do communal work. Farmers with plots close to the main channel, do not necessarily need to clear the channels in order to receive water, as he will always receive water. Farmers with plots at a further distance from the main channels, will only receive water if the channels are regularly cleared, these farmers are thus more committed to communal work. The strip leaders should overlook this and make sure everyone is involved in communal work and water is distributed efficiently. Strip leaders are elected by farmers located along a strip, however, 'ofcourse there is a bigger influence of people who own bigger or more plots along the strip'.

#### BYLAWS

DORSEFA set up a number of bylaws, which each tenant, theoretically, had to live up to. In practice however, many tenants did not comply to one or more of the bylaws and punishment of un-complying tenants was rarely put in place. The most central bylaw concerned the irrigation fees, every farmer had to pay 20 000 shillings per acre, per year. This money should have been spend on maintenance of the channels and on efficient water distribution. The fees had to be paid by each tenant in the scheme, members and non-member of DORSEFA, and were to be collected by the board of DORSEFA. It used to be very common though that tenants did not pay any fees, in some periods, only 20% paid irrigation fees. During the rehabilitation, no irrigation fees were paid nor collected. According to the OC, local politicians negatively influenced farmers when it came to paying irrigation fees. A tenant who refused to pay, would complain about the DORSEFA board member who collected the money, and for example argue that this person was wasting the money. The tenant would report this to a local politician, who hence uses this to convince other farmers to not pay irrigation fees anymore and demobilize them. That is why, according to the OC, 'we should not allow politics to come into the scheme'. A second bylaw stated that all tenants in DRS should participate in communal work to slash the irrigation channels, in order for water to keep flowing freely. However, certain farmers often refused due to several reasons. They would be absent, or did not feel the incentive to participate, for example in case channels were blocked and no water was coming to their plot. In that case, they would not be able to grow rice and therefore refused to participate in communal work. Other farmers would own plots which were favorable located, close to the main channel for example, which means these farmers always have adequate water and thus did not feel the need to participate in slashing channels further on in the scheme. If a tenant would be unable to do communal work, he had to pay a compensation and should have, by regulations been fined if he refused to do so. Third, tenants occasionally let their livestock graze on the scheme, another violation of one of the bylaws. Fourth, tenants were not allowed to leave their plot bushy or uncultivated. This bylaw would especially be violated by tenants who live or work somewhere else, for example in the city and therefore not always physically present at Doho. They would sometimes leave their plot bushy and uncultivated for a month. Other bylaws included that farmers should stick to the cropping calendar and use the type of seeds that were dictated by management.

Although it was stated that farmers who did not comply to the bylaws would be withdrawn from their plot in DRS for two seasons, this was rarely actually done. Penalizing farmers was the task of the board of DORSEFA. However, a lot of farmers were somehow related to someone in the board, penalizing this farmer was then postponed indefinitely, which hence gave room for others to avoid the penalty as well.

In general, the authority of block and strip leaders tended to be undermined by 'big men' in the blocks, tenants who are local politicians, local councilors, doctors or rich business men. They tended to disrespect block and strip leaders and neglect bylaws. In many cases bylaws were not actually put in practice, un-complying tenants would go without punishment. In the management of the scheme, local social differentiation patterns thus played central role as well, and most probably will in the future as well.

## WATER

Water has been crucial direct factor in most of the problems encountered at DRS. Water distribution was supposed to be regulated by management based on efficient and optimal distribution. Due to insufficient water supplies, farmers started to block water channels and divert water to their own plots, which impeded efficient water flows and led to a sort of 'competition' between the farmers for water. 'The person in charge of controlling the water flows in a block' would report such a case to the OC, the OC would then usually call a meeting to sensitize farmers about the consequences of blocking channels and the importance of cooperation in order to facilitate efficient water distribution

Some blocks have been split into 2 blocks, due to the size of the blocks, or in case of block 5, due to problems and disputes concerning water distribution. Each block has a water channel diverted from the main channel, block 5 had two of these channels, which led to difficulties in supervising. The part of block 5 that is now 5A, had many tenants coming from far, so they were usually absent. The other part, now 5B, had mostly tenants from nearby, 'the common people'. These common people were always present and thus able to do communal work, while the absent tenants did not. This led to disputes, as the water moved from 5A to 5B, and tenants in 5A often cut water from the channels, which prevented water to flow to 5B. According to the OC, the problem was solved by splitting the two blocks, however, the lack of water and unequal water distribution remained a general problem in the scheme, which should now be have solved by the rehabilitation of the irrigation structures.

Tenants in blocks which lacked water often caused problems by cutting off water from canals of neighboring blocks. Such disputes were resolved by the chairman of the blocks, the OC and DORSEFA. Besides steering water flows, tenants tended to manipulate strip leaders and/or block leaders, who are responsible for opening up channels within a block. They tended to be sensitive to the influence of powerful and richer tenants or social expectations of friends and kin. Water distribution in the scheme thus still reflected relationships of authority outside the scheme. Another common problem, related to water distribution is communal work, which has been described above.

In cases the strip and block leader disagreed, for example if the strip leader insisted that a certain person would water first, the other tenants would complain at the block leader, who can overrule the strip leader. This also illustrates the importance of power and connections in being favored by scheme management in receiving adequate water.

## LAND

Sometimes farmers hire out their plot for 1 or 2 season if a farmer is in need of cash money. In order to receive more money, farmers may rent out the same plot to another person, thus renting out their plot to two persons at the same time. The farmers hiring the plot might go and complain at the block chairman, however he might be bribed by the farmer who hired out his plot.

Within a family problems arise if the tenant of a plot dies unexpectedly, without having written up his will, the wives and children of the man might struggle for the plot. In such cases, the block chairman, chairman of DORSEFA, clan leader and LC<sub>1</sub> would make a decision based on the advice of the clan leader, the village chief (LC<sub>1</sub>) and the heir of the deceased tenant. The LC<sub>1</sub> of the surrounding villages of DRS are often involved in problem and dispute solving, in such cases they work well together with the block chairmen, according to the OC.

Problems between farmers within a block were to be solved by the block council, of which the block leader is the chairman. In some cases, block counselors would disagree with the block chairman, in that case, the chairman had to go to the concerning village chief (LC<sub>1</sub>), and together they would take a decision. If the OC of DRS thought that the decision taken is not good, he will call all involving parties to his office to solve the problem.

#### 4.3.5. PRIVATIZATION OF DOHO?

Privatization of the Doho scheme is not a mere speculation but has been considered in the past and is the subject of some speculation currently; the OC mentioned that privatization in case the co-operative will fail, 'is very possible'. Below the likeliness of privatization and factors that could direct towards or away from a scenario of privatization of Doho are being discussed.

At the time the Kibimba scheme was privatized, the government offered the Doho scheme as well to Tilda Rice Ltd. According to Tilda management, they refused to take over Doho as, at Doho, farmers were still owning the land and Tilda did not want to get involved in land issues. As the DRS was managed by farmers themselves as plot holders, while the Kibimba Scheme functioned as a governmental enterprise with wage labor and outgrowers, Kibimba was more attractive for a private investor compared to Doho. The land tenure situation at Doho has been unchanged up to today, farmers are still tenants in the scheme, registered at the DRS office. I would argue that any kind of registration, though not completely official or legal, has and will serve as an obstacle to land acquisition. However, the land is officially owned by government, who thus has the legal authority to sell it off to a private investor. A disincentive however, would be the Wetland Act, stating that no wetlands should not be leased out to individuals and government owns them for the people of Uganda. However, as Glass (2007) indicates, the Wetland Act is rarely properly implemented and thus should not have to be a disincentive for the government in privatizing Doho. It would be a contradictory stand of government though. Several indications and possible reasons for the government to privatize the scheme can be given. First of all, privatization could be a solution to several problems Doho has encountered over the years, the most important being managerial problems. Secondly, after all the money the government has invested in the scheme, they likely would like to see some rewards in the form of increased productivity and economic profitability. If the scheme is handed over to the recently created farmers' co-operative in the near future and the co-operative turns out incapable and unprofitable, government might opt for privatization as a sort of 'last option'. It has been confirmed by the OC, that this could be a likely scenario. More farmers inexplicitly mention a feeling of uncertainty regarding the ownership of their plot in DRS. One interviewee suggested government invested such an amount of money in rehabilitating the scheme because they might already have plans to eventually sell it off, as farmers themselves turned out incapable of managing and keeping the infrastructure in good condition 'The government is powerful', is being said, on a tone suggesting the powerlessness of the farmers in case the government decides on selling the scheme. The majority though has confidence in the promise of the government to give the scheme to the farmers and support them in rice growing. Other indications pointing at a possibility of privatization in the future are trends in Uganda whereby government seems keen to support economic investments in the country and FDI, which has in several cases led to malicious land deals by private companies supported by the government. This relates to broader trends of structural

adjustment and liberalization policies. Finally, with newly rehabilitated infrastructure and water availability, the scheme is ideal agricultural land, which is just what could attract potential investors.

In general, I would argue that there are a few conditions which can hamper privatization of the scheme in the future. First of all, farmers rights to their plot in the scheme should ideally be secured. This relates to the role of the government in the scheme, as government officially owns all wetland areas in the country, how will farmers land rights be secured if government is to hand over the scheme to the co-operative? Educating and strengthening farmers' knowledge concerning their land rights might make the communities stronger in resisting possible threats. Secondly, the development of an efficient and profitable co-operative will be beneficial. This will very much depend on the motivation and willingness of farmers to conform to scheme operations. This in turn will depend on technical functioning of the irrigation infrastructure and the efficiency and capability of the management of the co-operative. Several issues might be of influence and should be considered. The influence of local politicians, richer and more powerful or influential tenants, including those who own more than 1 or bigger plots in the scheme and the influence of local government officials. In other words, embedded patterns of social differentiation should be considered. Then it should be carefully considered if, and in which manifestations, the scheme's operations fit the livelihoods of the rural communities. Currently, the tenants at Doho are mostly part time irrigators and have upland plots of land to work and other livelihood activities on as well. This implies they are, and will not automatically be fulltime irrigators. The scheme and co-operative should thus ideally function properly on the basis of part time irrigators. In order for the co-operative to function, bylaws will have to be enforced. To achieve that, farmers motivations and abilities should be examined in order to determine the feasibility of the bylaws and the most effective ways to enforce them. Social differentiation patterns play a key role in this well, as became clear that especially the more powerful or richer tenants tend to not comply to certain bylaws. On the other hand, there might be poor tenants for whom it may be difficult to pay irrigation fees. The variations in plot sizes or amount of plots among tenants also needs consideration, should every farmers, regardless of his or her plot size, spend an equal amount of time on for example communal work? Third, the maintenance of the infrastructure needs consideration, how and by whom will the infrastructure be maintained. There are several more factors influencing the productivity of the scheme and therefor the solidness of the co-operative and farmers of Doho, including market access, financial inputs, beneficial new technologies and so forth. These will all influence the productivity of the scheme and success of the co-operative and give the government less reason to consider selling off the scheme to a private investor. The last aspect that might hamper privatization, is the fact that Doho is rather well known among NGO's, researchers and other organizations, possible land acquisitions will thus not go unnoticed in the public sphere, as was the case in the Naigombwa swamp. Besides, these NGO's and international agencies might be able to support the scheme in the above mentioned issues<sup>3</sup>.

As for now, privatization is just a possible future scenario. Some conditions indicated to facilitate privatization are present, including the combination of land and water and a government supporting a neo-liberal discourse, other conditions might prevent land acquisitions, including the fact that tenants at Doho are registered plot holders. Considering the likeliness of privatization and the impacts it will have on rural livelihoods and food production, can help to make decisions by organizations and institutions that aim to work with the farmers of DRS, regarding the kind of support or actions that would be suitable, depending who's interests are to be represented. In the next section rural livelihoods at Doho will be compared with rural livelihoods at the privatized Kibimba Scheme and Naigombwa swamp.

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<sup>3</sup> Support from NGO's and other organizations will raise other issues again, concerning the effectiveness and appropriateness of 'developmental projects', these are beyond the scope of this thesis to discuss.

#### 4.4. RURAL LIVELIHOODS AT DOHO COMPARED TO IRRIGATION ON PRIVATIZED LANDS

Although the Doho Scheme has been designed as a modern irrigation scheme for developing commercial rice production, it has been, up to today been a smallholder irrigation scheme, contrary to the previous two cases. The introduction of the Doho irrigation scheme, has re-organization existing agricultural practices in the wetlands. The wetland became property of the government, and plots were allocated to farming households. Rice became the only crop cultivated thereby replacing traditional wetland cultivation practices and scheme land was no longer allowed to be used for other purposes than rice cultivation. The plots in the scheme and hydraulic infrastructure were officially owned by the government of Uganda and the management of the scheme decided on water distribution and a cropping calendar. The scheme aimed at economically profitable rice production and the tenants were expected to optimize their agricultural output. The key role of water distribution legitimized the authority of technocrats, in Doho the technical, government staff. However, Doho still seems entangled and embedded in the multi-functionality typifying African rural livelihood; irrigation is practiced as one of more livelihood strategies. Rice production in the scheme has become for most the most important livelihood strategy, but they nevertheless still practice rain-fed agriculture on their upland plots and keep livestock and fish besides the cultivation of rice. Rice has become a cash crop but is still used for subsistence consumption as well. In various households, wives have their own share of land and make decisions regarding the produce and generate money independently from the husband. The land can be either bought by herself or provided by her husband. Some farmers practice commercial farming with other crops than rice, but only when produce is surplus.

It could be argued that with the introduction of the scheme, farmers have 'lost' some autonomy; most notably, they have become partly dependent on the irrigation infrastructure for production of rice and on external agencies for the maintenance of the infrastructure, as farmers themselves lack the financial and technical means to maintain the infrastructure. Besides they still depend on the government for access to the wetland, they are bounded to grow only rice in the scheme, they are dictated which seeds to use, have to practice rice production according to a fixed cropping calendar and have to comply to a set of bylaws, in theory. However, these bylaws have been set by 'the farmers themselves', according to many interviewees, since DORSEFA has set the bylaws as representatives of the farmers in Doho. The farmers themselves have always for the board members of DORSEFA, and therefore influence the operations at Doho. By means of their votes, farmers elect board members, block and strip leaders, even though election processes might not always be completely fair. Besides, they can resist certain dictations and refuse to comply to bylaws, without serious consequences, in most cases. Farmers are thus in charge in the sense that their compliance is needed in order for the scheme to be productive and this compliance can not be forced on them. This is a crucial difference with the farmers in the other two cases, who are in fact forced to comply to rules set by the private player, as those companies have gained the ownership over the land, and do not see 'peasants as worthy partners', which Pearce mentioned as one of the reasons why agri-firm investments often do not turn out beneficially for the poor (Pearce 2012: 343). In Doho, farmers are also not dependent on a certain company in marketing their produce, they are free to market their produce to whomever they prefer. They are limited though, as they lack the means to for example market their own produce in the capital city, they are dependent on middle men most of the time. In terms of production inputs, they balance commoditized/external and non-commoditized/traditional inputs, as they occasionally receive commoditized inputs from technical staff or NGO's as JICA and if money is available they may buy fertilizers or pesticides. Most of the time though, they depend on traditional inputs and family labor. Then, they still sell their produce individually rather than collectively and usually keep part of it for home consumption. This is not to say that they actively opt for an 'peasant like' livelihood, for being partly subsistent, self-provisioning and

only partially integrated into the market. Many interviewees stated that they want to modernize, although they often failed to explain in more detail what they actually meant with modernization. 'We need modern seeds and training on better and modern methods of farming. 'Modernization of agriculture and mechanization of agriculture, just like at the time of the Chinese when there were machines to help them plough the land. Fertilizers should be made accessible to farmers including trainings on how to use them' (26-2-2013). In turn they wished to add value to their produce and sell collectively at higher prices. I did have the feeling that some interviewees were sort of repeating what was told to them by the technical staff or government officials in meetings for example, rather than having an actual intrinsic motivation or argumentation favouring modernizing their production process. Clear is, that modernization is still seen as the best and only way to go and as the means to improve lives.

Farmers at Doho have thus been subject to a transformation in which a new balance between autonomy and dependency was created. They have become more dependent on external forces as a result of the irrigation structure, but do still have 'the room for manoeuvre', in which they have the agency and power to be autonomous in some aspects. This is mainly because they are official tenants of their land and have been involved in the operations of the scheme through a farmers' association, today a cooperative. Scheme operations thus depend on farmers' voluntary compliance, which might be the basic factor differentiating the Doho Rice Irrigation Scheme with the Kibimba Scheme and the development or irrigation practises at Naigombwa.

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## 5. CONCLUSION AND DISCUSSION

### 5.1 Privatization and land acquisitions

The meaning and value of land has changed over time from a resource of which one could *live from*, to land being perceived and treated as a commodity. This has been accompanied by the introduction of new land tenure laws, on top of existing customary land tenure systems. These added on or received laws have created a space in which land has become a tradable commodity and in which customary land rights can be 'overruled' by new land tenure rights. Currently there is a situation of overlapping and contradictory land laws and policies in Uganda; 'legal pluralism'. Besides, the implementation of some of these laws and policies has proven difficult and sensitive to confusion and misuse as it involves multiple institutions, including national and local government bodies. This was reflected in Naigombwa, case 2, where local government officials have misused their authority of their decentralized function to manage the wetlands, to 'sell' a wetland area to a private investor, Pearl Rice Ltd, despite the national wetland policy of Uganda, stating that wetlands should not be sold or leased to individuals.

Wetland has been recognized in Uganda as a valuable source of land and ecosystem and therefore received a specific policy in which the management and use of wetlands is laid out. Due to water supplies, wetland and irrigated land are valuable resources and very suitable for agricultural purposes. This makes it complicated to protect wetlands' natural properties and the customary rights of local users of wetland and irrigated land. More people are interested in the benefits that can be derived from wetlands and irrigated land, including private investors. In the acquisition of wetlands and irrigated land, water rights are not explicitly mentioned. In practice, it turns out that acquiring the right to land includes the right to the water resources. Tilda Uganda Ltd. appears to have the authority to deny locals access to the river water, Pearl Rice Ltd. has started creating dams and plans to construct an irrigation network on the land they have acquired and at Doho, water use has been bound to regulations and schedules, although the enforcement of these regulations and schedules has been problematic.

Irrigation has long been perceived as a 'privileged solution', to the 'privileged problem of hunger and poverty in sub-Saharan Africa. This has been reflected by the many modern irrigation schemes that have been constructed in sub-Saharan Africa in the past, for which large tracts of lands were enclosed and which often involved the dispossession of locals from their land. By introducing irrigation infrastructure to control the water, productivity has become dependent on the functioning of the infrastructure. Such modern, technical infrastructure can not be fully maintained by local farmers due to a lack of specific expertise, assets and finance and thus becomes dependent on external support of either government or other actors. This leads to financial and managerial burdens which might have contributed to the governments' decision at the time to sell the Kibimba scheme to Tilda, and currently stimulates the government to find an alternative 'form' for the Doho Rice Irrigation Scheme, in order for the scheme to become less financially dependent on government funding. The dependency of farmers on the irrigation infrastructure was reflected at Doho by the rehabilitation of the scheme, which caused many poverty related problems among local community members.

The prevailing discourse which has proven to legitimize the undermining or ignoring of customary land rights, is the one in which privatization is seen as the means to achieve an economically profitable commercial agricultural sector, supported by the neo-liberal ideology. This discourse has been reflected by liberalization policies and the support of the Ugandan government to private agri-business investors in acquiring land and 'controlling' the local surrounding communities. This reflects the contradictory role of the government which intends to protect customary land rights, while on the other hand



liberalizing its markets and supporting an 'agri-business' approach in which foreign investors are welcomed.

The main reason why the Doho Rice Scheme has not been privatized, is most probably the fact that plots in this scheme have been allocated to local farmers, who have been registered as plot holders at the time on a 99-years lease basis. Tilda was offered the Doho Scheme as well, but refused as to avoid 'land issues'. Customary land rights thus seem not to be a too large obstacle for acquiring land for investments, while registered land rights, do. It remains to be seen if Doho will develop into the direction that is now envisaged by government; the scheme managed by a profitable farmers' co-operative. There are indications though, that Doho might be sold off to a private investor in the future, if the farmers' co-operative fails in efficiently managing the scheme.

The interplay between these factors (new land laws & policies, land & water, privatization & commercialization, the undermining of customary land rights), has created a space in eastern Uganda, in which land acquisitions are facilitated.

## 5.2 RE-DEFINING RURAL LIVELIHOODS

The above described processes re-define rural livelihoods by undermining local farmers autonomy and food sovereignty and initiating processes of de-peasantization. The local communities are not passive subject in these processes, they actively shape, re-shape and manipulate and resist situations.

As mentioned, modern irrigation infrastructure inherently creates a form of dependency on the functioning of the infrastructure. Apart from that, the commercial private investments Tilda Uganda Ltd. and Pearl Rice Ltd. have made local farming communities partly dependent on them by having acquired land that was used by local farmers. This seems to have negative impacts on the livelihoods of local communities. First of all, only a minor number of farmers are given the opportunity to produce rice for the companies as 'outgrowers'. The conditions for outgrowers are not very favorable either; the terms of production are all set by the company, without any negotiation with the outgrowers themselves; in most cases 100% of the produce has to be sold to the company for a minimal price. Secondly, since most farmers have been denied access to a large part of the cultivatable wetland in the region, without the opportunity of outgrowing for the company, many have been forced to halt their own production of rice, and instead seek occasional wage labor. However, confirming Li's observation, 'few jobs are provided and most of them filled with migrant labor', resulting in many farming households now struggling for alternative livelihoods. Both the companies Tilda and Pearl, employ migrant workers. It is said that most migrant labor are landless dwellers, from central Uganda. Without land left to turn to, migrant labor probably fits better into full time irrigation compared to locals, who, most of the time, still own (upland) land, and thus need to combine wage work at Tilda/Pearl with cultivating their own plots. Besides, working conditions and salaries at the companies, appeared very poor.

Land has become scarcer as a result of the commercial private investments, population growth and influx of migrant labor. As employment is not very abundant either, due to migrant labor and just a few agri-businesses in the region, Tilda, as the largest commercial company in the regions, lacks the incentives to improve working conditions and salaries. However, this situation might be slightly changing as we speak, due to new companies vesting in the region, including Pearl, thereby undermining Tilda's position as the sole, large employer. This resulted recently in negotiations between Tilda and a new company, whereby Tilda convinced the company to lower its wages, since workers started to leave Tilda for the other company because of higher wages. It has also been said that workers leave Tilda for Pearl, as wages and working conditions at Pearl seem slightly better. Besides, Tilda is said to face labor constraints during the high seasons.

This could be perceived as a situations in which locals find agency to leave a company for another company that offers better wages and working conditions. Local communities have practiced various forms of resistance against unfavorable practices of the companies Tilda and Pearl. The most drastic one concerns the well- known, violent strike at Tilda, in which workers demanded the right to form a workers union, which they have been denied up to today. At Pearl, the most 'drastic' forms of resistance concerned the refusal of some villages to sell of their land and violent attacks on Pearl vehicles. Other acts of resistance included 'sit- down' strikes, the smuggling of produce, refusing to sharecrop for Pearl because of the unfavorable terms and conditions, complaining at local councilors and attempts to complain and negotiate with company management. As a result of the local communities being, 'non cooperative' according to Pearl, Pearl faces difficulties in executing their plans to construct a factory, which indicates the power of local communities in influencing, to a certain extent, the direction of current developments. Apart from these acts of resistance, the daily reality comes down to the struggle for a decent livelihood after many have lost access to an important livelihood resource. Due to a variety of unfavorable conditions, including the scarcity of alternative land, the minor chance to be able to outgrow for the company, the few employment opportunities offered by the companies and the extremely low wages, local farmers that have lost land feel worse off than they were before and there is a general negative attitude amongst local communities towards both Tilda Uganda Ltd. and Pearl Rice Ltd.

Although there are still farmers expressing their grievance concerning the fact they have lost land to the irrigation scheme at the time it was constructed and the corrupt plot allocation procedure after its completion, the population at Doho seems, in general, content with the irrigation scheme. It makes possible having two growing seasons in one year. Besides they feel grateful for the knowledge they received on rice cultivation from the Chinese and later the technical staff and additional trainings. They are quite fond of the national government, for supporting the scheme and having spent billions of shillings on its rehabilitation. However, management of the scheme and managing the irrigation infrastructure, has proven problematic ever since the Chinese left, hence production has remained low.

In all three cases, all of the interviewed community members who were using wetland or irrigated land or used it in the past, owned additional up land plots as well. Their livelihoods thus did not solely rely on irrigated and/or wetland. Access to additional upland has proven a safety net in all three cases: at Kibimba and Naigombwa, many farmers now rely on this upland after having been denied access to the wetland, at Doho, upland plots have helped the tenants of the scheme to come through the rehabilitation period.

As 'the rights to use and manage lands, territories, water, seeds livestock and biodiversity' are no longer in hands of the local communities at Kibimba and Naigombwa, but instead in the hands of the companies who now manage the production of food (as opposed to actually *produce*), food sovereignty is undermined. At Doho, farmers largely still operate autonomously, although they have been restricted in some aspects, including the use of seed varieties and cultivation practices.

### 5.3. RE-DEFINING FOOD

The processes described in this thesis, do not only effect rural livelihoods and food sovereignty, but re-define food, in this case rice, as well.

Rice has been part of the diet of the population in eastern Uganda since the start of rice cultivation in the wetlands, which differs per region. Cultivation started small, just for home consumption. Rice evolved to become a cash crop, next to its role as subsistence food product. The rice is marketed through middlemen.

Through the commercial investments, the production of rice in eastern Uganda is being integrated in an international market. Rice cultivated in eastern Uganda used to be only marketed and consumed by the local communities involved in production themselves and part of it in urban areas in Uganda. Today, two types of rice are being produced in eastern Uganda. The first type concerns the rice that is still locally marketed and consumed. This type of rice is being produced by the local farmers on the wetlands which are not occupied by the commercial investments, it is unpacked and unbranded and of a lower quality, it is often broken and might contain some small stones and sand particles. The second type of rice is produced on the fields owned by private, commercial investments, by local and migrant wage labor or by outgrowers producing for the company. This rice is high quality rice, packed and branded, marketed by the company, sold in urban areas and part of it exported, consumed by the upper class or foreigners. This type of rice is unaffordable for the general local rural population. The rice comes from improved seed varieties, the cultivation process involves artificial fertilizers, pesticides and modern cultivation practices. Production is, in other words, commoditized, based on technical scientific expertise and external inputs. The seeds which are used are developed at Kibimba or come from a rice development center in Tanzania.

The rice that is being produced by Tilda Uganda Ltd. and Pearl Rice Ltd. has thus completely different characteristics compared to the rice produced by the local farmers themselves, on fields outside the companies boundaries. The rice has become a branded product, although produced in Uganda it remains questionable if the rice can be regarded as a Ugandan product, it could also be perceived as a partly Indian product, or a British product, a United Arab Emirates product.. The rice has been 'detached' in some aspects from local conditions including local seeds, inputs, knowledge, interests and consumers. The processes described in this thesis of privatization, land acquisition and the impacts on rural livelihoods and food sovereignty, make that the branded rice carries, so to speak, a 'political burden' with it. A political burden that remains invisible to most of its consumers but raises questions considering the moral value of the product.

Food is hereby being re-defined in two ways. First of all, it is being commoditized. Secondly, it is being separated from its local ecological, social and political context. A large part of the rice produced in the wetlands of eastern Uganda is no longer produced to feed the families of the local communities and no longer consumed by those who produce it. Instead it has become a product which generates capital and is consumed by those who typically are not involved in the production process, live outside the region or even abroad, and are in a position to afford branded, high quality rice. The production and consumption process take place in different worlds.

## 5.3. DISCUSSION

### 5.3.1. FUTURE DEVELOPMENTS AND SCENARIO'S

Throughout this thesis, I have attempted to present the situations and conditions in the three cases as they currently are and seem to be heading to, while indicating that the directions into which the cases will develop are far from settled yet. There are many processes taking place, be it overt or covert, that might, reshape conditions and shift the direction of current development.

The case of Doho is a very interesting case as it remains to be seen if the observed trend of corporate companies 'invading' important agricultural production sites will in the future hold true to Doho, or if the scheme, as is currently pursued, will take a different pathway in which management of this scheme will stay in hands of the tenants themselves, in the form of a co-operative. If one considers the difficulties that were faced in the past in managing the scheme and the farmer association, developing this co-operative into an efficiently managed, productive and profit making co-operative will be challenging. The tenants in the scheme are currently not used to strict enforcement of bylaws, regulations or schedules, and corrupt practices and local politics are interwoven in the management of the scheme. It will thus, I would argue, be extremely important for any initiators, policy makers and implementers, to get a thorough understanding about the current dynamics in the scheme and the social power relations underpinning it, before any plans to reform current practices are imposed on the tenants at Doho. Reforms should, I would argue, ideally be community based solutions, for reasons I will elaborate on later in this discussion.

In the second case, the Naigombwa swamp, the situation is far from settled either, as I have made clear by describing current acts and events of resistance plus the fact that the investment is not yet fully operating, and might thus still develop in various directions, depending on various social, economic, political and environmental conditions, including support from civil society, legal aid, media coverage, possible involvement of the national government and the intentions of the company. With help of the Netherlands Embassy, I have informed the Platform for Labor Action in Uganda on the situation in the Naigombwa swamp. As a result they have investigated the case and have been active in the region to inform farmers and provide legal support.

Even the situation in the first case, at Kibimba should not be perceived as a static one, as underneath its outside appearance, things are 'broiling' as well, and might turn out less well for the company in a different political climate in which the president for example, does not give his support in the form of police and military forces during working strikes any longer. Tilda has for a long time had the position as the sole large employer in the region. As employment opportunities have not been very abundant, due to migrant labor and just a few agri-businesses in the region, Tilda thus far seems to have lacked the incentives to improve working conditions or increase salaries. However, this situation might be slightly changing as we speak, due to new companies vesting in the region, including Pearl, thereby undermining Tilda's position as the sole, large employer.

Although various future scenarios are possible, it seems unlikely that in the case of Kibimba and Naigombwa, the private companies will step out of the picture, or that the land will be allocated back to its local previous users. The basic situation, in which land is privatized and land and water acquired by the private companies, will thus, most likely remain. The form and scale in which local communities and farmers are integrated in the investments and involved in the production process and management of the land, depends on the above mentioned factors.

By involving and informing organizations that support rice production in eastern Uganda on the findings in this thesis, I hope to have raised some awareness on the issues I have described and set in

motion a discussion, or a thinking process on how NGO's, research institutes and policy makers relate to such situations whenever they encounter them, and what would be appropriate steps to take or activities to conduct in such a region.

### 5.3.2. CHALLENGING DOMINANT VIEWS

In this final section I will challenge the idea that 'communal African farming' is unsuitable for commercial development. Building forward on this, processes of re-peasantization and agro-ecology are discussed as different pathways in which the production of food is again locally embedded, thereby reconnecting people and living nature, rather than food production increasingly being detached from local ecological, social and political conditions. To end with, Platteau's view on suitable land tenure systems in rural African contexts is given, as this supports, I would argue an alternative pathway to a more equitable food system.

#### AFRICAN FARMING AND COMMERCIALIZATION

The dominant discourse discussed in this thesis as one of the factors facilitating land acquisitions, is the neo-liberal inspired idea that privatization is the means to the preferred direction of intensification and commercialization of agriculture in rural areas. This 'privatization discourse' links to the discourse favoring mechanized and industrialized farming in order to solve the world's food and energy crisis. In this discourse, African farming is portrayed as backward and a constraining factor in market dynamics and private commercial investments. African farming is presented as 'traditional smallholder peasantry' in combination with 'communal forms of property relations' (Makki 2012: 82). Peters (2013) gives a more nuanced description of African farming, in which she also makes the link between African farming and commercialization. Many studies in various African sites have identified the variation among households classified as smallholder farms in terms of 'the degree to which agricultural production on 'own account' contributes to their livelihoods' (Peters 2013:550) and have shown considerable socio-economic differences among these households. In the 1920's/30's, rural communities, especially in densely populated areas, were already depending on the market for many products. These days, fully subsistence farmers are practically non-existent. As it has been indicated that most small- and medium scale farmers deploy both subsistence and commercial farming to different degrees. Subsistence and commercial farming should be seen as two different strategies simultaneously deployed by rural African households (Peters 2013: 550-551). Besides, contrary to prevailing ideas of smallholder farmers, it is 'the better off with most land and income who are more able to produce much to all of their needed staples'. The poorer on the other hand, with less land and income, seem to be more dependent on the market for their necessary staple crops (Peters 2013: 551).

#### RE-PEASANTIZATION AND AGRO-ECOLOGY

Currently, there is a trend taking place which can be regarded as a countermovement to de-peasantization, a process identified in this thesis in which farming and food production are being 'disconnected' from local conditions and farmers increasingly turn into laborers. Today, processes of re-peasantization are taking place all over the world (van der Ploeg 2013). Re-peasantization refers to farmers who consciously opt for the peasantry thereby using land as 'ecological capital', defined as 'a non-commoditized exchange with nature'(van der Ploeg 2010: 4). Farming based on ecological capital is centered around 'soil biology, manure and peasants' knowledge' as opposed to chemical fertilizers in modern ways of farming (van der Ploeg 2013: 53). The monetary cost of production in peasant farming are thus far lower compared to an entrepreneurial, modernized way of farming, relying on commoditized inputs.

De- and re-peasantization processes are taking place simultaneously around the world. In some contexts, peasants have already been through processes of modernization and have found these

unfavorable, or are unable to keep up with the modernization script. They might opt again for a more peasant oriented livelihood. Re-peasantization can take many forms but it is general characterized by processes of de-commoditization, or setting a new balance between in- and external resources, and the development of multi-functionality (van der Ploeg 2013: 129). Ploeg gives several examples of re-peasantization processes across the globe. Urban dwellers in China facing urban poverty, have en masse moved back to the countryside again to start peasant farming, hoping to be able to live from the land. La Via Campesina is another example of a movement supporting re-peasantization and agro-ecology (van der Ploeg 2013: 127), and van der Ploeg argues that even in Western Europe, a large part of European agriculture is becoming more peasant- like as farmers reduce their dependency on external resources, including credit and instead optimize the use of internally available resources (van der Ploeg 2013: 129). This shift from a high tech style of farming to a low cost one can double labor income according to van der Ploeg (van der Ploeg 2013: 129).

More critics agree that de-peasantization should not be regarded as a necessary process in development. As Makki argues, 'there is nothing inevitable or irresistible about this politically enforced dynamic of expropriation'(Makki 2012: 99) and that we should avoid perceiving these processes of de-peasantization as being an inevitable phase in history. What should be done is support peasants 'inalienable social right to cultivate the soil' (Makki 2012: 99). This, according to Makki, does not imply going back to a more primitive state of society, but rather the repositioning of farming and 'the commons' in a framework encompassing 'food sovereignty' and 'ecological citizenship'(Makki 2012: 99). Olivier de Schutter (United Nations Special Rapporteur on the right to food), is another supporter of agro-ecology. He argues that it is a better alternative for the future than new economizing techniques. The development of new, 'sustainable', energy saving techniques for large scale agriculture, are according to de Schutter only 'symbolic gestures'. He argues that research has demonstrated that we are currently depleting our earth, through monocultures, soil depletion and pollution due to chemical pesticides. Agro-ecology, is not organic farming, but rather cultivating with sanity using 'tricks' that copy nature. Large scale agriculture, he argues has disjointed natural cycles (de Schutter 2014). Agro-ecology has the potential to increase yields, a study of 286 agro-ecological project found an average increase in yields of 79%(van Vark 2012). Re-peasantization includes reassessing the balance between internal and external resources, reduce dependency on external resources, (van der Ploeg 2013: 129), thereby being more 'self-provisioning' (van der Ploeg 2010: 6). By providing (part) of the resources required for production themselves, as opposed to being dependent on commoditized input, self-provisioning can be a way of resisting commoditization. Especially in the past, but still today as well, many farming households had/have no other choice but to be self-providing. Currently though, self-provision is for some, especially in the West and Central America (think of La Via Campesina) a more conscious choice and a way to distant from main commodity markets.

Based on my own observations, it seems that many rural African dwellers seem eager to use chemical pesticides and fertilizers, as many told me during the interviews they want to 'modernize'. However, their ideas on 'modernization' were limited to using artificial fertilizers, pesticides and 'modern methods'. I would argue that their 'requests' for new techniques and external inputs could be more a result of external actors advocating the use of external inputs and new techniques in order to achieve modernization as the means to development and more wealth, rather than a well thought off request based on balanced information, and the lack of an alternative paths to improve rice cultivation practices and increase yields. Rather than becoming entangled in a bunch of dependency relations in the dominant food system which is, according to Schutter (2014), 'obsessed with the production of bulk calories, including mais, grains and soy, which is good for large food companies, but 'not for people', it could, in the long run, be more efficient for these rural communities to operate more autonomously. Rather than becoming dependent on external inputs, optimize the use of internally available inputs, find

agro-ecological methods to increase yields and improve quality of the produce and thereby creating resilient local food systems.

This is not to say that businesses have no role to play in a future directing towards agro-ecological farming systems, according to Michel Pimbert, former principal researcher and team leader for agroecology and food sovereignty at the UK-based International Institute for Environment and Development (IIED), and now a fellow at the Rachel Carson Centre for Environment and Society in Munich (van Vark 2012). ‘There are opportunities for forward thinking businesses who can see beyond proprietary seeds and fertilizers’(van Vark 2012). Pimbert argues that ‘co-operative businesses can play a potential huge role in supporting agro-ecology and resilient local food systems. Novel types of partnerships between agro-ecological innovations and this part of the private sector should probably be developed more’ (van Vark 2012). There is room for private partnerships both up- and downstream, for example for suppliers of biological and pest control products like insects and bacteria. Efforts to scale up agro-ecological farming do not necessarily need to be small scale or restricted to local markets, according to Pimbert, but they must be ‘localized in design’, as there is no ‘one-size fits all approach’ to agro-ecology. Although the opportunities are there, they need a favorable policy framework to increase, according to Pimbert.

#### COMMUNITY BASED LAND TENURE

J.P. Platteau complements this discussion by providing an alternative to private land tenure rights, as it remains questionable if the establishment of private property is ‘an advisable structural reform’ in rural African contexts. The general picture that is often presented assumes that freehold land tenure promotes land being transferred to more dynamic farmers. As a result larger landholdings are created, which is rendered more efficient compared to fragmented and subdivided plots. Tenure security will increase, resulting in more efficient crop choices, increased willingness and ability to invest and soil conservation and land improvement practices. Investments by potential entrepreneurs will be encouraged while land owners will also get easier access to credit themselves. This will result in an efficient agricultural sector, safes costs for the government as the number of land disputes will go down and collecting taxes is made easier (Platteau 2008). Platteau argues however, that these beneficial effects that are usually being ascribed to such reform, are ‘grossly over-estimated’(Platteau 2008: 29).

First of all, individual land titling does not necessarily provide tenure security to all customary land holders. Sections of the local population face the risk that their landholdings will not be recognized in the titling process, including women and other ‘marginalized land holders’. This group of marginalized land holders are critical producers though, excluding their rights to land from the titling process will lead to efficiency losses. Traditional tenure rights determine access to land and water in such a way as to ensure employment for the able and social security to the poor. Customary tenure hosts complex bundles of rights, as a landholding unit is rarely under a single management rule. It would be very difficult and costly to entail these in a comprehensive registration, as turned out the be the case in Kenya (Platteau 2008: 40). As a result, there will not be a naturally evolving demand for formal property rights resulting from population pressure and increasing commercialization. Furthermore, as many states will not be able to cover the costs of acquiring a title, it will only be a selected group of the population who can afford to acquire a title(Platteau 2008: 74). Furthermore, land sale transactions in Kenya have not showed to increase as a result of land tenure reforms. Only in the early phases, which most probably resulted from ‘educated elite take advantage of the situation to acquire additional land’ (Platteau 2008: 49). Then, as land also carries social, spiritual, emotional and political meanings for rural Africans, they are keen to retain it, and do not treat it solely as a commodity (Platteau 2008: 50-51). The sales value of land thus exceeds its ‘agricultural value’. This hampers a rational efficient land market. Besides, indigenous tenure systems are often kept in place, even when land has received individual titling. Extended family members for example continue to use land which is entitled to

someone else. This relates to social norms and values in land transactions, which are usually neglected in predictions of the transaction costs of land sales. Selling land might be legally possible and easy, it might not be socially legitimized (Platteau 2008: 59). Titling thus does not necessarily activate a land market, according to Platteau (2008). Furthermore, the effect of land titling on credit has proven nil or negligible according to Platteau (2008: 60) and there is no inclusive evidence proving a relation between land titling and land improvements or agricultural yields (2008: 64).

Alternatively, Platteau supports 'more appropriate solutions that rely on existing informal mechanism at community level' (Platteau 2008) (abstract). Indigenous African land systems are dynamic and flexible enough to increase adapt to a need for agricultural intensification and accompanying long-term investments (Platteau 2008). As was already concluded in 1990, 'African tenure systems appear to be dynamic arrangements which have come to recognize increasingly individualized rights for individuals and households under the pressure of rising land values' (Platteau 2008: 34). The state should facilitate such community based processes and 're-institutionalize' indigenous land tenure, according to Platteau (2008). Such community based solutions are adaptable to existing arrangements, avoid a 'regimented tenure model' and rely on informal processes at local level. The advantages of community based tenure reforms are numerous, according to Platteau (2008: 75). They are cheap and flexible. Even though there will always be social differentiation patterns which should not be underestimated, local tenure systems tend to provide social security to all community members and ensure that everyone can participate in new opportunities. Such 'social considerations' usually dominate considerations of 'pure efficiency' (Platteau 2008: 75). This is needed to regulate free market forces in rural areas that lack legal insurance measures. Furthermore, customary systems tend to achieve remarkable consensus. As the socio-cultural systems of communities are not easily bypassed, co-operation is a better strategy than confrontation, according to Platteau. Furthermore, it is a waste to impose formal rules and procedures, when problems can be solved internally. Focusing on indigenous land tenure and community based solutions to tenure problems is thus no romanticism but pragmatism. If customary land rights prove more suitable to the rural context, it would be a task of civil society organizations in Uganda to protect customary land rights and support communities in protecting access to farmlands and finding community based solutions to land tenure problems and strengthening their abilities to resist the pressure of land markets and risk of privatization.

#### LOCALLY EMBEDDED IRRIGATED PRODUCTION

The overview below puts forward the characteristics of the indigenous African irrigation paradigm verses characteristics of industrial irrigation.

<b>Industrial irrigation paradigm</b>	<b>African irrigation paradigm</b>
Plots and hydraulic infrastructure owned by government or private actor	Plots in usufruct ownership of (fe)male farmer, infrastructure owned by collective of plot holders
Scheme's economic performance pivotal	Farm output central
Settlers should be full time irrigators	Irrigated production is one of the livelihood strategies besides livestock, rain-fed production, fisheries, non-farm income
Settlers expected to optimize agricultural output	Farmers optimize their productive activities along rationales of risk spreading and maximum labour productivity
Agricultural produce should be marketed	Only after achieving food self-sufficiency, produce is sold
Only male head of household qualifies as settler	Women work their own plots
Allocation of plots is made to households	Plot allocated to individual members of kin- group



Existing labour allocations between men and women, old and young are irrelevant	Irrigated production is subsumed in existing kin-based organization of production and consumption
The management decides on the crop patterns	Individual farmers decide on crops grown
Centralized management which is accountable to government, not to settlers	Decentralized management through leaders who are accountable to the settlers
Management allocates water to plots	Water is distributed amongst individual persons
Crop water requirement based water distribution	Rights based water distribution
Key role of efficiency of water distribution legitimizes authority of technocrats	Criteria for water distribution reflect relationships of authority outside the scheme

TABLE 1, THE INDUSTRIAL AND AFRICAN IRRIGATION PARADIGM TABEL 1, THE INDUSTRIAL AND AFRICAN IRRIGAITON PARADIGM

Source: (Bolding 2004: 10, after Diemer (1990, 209-210))

This framework provides the two different pathways or development trajectories which can be taken by states, international organizations and policy makers in supporting irrigation. The first trajectory is based on privatized, individual land tenure. The irrigation practices following this direction fit a discourse favoring modernization and based on technical and scientific knowledge rather than local knowledge. This thesis has been critical towards this pathway in which privatization is key, and has concluded that such an approach can be a facilitating factor for land acquisitions whereby local farmers are being dispossessed of their land thereby undermining their autonomy and food sovereignty. It is therefore valuable to consider alternatives, which is provided by the second approach in this table, 'the African Irrigation Paradigm'. This second paradigm, I would argue, provides a 'framework' for locally embedded irrigation practices. This trajectory is centered around autonomous rights for farming communities, thereby fitting the above discussions on re-peasantization, agro-ecology and community based land tenure. The practices of this approach provide a rough framework for supporting irrigated production through co-operation with communities.

If customary land rights are maintained in wetland and irrigation, rather than introducing privatized individual land rights, land and water is brought together in a different way. This different way might direct towards food sovereignty, though does not necessarily. Local social differentiation patterns might be reinforced, leading to for example a situation of surplus extraction by the local elite or marginalization of certain social groups, such as women (Whitehead 2003). Furthermore, commoditized transfers of land within the framework of customary land rights should be correctly understood as well, 'if state land policies are to succeed in promoting the interests of the poor' (Chimhowu 2006). Customary land tenure should thus not naturally be considered as the self-evident alternative to private individualized tenure without critical assessment. This holds as well for the African irrigation paradigm that is pictured above. This approach fitting in the alternative discourse put forward in this thesis centered around customary tenure, food sovereignty, re-peasantization and agro-ecology, is not necessarily the naturally better alternative to modern, privatized irrigation, what is needed is comparative, empirical analysis on critical social and technical aspects of both paradigms, in order to draw relevant conclusions on the productivity and suitability of the different production systems. This requires first of all an enabling environment for the implementation of agro-ecological oriented projects, which is a gradual process that requires the involvement of various actors and time to evolve. It should be considered as a profoundly socio-technical problem; it concerns both the food product, the production process and the people and societies involved in both production and consumption. Elements that could be included in an empirical comparison are production output per hectares, per person or household, per unit of water, distribution of benefits, impacts on rural livelihoods, the possibilities and position of women and so on. In this way the assumption that modern, privatized agriculture/irrigation naturally leads to higher production levels and more output than agricultural

production in locally autonomous production systems based on local land management and agro-ecologically oriented practices, is challenged.

Agriculture today seems to be positioned at a crossroad, a turning point which can either tip over to a completely neo-liberal food production system in which generating capital is central, or it can divert towards a system which re-values peasant oriented farming, based on values of autonomy, ecology, cooperative farming, and local conditions, thereby shifting the focus from capital to food production by, and for human beings. This latter direction does not imply excluding progress and new techniques. Progress should not be considered as modernization, privatization and liberalization per se, progress can have various manifestations. Progress and new techniques can suit and support smallholder farming rather than replacing it with industrialized production. Alternative paths to agricultural development have largely been neglected and have received not the slightest amount of attention in the form of financial support, research focus and favorable policy frameworks compared to modern agricultural practices on privatized lands. I have indicated the drawbacks of privatization and land acquisitions for agricultural development for rural communities in this thesis, thereby complementing the already growing awareness on the negative effects of industrial and 'Green Revolution' farming, including the peak oil, climate change, water scarcity and various social, public, health and environmental costs (van Vark 2012). Therefore, I would like to end with a pledge to open up for alternatives forms of progress in the agricultural sector and give them a fair change by supporting and enabling their implementation to hence conduct empirical comparative assessments in order to reach for an efficient, more humanized and ecology friendly food production system.

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