

**Agricultural improvement? Persistence and change in agricultural
development ideas and farmers' responses in Kilombero Valley, Tanzania
(1900-2015)**

This dissertation was
accepted for the completion of the doctorate from the Faculty of Arts and
Humanities
of the University of Cologne
in the subject, Social and Cultural Anthropology

Innocent Mwaka

born on 30.12.1983
in Lacor Gulu, Uganda

Cologne, December 2020

Declaration

I solemnly declare that I prepared the dissertation I am presenting independently and without undue assistance, that I have completely stated the sources and aids used, and that in each individual case I have identified the passages in the dissertation, including tables, maps and images, that are quoted from other works literally or in spirit as a borrowing; that this dissertation has not been presented to any other faculty or university for examination; that it has not yet been published, apart possibly from partial publication approved by the chairperson of the doctoral committee after consultation with the supervising professor, as well as that I will not undertake any such publication before completing the doctorate. I am aware of the provisions in Sect. 20 and 21 of the doctoral regulations. The dissertation I am presenting has been supervised by Prof. Dr. Michael Bollig.

Abstract

The Kilombero valley in south-central Tanzania has undergone a series of agricultural development experiments since German colonialism. These experiments have largely failed to meet their goals of increasing production and quality of agricultural products. However, experiments similar to earlier ventures are still being implemented in the valley today under the auspices of the Southern Agricultural Growth Corridor of Tanzania (SAGCOT). This raises one central question: why, despite the failures of earlier strategies, have similar recipes for agricultural development persisted in the valley? I approach this question by analyzing the discourses and practices of agricultural development in the valley since the German colonial time.

Following the footsteps of post-developmentalists like Ferguson (1990) and Li (2005) I ask what these agricultural development strategies have done in the valley such that they are replicated over time. A focus on discourses and policies allows conceiving agricultural development projects as having certain effects, which give their strategies persistence.

I furthermore investigate how the recipients of the agricultural development projects in the valley perceive such initiatives and how they respond to them. Previous research in the valley (e.g. Monson, 1995) and research elsewhere on development topics (see for instance Li, 2005; Venkatesan and Yarrow, 2014) have shown that people either resist or comply with such initiatives. However, it is necessary to examine the nature and effects of such responses as well. For if recipients “resist” a development project, what is the nature of such resistance? Does it lead to modifying the development strategy? Does it intensify it, or lead to a complete overhaul? And if recipients comply, how does compliance affect policy and practice?

I, therefore, analyze the history of agricultural development in the valley, considering colonial and post-colonial policies and the diverse actors that attempted to improve its agricultural production. In so doing, I examine the consequences of these policies and the outcomes of different actions in shaping the agricultural development landscape in the valley. However, considering the state of agriculture in the valley, this book can be read in two ways: on the one hand, as an exploration of the history of agricultural development in Kilombero Valley and on the other, as a critique of the development experiments that continue to reappear in new forms.

Acknowledgements

The process of writing a PhD dissertation requires a lot of effort, time, and patience from the candidate, “academic elders”, peers, and most importantly family. Beyond this enclave of professional, social and family support are the people of whom the work speaks and with whom we collaborate. Without all this support, this work would not have materialized. It is therefore with humility, that I want to extend my gratitude to all who made this work possible. I cannot however place a weight to their contributions in relation to others.

I will start by thanking my wife for the patience and support she gave me from the start of my PhD to the end. The numerous discussions we had on the topic of agricultural development were instructive. The time she took off from work to take care of our little baby so that I could work longer hours meant a lot to me. She always offered encouraging words and support whenever I felt like I had reached a dead end. I extend, as well, my gratitude to all those who supported us in this period, especially my in-laws.

My academic journey and interest in anthropology started when I met Prof. Dr. Lioba Lenhart in 2008. By then a visiting scholar and guest lecturer at the Institute of Peace and Conflict Studies at Gulu University, Uganda, Lioba introduced me to different perspectives in anthropology. Not only did I discover the honesty in anthropological methods, I admired the perspectives expressed in the self-criticism of the discipline. Lioba supported this interest by pointing me towards different opportunities and fully supporting me in achieving them.

In October 2010, I started my studies in an MA in Culture and Environment in Africa (CEA) class at the University of Cologne. It was within these studies that I developed interests in studying “development” in Africa. Towards the end of my CEA studies, I met Dr. Clemens Greiner who introduced me to studies and literature on agrarian development and guided me in my research on honey production in East Pokot. Clemens continued to guide and mentor me in my PhD studies. I am grateful for both the slithering critics and encouraging words during the period of conceptualizing my research topic and writing the dissertation.

I would like to extend my sincere gratitude to my supervisor Prof. Dr. Michael Bollig. Since my MA studies, I have benefited from the knowledge, comments and support from Michael. Despite his busy schedule, he always had time not only for me but all his students. He has brought to knowledge what different opportunities there are and supported us in archiving them. The support I got from Clemens and Michael go beyond their constructive comments towards my

dissertation to other activities e.g. funding for conferences, workshops, flights to job interviews e.t.c. I would like to further thank my second and third supervisors Prof. Dr. Julia Tischler and Prof. Dr. Martin Zillinger for their critical reviews on approach and content of my dissertation.

I would like to thank my peers, Matian van Soest, Johanna Treidl, Elsemi Olwage, Souleymane Diallo, Gerda Kuiper, Diego Menestrey, Marie Mueller, Marie Gravesen, Denis Akena, Qian Zhu, Eric Kioko, Hauke-Peter Vehrs, and Cora Gäbel who, not only endured the pain of reading draft chapters and discussing them with me, but joined for a beer, a coffee or a dinner to make the PhD writing less distressing.

This PhD was funded by the BMBF through the GlobE wetlands in East Africa project. The funding made it possible to join the University of Cologne, and carry out long field works, and sustain myself and family for 3.5 years. I further received a 3-month completion grant from DAAD through the STIBET program of the International Office at the University of Cologne. I am grateful for their support especially in ensuring that international students in German universities get a comfortable stay so that we concentrate on our studies and research.

Last but not least, I would like to humbly thank the people I worked with while in Kilombero and those who helped in organizing the data when I came back to Germany from fieldwork. The numerous respondents, and their personal stories, materials, and time were invaluable for this work. Those who helped me to settle in Kilombero, to find people to talk to, to translate, to transcribe and many more, I am very grateful. In this regard, I would like to send special thanks to Anne-Christina, Elias Shemtoi, Mbilinyi, Geoffrey Isdory, Veronika Steffens, and Daniel Malto. I am grateful to all of you.

I owe the success of this work to all those mentioned above and all who contributed in different ways. I take up the sole responsibility for any shortcomings of the dissertation.

Dedication

To my mother Janet Mary Lukwiya who endeavored to educate not only her children but the village.

Declaration.....	i
Abstract.....	ii
Acknowledgements.....	iii
Dedication.....	v
Table of contents.....	vi
List of tables.....	ix
List of figures.....	ix
List of photographs.....	x
List of abbreviations.....	xi

Table of Contents

1 Introduction	1
1.1 Agricultural improvement? Background, scope and research questions.....	1
1.2 Smallholders and the agricultural improvement strategies in the Kilombero valley.....	6
1.2.1 Groupings – cooperative societies and village settlements.....	7
1.2.2 Intensification and use of modern technology	8
1.2.3 Engaging smallholder farmers in commercial value chains.....	9
1.2.4 Large-scale farming.....	10
1.2.5 Conservation of the soil, flora and fauna	11
1.3 Studying persistence in agricultural development in the valley	12
1.3.1 Discursive practices.....	12
1.3.2 Beyond discourse: agency and practice	15
1.4 Outline of the dissertation.....	16
1.5 The setting: into the Kilombero valley	18
2 The unfolding anthropological methods.....	25
2.1 Unfolding methods	26
2.1.1 Social survey and case study.....	26
2.1.2 Narratives.....	32
2.1.3 Life history	33
2.1.4 Researching archival records	35
2.2 End and continuities of “field work”	40
3 Changing practices and agricultural improvement in Kilombero valley before 1940	42
3.1 Migrations and agricultural practices in pre- and early colonial periods in the valley	42
3.1.1 Valley inhabitants: migration and identity in the Kilombero valley (1850-1920)	42

3.1.2	Agricultural systems in the Kilombero valley before 1940	45
3.2	Reorganization of local institutions and agricultural production	55
3.2.1	Political and administrative reorganization	55
3.2.2	Socio-economic reorganization	59
3.3	A valley reorganized. What next?	74
4	Paddy and cotton improvement? Market monopoly, production control and the uncaptured peasantry: 1940-1961	76
4.1	British colonial agricultural policies and schemes in Tanganyika: 1940 – 1960	76
4.2	Paddy and cotton production and control in the valley: 1940 – 1960	78
4.2.1	Paddy and rice control: 1943-1960	78
4.2.2	Cotton control: 1940-1961	89
4.3	Connections: paddy and cotton	94
5	Post-colonial agriculture in Kilombero: A nationalist vision, global shadows or a colonial mirror? 1960-1980	96
5.1	Framing Tanzania’s post-colonial agricultural policies within global and colonial development trajectories	97
5.2	Nothing learned, nothing forgotten in Kilombero valley	103
5.2.1	Cooperatives, settlements and villages in Kilombero	103
5.3	A concluding remark	119
6	Cooperative societies and agricultural improvement: 1980 - 2015	121
6.1	The evolution of cooperative society frameworks in Tanzania: 1980 and 2015	122
6.2	Remembering cooperatives in Kilombero district	126
6.3	Organization and functioning of cooperative societies in Kilombero after 2009	130
6.3.1	Levels of participation	132
6.3.2	Levels of input use	136
6.3.3	Output/quantity of production	139
6.4	The progressive cooperatives: two case studies	140
6.5	Have cooperatives in the valley met their expectations?	143
7	Standardization, markets and agricultural improvement since 2008	147
7.1	A renewed interest in value chain and standards in the Kilombero valley	147
7.2	Working with the concepts of value chains and standards	149
7.3	Ntalamu and his milling machine: a biography of a Kilombero rice miller	150
7.4	Transaction dynamics and the value chain standards in Kilombero district	152
7.4.1	Input stage: smallholder farmers and adoption of farm standards in Kilombero	152

7.4.2	Post-harvest trade stage: smallholder farmers, middlemen and selling paddy	159
7.4.3	Milling and marketing stage: middlemen, millers, and traders	160
7.5	Winners and losers in the value chain: Positioning benefits for smallholder farmers in Kilombero	163
7.6	Inclusion and exclusion of Kilombero smallholder farmers in the value chain: final thoughts	168
8	Contested areas, evictions and agricultural improvement?	171
8.1	Political discourses and public validations – narratives and policy actions in the valley .	171
8.2	Agro-pastoral conflicts in the Kilombero valley – myths and realities	177
8.3	Land, water, and enclosures in the valley: a brief overview	185
8.3.1	Ramsar site and contested spaces	190
8.3.2	SAGCOT, largescale farming and contested spaces	193
8.4	What futures? – a concluding remark	201
9	Finding connections and linkages: a conclusion	203
9.1	The discursive practices of agricultural improvement in Kilombero valley	204
9.1.1	Groupings – cooperative societies, villages and settlements	204
9.1.2	Intensification and use of modern technology	206
9.1.3	Engaging smallholder farmers in commercial value chains	207
9.1.4	Large-scale farming	209
9.1.5	Conservation	210
9.2	Synergies	211
References	214

List of tables

Table 1: The agricultural year in Kilombero valley, 1930s	52
Table 2: Labor migration out of Mahenge district, 1926	62
Table 3: Settlements and their respective tax paying	68
Table 4: Market posts in Kilombero valley, 1943	81
Table 5: Anticipated and actual purchase of hand-hulled rice at different market posts in Ulanga district by D.K Hindocha (Tang) Limited, 1947	88
Table 6: Quantity of paddy sold in Ulanga district between 1949 – 1957	89
Table 7: Production of native-grown cotton lint in the Eastern Province (in bales of 400lb)	90
Table 8: Summary of Government agricultural policies in mainland Tanzania, 1946-76	100
Table 9: Changes in number of members in 12 cooperative societies	131
Table 10: Use of extension services between 2005 and 2014	157
Table 11: Quantity of paddy produced and sold for the year 2013	158
Table 12: Report B. Q51. Do you sell your crops? Where N=94	159
Table 13: Quantity of paddy brought and milled in Ntalamu's rice mill for seasons 2013-2014 and 2014-2015	164
Table 14: Timeline over evictions in Operation Save Kilombero Valley, 2010-2013	176
Table 15: Number of livestock branded in Kilombero district between August and October 2012	179
Table 16: List of farms in Kilombero district council owned by corporate farmers, 2015	195
Table 17: List of medium-scale farmers in Kilombero district council, 2015	196

List of figures

Figure 1: Map of Africa and of Tanzania showing the location of Kilombero valley	1
Figure 2: Map showing Kilombero valley with some of its land use activities	19
Figure 3: Intermarriage in Kilombero district, 2014	23
Figure 4: Main livelihood distributions in Kilombero district	24
Figure 5: Map of Kilombero valley showing the location of Mahutanga village	30
Figure 6: Map showing migration and settlement patterns of different groups in the Kilombero valley (ca. before 1885)	44
Figure 7: Systems of shifting cultivation in the Kilombero valley	48
Figure 8: Kilombero trading networks in the early British colonial period	73
Figure 9: Map of Kilombero valley showing the locations of settlement schemes of the 1960s	109
Figure 10: Map of Kilombero valley showing the locations of three Ujamaa villages of the 1970s	114
Figure 11: Use of inorganic fertilizers by members and non-members of farmer groups	137
Figure 12: Use of weed spray by members and non-members of farmer groups	138
Figure 13: Rice output from Mangula A Farmers Association	141
Figure 14: Proportion of land holdings among large-scale farmers in Kilombero valley	194
Figure 15: Map of Kilombero valley showing the location of Mngeta farm	199

List of Photographs

Photo 1: Hand-drawn map of Mahutanga village showing sub-village boundaries and livelihood strategies..... 31

Photo 2: Photo: A farmer showing us around the irrigation scheme of Mkula Farmers Association 142

Photo 3: A farmer showing me around part of her shamba that is intensively cultivated 156

Photo 4: Grader (left) and non-grader (right) milling machines 162

List of Abbreviation

AAGC	African Agricultural Growth Corridor
AO	Administrative Officer
BMBF	Federal Ministry for Education and Research (Germany)
CBNRM	Community Based Natural Resource Management
CCD	Commissioner for Cooperative Development
CCM	Chama Cha Mapinduzi
CSO	Civil Society Organization
CEA	Culture and Environment in Africa
DAAD	German Academic Exchange Service
DANIDA	Danish International Development Agency
DC	District Commissioner
DFID	Department for International Development (United Kingdom)
DO	District Officer
FPA	Focal Point Approach
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GoT	Government of Tanzania
HIV	Human Immune Virus
IAU	Ifakara African Union
IBRD	International Bank for Reconstruction and Development
IMF	International Monetary Fund
IWGIA	International Work Group for Indigenous Affaires
JICA	Japan International Cooperation Agency
KATRIN	Kilombero Agricultural Research and Training Institute
KIHOCO	Kilombero Holding Company
KILORWEMP	Kilombero and Lower Rufiji Wetland Ecosystem Management Project
KNPA	Kilimanjaro Native Planters' Association
KNPU	Kilimanjaro Native Planters' Union
KOTACO	Korea Tanzania Company
KPL	Kilombero Plantation Limited
KVTC	Kilombero Valley Teak Company

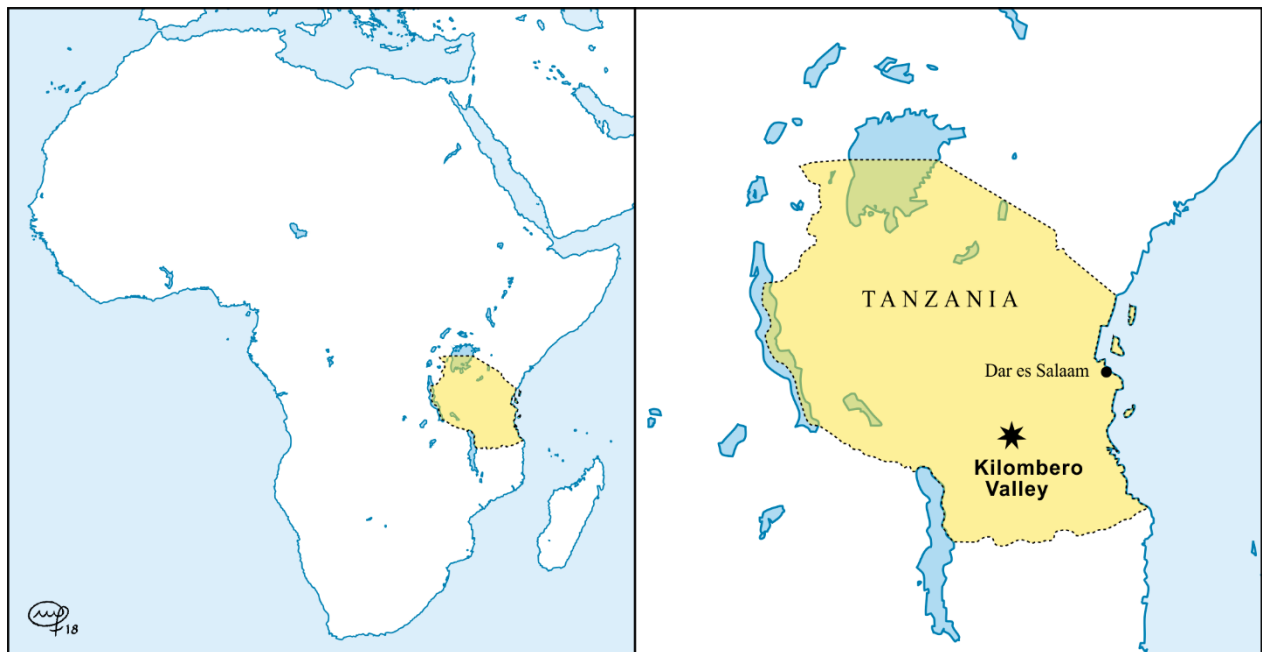
MFI	Micro-Finance Institution
MNRT	Ministry of Natural Resources and Tourism (Tanzania)
NGO	Non-Governmental Organizations
PC	Provincial Commissioner
PDF	Tanzania Peoples Defense Force (National Tanzanian Army)
RC	Regional Commissioner
ROM	Regional Office Morogoro
RSC	Rural Settlement Commission
RUBADA	Rufiji Basin Development Authority
RUDI	Rural Urban Development Initiatives
SAGCOT	Southern Agricultural Growth Corridor of Tanzania
SBT	Sugar Board of Tanzania
SUDECO	Sugar Development Company
TAA	Tanganyika African Association
TANAPA	Tanzania National Parks
TANU	Tanganyika African National Union
TNA	Tanzania National Archives
TSh	Tanzania Shillings (1 Euro was approximately TSh 2200 at the time of data collection – 2014-2015)
TRDB	Tanzania Rural Development Bank
UATA	Ulanga African Traders' Association
UKAID	United Kingdom Agency for International Development
UNFAO	United Nations Food and Agricultural Organization
UNO	United Nations Organization
USAID	United States Agency for International Development
VBAA	Village Based Agricultural Advisor
VDC	Village Development Committee
VSA	Village Settlement Agency
WISE	Women in Social Entrepreneurship
WMA	Wildlife Management Area
WW	World War

1 Introduction

1.1 Agricultural improvement? Background, scope and research questions

On the morning of June 11th, 2014, my driver and I set off from Dar es Salaam for the Kilombero valley which lay about 410 kilometers south-westwards (see figure 1 below). It was a slow drive because the highway, which connects the Seaport in Dar es Salaam to the interior of the country, and to the other East and southern African countries bordering Tanzania, is laden with both passenger and goods vehicles. The congestion of vehicles on this highway eventually slows the traffic down. My experience with slow traffic, especially on the highways in East Africa, is that it causes frustration and restlessness among many road users. I am one of those road users who sits and impatiently wishes that the traffic would speed up. On this day, however, I did not mind the pace at which we drove. I may even have enjoyed it. The drive enabled me to peruse different impressions of the surrounding environment and the activities taking place in them. In many cases, I related closely with the undulations, plains, highlands and bushes in the near and distant spectrums along the highway. I connected with the buzz, the fuzz, the swirls and whirls in the trading centers and the small towns through which we drove. This could have been a highway in Uganda, my home country.

Figure 1: Map of Africa and of Tanzania showing the location of Kilombero valley



Many of the impressions along this highway contributed to a passing thought, but some opened new conversations with Alex, the driver. One such conversation-opening-impression was a number of smallholder farmers I saw working on their *shambas*¹, across different landscapes. My plain, and perhaps naïve curiosity was whether those whose shambas were located around swamps got a better harvest than those on the undulating plains. I might have uttered these thoughts out loud, for Alex enthusiastically offered his view point. His view was that production was generally low and it was the fault of the smallholder farmers. According to my recollections of the conversation (which I wrote down only the following day), he continued along the following lines which I have paraphrased:

Sometimes, if they are lucky, production is good, and sometimes it isn't. But I see many NGOs now coming to help... They teach farmers how to farm, give them seeds and fertilizers and even find them buyers in Dar es Salaam... But some farmers are stubborn, you know. Even when you help them, they don't change!

This conversation kept me pondering about agricultural development in Tanzania and, particularly, in the Kilombero valley. As in many African countries, many colonial administrators in Tanzania attempted to transform and “improve” agricultural production from small-holder subsistence cultivation to a “modern” market-oriented agriculture. “Improvement” hence was, and as I plan to show, still is, regarded as a linear and evolutionary movement towards a betterment by the conceivers, designers and implementers of “development”, especially the state, global institutions, and multinational companies. By this definition, I will argue that since the German colonial period, agricultural improvement in the Kilombero valley, has been bound within five “improvement” strategies (discursive practices) or ideas. These strategies are:

1. Groupings: the belief that organizing farmers into settlements, villages and cooperative societies will enable them to realize economies of scale;
2. Intensification and use of modern technology: encouraging farmers to intensify production and to adopt modern inputs in order to increase productivity;
3. Value chain: integrating local farmers into the national, regional and, or global value chains;

¹ Swahili for agricultural field. Along the highway from Dar es Salaam to Kilombero valley, and in the valley, the size of the shambas ranged from of 0.5 acres to 5 acres, usually cultivated by family labor which consists on average of 1 to 8 individuals, both children and adults.

4. Large-scale farming: using large-scale farms to serve as model modern farming and/or to improve production;
5. Conservation of the soil, although in some cases the arguments are extended to flora and fauna.

The attempts to transform and improve agricultural production in the 19th and 20th centuries in many of the European colonies stemmed, as has been argued by Li (2005: 388), from the “will to improve, a notion emphasizing the right and the responsibility of the colonial power to develop nature’s bounty and spring Native welfare and productivity up to new standards”. This “right and responsibility” was, however, motivated by the socio-economic transformations in Europe that demanded extractive resources for industrialization in the metropole (Isaacman and Roberts, 1995: 7; Green, 2014: 4; Sunseri, 1995: 180), and later, a need for the colonies to be able to finance themselves (see Hoag, 2013: 14; Wakefield, 1940: 233-234). Hence, German colonialism in Tanganyika Territory saw the emphasis on cash-crop production, with an initial focus on plantation agriculture and later encouraging cash-cropping for smallholder farmers. The British colonial administrators, however, concentrated their agricultural interests on promoting smallholder production of both food and cash-crops.

Since riverine areas had captured the interests of colonialists, the Kilombero valley, a wetland area, became a center for many agricultural improvement experiments. In 1909/10, the German colonial administration proposed a canalization of the whole valley. Between 1920 and 1960, the British colonial administration centered their agricultural improvement efforts around attempts to expand the production and marketing of cotton and paddy in the valley. They tried to introduce new crops and attempted to institute new technology. However, by the end of British colonialism in Tanzania, some colonial administrators in the valley lamented the inabilities of their agricultural policies to increase production of cash- and food-crops and thus bring about a better standard of living in the valley. These disappointments, as I will show, can be explained by the disconnection between the agricultural policies which ignored the socio-economic and ecological conditions in the valley.

The post-colonial agricultural development policies of Nyerere’s socialist Governments in Tanzania, which aimed to turn the country into a modern industrial state, employed similar agricultural development strategies as the German and British colonial administrations. The Kilombero valley was among the first areas in the independent state where experiments in settlements and large-scale farms were initiated. These experiments, in so far as they were driven

by the state, were facilitated by the Food for Agricultural Organization of the United Nations (FAO) and World Bank. However, by the end of the 1970s, these experiments had collapsed. A few of the smallholder farmers I talked to remember the Lumemo large scale paddy farm, which was situated in the heart of the valley in the 1960s, while many of them grumbled at the defunct cooperative societies of the 1970s. The strategies employed by the state to reorganise the agrarian system, not only in the valley but in the country, had failed to improve agricultural production. Such state-led intervention was brought into question.

In a wider sense, state-led development came into critique, not only in Tanzania but globally. The inability of the states in the so-called Third World, to bring development to their citizens, was compounded by the breakdown in the Bretton Woods control of capital movements. This resulted in the reduction of the capacity of the state to promote national development; led to the termination of the exchange rate being fixed to a gold value through the United States (US) dollar; and resulted in a series of policy changes which gave rise to the neoliberal agenda – policies that accord the main role in resolving economic and other problems to the market rather than to the state (Harvey, 2006: 25-29; Kirsten et al., 2009; Leys, 1996: 6-7; Rapley, 2007). Tanzania reluctantly and gradually gave way to neo-liberal policies in the mid-1980s and the subsequent decade. Agricultural development however, remained a focus and an interest to the following Governments, although with increasing auspices from global institutions. The Kilombero valley remained a hub for agricultural development within the neo-liberal space. It presently, forms part of the Southern Agricultural Growth Corridor of Tanzania (SAGCOT), which aims to ensure food security, reduce poverty and kick start economic development through agribusiness and modernization (Government of Tanzania, 2013). Recently, global food and input companies like Monsanto, Bayer and Yara have joined the endeavours in the valley to provide seed and fertilizer inputs; conservation institutions like Ramsar have come in to ensure sustainable wetland use; Non-Governmental Organizations (NGOs) like Rural Urban Development Initiatives (RUDI) are trying to organize farmers into cooperative societies; large scale farms have been re-introduced; and agricultural business investors like Agrica, AgDevCo, Norfund and Capricon have come in to support and engage smallholder farmers with global value chains and markets.

Despite the historical trajectories and the national and global efforts to improve agriculture in Kilombero valley, the production of food- and cash-crops in the valley is still very low and poverty is still high. Notwithstanding this lack of positive outcome, the five strategies/ideas of agricultural development outlined above appear to have persisted. The main concern of this

dissertation is to understand why these five agricultural development strategies, initiated during the colonial time in the Kilombero valley, are still unequivocally applied, even though they have not met the goals of improving the quantity or quality of agricultural production for food and market, and have not managed to safeguard food security or lift the people in the valley out of poverty. This concern will be addressed by asking one central question: What have the five agricultural development strategies done in the Kilombero valley that makes them persistent over time? To answer this question, the dissertation investigates the following specific research questions:

- a. Which policy initiatives have shaped and continue to shape agricultural practices in the Kilombero valley since the German colonial period?
- b. How did these policy initiatives and practices come about?
- c. In what ways have these policy initiatives and practices sought to shape agricultural practices in the valley?
- d. What have been the responses from smallholder farmers in the Kilombero valley towards these initiatives since the colonial period?
- e. What are the connections between and among
 - i. past and present agricultural development initiatives in the valley?
 - ii. responses by the smallholder farmers to these agricultural development initiatives?

This dissertation, therefore, attempts to answer these questions by investigating the agricultural development discourses, practices, and agencies in the Kilombero valley since the onset of European colonialism. It explores how planners think, how they try to put their plans into practice, how local people respond to these plans and practices, and how this in turn might influence the discourses and practices. What becomes clear is that the five agricultural improvement ideas listed above have survived the colonial, socialist, and neo-liberal regimes in the valley and in Tanzania at large, and yet these continuities have not been thoroughly discussed. Because of this, the dissertation places a major focus on the persistence of these improvement ideas/discursive practices, considering what effects they have had on the valley, and how farmers in the valley responded to them. However, in focusing on continuities, I do not intend to de-emphasize the changes that have taken place in the valley over the last 100 years. Since the valley has been a center for many agricultural improvement policies, it has experienced some significant changes in many areas including cultivation techniques, agricultural technologies, institutional settings,

population, marketing and trade. I will point out some of these changes in the course of the narrative. This dissertation can, therefore, be read as a history and critique of agricultural development in the Kilombero valley (1900-2015).

1.2 Smallholders and the agricultural improvement strategies in the Kilombero valley

The definition of who smallholders actually are has been a contentious issue in the agricultural development literature. Netting (1993: 2–3), for example, described smallholders as rural cultivators, who practiced intensive cultivation on a relatively small area of land in densely populated areas. He portrayed them as custodians of land whose social differentiation is negligible, as the rich ones tended to migrate to the urban areas. They practiced sustainable agriculture, engaged with the market and exuded a social harmony based on cooperation (ibid). Netting’s description covers many of the qualities attributed to smallholder farmers by other authors, which include sustainable farming (Altieri and Nicholls, 2012); autonomy from other economic (capitalist) groups (Hydén, 1980); cooperation (Nyerere, 1968b); cultivation on a small area of land (Hazell et al., 2010; Nagayets, 2005), and engagement with the market on a small scale (Bernstein, 2006, 2009). Each of these qualities can, however, be examined from several critical perspectives. For instance, treating differentiations in smallholders as negligible and analyzing smallholders as a homogeneous group, is contested by many (see, for instance, Bernstein, 2013; Cousins, 2010: 2; Oya, 2007; Peters, 2013: 550). Cousins (2010: 2), for example, argues that considering smallholders as homogenous obscures “inequalities and class-based differences” and fails to distinguish interest and goals of smallholders. There are smallholders to whom farming only makes a partial, a significant or a full contribution to their social reproduction, hence also have a differentiated level of investment in farming. Similarly, the question of farm size has also been debated, a major contention lying in the ambiguity of the meaning of “small farms” (see Nagayets, 2005: 355). And finally, are smallholders only crop cultivators, as Netting suggests? Where do pastoralists and fisher men/women fall?

This dissertation, basing on observations from the valley, defines smallholders as those farmers who cultivate areas of land ranging from less than one acre to seven acres; and pastoralists and fishers who, as individuals, households or groups, practice an extensive livelihood. They rely primarily on family labor, although they might engage a small amount of hired labor. Although

they may be differentiated in terms of socio-economic background, they have historically been and remain, suppressed by a national and international hegemony that has viewed them as backward, static, unproductive, and in need of change. This change is seen as a movement away from subsistence and extensive livelihood and toward “modern farming” in order to improve their production. This dissertation then contends that the colonial and post-colonial Governments in Tanzania and their administrators in the Kilombero valley, through multiple deliberations, have attempted to transform smallholders into modern agriculturalists, as envisaged within the context defined by the five improvement strategies outlined above.

1.2.1 Groupings – cooperative societies and village settlements

Groupings is a form of social engineering that many Governments in Africa have used to control population and to effect Government policies. Such social engineering in agriculture involved, but was not limited to, relentless measures to reorganize villages and “tribes” (see Mamdani, 1996), family (see Hickel, 2012), and gender roles (see Moore and Vaughan, 1994). Scott (1998: 2-3) argues that the state is interested in organizing society in such a way that it is legible and easily controllable, in order to effect (state) development plans. He sets four premises for the logic behind such social engineering. These are: the administrative ordering of nature and society, the high modernist ideology, an authoritarian state willing to use its power to accomplish high modernist designs, and finally a weak civil society (ibid: 4.5). As much as these premises are still pursued by many Governments, many social engineering do not strictly follow these premises. For instance, coercion might not be applied to implement a development project and social engineering was not and is not only carried out by the state but missionaries, churches, NGOs and development institutions among others (Li, 2005: 383-384). These schemes might range from big projects like those described by Scott (1998) to less visible ones such as the introduction of the Systems of Rice Intensification in a village in Kilombero or putting up structures for youths to access HIV counselling and guidance. Cognizant of the various forms of social engineering, I will limit my analysis of social engineering to settlements, villages and cooperatives. This is because these were, and still are, the most common attempts towards reshaping the population in the Kilombero valley in order to reorganize agricultural production.

The main feature in settlements and cooperative societies in the valley is an attempt to gain economies of scale by bringing several people together in the economic logic of pooling resources. This logic of cost-effectiveness increases bargaining powers of smallholder farmers on the one

hand and, on the other, eases the delivery of goods and services to the farmers. I have divided “groupings” into cooperative societies and village settlements because, although at some point in the history of the Kilombero valley these have been one, at other times they have existed exclusively of each other. Although there were forms of cooperation and settlements within the valley before European colonialism, their reorganization as a modern institution emerged within the structures of the colonial and post-colonial states, albeit with various claims to protecting local organizational traditions. On many occasions, these structures failed to improve agricultural production. What then has this strategy done towards achieving agricultural improvement in the valley?

1.2.2 Intensification and use of modern technology

The argument for this strategy is that for agricultural development in Africa to be achieved, there is a need for intensification with the adoption of new technologies that use purchased inputs, such as improved seeds and inorganic fertilizers, to increase land and labor productivity (see Conley and Udry, 2001: 668; Dorward et al., 2009: 7; Sheahan and Barrett, 2017: 12). Improved technology is said to provide opportunities, also for smallholder farmers, to increase their output as well as their income and food security (Mariano et al., 2012: 41). Many state administrations in Africa have, since the colonial time, attempted to introduce various modern agricultural technologies, such as milling machines, ploughing tractors, chemical fertilizers and improved and high yielding seeds. Peters (2013: 540) has argued that the logic of modern input use in the colonial period in Africa was based on northern European models. One reason to set up a giant ground nut scheme in Tanzania between 1946 and 1953 was to be able to show the African population the benefits of using modern technology and intensification.

The adoption of these technologies has varied from individual to individual, place to place, in time and in the type of technology. A resounding tone in the discourse of modern technology is that its adoption in many African countries is still low (see Kirsten et al., 2009; Sheahan and Barrett, 2017). The reasons for this are manifold. Different studies point to various factors including risk, uncertainty and learning (Marra et al., 2003), age and level of education (Mwaseba et al., 2006), social capital (Isham, 2002), social learning (Conley and Udry, 2001), perceptions (Adesina and Baidu-Forson, 1995), gender (Doss and Morris, 2001), technological attributes (Nakano and Kajisa, 2011) and cultural factors (Boholm et al., 2013; Heinrich, 2001).

Since the 1940s, the Kilombero valley has experienced attempts by the state to introduce modern farming methods. Although modern technology adoption rates are low, the state and its development partners still strongly advocate the use of these technologies. Through ethnography, this dissertation will examine how the state and its development partners launch strategies to implement and intensify the use of modern technology and consider the reasons why local smallholder farmers do not adopt certain modern technologies.

1.2.3 Engaging smallholder farmers in commercial value chains

The logic in integrating smallholder farmers in the commercial value chain is so that they can add value to their agricultural products, sell them at a fair price to a wider market, gain an income and get lifted out of poverty (see *World development report 2008*, 2007). The colonial administrators in the valley wanted to widen production of seed cotton in order to increase the amount of cash in the hands of the local producers, albeit for them to be able to pay their taxes. However, because such initiatives ignored the interest of local farmers and traders, they were soon ignored by the local farmers. In places where they were carried out, it was because of the authoritarian enforcement of such policies. Efforts to integrate smallholder farmers into the commercial value chain in the valley continued in the post-colonial socialist state. However, many of these farmers, when not coerced sold paddy and at the farm gate.

Recently, the neoliberal state has explicitly designed policy measures to integrate the local producers into the global value chain (see the SAGCOT Investment Blueprint 2011). These new policy measures attempt to modernize agriculture by emphasizing the business capabilities of agriculture and working towards making agriculture lucrative. Such an agribusiness strategy is promoted by emphasizing the need to integrate local smallholder farmers in the value chain from input to consumption. It is therefore not limited to a specific locale, but transcends boundaries, involving actors from across the globe. One way of achieving this is through contract farming. For example, the Kilombero Plantation Limited (KPL), with support from investors like AgDevCo, Norfund and Capricon Investment Group², offers input subsidies to the local smallholder farmers, teaches them the System for Rice Intensification (SRI), and buys their paddy, processes it and exports the rice outside the valley and the country. Similarly, those not under contract may get input subsidies from the state and its development partner. This group of smallholder farmers, to

² <http://www.agrica.com/html/investors.html>

various degrees, receives technical support from extension officers who teach them how to use these inputs. This dissertation examines concepts, theories, and policies in the value chain propagating and facilitating resistance and compliance.

1.2.4 Large-scale farming

The logic behind large-scale farming is the belief that it is technically more efficient and productive than smallholder farming, hence, enjoys economies of scale (Johnson and Ruttan, 1994: 691). Given the increasing need for food production and the evolutionary conception of development, large-scale farms have been taken as models for agricultural development in many African countries. However, various studies, mainly in agricultural economics and development economics, dispute this claim. For instance, following insights from the Russian agricultural theorists, Alexander Chayanov, Collier (1983) and Barrett (1996), have observed an inverse relationship between farm size and productivity in Africa. The reasons for this include a failure in the labor market due to high transaction and supervision costs of labor on the one hand and the lack of precise data on the soil quality on the other (Barrett et al., 2010: 88). One of the prominent conclusions in this body of literature is that small farms are on average more efficient and productive than large farms. Moreover, as for the claims that large-scale farms enjoy economies of scale, Johnson and Ruttan (1994: 693) argue that large-scale farms do not enjoy internal economies of scale, but under certain circumstance might have pecuniary economies (such as access to credit facilities, inputs, storage and marketing) or policy distortions. This conclusion further undercuts the efficiency narratives accorded to large-scale farms. Similarly, there have been various criticism of the socio-economic effects of large-scale farms on the poor farmers and of ecological effects on the environment. Schutter (2011: 256–257), for instance, argues that wage labor in large-scale farming is underpaid compared to subsistence wages and that these laborers lack legal and social protection. He adds that large-scale agriculture has led to a growth of landless or quasi-landless agricultural workers (*ibid*).

There has been a long history of large-scale agriculture in Tanzania. This ranges from colonial plantations in rubber and sisal; the disastrous groundnut schemes of the 1940s and 1950s; the state farms of the 1960s and 70s; to the recent endeavors to uplift large-scale farms in the SAGCOT. However, Tanzania and the Kilombero valley have experienced the demise and collapse of large-scale farms respectively. Sunseri (1996) has highlighted the labor regimes and squalid conditions endured around colonial German plantations, just in order for people to be able to earn

an income to pay their taxes. Similarly, the infamous groundnut scheme saw miscalculated assumptions on nature, labor and infrastructural services, which only resulted in diseconomies of scale (Rizzo, 2006). Coulson (1982) has lamented on the failures of state farms and collective farms of the 1960s and 1970s which, despite aiming at increasing production to kick start an industrial revolution in the country, failed miserably. Most recent is the dispossession of small farmers on the Mgeta farm in the valley which attests to Schutter's (Schutter, 2011) fear of displacement or, in Harvey's (Harvey, 2003, 2006: 41) term, "accumulation by dispossession". Moreover, smallholder farmers working as contract farms to the Kilombero Plantation Limited have confessed to being in greater debt than before entering the contract. Therefore, if large scale farms are economically, socially and ecologically costly, why then has the state in Tanzania and the administration in Kilombero valley continued to pursue them?

1.2.5 Conservation of the soil, flora and fauna

Conservation discourses spread across the African continent towards the end of the 20th century and the beginning of the 21st century. The conviction for the discourse was the actual or perceived realization of the declining wildlife and forest frontiers, a fault accorded to unregulated hunting and deforestation activities. Campaigns to conserve nature at the turn of the 20th century, originally prominent in the southern parts of Africa, aimed, at first, to save the 'Big Five'³ but later included the generation of income for development through tourism. This wind of change eventually blew across eastern and central Africa during the 20th century, resulting in the creation of many game parks and nature reserves. In this movement, the state became the patron for conservation, until the 1980s, when the 'community' and private investors with support from some international conservation bodies were incorporated as co-owners through the participatory management policies.

Conservation went hand in hand with agricultural improvement in many cases. On the one hand, the logic of separating reserve land from agricultural land was to prevent vermin from destroying crops. In this way, the problems of low production and hunger resulting from the vagaries of elephants or hippos would be avoided. However, in some countries, such as South Africa and Kenya, this process also saw the portioning off to white farmers of massive chunks of land for large-scale agricultural development and group concentrations or block farms for black

³ Elephants, Lions, Rhinoceros, Leopards and Buffalos

farmers. On the other hand, the conservation narrative, which took the form of land improvement, put a focus on soil conservation and improved farming techniques. Rapp et al. (1972: 105) observe that soil erosion and soil conservation had long been major issues in several tropical areas. Since the 1920s, the theme of erosion had been a talking point in the East African countries. Consequently, research on the causes and the extent of the erosion was carried out and different conclusions were reached. In the Tanganyika Territory, the claim was that local African farmers practiced poor farming, which degraded the land, leading to erosion. The solution provided by the colonial administrators provided was to persuade local farmers to use improved land use methods, like terracing, mono-cropping and land intensification (ibid).

These measures, as I will argue, have led to the dispossession of smallholder farmers and in some cases decline in production. This dissertation, therefore, questions the argument that conservation is a strategy for agricultural improvement in the valley.

These five strategies of agricultural improvement are not mutually exclusive, although some have been emphasized more than others at different or similar times in the course of the history of the valley. Because agricultural improvement in the valley has been bound within these five strategies (which I will call discursive practices – see next section), the dissertation will analyze the processes of agricultural development in the valley within these strategies while focusing on their conceptions, implementations and how smallholder farmers respond (ed) to them. This will provide a means to understanding what they have done that makes them persistent.

1.3 Studying persistence in agricultural development in the valley

1.3.1 Discursive practices

In the late 1980s and early 1990s, anthropologists started moving away from studying the processes, relationships and dynamics from which development was to be understood, towards trying to understand the very institutions and knowledge through which development ideas were produced (Venkatesan and Yarrow, 2014: 3). This move was tied to anthropology's self-reflection as an ally to and a product of the colonial agenda, which sought to bring progress and development to the poor in the (African) colonial territories but instead created moral and ethical questions in its practices and representations (see Ferguson, 1997 for discussion). These criticisms were therefore made in an effort to closely reflect upon and deconstruct the practices of anthropology and "its evil

twin” so as to create an objective conception of the colonial and former colonial territories (Ferguson, 1997). In critiquing the concept of development, these perspectives extended Foucault’s insights on discourse and power to help understand development, especially in the way in which it has been applied in the so-called developing world (see Ferguson 1990; Escobar 1995; Cooper and Packard 1997; Scott 1998). Escobar (1995: 5–6), thus, argues that thinking of development in terms of discourse not only keeps attention on domination but also opens up avenues to productively discuss conditions of possibilities and negative outcomes of development. Even though this literature focuses on development as a whole, it offers insights to understanding the persistence of agricultural development strategies in the Kilombero valley.

A starting point in analyzing the persistence of the five agricultural development strategies in the Kilombero valley is to apply the concept of ‘discursive practices’ discussed by Escobar (1995). Building on thoughts expressed by Ferguson (1990), Escobar argued that development ideas meander around a body of knowledge constructed around a complex system of socio-economic, institutional and technological relationships that form powerful and hegemonic entities. Like many post-development critiques (Sachs 1992, Ferguson 1990, Crush 1995, Scott 1998), Escobar reasons that these institutions define the problem, accord it to a people or a place, outline the means to solve such a problem and intervene with technical (or assumed) expertise. He argues, further, that this complex system of relations that make development ideas persistent, although existed before, was re-formulated in the mid-20th century. He explains that despite a series of structural changes, the architecture of such relations remains unchanged, allowing the development discourse to adapt to new conditions. In this way, development strategies and sub-strategies can only be contended, modified or changed from within the confines of the same discursive space.

This argument might explain why the state of Tanzania came to conceive agricultural development in the valley within the five strategies outline above. These strategies were anchored on the ideas of “progress” engrained in the industrial age of western Europe and the colonial imperialism in Tanganyika (see Green 2012). Hence, when German and British colonial administrators in the valley encountered an agricultural system based on shifting cultivation, and a cultivation of paddy which they deemed unfit to contribute to a flourishing market, industrialization and “civilization”, they introduced cotton and expanded the production of paddy for the market. Eventually, large-scale farms were instituted, and smallholder farmers were concentrated in villages. By the middle of the 20th century, farm inputs like tractors and new crop varieties had been introduced, continuous induction of smallholder farmers into the commercialized value chain

was ongoing, and conservation of the soils to improve production and protect the environment was a central narrative. The post-colonial state, together with international development institutions interested in developing agriculture in Tanzania stuck with these strategies, reformulating or modifying them in what Escobar (1995: 43, 207) referred to as the “complex system”. This dissertation therefore, takes these strategies as discursive practices, through which agricultural development in the valley has been and continues to be pursued.

This formulation of discursive practices, however, when left to stand alone, views the state’s role as passive and limits the formulation of development strategies to the colonial and so-called Western world. Since this dissertation argues that agricultural development in the valley has been influenced by a multitude of actors including the state, the interests of the state in agricultural development should hence be considered in the analysis. A seminal contribution of state interest in the persistence of agricultural development strategies can be found in the concept of “side effects” of development projects as highlighted by Ferguson (1990: 252). The “side effects” might, on the one hand, be infrastructural development and administrative knowledge and, on the other hand, the expansion of the exercise of bureaucratic state power on the “target population” (ibid: 252-256). This is achieved by depoliticizing poverty and the state by defining “development problems” in technical terms and by offering technical solutions which mask the political interests of the state and its development partners in a development project. In considering interest, one might find that the state is interested in the “side-effects” of development much more than in the intended goal expressed publicly. Therefore, despite failures in development projects, such projects will probably be replicated.

In a similar vein, the agricultural development strategies discussed in this dissertation explicitly illustrate the interests of the colonial and post-colonial Governments in extending their powers to the local smallholder farmers. A clear example is the encouragement and controlled formation of cooperatives, settlements and villages. The Government also uses the infrastructure from the development programs for political gains. Local officials in the Kilombero valley told smallholder farmers in cooperatives that they (officials) brought the stores or the milling machines to them even though such infrastructure was ingrained with phrases like “donated by USAID” or acronyms like “FAO”.

Two voices from these perspectives are worthwhile noting. The first is that in transcending a structuralist approach, these post-structuralists, bring history, trans-locality and globality to the fore front of development analysis. Such approaches have recently found a safe bed in the

anthropology of development and globalization (see introduction from Edelman and Haugerud 2005). For instance, Durrenberger (2001: 532) argues that it has become obvious that if we (anthropologists) are to understand people anywhere, we need to understand global processes and how they affect everyday lives. Green (2014: 5) adds that colonial legacy in poorer countries should be integrated in such analysis. Secondly, they imply that examination of development should go beyond the economic analysis usually posed in political economy to include a blend of culture and history (see also Edelman and Haugerud, 2005).

This dissertation hence integrates the discourse approach to analyze the persistence of agricultural development strategies in the Kilombero valley. However, studying development as a discourse, much as it is necessary, might have its limits. What then will inform the agricultural improvement problem in the Kilombero valley?

1.3.2 Beyond discourse: agency and practice

Studying development only as a discourse leads to an analysis and description that ignores the particular ideas, relations and practices through which ideas of development are practically enacted (see Venkatesan and Yarrow, 2014: 2). They argue, following other authors (Bornstein 2003; Englund 2006; Friedman 2006; Lewis and Mosse 2006; Mosse 2005; Yarrow 2008), that the discourse approach produces forms of ethnographic reductionism in cases where it is assumed that the discourses and practices of development are driven by the disguise of power, overlooking the fact that development actors might themselves privilege beliefs, meanings and actions (Venkatesan and Yarrow: 7). Friedman (2014: 35) has, therefore, suggested that development is not top-down but rather a product of constant interaction between and among localized social and political forces and the dominant and subordinate actors and forces of global development. Connecting this approach with the case of the Kilombero valley, this dissertation shows that planners not only have a multitude of ideas, some of which are conflicting or antagonistic to each other, but that in responding to development initiatives, the local “target” population is not always resistant and subversive but can be cooperative, collaborative, compliant and able to manipulate the initiatives to their own benefit. In the Kilombero valley, parts of the target groups (chiefs and their followers in the colonial times, progressive farmers, local elites, individuals with economic or political motives) position themselves strategically to benefit the development initiatives. This could be through buying land in areas targeted for agricultural development, and/or forming “paper

cooperatives” to receive agricultural inputs. This approach also transcends the state-society binary to recognize the multiple actors carrying out development initiatives in the valley.

Therefore, this dissertation, as much as it considers the discourses of agricultural development in the valley, will integrate in it an analysis of agency and practice.

1.4 Outline of the dissertation

This dissertation is divided into 9 chapters. The second part of this chapter introduces the physical, social, economic and political dynamics of the valley. Chapter 2 outlines the methods used in this study. It highlights my positionality as a researcher and how the research methods unfolded during the time I spent in the valley. The rest of the dissertation is arranged to tell a history of agricultural development in the valley. Chapters 3, 4 and 5 focus on attempts by the colonial and the post-colonial socialist Governments and their respective development partners to develop agriculture in the valley. Chapters 6, 7 and 8 focus on the neo-liberal period in Tanzania and on how this has influenced agricultural development in the valley. Chapters 3-8 discuss also the responses of the smallholder farmers to these respective attempts.

Chapter 3 discusses the pre-colonial socio-political and agricultural dynamics in the valley and highlights ways in which agricultural production was reorganized as a result of colonial actions. It argues that, although the colonial administrators contemplated the significance of the agricultural practices they found in the valley, the overwhelming need to expand production for the market, which some colonial administrators thought could be attained by reorganizing society, compelled them to introduce new and/or modify old agricultural practices in the valley. This was done by inventing and or re-organizing certain institutions in the valley. The creation of ethnicities, reorganization of chiefdoms and establishment of a central authority in the valley was key. It is, however, necessary to point out that whereas colonial officers put an emphasis on “traditional” leaders, chiefs and “native” authorities or tribes, these categories seemed inconsequential in post-colonial social-relations. Post-colonial Kilombero valley became increasingly heterogeneous in terms of ethnic compositions and livelihood strategies, while political rhetoric emphasized national unity as opposed to tribal identity. It then becomes irrelevant to analyze agricultural development ideas based on such categories after independence. Ethnic categorization resurfaces in the new millennium as a political tool to claim and reclaim land and water spaces amongst the state, large

scale farmers, conservationists, smallholder crop farmers and pastoralists. I will discuss this in chapter 8 of this dissertation.

Chapter 4 discusses how colonial administrators in the valley sought to increase production and marketing of paddy and cotton in the interwar and post-WWII periods. It highlights the agricultural development strategies employed and discusses how they were introduced. Chapter 5 discusses the formation of settlements, Ujamaa villages and cooperatives in the valley by the post-colonial socialist Government. It demonstrates the continuity of colonial agricultural development ideas in the post-colonial socialist state and suggests the reasons thereof. Chapter 6 examines the continuity of the cooperative societies in Kilombero district over a long period (1982-2015). It scrutinizes three parameters of cooperatives – farmers’ participation (in common cooperative farm/shamba la darasa, in meetings and in storage and marketing), level of input use, and level of output/production. A general conclusion drawn here is that cooperative societies in the Kilombero valley do not serve the purpose of increasing production and participation in markets but their persistence lies in their infrastructural benefits.

Chapter 7 examines the extent to which smallholder farmers are integrated in, and how they benefit from, the commercial value chain of rice. The chapter examines inputs and commodity chains of rice in the valley. The findings show big power asymmetries between smallholder farmers and agro-processing and marketing businesses, which have resulted in exploitation of the smallholder farmer. Chapter 8 demonstrates how the state has manipulated its land laws and how it created a narrative to blame pastoralists and smallholder farmers for land degradation and conflicts to appropriate more land for conservation and large-scale farming.

Finally, chapter 9 gives the conclusions of this dissertation. It draws from the research questions and discussions in the other chapters to bring together the discursive practices stated in the first chapter. The three general conclusions are: the colonial and post-colonial state of Tanzania and administrators and development partners in the Kilombero valley have imagined agricultural development within five discursive practices. The logic behind the inability of agricultural improvement within these five discursive practices in the valley is premised in the disconnect between these ideas and the socio-economic conditions and expectations of farmers in the valley. However, persistence in the development idea (the five discursive practices) in the valley rests on the expansion of powers of the state and global corporations and institutions through these development initiatives, the physical infrastructural benefits of these initiatives, the desire to manipulate the initiatives by parts of the target group and fear of punishment by the population.

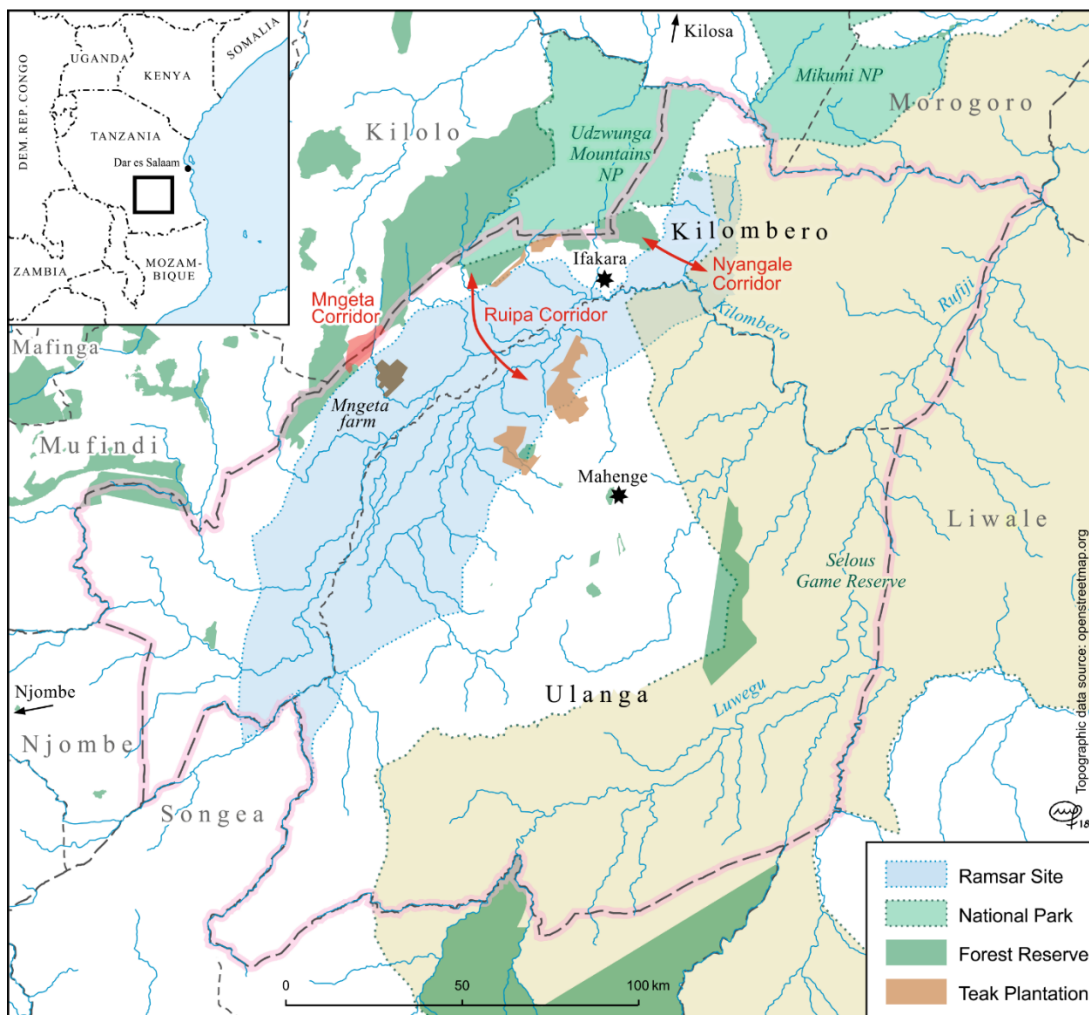
1.5 The setting: into the Kilombero valley

The first pages of this dissertation introduced the conversation with Alex on my first journey to the Kilombero valley. On that morning in June, as we drove to Kilombero, our conversations continued with a range of other topics – from politics to family issues. There were also repeated impressions of the physical environment and landscape - flat land with undulating topographies, short bushes and shrubs, a couple of pastoralists here and there, or people working on their shambas. The highway we were driving on goes through Morogoro town, a place which has historically been an epicenter of agricultural experiments, political discourses and a regional agricultural headquarter since the colonial times (Coulson, 1982). The most prominent feature in Morogoro town, however, is the Uluguru mountain range, which in the month of June, is seen “entering” the heavy cumulus and cumulonimbus clouds. This is the same range we would later meet flowing down into the valley and fencing part of it from the north, north-west and south. Beyond Morogoro town and towards the south, one drives through the Mikumi National Park, which lies about 20 kilometers to the north of the valley, with the Udzungwa Mountain National Park separating the two areas. In the following two months, I would discover the Selous Game Reserve, curved along the east towards the southern sides of the valley. In short, the Kilombero valley is located within a wider ecology of conservation and is a frontier of agricultural production which has multiple socio-political and economic implications on the activities within the valley (see figure 2 below). We shall come across these implications as the chapters unfold.

It was at the start of the ascent of the Udzungwa National Park that Alex announced that we were entering the Kilombero valley. At this stage of our journey, dusk was settling in but a new phase of curiosity was awakened. The early phase of the darkness was partly because the sun was sinking behind the Udzungwa mountain range and partly because the sun was setting in a general sense. The yellow and golden lights still fell upon the dark clouds and illuminated the green vegetation that seemed to be immersed in a fog-steppe. The land formation at this stage did not allow a lot to be seen. We drove uphill on a winding road that was edged by high grasses and trees. Once at the top of the hill, the descent offered a wider perspective. The beginning of the valley curved like a long and narrow trough. As a general description, the valley is part of the *Rufiji* catchment and has a length of approximately 160 miles (about 257 kilometers) and a width of 40 miles (about 64 kilometers) (Jätzold and Baum, 1968: 16). This vast area with multi-facets of features can be categorized according to its geographical coverage, that is, the Inner and Outer

Kilombero; and with their main topological properties (ibid). The outer Kilombero covers only 600 square miles, while the inner Kilombero, which takes up the rest, is framed on three sides by mountain ranges (ibid). These ranges are vast but a description of the Udzungwa and the Mahenge ranges is worthwhile, since, apart from their physical and climatic properties, they have acted as spaces and places of refuge and contentions since pre-colonial times in Tanzania.

Figure 2: Map showing Kilombero valley with some of its land use activities



The Udzungwa ranges, lie to the north-west of the valley and rises gently or, in some places abruptly up to a height of 2000 meters above the Kilombero valley (Larson, 1976: 2). The mountains are covered with natural vegetation of semi-deciduous rainforest and they act as a precipitation barrier with an annual rainfall of 1500 mm (ibid). Towards the south of this inner valley are the horst-like mountains of Mahenge and Mbarika whose elevations range between 3000

and 5000 feet (914 and 1524 meters) (Jätzold and Baum, 1968: 17). This is where the German colonial administrators set their buffer posts and annihilated many of the rebellious groups during the 1904/05 Maji-Maji war (Larson, 1976: 90–95). After the Maji-Maji rebellion, the Mahenge highland became on one hand, a center for agricultural improvement carried out by some German administrators and, on the other hand, a plateau where labor was competed for between these administrators and the missionaries at Kwiwo (ibid, 155-157).

Apart from the national parks, a game reserve and mountain ranges already mentioned above, one more physical feature which covers both the outer and the inner valley is noteworthy of elaboration. This is because it highly shapes settlement and livelihood patterns, climatic conditions and political actions that will be highlighted in the later chapters of this dissertation. This is the river system which is part of the Rufiji drainage.

The Kilombero river, whose main tributary is the *Ruhiji*, flows through a steep and narrow valley before reaching the Kilombero flood plains where it is joined by the *Pitu* coming from the south and a little further down by the *Manyera* coming from the west (FAO, 1960: 15). It splits several times through the valley before reaching *Ifakara*, which is the main trading town and a former colonial administrative center in the valley. At the same time, the river receives tributaries from the west and north-west, with the main tributaries being the *Mpanga*, the *Kihazi*, the *Mgeta*, the *Ruipa*, the *Lumemo* and the *Msolwa* rivers (ibid). The changing steppe of the tributaries regulates the speed of the water flow eventually resulting in the formation of alluvial fans bordering the flood plain and extending irregularly but correlating with the river gradient (Bonarius, 1975: 9). The alluvial fans on the south-western side of the valley are, therefore, better developed, but with spatial vegetation and torrential rainfall (ibid). These alluvial fans face high soil erosion in the catchment areas of the valley while, on the north-western side (which today faces competition from largescale farms), the rivers form “smaller but generally more fertile alluvial fans penetrating and overlying the comparatively poor non-alluvial sand-flats on the edge of the flood plain” (FAO 1961 cited in Bonarius, 1975: 9–10). On the northern side of the valley, one finds the Great Ruaha river that emerges from the *Poroto* Mountains and the *Kiperege* ranges, south-west of the Rufiji basin (FAO, 1960: 14). A 2002 information sheet on Ramsar wetlands registered 37 permanent rivers in Kilombero district and 5 in Ulanga district (1TZ003, 2002). Similarly, a couple of perennial tributaries, the most important being the *Mbarali*, the *Kimani* and the *Chimala*, contribute to the headwaters of this river (FAO, 1960: 14).

At this point of the description, it is important to make clear the administrative boundaries this dissertation is dealing with. For unclear reasons the names Kilombero, Ulanga and Mahenge have referred to similar or different places in history. During the German colonial period, Mahenge was part of the 21 provinces in Tanganyika Territory (Iliffe, 1979). Mahenge Province was made up of Mahenge district and Songea district. Mahenge district in this case was the headquarters of the province and covered the Ulanga valley, consisting of a similar area to that shown in map 1 above (this is the area this dissertation deals with). This might have been the reason why Mahenge district was sometimes referred to as Ulanga district. In 1936, most likely as a result of provincial reshuffles, Mahenge district was changed to Ulanga district and the Ulanga river became increasingly referred to as the Kilombero river at about the same time (Larson, 1976: 268). It was only in 1974 that the valley was divided into two districts, Kilombero District which lies on the northern part of the Kilombero river and Ulanga district which lies in the southern part of the river (Chamwali, 2000: 15).

Having outlined this general description, let us return to the drive with Alex. As we descended the hill, I observed a sugar plantation that stretched along the left-hand side of the road and dispersed homes with vegetable and maize gardens on the slopes of the hill on the right-hand side. After a 10-kilometer drive, we came to the first trading center called Kilombero. It is quite busy here in the evenings. Small-scale trade flourishes at this time in many such trading centers I have been to across East Africa. This small trading center is also the center where the largest sugar factory in the region lies. This is the Kilombero Sugar Company Limited, with 55% of the shares of capital owned by Illovo Sugar Limited, which is a subsidiary of the multinational food processing company, Associated British Foods Plc., based in London, 20% by ED&F Man a London-based commodities group, and 25% by the Government of Tanzania (Illovo Sugar, 2014: 2). The company directly farms 12,000 hectares of land leased from the Government and has a registered out-grower base farming about 14,600 hectares, according to their 2014 corporate report (ibid: 1). Later, I learned that there are 13 such “corporate companies” and 52 medium-scale farmers (who had recently acquired land in the district) owning approximately 83, 891 ha of the 786,800 ha of arable land in Kilombero district. In the corporate companies where the State had shares, the shares can be as small as 2.46%⁴. The drive from Kilombero trading center to Ifakara

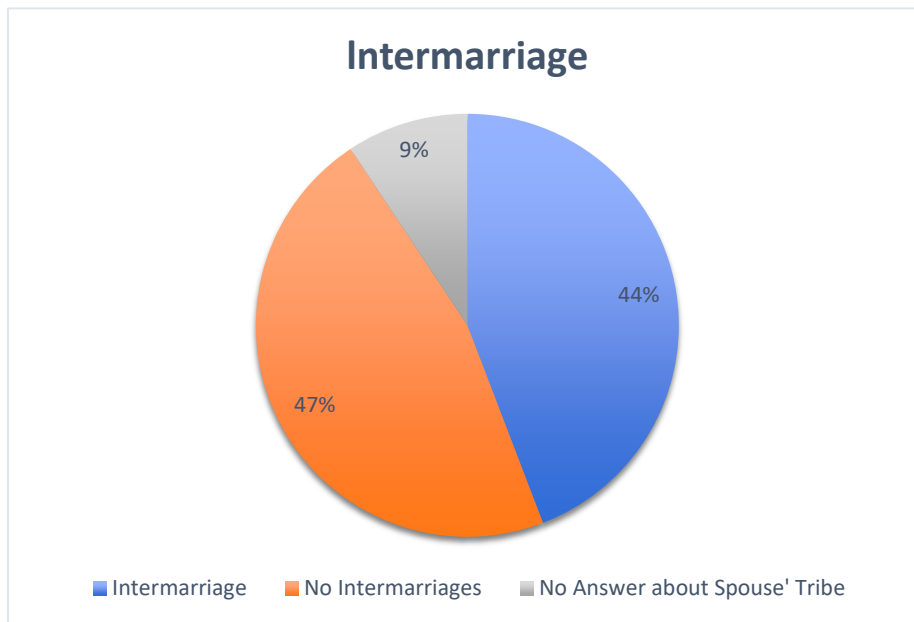
⁴ This is the case with the Kilombero Plantation Limited where Agrica limited a UK based agri-business company owns 97.54% of the shares while the Rufiji Basin Development Authority (RUBADA), a Government organization owns only 2.46%. See KPL (2015)

town offered a couple of agricultural activities on the left-hand side of the road and conservation on the right-hand side. Beyond the sugar plantations were settlements and rice fields. On the right-hand side of the road, the Udzungwa range rose and descended almost in waves, some parts covered in forests while others habited water falls that ran down into the villages, enabling some forms of intensive irrigation. Soon we arrived in Ifakara town, where I would be based for 11 months.

The next two months served to acquaint myself with the Kilombero valley. From my observations and preliminary interviews, every smallholder farmer seemed to grow paddy. I was curious to know how much they produced, on what size of land, how much they sold, how much input they used, from where they got such input, if they received extension services, what kind of extension services and how often, and if they belonged to farmer associations and how that worked, among other questions. Some of the answers will be provided in the arguments as the chapters unfold. However, as a way of introduction to the valley, there are a few points I could highlight here. A livelihoods survey that I conducted towards the end of June, in July and the first half of August 2014 showed that the average land size owned by a smallholder farmer household was 3 acres with an average of 1 acre for land used but not owned. This is similar to findings from Futoshi (2007) who did his research in the valley seven years earlier.

Colonial literature and oral history suggest that the ‘Wandamba people’ were the original inhabitants of the valley and practiced fishing as their main livelihood strategy; that in-migration in the pre-colonial period saw the coming of the Wapogoro, Wabena, Wahehe, Wagindo, and Wangoni, among others, into the valley; and that instances of wars, and subjugations resulted in amalgamations of groups (Culwick and Culwick, 1935; Hodgson, 1926). It should be emphasized here, like (Mamdani, 1996) argues, that, in a general sense, these categories were invented in the colonial times. In chapter three, I show how, on one hand, colonial administrators only made up such categories for easy control and to form alliances, while on the other, tribal chiefs contributed in their invention to gain jurisdictions over other “tribes”. I show how, and argue that, following Gupta and Ferguson (1992), these categories were highly differentiated and their social, economic and political boundaries were fluid.

Figure 3: Intermarriage in Kilombero district, 2014

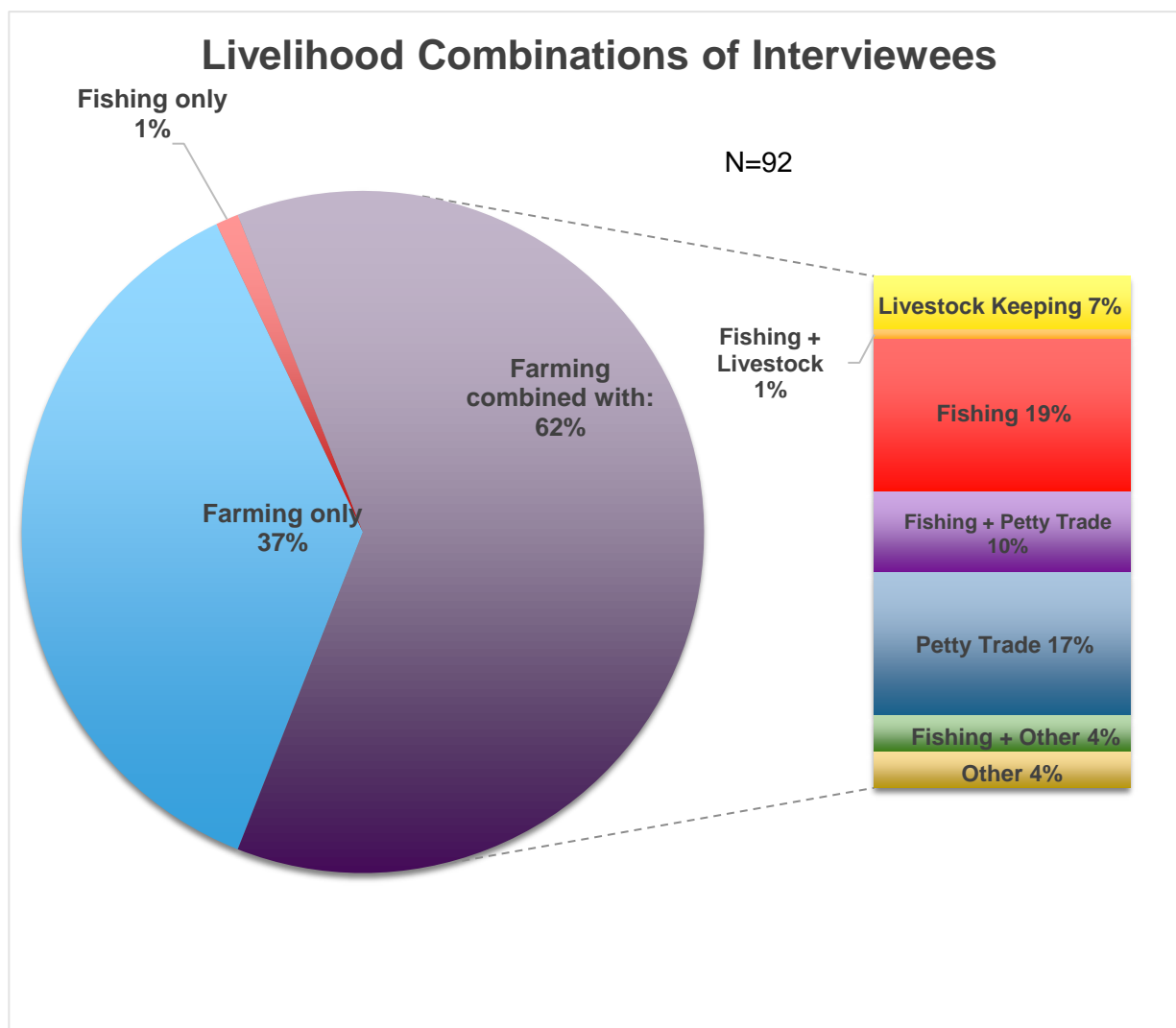


However, since politicians still use them, and many individual farmers still identify themselves within these categories, I maintained them during the survey for purposes of understanding political discourses on resource access and conflicts. Thus, the survey showed a high rate of intermarriages (see figure 3 above).

The main livelihood activity in the Kilombero valley is wetland agriculture, particularly rice production (Beck, 1964: 39; Futoshi, 2007: 4; Baum, 1964: 24; Kangalawe and Liwenga, 2005: 971). The survey showed that 99% of the valley's smallholders were farmers (mainly paddy), and of these, 34% had carried out exclusive farming (paddy intercropped with maize) in the season 2013-2014 (see figure 4 below).

My survey required respondents to state quantities of paddy produced in the last season (2013/14). The average production in 82 households who could give relatively reliable figures was 823.32 kilograms of paddy, of which about one half, was sold. This might not be representative of long term trends, since there had been floods the previous year, but other researchers show that production in the valley is generally below optimal levels (Futoshi, 2007; Kangalawe and Liwenga, 2005)

Figure 4: Main livelihood distributions in Kilombero district



Moreover, the paddy was sold to middlemen at the farm gate, rendering little, if any, value addition. With such information, some curiosities arise: what happened to all the agricultural improvement endeavors the valley has experienced and why are similar initiatives being implemented if the intended goals of increasing the production, value and marketing of agricultural products of smallholder producers is not being met?

2 The unfolding anthropological methods

Friedman (2014: 35–36) argues that integrating an analysis of local agency in studying development means a methodological approach which goes back to anthropology's stronghold – ethnography, long field work and its associated methods, and “thick description”. Long field work enables a researcher to apply the tool of participant observation where he or she gets immersed in a culture and learns through emic perspectives, but is able to withdraw from this immersion, make sense of what he or she has learnt, put it into perspective and write about it convincingly (Bernard, 2011: 258).

Postmodern critique of anthropology has, however, been critical of the traditional field work approach. It has questioned the ability of an ethnographer to immerse oneself enough to empathize with, and depict a culture from the view of those under observation (Clifford, 1983). More recently, questions have been raised as to whether it is even relevant for the anthropologist to empathize with a culture, or whether it is “desirable to describe and/interpret cultures as if those depictions could exist without the ethnographer's being part of the action” (Angrosino, 2005: 731). Rather, should not a researcher's situation (gender, status, class, race, ethnicity etc.) be considered and understood in interpreting the ethnographic product (see Abu-Lughod, 1991; Ensminger, 1998)? And if a researcher's situation influences his or her interpretation of ethnographic data, does it not influence the data he or she gets?

The social background of the researcher and how the situation is managed both by the researcher and the people under research - positionality, therefore, becomes central in my study. I, a Ugandan citizen, was positioned and positioned myself in different situations either as an insider or outsider in the process of data collection. I managed my position along the “insider” – “outsider” continuum so that I could ease access to information. I carried out 11 months of field research in the Kilombero valley, employing multiple anthropological methods including surveys, formal and informal interviews, life histories, biographies and archival research. While being cognizant of postmodern critics of traditional anthropological methods, this chapter will also describe how the specific quantitative and qualitative anthropological methods in this study unfolded.

2.1 Unfolding methods

Before going to the field, I only had a general idea of how I could collect data, but the subsequent methods I finally employed unfolded with the situations as I gained more information in the field. This subsection will show the specific quantitative and qualitative methods used for data collection but more so how they unfolded in this research

2.1.1 Social survey and case study

From the transect walks and social-economic reconnaissance, three issues became highlighted: firstly, it became apparent that the public portrayal of agro-pastoral violence must have been exaggerated to say the least. However, the extent to which it prevailed needed to be substantiated if one was to understand agro-pastoral dynamics in the valley in relation to agricultural improvement. Secondly, the idea of conservation came to the forefront, especially the recently-created conservation space – the Ramsar site. The word “ramsar” was interpreted in local vocabulary and narratives, mostly as an undesired notion. Finally, the enthusiasm with which the local Government officials talked about modern inputs, extension services and farmer groups encouraged me to seek a deeper insight into these issues. There were, however, other issues that interested me, but which could not be easily observed. These were: the characteristics of the smallholders in the valley, the land tenure system and access to water resources, cooperative organizations, market practice and value chains of rice. These issues and the gaps in knowledge formed the basis to carry out a case study survey in Mahutanga village, employing the use of questionnaires as the main tool for data collection.

According to Davies (2008: 171–172), much as social surveys are commonly understood as being the administration of highly-structured questionnaires, with each question typically providing a pre-selected set of possible responses, it is more important to define it by the manner in which data is organized and analyzed, so as to produce descriptive material, particularly frequency tables and cross tabulation for the entire dataset or specified subset. In this dataset, a researcher should be able to search for relationships between variables using various kinds of inferential statistics (*ibid*: 72). The survey tool I designed, therefore, aimed at establishing the state-of-affairs which I considered would indicate smallholder relationships with, and perspectives on, land tenure and access by different groups within the valley. The same reasoning applied to issues of access and use of water. With the background knowledge that the Government had been

providing input in terms of fertilizers and that the NGOs had come in to support the Government, a section of the survey dealt with rate of use of these inputs. And finally, a section of the survey tool focused on establishing institutions and organizations that influenced the local livelihood activities. This survey would, therefore, inform me about the next step in designing the detailed interview which I call, “narratives” following (Davies, 2008). However, before justifying the “narratives” method that I applied, I would like to point out some critiques of social surveys and in the process, highlight the steps I took in this survey to ensure its credibility. I will, thereafter, present some results which aided the design of the detailed interview guide.

Critics of the survey method are skeptical of four key things; categorization, quantification, sampling and questionnaire construction (Davies, 2008: 173–175). Citing the arguments from Leach 1967, Davies highlights the problem of misinterpretation stemming from the process of categorization and quantification. For instance, Leach shows the weaknesses of categorization and quantification with the disparities in results conducted in a survey in Sri Lanka. His ethnography of a similar region explained in detail why what seemed like 60% of households falling under the category “landless” was only a result of defining a household narrowly as those who cooked rice in the same pot. In the actual sense, many freshly married couples considered as landless in the survey were waiting to inherit land from their parents. Leach seems to believe that errors associated with categorization are inevitable because categorization by necessity disregards the ethnographic insight that “a social field does not consist of units of population but of persons in relation to one another” (cited in Davies, 2008: 173). Thus, in many anthropological studies, categorization and quantification are supplemented by long ethnographic research to bridge the gap between etic and emic perspectives. I describe how I did this in the next subsections.

Designing a valid questionnaire is an issue that goes beyond just asking the right questions to being assertive of the research conditions under which the questions are asked. It refers, not only to cultural sensitivity, seasonal conditions and time, but extends to the awareness of respondents’ past conditions and their expectations. In the worst case, the types of previous surveys in an area may heavily influence the present survey in terms of expectations from the respondents. Between 2005 and 2008 when I worked as a research assistant for a couple of NGOs in northern Uganda, it occurred to me that sometimes well-designed questionnaires would draw wrong results. In an area, which was by then, loaded with armed conflict, many of the NGOs offered relief aid to the victims of war. Before offering aid, a baseline survey would be conducted to identify the people in most need. Later during the resettlement period, infrastructural development projects were extended to

the most vulnerable villages. Many respondents in the surveys, however, gave false information to reflect the most desperate situation, so that his/her family or his/her village would qualify for help. In subsequent research I conducted in 2008, respondents were reluctant to participate because the study would not personally benefit them.

Likewise, in doing research in Kilombero, one is likely to face similar predicaments. Kilombero valley itself has had its fair share of researchers. To avoid this conflict of interest, and to reduce the dangers of misinterpretation, it was important to state my intentions clearly and mention at the start that this would only benefit my studies. However, reconciling this declaration with the identity I exuded was hard in the first months of my stay. However, due to the reconnaissance activities, the long time it took to complete the survey (I issued the 100 questionnaires myself with the help of a translator) and eventually a maintained identity of a Ugandan student, expectations were minimal and interest in my work among the smallholders was raised.

But asking the right questions in a survey is still very important for different reasons. Some survey questions may seem reasonable to the surveyor, but may be insensitive to or hold double meanings for the respondent. It is generally important to double check for clarity in both the language in which the survey is designed and in which it is administered. Carrying out a pilot is important to check for ambiguity. To make a respondent comfortable, it is also important to section the questionnaire, putting the “easy-to-answer” questions in the first and last sections and more complicated questions in the middle. The first part of the questionnaire used in this study was filled with biographical questions, followed by detailed questions on livelihood practices, land and water tenure and access, input use, marketing and finally access to and use of Government institutions and perceptions towards these institutions. My research assistant read through the questionnaire and translated it to Swahili and back to English. Before starting the survey, we pretested the tool to make sure that it was valid and that our questions were understandable and had the same meaning to the respondents as to us.

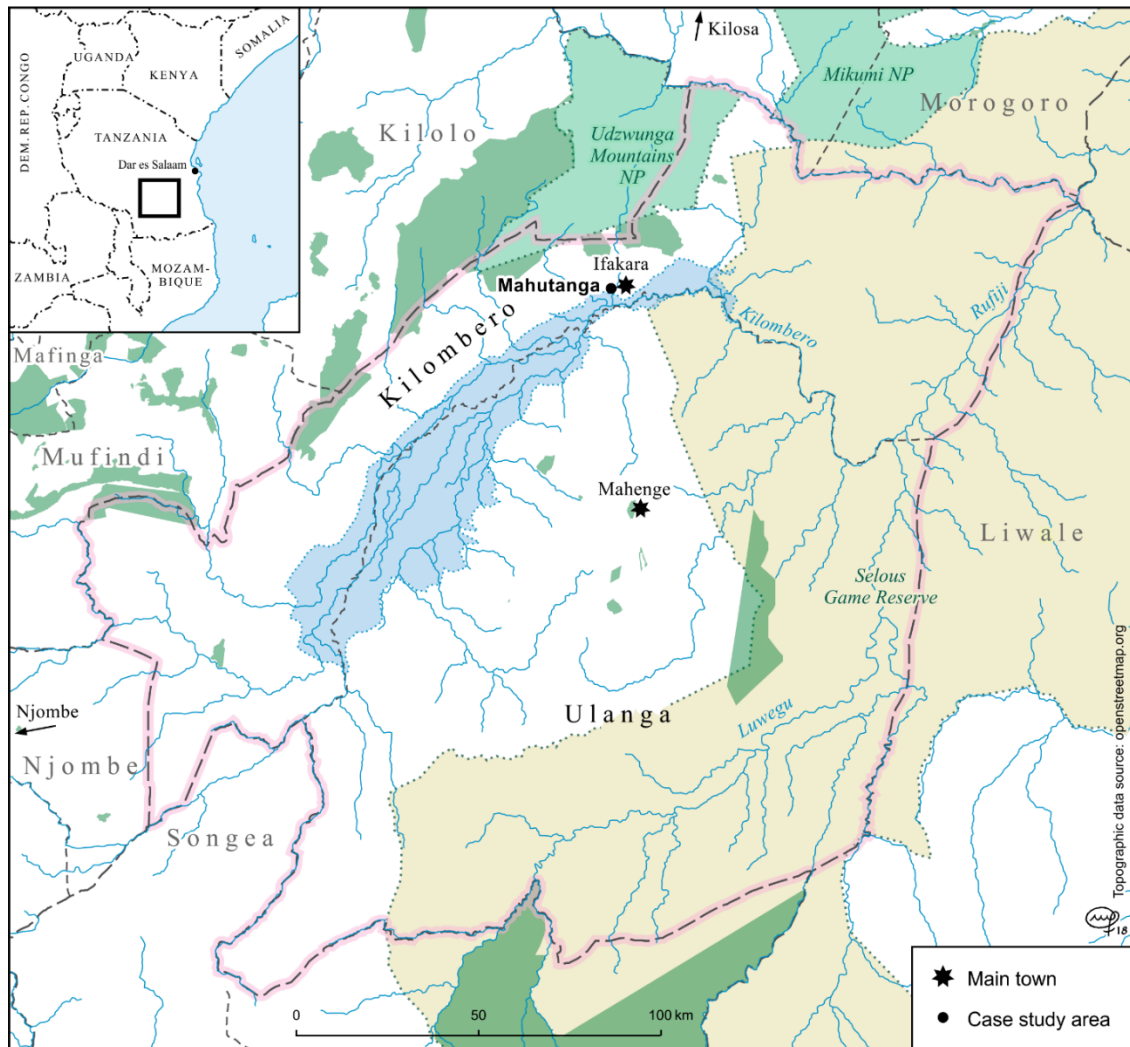
The criticism of sampling is a question of representation. How do you sample and what sample would be representative of the whole? Buckingham and Saunders (2004: 103) suggest two basic sampling strategies; probability sampling, which is usually known as random sampling, and non-probability sampling. Like the name, non-probability sampling points towards a purpose. What does one want to find out and how can it be found out at best? Therefore, when it is the best and convenient method, it could be the best strategy to take. On the other hand, probability

sampling suggests chance. This is usually to reduce bias from the researcher. It would limit, for instance, a researcher selecting respondents for convenience, without them necessarily being the best for the study.

The country and the district where the study took place were selected through purposive sampling methods. From the literature about livelihood practices in the Kilombero valley (Kangalawe and Liwenga, 2005) and from my preliminary observations, I knew that the major livelihood activities were farming, fishing and pastoralism. Therefore, the most convenient and accurate strategy would be to choose one case study village which is accessible throughout the year, and where all the three livelihood activities are practiced. This was optimum, since, as argued by Buckingham and Saunders (2004: 99) a sample may consist of only a tiny fraction of the whole, but can provide remarkably accurate estimates of the parameters of the whole population. Government laws, district by-laws and policies are generally implemented throughout the district. A case study of a village would be representative of the district. Besides, the survey was only a step in the needs assessment which would be supplemented by household narratives, and life histories. Further group interviews would be extended beyond a single village.

Kilombero district is organized into wards which are smaller units of decentralization of political and economic power and offer an easy social service delivery. It has 19 wards, of which 1 (Lumemo) was purposively selected for the study. This is because it lies within the flood plains, faces competition over land and water resource from different groups including pastoralists, farmers, fishermen and the Government, and is accessible throughout the year. Within this ward, one village (Mahutanga – see figure 5 below) was purposively selected because it is accessible and has all the three major forms of livelihood practices – farming, fishing and pastoralism.

Figure 5: Map of Kilombero valley showing the location of Mahutanga village



Together with a few village leaders and community members, we drew a map to indicate settlements and livelihood areas (see photo 1). This would help in the sampling process, as explained in the paragraph below.

Photo 1: Hand-drawn map of Mahutanga village showing sub-village boundaries and livelihood strategies



Source: Innocent Mwaka, field data

Mahutanga village is divided into 5 sub-villages, of which 3, with regular agricultural activities, were selected. These were: Mahutanga A with a total of 149 households; Mikoroshini with a total of 91 households; and Kikweta with a total of 156 households (Mahutanga Village Book 2014). 30 households were randomly selected from Mahutanga A and another 30 from Mikoroshini. 40 households were selected from Kikweta sub-village, which has a slightly higher number of households than the rest.

Since all the households are arranged close to the road in a linear way, the selection of the households involved selecting every third house in the direction away from the sub village chairman’s house, both to the left and to the right. However, it must be mentioned at this point that the actual number of interviews carried out in this survey was 94. The reason was that some of the pastoralists refused to speak to us. Those who spoke to us limited their answers to certain topics. In the analyses, the (n) changes, depending on the number of valid questionnaires.

2.1.2 Narratives

After establishing thematic areas from the survey, more concrete information was needed to back up these themes. For example, the survey showed that 74% of the households do not use inorganic fertilizers, although the Government and NGOs claimed to create access to these inputs, but 53% of the households used weed sprays which they bought from the local shops. Fishing was rampant on the river despite laws banning the activities, and the name “RAMSAR” came up so often, more as a hindrance than as a good thing. The fight between pastoralists and farmers was still significant but not top of the agenda, the number of households owning land was high. In a few instances, the pastoralists literally ran away when they saw me and my research assistant coming to their home areas. Some (the Sukuma pastoralists) asked us to leave because they thought we were disguised Government officials spying on their activities. Trade in rice seemed to be flourishing, but the farmers seemed to be missing out on the fruits of this trade. Several NGOs were involved in livelihoods projects. In a stake holders’ learning forum I attended, there were up to 26 organizations working towards empowering the smallholder in agribusiness. Some questions had to be answered especially concerning the depth and time these issues have taken, the reasons for and implications of agricultural policies, and their perception by farmers. One of the ways I would approach this would be getting an emic perspective through narratives.

A narrative is a research technique that encourages informants to tell their own stories, to develop a narrative about how they experience certain life events (Davies, 2008: 10). It aims at constructing and understanding informants’ perceptions of particular life experiences; it is normally done with a series of individuals and “tends to be more under the direction of the informants who may want the ethnographer to observe particular objects or events in order to illustrate their narrative” (ibid). It is often used to investigate collectivities who have shared an experience of some collective past event (ibid). For these reasons, I selected 20 households who had participated in the survey from Mahutanga village. These were among those who had shown great interest in talking about their lives as individuals and about the experiences of the community. Since I was, by now, interested in deeper historical changes, 15 of them were over 55 years old and the remaining 5 ranged from 25 to 45 years.

By the end of October 2014, I had carried out all the 20 narrative interviews. The main problem seemed to lie in the lack of clear information about these novel policies, and about by-laws and their impositions. These policies and by-laws were reflected in the types of crops and the way in which they were grown, the market system and settlement patterns. The Government’s

approach to promoting modern agriculture in the region was through the formation of cooperatives in the 1960s and 70s. These later collapsed and were reintroduced in the 1980s as farmer groups. They collapsed again and were reestablished in 2010. I refer to these parameters in depth in chapters 5 and 6.

In November 2014, our working group had a methods workshop in Jinja, Uganda where we discussed issues that came up during field work and considered how we dealt with them. Thereafter, I had a three-week holiday and then returned to Cologne to prepare for the second field phase which started at the end of January 2015.

In the second phase of my data collection, I focus on farmer associations, value chain analysis and the relationship of smallholder farmers with conservation and with largescale farms. Among other methods, life history was at the forefront. I was keen to investigate the history of the farmer groups, their formation, evolution, survival and in some cases collapse, and the reasons for this.

2.1.3 Life history

What was clear at this point was that smallholders had a strong distrust of Government institutions. The extent in terms of time and space was still unknown, but was worth delving into. It was now clear that state interest in agricultural improvement was dominant. However, the dynamics were still subtle. To understand the present dynamics, Abu-Lughod (1991) recommends looking not only into transnational connections, but exploring historical processes as well. Investigating such connections will form a central part of this dissertation. Life histories will, therefore, help me understand these dynamics.

The understanding of what life history means varies among different scholars and across disciplines. Some equate it with biographies (Davies, 2008) or with oral history (Bornat, 2001). Bonart maintains that the interviewer who focuses on a life history with a view to finding out about the past and an individual's life in that past, is working as an oral historian (*ibid*). He differentiates this from reminiscence, which he refers to as a life review, reflecting on those same experiences, but with a view to encouraging greater self-awareness and personal reflection by that older person (*ibid*: 223). In this view, life history research is a subset of oral history. On the other hand, Langness and Frank (1981) distinctively differentiated the two. This basically points to the complicated nature of defining what a life history is.

Kouritzin (2000), however, points out some useful components of life history which gives a flexible understanding of what it is. Life history emphasizes critical interpretive inquiry focused on an individual's understanding and recollection of events that have had a substantial impact on their development (ibid: 2). These may include oral accounts of a participant's life by the participant, interview data, and available documents like diaries, and letters, third-party interviews, reference and comparison with other research methods and analysis and comparison across different sources (ibid). As much as this might seem too general, it is an effective and intensive way of collecting data. As Davies (2008: 207) has pointed out, ethnographers collect and study life histories not primarily out of interest in individual stories, but in order to improve understanding and knowledge of social and cultural processes more generally. What is important in this (Kouritzin's) definition are the process, context and analysis. We would not expect people to tell us details about their lives without a prior reasonable relationship with that person based on trust. If they do, we cannot guarantee truth. Unfortunately, the reliance on verbal accounts reduces the reliability of the data obtained through life history. Because of this, life history has been criticized as not scientific enough.

Proponents of life history research have, however, defended the approach by encouraging triangulation of sources of data (Kouritzin, 2000) explaining the context of the data collection and including the same ethnological data collection methods like observation, watching, asking, listening, sanctioning and recording (Langness and Frank, 1981: 32). They also encourage a continuous creation of rapport between the interviewer and respondent, use of repeated interviews and encouraging spontaneity using open ended questions (ibid: 32-48). Another major critique is the question of representation or generalization. How does one individual's story reflect the stories of a whole village, region or country? Davies is very precise in answering this criticism. She suggests that it is important to distinguish empirical generalization to a larger population and theoretical induction in which social and cultural processes observed in individual cases are relevant in other contexts (Davies, 2008: 207). This can be through abstracting common themes. In this way, it is enough to find those members of the society with broad knowledge and experience in themes of interest rather than a large group of people and the population to which the conclusion applied should be specified (ibid).

The steps described above did not only generate important data for the study but also shaped my approach to collecting data through life histories. Life histories by anthropologists usually emerge out of field work situations (Langness and Frank, 1981: 32). From September 2014, I

identified certain respondents with whom I would talk about their private lives to gain an insight into strategies of agricultural improvement over time. These were 8 individuals of at least 60 years of age. 7 had been born and raised in the Kilombero valley, with occasional travel to the neighboring regions. 2 of the 7 had worked in Government offices and had simultaneously been farmers. One of them (the 6) was a man aged about 70, who had migrated to the valley quite recently as a Masaai pastoralist. His life story about relations to different communities and to the local Governments and his own people reveals deep dynamics about political ecology and a systemic plan to evict pastoralists to create space for conservation and largescale farms. It also gives deep insights into everyday evasions of Government policies and overt and covert conflicts with other groups. These life histories established the bridge between individual subjectivity and collective perspectives, and the bridge between official truths of history and the perspective of the smallholder farmer. Life history, therefore, is important in rewriting history to include the marginal and individual points of view instead of only the vantage point of those who have been charged with running or attempting to run other people's lives (Waren 1982: 218).

2.1.4 Researching archival records

A study with a historical approach will require one to consider archives to try and retrieve information that might inform the researcher on the topic at hand. Like many concepts, archives are understood in many ways by different people. They (archives) may include written records like books, magazines, official/administrative statistics, “often including material concerning former colonial territories” (Zeitlyn, 2012: 462). They might also be individual/private documents with a wide range of topics (ibid; Davies, 2008: 198). Finally, following arguments about the plurality of archives, Zeitlyn posits that archives “are both repositories of materials (buildings, suites of rooms, or a web address) and the materials contained therein” (Zeitlyn, 2012: 462). These indicate the diversity and generality of what archives can be. The basic denominator is that if they hold information (mainly first hand) about the past that we cannot directly access through observations and interviews, then they qualify as archival data.

That past information is recorded and stored does not, however, qualify it as good and usable data. Not all recorded and archived documents are “quality” data. For this reason, a researcher needs to develop some quality control measures that limit misinterpretation of data or prevent the use of the wrong data. This involves understanding archives in terms of what they are, how they come about and their intentions. This section will not deal explicitly on these questions

but will hint on them in the criteria suggested by John Scott (Scott, 1990) as measures to limit bias of archival records and improve quality of data.

Scott (1990) suggests that one should consider the authenticity, credibility, representativeness and meaning of information attained from the archive before embarking on using them to interpret social phenomena. Authenticity has to do with the genuineness of a document (Davies, 2008; Scott, 1990: 6). One should establish who the author is and that the document is not a forged one. Unauthentic data can be used to mislead or misinform a population especially if the proprietor of that document has an influential power in society. Scott suggests that this can be done through checking the vocabulary and writing style for “coherence and consistency” and through seeking external expertise for chemical tests (Scott, 1990: 7).

The second criterion, (which according to Davies, 2008, is more relevant to ethnographers), refers to the credibility of the document and looks at the question of whether the evidence is free from error or distortion. It is important for the researcher to look at the material interest of the author. How does he/she present him/herself if the archive is a personal diary? Does he/she write with the hopes of future publication? If so what is his/her target audience? (Davies, 2008). Similarly, official documents may be based on political interest in presenting one view rather than another (Scott, 1990). In his analysis, Zeitlyn (2012: 461) refers to the works of Derrida and Foucault, who see archives as “hegemonic, characterizing ways of thought, modes of colonization and control of citizens”. Archives may be set up as instruments of political and cultural domination over others or may be created with the genuine goal of informing future historians but based on the judgment of the people organizing and setting up the archive. Zeitlyn, therefore, warns us to be critical on questions of who set up the archive, for what reasons, who decided what documents to put into the archive and for what reasons. For it is in this selection process that some information is inevitably lost, withheld or distorted (ibid).

The third criterion is that of representativeness. This deals with questions of availability and survival. According to Davies (2008), some documents survive, others disappear with no trace of ever having existed, whether through accidental loss, poor storage or deliberate destructions among other reasons. A good example is an informal conversation I had with a priest during my field study. The Ifakara parish had many colonial records dating back to the German colonial times. In the 1990s, the parish lacked space for new literature, so they decided to get rid of “useless” literature. This included hand written records of missionaries and German colonialists, since their work looked old, was in a language the locals could not read and, therefore, seemed irrelevant.

These records were burned. A second example is my attempt to access the Kwiwo archives in Mahenge, the neighboring town where a church archive houses several documents from the colonial period. I was denied entrance to the parish archives because, apparently, another researcher had used their archives 5 years earlier, under the hospitality of the church, but her report was “cruel” to the church. After a few inquiries, I was told her topic of research was about the church and gender and her conclusion was that the church was not only limiting women’s opportunities but further intentionally suppressing them, something the church thought was unappreciative of the researcher. Ever since, only students of theology have been allowed into the Kwiwo archives. These examples show that the challenges of survival and availability can be compounded by accessibility which in the end may affect representatives. And yet, in the vein of representativeness, Scott suggests that one should know how many documents containing required information exist, in order to determine whether the information can be generalized (Scott, 1990). However, some themes do not need numbers but depth and evidence that an event occurred and that is enough to represent a group, or a phenomenon being researched. But in ensuring availability, access and numbers, care should be taken on power dynamics. Those with more cultural and political power are more likely to create documents which are also more likely to be preserved, and this might be especially true for traditional societies with no written records before the advent of colonialism (Davies, 2008: 199).

The fourth criterion that Scott deals with is that of meaning, in terms of literal and interpretive meanings. He notes that “a particular way in which a concept was defined and applied in practice changes over time and from place to place and the researcher must discover as much as possible about these changes (Scott, 1990: 28–35). This is obviously not an easy task but one approach would be through triangulation of literature of the time or by carrying out life histories determining certain qualities of a concept. For instance, who was a “resisting citizen” 60 years ago? What did he/she do to qualify him/her as “resistant”? Who labeled him/her as “resistant”? Was it the authorities in power, himself/herself, or was it their peers? If he/she did the same thing now would they still be considered “resistant”? Digging into concepts like that help to determine the temporal and spatial use of the concept and avoid misinterpreting it. This involves “interpretive understanding of individual concepts, appreciation of the social and cultural context through which the various concepts are related to a particular discourse, and a judgment on the meaning and significance of the text as a whole” (ibid).

Scott concludes that these four criteria are interdependent, not hierarchical and nonlinear. A researcher should therefore maintain a critical analysis throughout the document analysis and remain flexible in line with the above-discussed criteria. Davies, though, reminds us that similar approaches ethnographers use for interviews should not be left out when analyzing documents. Similar questions should be asked, and context of production and reception of the document analyzed. Finally, the ethnographer should keep in mind the point of reflexivity throughout his archival research. Questions concerning an understanding of what the archive is, the process of setting it up and its intention should always be at the forefront in ethnographic archival research.

While writing the next chapters, I will continuously refer to the archival records that I used and how I used them. But in a general way, I followed some of the recommendations stated above. Most of the archival records I use in chapter 3 and chapter 4 of this dissertation were obtained from the Tanzania National Archives (TNA) in Dar es Salaam. The archive has stored colonial records about the Kilombero valley since the German colonial times. The earlier records are, however, scanty compared to those from the mid-1930s to mid-1950s. However, this does not impact negatively on this dissertation since the gist of agricultural improvement I focus on begins in the mid-1930s. I use a mix of secondary literature, monographs and the scanty archives to create strong background information on pre-colonial and colonial events that shaped the agricultural improvements of the British colonialists in the valley. I then review primary archival data.

In my first encounters with the archival records, I looked through general records from Morogoro, Kilosa, Mahenge and Kilombero. However, with time, as my theme of research narrowed, I perused only the files that had information about the Kilombero valley. After establishing good rapport with people who work in the TNA, I could copy several of the files and come back with them to Germany where I could read them at leisure.

I also encountered some monographs from colonial officials who worked in the Kilombero valley. Two noteworthy ones are from Edward Kenneth Lumley and from the Culwicks. Lumley occupied the position of a District Commissioner in many parts of Tanganyika between 1923 and 1944. He was posted to Kiberege in the valley at the end of the 1930s. In his short tenure, he attempted to expand cotton production in the valley and to concentrate people in villages. The chapter, on Kiberege, in his book *Forgotten mandate. A British District Officer in Tanganyika* (Lumley, 1976) explains the efforts he took in his short tenure to expand cotton and rice production in the valley and the rationale behind attempts to put farmers in villages. It also details his frustrations and success. The Culwicks (A. T Culwick and G. M Culwick) on the other hand wrote

some monographs and several articles about the experiences in the valley. They were both ethnographers, but A.T Culwick doubled as a District Officer in the 1930s and 1940s in Kilombero. They collected oral history to write the history of the tribes in the valley and the practices. Some of the information in these monographs is, however, used here with reservations.

These writers and their writings represent a time when colonial officials looked for justification of their imperialism. In some cases, by writing down and formalizing a tribal history, they highlighted the moralities and strengths of a tribe they thought would serve as the example for their improvement projects. In a similar vein, they discredited the strengths and abilities of the tribes they thought did not conform to colonial ideas of improvement. Nevertheless, their writings still inform us about dynamics in the valley regarding improvement of agriculture, social interactions and the environment, among other socio-economic, political and ecological phenomena of the past 150 years. Moreover, I triangulate their writings with the writings of travelers, development reports, oral histories and secondary analysis from others who worked in the same place.

A confidence factor is that most of the post-1940s archival data I used were correspondences. These are direct communications in letters and telegrams, either amongst colonial officials themselves or between colonial officials and the people they worked with. One significance here is that, in attempts to expand the markets and improve the value chains for cotton and rice, many correspondence letters were exchanged between private companies, the colonialists and sometimes extension officials. These give clear insights into intentions, policies, procedures, failures and success in the quest for agricultural improvement. They show many ways in which smallholder farmers responded to such attempts to improve agricultural production.

Finally, I dug into media archives. Notably, *Tanzanian Affairs*⁵ has records running back to the 1970s on many topics in Tanzania. I also subscribed to the *allAfrica*⁶ website to get information about eviction processes in the Kilombero valley that happened long before I started my PhD. All these sources offer a wide range of information for use and triangulations where necessary.

⁵ <https://www.tzaffairs.org/>

⁶ <http://allafrica.com/>

2.2 End and continuities of “field work”

There is an emphasis on both archival research and empirical data collection in this study. Both approaches have been rewarding in informing the study on agricultural improvement in the Kilombero valley. The empirical data collection included both qualitative and quantitative methods. The major quantitative method, the survey, was important at the beginning of the empirical data collection to inform the study on the status quo as pertains agricultural practices in the valley. The subsequent narratives, life stories, and observations were very informative on the attitudes and emic views of wetland users in relation to Government policies and modern technologies. It is hard to categorize observations as an independent stage in this study - for at what point does observation start and at what point does it end? At what point is it active observation and at what point is it passive? To me, being able to learn something new without asking questions, to actively and emotionally experience the different practices and activities, to be observed by others and feed into their perceptions and to form my biases knowingly or unknowingly, were all parts of observation. It started with preparations before assuming my journey to Tanzania. It involved my expectations and fears, my frustrations and satisfactions, forming my identity or it being formed by others. This process, though in many cases unconscious to me, was most revealing about processes and dynamics of smallholding in the valley. It is actively present in the analysis process as well as I relive these experiences “outside the field”.

Like many empirical data collection processes, this one had some challenges along the way as well. The main challenge presented itself in the form of the translator. With Kiswahili being the predominant language spoken in Tanzania, it was hard to find someone who was proficient in written and spoken English and at the same time a local of the valley. Employing a research assistant from Dar es Salaam would not have been beneficial since a research assistant is also key to building rapport and guiding one through the local community. The first couple of assistants I had after the survey were not fluent in spoken or written English and my Swahili was not good enough to conduct a narrative interview. I can only imagine how much information I missed out on in the first couple of narrative interviews with the wetland users.

Still connected to the problem of the research assistant, one of the research assistants that I worked with went around the village on days we did not work and made false promises to some respondents. It was only later when I employed a different (excellent) research assistant that we were told the previous assistant had promised some of the respondents that I would bring NGOs

from Europe to support them, and that they would be the first beneficiaries. Later he ran for office as a local representative on such propaganda.

In conclusion, Friedman (2014: 36) reminds us that we should not forget that anthropologists distinguish themselves as field workers and not as discourse analysts or literal critics. Therefore, to go beyond the post structural impasse of discourse analysis, researching development in the discipline of anthropology needs to refocus on agency to better comprehend the complex dialectical processes associated with the development encounter. This involves illuminating perceptions, experiences and social-political processes surrounding the so-called targets of development (ibid). Discourse analysis should, however, not be entirely discarded in this process. To understand agricultural improvement in the valley, in the next two chapters I sketch precolonial and colonial dynamics of agricultural practices in the valley. These will guide the subsequent chapters 5, 6, 7 and 8, to put into perspective contemporary local and transnational ideologies in agricultural improvement and how they have shaped and are still shaping discourses and practices in the Kilombero valley.

3 Changing practices and agricultural improvement in Kilombero valley before 1940

“Every village has its idiosyncrasy, its constitution, often its own code of morality” English poet and novelist, Hardy (1891: 75)

“Far from being timeless, static, and rigid, indigenous agricultural practices were constantly being revised and adapted” (Scott, 1998: 285)

Colonial encounters in the Kilombero valley set forth a process of reorganization of socio-political and economic systems of the valley inhabitants. The reorganization was aimed at the creation of a system that was intended to expand agricultural production. However, this reorganization faced several responses from the local valley inhabitants. These responses were contradictory and varied, ranging from outright rejection to compromise and compliance. These processes contributed in many ways to the agricultural improvement strategies carried out in the valley during the colonial period.

3.1 Migrations and agricultural practices in pre- and early colonial periods in the valley

3.1.1 Valley inhabitants: migration and identity in the Kilombero valley (1850-1920)

According to Monson (2000b: 360), the narratives of migration into the Kilombero valley in the late 19th century center on three elements: “conflict over highland resources leading to migration of a chief and his followers, that group’s subsequent resettlement in a lowland environment and subordination of the inhabitants of the new area”. The major “tribal” groups in the migration narratives in the valley are the Bena, Ngoni, Ngindo, Ndamba, Pogoro, Mbunga, and Hehe. The Wabena⁷, for instance, are said to have been a collection of patrilineal and highly stratified clans that inhabited the highlands of Njombe, Mufindi, and Lupembe before their dispersal in the mid-19th century (Culwick and Culwick, 1935: 17). These clans were distinguished both territorially and linguistically, and each enclave was known by the areas they occupied – the *Wakombwe* lived in *Mkombwe*, the *Wafwagi* in *Fwagi*, *Wasovi* in *Sovi*, and the *Waikondo* in *Ikondo*

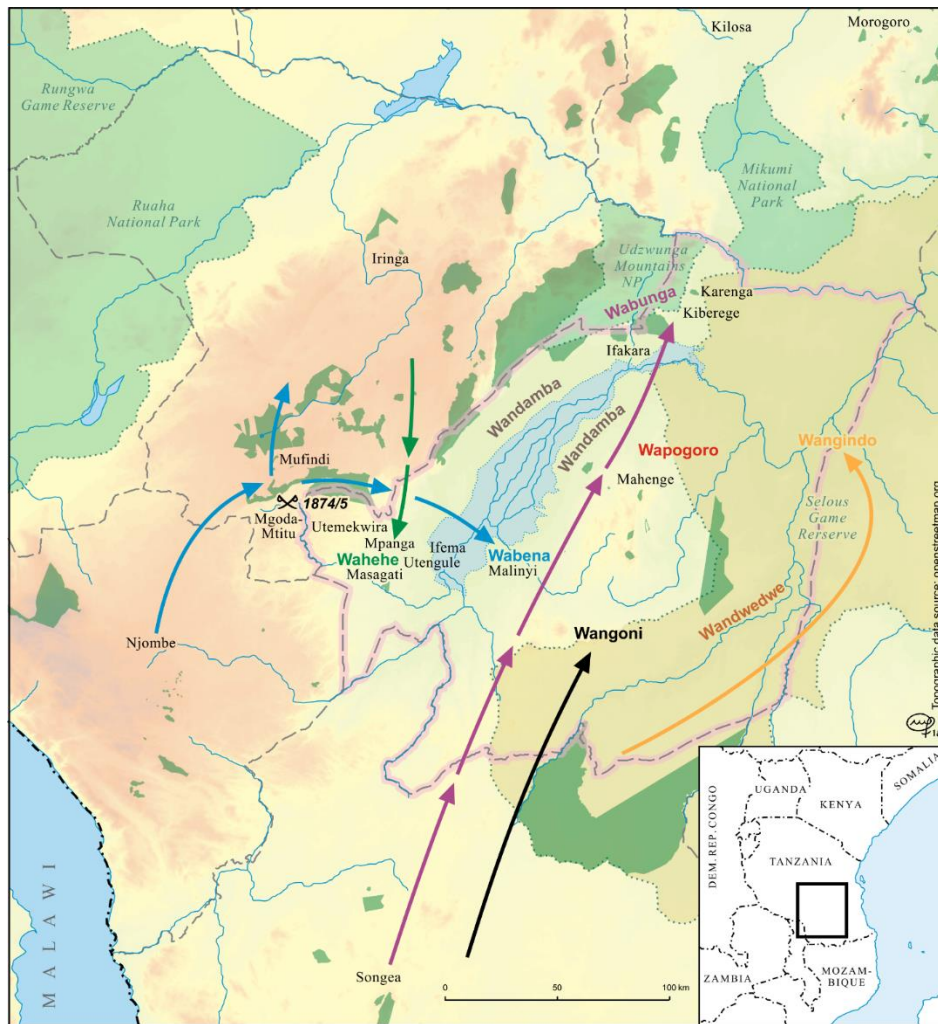
⁷ *Wa* = personal prefix plural common in the Bantu language family. Means “of the line of”. Applies also for the other “tribal” groups discussed in this section.

(ibid: 20). They were not related according to kin but rather acknowledged the authority of the chief of one (*Manga*) clan and observed similar customs (ibid). They kept cattle and farmed millet. After several inter-tribal wars, the biggest being against the Wahehe in Iringa, in the battle of Mgodamtitu in 1874, they moved to and settled in the Kilombero valley (Monson, 2000b: 347). (See illustrations in figure 6 below).

There are indications that the Wahehe of Ulanga, those from the Iringa highlands, and the Wabena have a common history. Oral history recorded by the Culwicks (Culwick and Culwick, 1935) suggests that the *Manga* clan of the Wabena and the Wayinga clan of the Wahehe were related by blood. These two clans trace their origins back to two brothers who were great hunters and had formed two great kingdoms, which later turned rivals. After the battle of Mgodmtu, some of the Wahehe who were captured in battle moved and settled in the valley. Similarly, Hodgson (1926), describes the Wahehe as a chiefdom made of patrilineal clans who settled in present Iringa and parts of them, because of disagreements from their ancestors moved to the Kilombero valley. In tracing the ancestors of the Wahehe of Ulanga, Hodgson's list of the ancestors of the Wahehe of Ulanga includes the direct ancestors of the Wabena, as reconstructed by the Culwicks (see Culwick and Culwick, 1935: 57–58; Hodgson, 1926: 38). It is probable, since the German colonialists reorganized the system of native administration in the wake of their occupation (as we shall see in section 3.2 of this chapter), that they annexed the Wahehe of Ulanga to the Wabena. After all, they had experienced bloody resistance from *Mkwawa* the chief of the Wahehe of Iringa, and would be suspicious of the Wahehe of Ulanga. Besides, *Kiwanga I* had cooperated with the German colonial administrators in the valley. They (German colonialists) must have preferred that he ruled over the Wahehe. By the time Hodgson made his ethnography in the 1920s, his respondents must have been assimilated by the Wabena.

The Mbunga, who consider themselves related to the Ngoni, and claim that their original home was mount Mbunga, are said to have originated from the hills of Songea, south of the Kilombero valley (Monson, 2000b: 358; Raum, 1964: 7). Like the Bena, they were forced to leave their home in the 1870s because of resource-related conflicts with other groups (Gulliver, 1974). When they arrived in the valley, they, like the Bena, subjugated the valley-dwellers to settle on their land. They settled mainly along the *Karenga* scarp between Ifakara and the exit of the Great Ruaha river (Raum, 1964: 7). Raum argues that they gave up their former livelihood of cattle keeping and maize cultivation and adopted rice farming and fishing, a trade of the valley dwellers, especially the Wapogoro and the Wandamba (ibid).

Figure 6: Map showing migration and settlement patterns of different groups in the Kilombero valley (ca. before 1885)



Unlike the other ethnic groups described by the early ethnographers in the valley, the Wandamba and the Wapogoro were not recorded as migrants in the valley. However, like the Wabena, the word Wandamba represents highly differentiated subgroups (Culwick and Culwick, 1935: 22). Within the Wandamba are the *Wamwera*, *Wambowa*, *Wachanya*, *Watemangande*, *Wahanila*, *Wapindi*, and *Wahungu*. Although they seemed to be independent from each other with separate social institutions, they practiced fishing as their main livelihood strategy (ibid).

The migration narratives seem to suggest that the new-comers were either pastoralists or agro-pastoralists who settled in the valley, and because the conditions there were harsh for keeping livestock, they abandoned pastoralism and adopted rice cultivation. It is noteworthy to mention, however, that in 1927, the Wabena, whose population was not more than 12,998 still possessed up

to 376 heads of cattle, 163 goats, and 83 sheep,⁸ and the Wabunga, whose population was about 13,854, possessed 206 heads of cattle, 756 goats, and 167 sheep⁹. The Wapogoro, who numbered 49,468, were found to possess 872 goats, 56 sheep and 51 heads of cattle, and the Wangoni, whose population was 3,284, and the Wangindo who numbered 4,427, together had a combined total of 61 goats and only 4 sheep¹⁰.

I have used the stories of only a few inhabitants to demonstrate the notions of migration and to highlight the differentiations and internal dynamics in the valley. It would, however, be shortsighted if I did not acknowledge that these narratives should be read as insights into the large vacuum of information on the socio-political organization of the valley, before and during the early years of colonialism. Even though it is true, as Moore and Vaughan (1994) have argued for the Bemba in northern Zambia, that the socio-economic and political dynamics of the precolonial and contemporary valley were an active construction by the colonial administrators, missionaries, chiefs, and local valley inhabitants, such constructions and materials are marred by prejudice as African voices are silent and Africans are only talked about. Monson (2000a) contends that these narratives, reconstructed mainly by colonialists and Bena elites, were aimed at justifying colonial reorganization of the “tribes”, and in this case, Bena legitimacy over other groups.

3.1.2 Agricultural systems in the Kilombero valley before 1940

Hillside cultivation, intensive irrigation, canals and drainages, shifting cultivation and intercropping were among the many agricultural systems that were observed in the Kilombero valley, before and during the early colonial period. The extent to which some prevailed and the exact techniques are scantily described, while others are deeply explored in the available literature (Culwick and Culwick, 1935; Kjekshus, 1996; Lumley, 1976; Pfeil, 1886; Raum, 1964). This section will describe these agricultural systems, grouping them under intensive farming and shifting cultivation.

⁸ TNA. District Office Mahenge. No. 2. Human population census was taken in April 1928 while the animal population census was taken in October 1927.

⁹ Ibid.

¹⁰ Ibid.

Intensive farming and shifting cultivation

At the end of the 19th century, the then Governor of Tanganyika, Friedrich von Schele, expressed his astonishment at the agricultural skills he observed in the valley, where production was extremely work intensive involving ridges and irrigation (Kjekshus, 1996: 32). Later, in 1906, Braun observed further that wet season planting of rice involved seed broadcasting while, in the dry season, heaping and artificial irrigation was common, especially, among the *Wabunga* farmers in the valley (Braun, 1906). He credited the large rice production to this technique of cultivation. In another work, *The ancient civilization of the Rift Valley*, captain G. E. H. Wilson draws evidence about irrigation, terracing and drainage in the valley. He, for example, describes the *Wabena* as a group “who are still experts on hillside cultivation” (Wilson, 1932: 252). He argues that the different methods had specific purposes. A heap or *mtuta*, for example, was carried out where it was necessary to protect roots of foodstuffs like potatoes and grains by drainage (Wilson, 1932: 254). Further, in his description of the irrigation setting, he conceives the practice in the Kilombero valley as:

“In low-lying districts, such as the Mgeta River areas near Kisasi, and the Kilomber[a] in North Mahenge, there are river diversions which may have been artificial; that is to say, although in these and similar localities the main river is known to change its course from time to time, there are particular channels that do not seem to be natural, but either have been completely constructed or are ‘improved’ waterways” (Wilson, 1932: 253).

What we draw from this scanty literature is the presence of intensive agriculture, which was differentiated across the valley in terms of methods, and that it was practiced more in the dry season.

What was more widespread, however, was shifting cultivation (Baum, 1968: 24; Iliffe: 8; Raum, 1964: 9). In shifting cultivation in the valley, a farmer identified a piece of land, cleared and worked on it for 3 to 5 years, before shifting to another piece, which had recovered from exhaustion or still held primary vegetation. This was possible because of the abundance of land in the valley (Baum, 1971; Culwick and Culwick, 1935: 233) and in areas, which generally had fewer trees (Telford, 1929: 55). The nature and type of shifting cultivation in the valley, however, developed and changed with population growth, but certain basic principles remained. Baum (1968) described three types/scenarios of shifting cultivation observed in the valley (see figure 5 below).

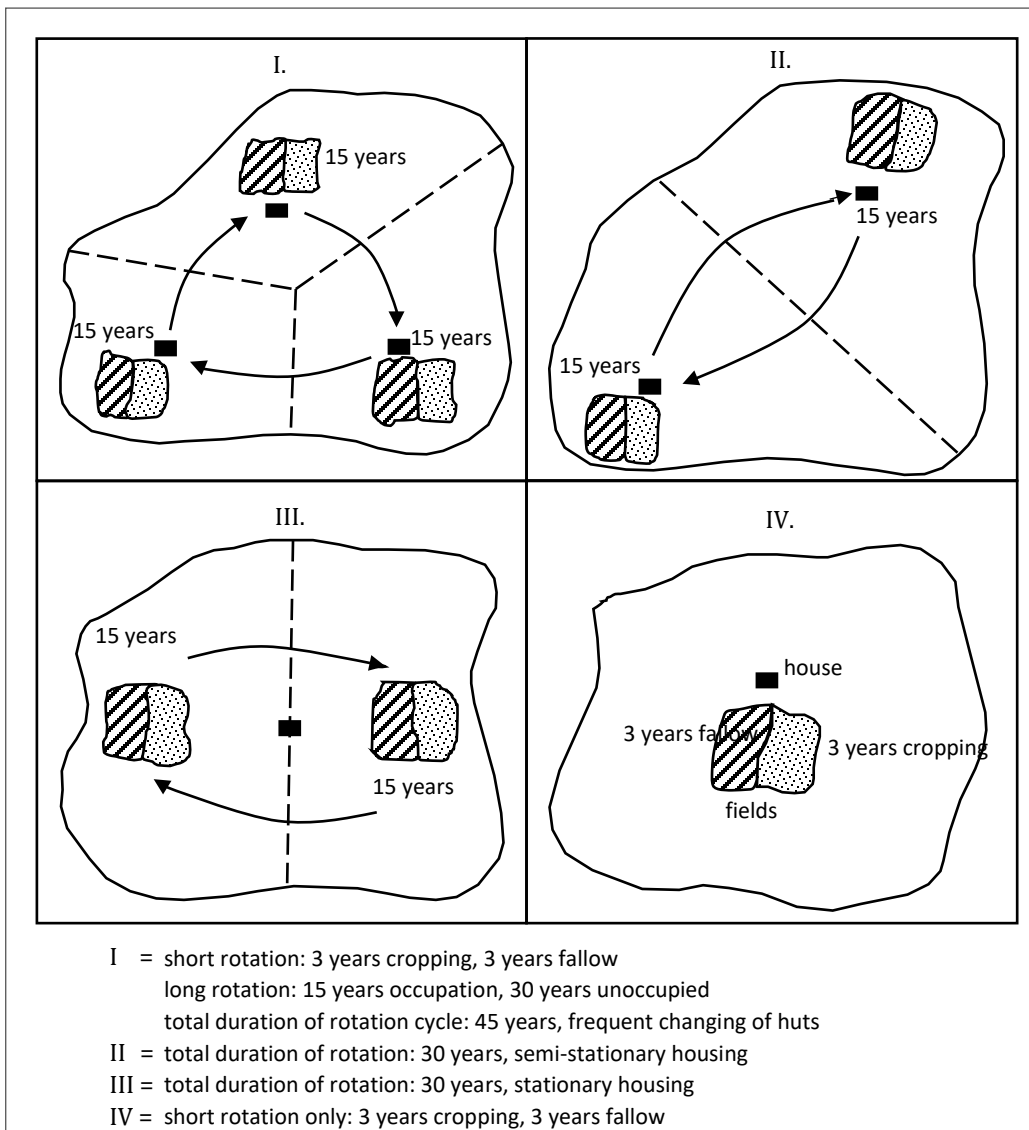
The first, (figure 6: I) is what he called a “Rotational Cycle of 45 years” (Baum, 1968: 32). This happens when land is abundant. It involves 3 years of rice-growing and 3 years of grass fallow. Several families come together and arrange their fields as one block to enable them to cooperate in the protection of their crops against marauding wildlife. This block is subdivided in half, allowing farmers to alternate between these halves; one carrying the rice crop and the other lying fallow. This 3-year interchange goes on for about 15 years. They then move to the second area and probably, as was the case in the inner Kilombero, to a third. This means they would move back to the first area and first block only after 30 years. Therefore, the rotation of 6 years is supplemented by the long rotation over a period of 45 years.

The second, which is a “Rotation Cycle of 30 years”, happens when there is less land available, and is therefore limited to 2 areas (figure 6: II & III). The families live in an area for about 15 years and cultivate 2 to 3 years of rice on half of the block, while the other half rests. After the 2 to 3 years on the first half of the plot, they shift to the second half while the first rests. In one case, (figure 6; II) as the families shift to a new area, their dwellings shift to the new place, as well, like in the first rotational cycle described above and, in another case (figure 6: III), their dwellings are more permanent in a central access point. It is only the blocks, which shift.

In the last cycle, “the semi-permanent farming”, the population density is high, making it not conducive for long rotations. The fallow time is therefore only 3 years. The housing is permanent, probably next to a road and, generally, land ownership and use rights are highly acknowledged. By the time of Baum’s research (1960s), this last type was common in the Kiberege strip, which was his case study area. However, all three scenarios occurred to various degrees in different places in the valley in colonial times.

The Culwicks described the lowlands with alluvial fans near the big rivers as being more permanently settled, with dwellers moving to and fro around the village (Culwick and Culwick, 1935: 233), although with no organized rotation as described above by Baum. The Culwicks explain that in such areas, the ground left to fallow recovered a lot faster, since they carried fast-growing tall grasses and shrubs (ibid). These protected the ground from erosion and the loss of humus. The fallow periods here were also shorter. On the other hand, in the highland areas, “a more truly shifting type of agriculture” was observed with “little communities of a few families, moving from one to another of the innumerable valleys” (ibid). These types of “true shifting” cultivation were still observed in the Kilombero valley in the 1960s (Baum, 1968).

Figure 7: Systems of shifting cultivation in the Kilombero valley



Source: adapted from Baum (1968: 33)

Although Baum theorizes this development as a unilineal effect of population growth, it is seldom so. By the 1930s, the Culwicks already pointed out the influences of wild animals, which limited or enabled shifting cultivations. They noted that “exhaustion of the soil is not the only reason for migration – quite often elephants become too troublesome...” (Culwick and Culwick, 1935: 234).

Nevertheless, the shifting cultivation and the different ways of intensification described above show how local smallholder farmers organized fields, crops and family relations, based on in-depth knowledge of seasons, the quality of soils, and disturbance from wildlife, among other

socio-economic and ecological conditions. The colonial administrators would later categorize some of these practices as poor land use, a narrative that formed part of the justifications to concentrate people into villages and introduce “modern” farming methods. Before we go into such reorganization, let us turn to the crops grown in the valley, the calendar year and land tenure respectively.

Crops grown in the valley

The first European visitors in the valley mentioned in their writings various crops they observed (Braun, 1906; Pfeil, 1886; Thomson, 1880). However, they and many others who followed indicated that the rice crop was the most common crop grown and that it was the staple food in the valley (Culwick, 1934; Gillman, 1927; Jack, 1932; Telford, 1929). In the mid-1930s, the Culwicks observed that farmers grew 4 types of rice, though two, *Faya* or “wetland rice” and *Meri* or “dryland rice” stood out (Culwick and Culwick, 1935: 229-230; Telford, 1929: 54). The Culwicks give the following details¹¹: *Meri* was mainly grown on the slopes of the hills, and it relied entirely on rainfall. The *Meri* fields were generally larger than the lowland *Faya* rice fields. The types of shifting cultivation seen in the previous section, were practiced more with *Meri* in the hills than with *Faya* in the more fertile lowlands. The fields were cultivated in proximity to one another, which formed a block around the village, and facilitated protection from scavenging animals. Therefore, the outlooks of the *Faya* and *Meri* fields were significantly different.

The other two types were the *Nganyangira* and *Ngapa*. *Ngapa* rice is dry season rice usually planted at the end of April. It was irrigated on a small-scale in *Ubena* and on a larger-scale, among the *Mbunga* people. *Ngapa* required less work, as it was said to have grown thickly and luxuriantly, smothering the weeds. The yields were high. *Nganyangira*, on the other hand, was planted in the receding floods of April. It was common among the fishermen, and other groups living on the flood plains. It was planted, in particular, when the main harvest was predicted to be poor. The fisher folks (*Wandamba*) usually staged their camps in an area as the floods receded, and the size of the *Nganyangira* garden depended on the duration of their stay. The longer they stayed in one place, the bigger the garden was. It was also common for the dry season rice to be grown initially in a seed bed, before being transplanted while still a few inches under water (Telford, 1929: 54).

¹¹ Culwick and Culwick (1935). Unless mentioned otherwise, the information in this and the following 3 sub-sections is drawn from the ethnography of the Ubena of the rivers by the Culwicks. However, as Raum notes, these can safely be generalized to the other groups in the valley Raum (1964: 27).

There were other crops that featured in the valley. Maize was common, but only as a buffer food. It was consumed in times when there was famine, or as people waited for the main rice harvest. Valley farmers complained that maize did not taste good, nor was it satisfying. Similar to maize was millet. But by the 1930s, it was scantily planted (Culwick and Culwick, 1935: 26). Similarly, other crops not widely spread were pigeon-peas, simsim, cassava, sweet potatoes and bananas (Telford, 1929: 54-55). They were found on small and poorly cultivated plots (ibid).

Calendar year and crops grown

I will now describe the seasonality and the choice of crops grown, primarily drawing from my own observation during fieldwork, and will link the observation to the 19th and early 20th century cultivation practices. The discussion reveals a form of continuity, both in rice production and in the organization of labor, with respect to gender and seasonality.

In mid-June 2014, on one of the transect walks (or rather transect bike rides), I observed men and women working on the vast paddy fields. From a distance, the women were more stationary, occasionally bending low to pick up straws of rice. They remained mostly in a bent posture, with a knife in the hand, reaping the straws from the main stoke. The men, on the other hand, moved to and fro across the field with bales on their shoulders, to a small store in the middle of the field. In some cases, a few days after it had rained, they waded to the store, carrying only small piles of straws between their belly and chest. The ears of the paddy waiting to be harvested, were turning into a golden color, before they would eventually turn grey. This was basically the beginning of harvest time.

The fields seemed vast, the harvest, abundant. I followed Elia, the District Livestock Officer, with whom I was travelling, asking him questions that interested me about rice cultivation. One of the questions, in the long conversations I had with him, was how paddy was cultivated in the past. An equivocal question for such a topic. His answer was ambiguous as well, lacking details. He explained that it was common that people cleared bushes in the dry season, planted at the beginning of the rains, in January or February, and then harvested in June/July. The harvest was done in two phases. The first phase started in May and culminated in July, when the main crop was ready, and the second, between September and October, when the “left-over” rice that had not matured in July was ready. He concluded that “it has been that way ever since I moved to Ifakara

about 8 years ago”¹². He believed it was that way in the past, as well. The past I was looking for went back as far as the beginning of the 20th century.

Life histories and literature reviews will shed more light into this distant past (1930s). The main case study group is the Ubena chiefdom, whose ethnography was detailed by Culwick and Culwick (1935). They show that there was a system behind the organization of cropping in the valley, which, with the demonstration of a calendar year, can be clearly explained (see table 1 below). In October and the first weeks of November, the men in each household would go and clear new bush grounds to make a new field, or would clear the old fields, which had, by now, been covered by bushes and shrubs (see also Telford, 1929: 53-55). This involved the use of hoes, and other tools, as well as burning, where necessary. After the clearing, the first showers of the November rains softened the hard ground and women came and dug through the cleared bushes. In December, before the short rains began, the maize seed was planted, and between the months of December and January, when the short rains were at their best, the rice seed was sown. The method of sowing was through broadcasting. By the time rice was sown (mostly intercropped with maize), the maize crop had finished sprouting. The maize was then harvested and uprooted in March, when the rice was still small.

Nevertheless, the process of planting generally required good timing. It started with hoeing, before the rice was planted, in order to prevent the weeds choking the rice seedlings. It is emphasized that a delay in the process, for even a few days, might have led to a loss, since “crops must both be established before the short break between the short and the long rains occurs and also reach a certain height before the flooding begins” (Culwick and Culwick, 1935: 246). At the end of January, a dry spell set in. The maize planted would, however, be grown enough to survive until harvest time, at the end of March. The maize was harvested and consumed until end of April, when the early rice, *Msonga*, was harvested. This fed the families until mid-June, when the main rice harvest was done. Meanwhile, in April, the dry season rice, *Nganyangira* and *ngapa*, described above, were planted

¹² Elias Shemtoi, District Livestock Officer. Quoted in my field notes. 17th June 2014.

Table 1: The agricultural year in Kilombero valley, 1930s

Source: adapted from (Culwick and Culwick, 1935: 256–257)

Month	Weather	General Remarks	Rice	Maize	Other crops
November ...	Showers	Cleaning, burning, digging, etc.	–	–	Last cotton picked. Last dry-season food-crops being reaped
December ...	Short rains begin towards end of month	Digging and preparing continues	Dry rice sowing in some places. Ordinary sowing begins according to rainfall	Planting towards end of month	Cotton uprooted and burned
January ...	Short rains. Dry spell expected about end of month and into February	Period of anxiety about both rice and maize. Men begin guarding maize at night	Sowing. Weeding begins where sowing was done early	–	Simsim sown
February ...	Beginning of long rains	Men guarding rice and maize fields at night	Weeding	–	Cotton planted in drier areas
March ...	Heavy rains	Men guarding fields at night	Weeding. <i>Msonga</i> (early rice) in ears and birds have to be scared off	Harvest begins about middle of month	Cotton planted in wetter areas
April ...	Heavy rains	Men guarding fields at night	<i>Msonga</i> reaped. Main crop tall enough now not to need weeding. <i>Nganyangira</i> and <i>ngapa</i> sown by a few people about end of month or beginning of May	–	<i>Ulezi</i> (finger-millet) sown
May ...	Rains slacken	Men guarding fields at night	Main crop in ear, bird scaring necessary till grain begins to harden	–	–

Table 1: continuation

Month	Weather	General Remarks	Rice	Maize	Other crops
June ...	Rains over	As soon as rice is reaped, digging takes place for dry season crops	Reaping begins	Dry season crop planted as soon as ground prepared	Cotton-picking begins end of month in forward places. Dry season crops being planted as soon as ground prepared
July ...	Dry season	People set about their individual dry season tasks, fishing, etc.	Reaping continues. People with <i>Nganyangira</i> and <i>ngapa</i> begin to plant out	–	Cotton-picking. <i>Ulezi</i> and <i>simsim</i> reaped. Dry season cultivation in full swing
August ...	Dry season	–	–	–	Cotton-picking
September ...	Dry season	–	–	Earliest maize ripens	Cotton-picking. Various dry-season vegetables now in use
October ...	Dry season	–	<i>Nganyangira</i> and <i>ngapa</i> ready about end of month	Harvest	Cotton-picking. Various dry-season vegetables now in use

Weeding and protection of crops

Weeding and protection of crops from vermin were labor intensive processes and the most tedious activities in the agriculture cycle. The Culwicks gave the following details: weeding took place from the end of January to April, and it was done mostly by women. In the low lands, the grass weed grew fast, and if it was not gotten rid of, it might have destroyed the whole cropping of the season. Women, therefore, spent days kneeling and scrapping the ground of any little grass in the field. It was a slow and tiresome job, and by the time they came to the end of the field, they would have to start again, since the encroaching grasses would have re-sprouted at the beginning of the field. This process was done twice – before the end of January and, once more, before the middle of April.

Meanwhile, the role of the men did not end with clearing the bushes of the old and new fields. Although they might not have been seen working so much during the day, they were mostly awake in the night, keeping crop predators away from the fields. The Culwicks wrote that:

“Given a chance, baboons by day and pigs by night will work havoc in a maize field in an almost incredibly short time; and often, one cannot help feeling, it might be from sheer malevolence, for apart from damage done after the cobs have formed, they will attack and wantonly destroy acres of young maize not yet bearing, from which they themselves derive no benefit” (Culwick and Culwick, 1935: 251).

Since the valley is enclosed within wildlife habitats, the possibility of vermin destroying the crops was always present. The Culwicks explained that in the day, women and children, in the middle of their farm chores, would keep away wild pigs and baboons. Since the main rice crop ears in May, they (women and children) would also scare away the “happy birds”, which were eager to peck on every bit of grain in the field. In the night, the men would look out for elephants, hippos, and other herbivores, that were seeking to feast on the fields labored on by the women. This was done from as early as the seeding time to the end of the harvesting time. It involved long wet and cold nights, and, in some instances, these guards suffered from chronic malaria. The fields had, at times, a small hut that sheltered them in times of rain. Sometimes, these men would keep watch against baboons and monkeys during the day as well, especially when the main work of weeding was done, and crops were growing. By the time of the Culwicks’ ethnography in the 1930s, the men organized themselves in mutual help groups, where they took turn guarding the fields, allowing them to catch a good share of rest.

Harvesting the rice crop

In the middle of June, the main rice crop was ready. Women, sometimes helped by men, started the harvesting process. The small huts used by men for shelter in the night during their guard, were turned into temporary stores in the harvesting time. Harvesting was done by cutting the ears of the rice and piling them to form a heap. These heaps were either immediately transferred to the small huts for storage, or were left in the field for days before they could be transported to the stores. While at the stores, these heaps were moved out to allow them to dry. The dry ones were then hit continuously with bamboo sticks to dislodge the grain from the straws. There is a continuity

in this practice of harvesting as I observed above. When required for food, sale or making alcohol, part of the dislodged grains, were hulled in a wooden mortar using a wooden pestle.

The rice husks are not thrown away. The Culwicks write that “from the husks they are in the habit of making a porridge which does not sound appetizing, but which they appear to enjoy” (Culwick and Culwick, 1935: 250). Part of the harvest was a form of unripe rice called *Pepeta*. *Pepeta*, crushed in the process of hulling the soft grains, was regarded as a local delicacy, and a buffer against hunger. The Culwicks write that:

“As it swells after being eaten, the sensation resulting from eating any quantity of it is left to imagination. When food is short and the harvest eagerly awaited unripe rice is reaped in considerable quantities, both to be cooked and to be eaten raw” (ibid).

The time between the end of the harvest and the preparation of fields was a time for social interaction and economic exchange. If a farmer was not selling part of his harvest to the neighboring villages or taking it to the trading center in Ifakara or Kilosa, this would be the time to visit family and relations within the neighboring villages, or as far away as Iringa. This involved long days on the road or many weeks being hosted or hosting a relative. In case there was a funeral, which one could not attend in the wet season, this was the time to pay a visit to the deceased family, usually with a part of a harvest. Ceremonies too, were popular in the dry season since beer from rice and finger-millet was common and cheap. Marriages took place, celebrations of births of twins and other rituals happened in this time. “Tribes”, especially the *Ndamba*, organized themselves to hunt hippos in the Kilombero river. However, in instances where dry season rice was still afield, the day and night guards resumed their work.

3.2 Reorganization of local institutions and agricultural production

3.2.1 Political and administrative reorganization

Even, before the arrival of missionaries and colonialists, the territories in the interior of Tanganyika already faced a quasi-colonization phase, where the Sultan of Zanzibar established his rule and sought to control trade routes for slaves and ivory. In some instances, the affairs of the locals in the interior land were managed by the sultan’s quasi-military officers known as the *Akidas* (who would later get adopted by the German colonialists) (Coulson, 1982: 70). It is even claimed

that, at one point, Barghash, the son of the Sultan Said bin Sultan, was appeased and even worshipped in some clans of the *Sukuma* (Moffett, 1958: 39). In the advent of exploration and missionary work in the 19th century, it was claimed that a letter from the Sultan of Zanzibar guaranteed safety of the explorers (ibid). Nonetheless, this quasi-colonialism barely had any significant influence on the social and cultural lives of the local inhabitants. The interventions from the Sultan or his officers, in matters related to local tribal politics, were only with varying measures of success. For instance, Barghash appointed a Governor of Tabora who served as his mouthpiece, but had little if any authority over his compatriots and no influence at all over the local chiefs (ibid: 34).

The advent of German colonialism dug deep into the political and social fabric of local inhabitants of the territory. Moffett claims that when the German colonial authority consolidated their grip on the territory, there were “numerous punitive expeditions” on people and institutions which resulted in the dismantling of some of the pre-German organizations like certain chiefdoms in many parts of the territory (Moffett, 1958: 78–80). The German colonial authority set up, and imposed on the locals, a political system partly inherited from the Sultan of Zanzibar. Moffett (1958: 78) described it as follows: at the top was the Governor, who was initially the supreme civil and military authority, later only civil after the changes made in the aftermath of the Maji-Maji rebellion. He was assisted by an advisory council that met thrice a year and dealt with issues of legislation and financial estimates. The country was divided into 21 large districts of which 19 were under a civilian District Commissioner (DC), or *Bezirksamtmann*, and 2 (Mahenge and Iringa) under military charge. The DC, who was the representative of the Governor at the district level, oversaw maintenance of law and order, and tax collection. He worked with the *Akidas*, who superintended “native” affairs. They held legislative powers and maintained law and order over village groups. Many of the *Akidas* were Muslims of Arab origin. Below the *Akidas* and subordinate to them were village leaders called *Jumbes*. They kept law and order at the village levels on behalf of the *Akidas*. They also wielded executive powers in their respective villages.

The German colonialists had a direct and keen eye on the affairs of the local Africans, as far as security was concerned. They faced the rebellious “tribes” and their chiefs with a scorched earth policy and afterwards re-assembled some of these rebellious tribes under the watch of the loyal ones (see Larson, 1976; Lumley, 1976). In the Kilombero valley, for instance, after the Maji Maji rebellion in 1905-06, sections of the Wandamba were annexed to the more cooperative *Bena* and Pogoro chiefdoms (Monson, 2000a: 543). The Bena had control of *Masagati*, *Utengule* and

Malinyi, each under the rule of the three sons of the former *Bena* chief, who had died fighting alongside the Germans during the rebellion (Monson, 2000b: 363). One of the sons acted as the *Obersultan*¹³.

In the aftermath of WWI, the 1919 Treaty of Versailles, under the League of Nations, gave Great Britain the mandate to administer the Territory of Tanganyika as a protectorate. Generally, the administrative structure that the British colonialists imposed in the territory was similar to that of the German colonial administration. Sayers (1930: 113–117) described it as follows: at the top was the Governor who was responsible for the affairs of the state and represented the Crown of England as head of the territory. The Governor was assisted by the executive council. This council consisted of the Chief Secretary to the Government, the Attorney General, Treasurer, Director of Education and the Secretary for Native Affairs. A Legislative Council was established in 1926 with the Governor as the President. It had 13 official members and 10 non-official members. The Legislative Council helped the Governor to enact laws of the territory. Unlike the German system, the British colonialists divided the territory into 14 provinces, each under a Provincial Commissioner. Each commissioner was assisted by a District Officer (DO) of the respective districts in the province. The DO was assisted by Administrative Officers (AOs) and in some cases by cadets who were administrative officers with less than 2 years' experience (Lumley, 1976: 10). The Administrative Officers were responsible for “peace, tranquility and good Government of their areas” (Sayers, 1930: 116). They carried out Government policies, held legislative duties and collected taxes. With a central position in the provinces and districts, was the agricultural department. This department was responsible for the encouragement and supervision of both the “native” and “non-native” farmers in activities related to agricultural improvement in the territory (ibid: 117). I will refer to some of these administrative offices in subsequent narratives, and especially, in the next chapter.

After assuming protectorate of the Tanganyika Territory, the British at first maintained and modified the German system of using the *Akidas*, but gradually faded them out. For if they were to control the “natives”, they did not require an intermediary of “alien” rulers (ibid: 124). Rather, a Natives Authority Ordinance was enacted in 1923, which gave power to the Administrative Officers, native chiefs, and headmen to maintain order, prevent crime, and collect taxes, among other things (Sayers, 1930: 125). However, Sayers writes that:

¹³ The *Obersultan* was the head of all the sultans.

“Although this legislation purported to be Native Authority Ordinance, these orders and regulations were in practice more frequently issued by the administrative officers themselves and with the gradual removal or disappearance of the intermediaries through whom contact between the Government and the native had previously been maintained, the tendency was for District Officers to exert a more direct influence on the native affairs” (ibid).

The year 1926 was, furthermore, pivotal in the institutional changes of colonial Tanganyika. The coming of Sir Donald Cameron as the new Governor of Tanganyika established what was commonly referred to as an indirect rule (see Crowder, 1964). The rationale of indirect rule was the pre-assumption that all “natives” were organized in chiefdoms, and since the chiefs and headmen had more jurisdictions on their people than the Arab *Akidas*, their authority would hence be more familiar and accepted among the “natives”. Furthermore, the British mandate intended to “benefit” the “natives” and stay away from their affairs as much as possible. In this sense, and being understaffed, it was convenient for the British to use the indirect rule system in Tanganyika. However, to be clear, this was not so much a system to benefit the “natives” as it was a “divide and rule” or an imposition and enforcement of colonial rule to which resistance resulted in dire consequences (See also Fortie, 1938: 538; Lumley, 1976: 14)

Nevertheless, because of this indirect rule policy, the Kilombero valley was divided into 6 native authorities: *Ndole* of the *Wandamba*, *Salehe* of *Mofu*, *Mpepo* of the *Wangoni*, *Hassani* of *Ifakara*, *Hassani Nloahanje* of *Kiberege*, and *Towegale* of *Bena*. (Lumley, 1976: 122). The two *Hassanis* ruled sections of the *Wabunga* in their respective areas. The 6 native authorities were charged with, among other things, championing colonial endeavors to turn the valley into a cotton producing area and to expand rice production. *Towegale* and the *Hassanis*, who accepted these demands, were described as progressive, while the rest were referred to as “drunkards”, “drug addicts” and “lazy” because they were not willing to champion the “progressive” ideas of the British administration (ibid).

Many of the changes that occurred in the socio-political organizations at the beginning of the 20th century in the Kilombero valley were, therefore, direct impositions from the colonial authorities, in some cases justified by wrapping them in the institutions of the “traditional chiefs”. We shall encounter some of these native authorities further in the narratives of the endeavors of the colonial administrations to transform agriculture in the valley.

3.2.2 Socio-economic reorganization

In the history of agricultural changes in Tanganyika between 1900 and 1940, enormous and direct influences from missionaries, and both the German and British colonialists, are reflected (see, Coulson, 1982; Hoag, 2013; Iliffe, 1979; Ruthenberg, 1964). Reports from explorers indicate that their motivations were primarily the search for wealth, and a common observation from these sojourners was the agricultural potential of the territory whose exploitation they greatly recommended (Braun, 1906; Gillman, 1927; Thomson, 1880; Wilson, 1932).

Thus, from 1891, the main effort of the German colonial administrators in Tanganyika Territory was devoted to economic development through plantation agriculture (Fuggles-Couchman, 1964: 16). Accordingly, cotton, sisal, and coffee plantations were introduced and expanded across the territory. To boost this expansion, road and railway infrastructure was constructed or improved upon (Jack, 1932: 122; Lumley, 1976: 133). The initial approach by the German colonial administrators was to reserve plantation and cash-crop farming to themselves, involving the locals only as sources of labor. Therefore, little attention was paid to the smallholder farmers until the last years of the German rule (Ruthenberg, 1964: 45). The shift in policy was from the realization that plantations alone could not increase production and that conditions were not suitable for German settlers on small farms (*ibid*).

After WW I, when Britain assumed protectorate of the colony, commercial production of smallholder African shambas was encouraged. A greater effort was, however, devoted to cash-crop production. The British Governor in Tanganyika, Sir Donald Cameron, aptly summarized this policy in 1926:

“the first object of the Government is to induce the native to become a producer directly or indirectly, that is, to produce or assist in producing something more than the crop of the local food stuffs that he requires for the sustenance of himself and family” (Sir Donald Cameron, cited in Iliffe, 1971: 12).

Hence implementation in the 1920s varied from autonomous smallholder production to direct interventions. The depression in the 1930s affected the territory as prices for key exports fell. The response from the colonial administrators was to make the smallholders plant more crops to raise farm incomes and territorial revenues (Fuggles-Couchman, 1964: 19). Pre-WWII years were years of uncertainty with little agricultural development efforts. The period between 1939 and 1945 saw concerted efforts to help with the war and production of cash-crops had to give way to food-

crops. The post-WWII period saw increased efforts to develop agricultural production. This implied increased intervention of the colonial state in the agricultural practices in the country.

Following the development agendas of both German and British colonialists, which had a great focus on agricultural production and marketing, the administrations justified their appropriation of the best lands, with high agricultural potential. Riverine areas like the Kilombero valley were, therefore, earmarked. The Kilombero valley had received excellent reviews from travelers, administrators, and consultants, describing not only its agricultural potential but its aesthetic beauty as well. Gillman, for instance, wrote that:

“Extremely well watered by countless permanent streams, which descend from the encircling highlands and swell the greatest East African river, that meanders sluggishly in a deep clayey bed through the endless grass-steppe, this plain has for long appealed to geographers and administrators, both British and German, as a future granary of East Africa” (Gillman, 1927: 105).

Thus, in attempts to create this “granary”, the German colonialists sought to canalize the whole valley and tried to expand cotton production (see Telford, 1929). Their focus was on plantation agriculture and although they later attempted to encourage smallholder production, this was halted by the WWI. British colonial officials right from the start sought to reorganize smallholder production by further reordering the then present political and agricultural systems, imposing new land tenure practices, interfering with planting and harvesting schedules, and introducing new technology, among other things, with the hopes of co-opting the then contemporary local practices for their own purposes (see Hoag, 2013). The period under investigation (1900 - 1940) demonstrates 3 interrelated forms of socio-economic reorganization which led to agricultural changes in the valley. These are: (1) labor and (cash) crop commodification; (2) planned villages for human control and crop production, and; (3) changes in market structures and trade dynamics. Such reorganizations enabled displacements and dispossession of “natives” from land that had become of interest to the colonial authority; migration in search for work; instituting the cotton crop and expansion of the value chain and markets for the rice crop. It is important to note, at this point, that these transformations did not come unchallenged by the smallholder farmers of the territory. The remainder of this chapter and the next chapter will, therefore, pinpoint some of these policies and, in some instances, illustrate the responses to these policies from the “natives”.

Labor and (cash) crop commodification

Plantation agriculture which formed German agricultural policy required a vast amount of labor. However, labor was not readily accessible to the planters which “led to an increasing resort to the use of forced labour” (Hill and Moffett, 1955: 267). After the Maji Maji rebellion, its devastating aftermath on local populations and the fear by the new Governor, Albrecht von Reschenberg, that a similar event might reoccur in case forceful recruitment of labor continued, the German colonialists resorted to voluntary labor recruitment. This voluntary recruitment worked in two ways: the poll tax, payable by all males, compelled the African to employment in the labor market, especially on European plantations (Coulson, 1982; Larson, 1976), and the 1909 labor regulations and its consequent amendments in 1913 served to entice the African “native” to plantation work by exempting or significantly reducing the amount of tax payable by the worker (Sunseri, 1996: 592). The result was a series of labor migration to estate farms for income to pay their taxes or to supplement their household incomes (ibid).

Although estate farming was disrupted during WWI, labor migration resumed after the war. In the Kilombero valley, Mahenge, which was one of the minor estate plateaus in the territory, was a source of labor recruitment to estates outside the valley, especially to the Tungi plantation in Morogoro (Sunseri, 1996: 595-596). Larson (1976: 240-241) reveals figures (see table 2 below) from the 1926 Mahenge district books, which show the number of labor migrants registered and estimated to have left the valley. He argues that almost 25% of the population in Mahenge migrated as labor to other estates on a yearly basis.

Table 2: Labor migration out of Mahenge district, 1926

Source: (Larson, 1976: 240-241)

Destination	Number of travel passes	Estimated total of migrants
Kilosa	1867	3400
Morogoro	906	1650
Dar es Salaam	223	300
Iringa	228	300
Itete	127	200
Kilwa	56	100
Songea	12	12
Dodoma	12	12
Bagamoyo	10	10
Tanga	7	7
Tabora	4	4
Pangania	3	3
Rungwe	2	2

Similarly, the (cash) crop commodification intended to expand the tax base and induce a market-based economy in the territory. It is clear that trade was going on among the “natives” before European colonialism (see Kjekshus, 1996). In the Kilombero valley, both large-scale trade in rubber, ivory and slaves and small scale trade in crops, and artifacts were evident in late 19th century (Culwick, 1934: 9; Monson, 1993: 133).

The interest of the German colonialists, to expand the tax base, and to expand production for the (world) market, stirred the introduction and expansion of new crops (mainly cash-crops) into the territory. The major crops included sisal, which was introduced from Florida in the United States, rubber, coffee, cotton, and coconut (Moffett, 1958: 81). However, their chief goal, as Sunseri (1995: 180) has pointed out, was “to acquire cotton for German textile mills”. This goal sprouted from the increased demand for cotton in the European countries as a result of the industrial revolution (Isaacman and Roberts, 1995: 7). To boost their estate and market economy, the German colonialists expanded the transport infrastructure across the territory. They also set up research centers for experiments on crops, trees and other potential economic crops, such as the biological and agricultural institute at Amani, constructed in 1902 (ibid). The policies to concentrate efforts on European estate agriculture was gradually changed after the Maji-Maji uprisings. The new focus was to involve and support smallholder farmers (Sunseri, 1996: 587–588). This support was, however, only to mainstream them into the market economy.

While the policies on commodification saw an increased involvement of the “natives” into the market economy and a boost in production of cash-crops for export (see Moffett, 1958: 94, 96), many smallholder farmers circumvented these policies, in some cases outright and violently, and in many cases, clandestinely. The clearest open resistance which was directly related to unsatisfactory labor and tax systems was the Maji-Maji rebellion (Iliffe, 1969; Sunseri, 1995). Here, Kilombero district was a battlefield with thousands massacred by the colonial soldiers (Larson, 1976: 89-127). In the aftermath of the Maji Maji rebellion and knowing that the use of force would not be effective, the forms of resistance from the “natives” became covert. This involved some of the valley inhabitants withdrawing into spaces where they would evade the jurisdiction of German administration. These secluded spaces were found in areas inaccessible by road infrastructure, and the protestors seemed to be as small as a family or only a couple of households (Culwick and Culwick, 1935: 140–141). They dispersed in hidden hamlets in the hills or tucked away in the valleys of Masagati or Ifinga, or hid “in small clearings in the dense long grass of the alluvial land near the big rivers” (ibid).

Nonetheless, the British upheld and expanded a market-oriented economy in the territory. British colonial figures like E.D. Morel advocated for less capital penetration which he argued eroded African individual basis of individual peasant farming (Kelemen, 2007: 77). Land alienation during British colonialism was limited in many parts of in Tanganyika especially in the 1920s. In the 1920s, with the new focus on smallholder farmers, the Provisional Administration ordered the introduction of cotton to the “native” farmers in Kilombero valley (Telford, 1929: 54). According to Larson (1976: 244), the 1922 annual district report of Mahenge stated that: “Natives had to be pressed, in fact, forced to grow this cotton but now that they realize there is a profit in it, they should show less reluctance in the future”. The next 3 years gave the impression that the valley would be a major cotton producer in the territory. The 1922 seed-cotton from the local smallholder farmers was described as of the best quality in the territory (Telford, 1929: 54). Telford continues that in 1922 the “natives” produced up to 8,655 kilograms of seed-cotton; the following year, a new ginnery in the valley recorded up to 12,000 kilograms of seed-cotton; in 1924, the “natives” produced 5,200 kilograms of seed cotton while in 1925, a total of 24,000 kilograms of seed cotton was produced in the valley, half of it coming from the “natives” (ibid: 54). However, after 1925, production ceased almost to nothing. This was blamed on the poor road infrastructure and a fall in the cotton prices (ibid). Larson (1976: 247), however, associates this failure with colonial ignorance on the environment, their ignorance of indigenous knowledge, low prices offered for seed cotton

and the shortage of labor for such a laborious enterprise¹⁴. The hay years of increased cotton production were because the colonial authority used enormous force to rally the “natives” to plant cotton (ibid). In 1924, a cotton expert noting that there was a considerable increase in the area planted with cotton in parts of the valley that he had visited, reported that:

“Unhappily though, the native has cleared the land and planted and tended his cotton, he has in many cases gone no further, though some have gone so far as collecting some lint and even sorting it, very little had been marketed though the date for uprooting cotton in the district is only a month ahead” (R. C. Wood 1924)¹⁵.

A fixation on the promise of cotton as the leading cash-crop for the valley led to the review of the possibilities to reestablish cotton production in 1931. This fixation was, however, nurtured by the flourishing rice trade and the “Plant More Crops” campaign which was aimed to accrue more revenue for Government during the depression years (Monson, 1995: 273). Moreover, 1930s saw an increasing recognition of capital penetration and acceptance of capitalist companies (Kelemen, 2007: 78). Hence the DC Culwick, encouraged the Indian company, Messrs. Vithaldas Haridas and Company, who had inquired about setting up a cotton ginnery in Ifakara, to set the ginnery up in 1932 (Larson, 1976: 289-290). By 1933, the project was on the verge of collapse for the same reasons as in the 1920s. In October 1933, the Director of Agriculture complained to the Provincial Commissioner that “the very natives who requested Government to permit the establishment of a ginnery are failing to grow the crop, therefore failing in their expressed undertaking”¹⁶. This time, however, the colonial officials, determined to make this work, intensified compulsion. Larson writes that:

“Native Authority ordinances were passed making it compulsory to pick all cotton, agricultural assistants were hired to enforce cotton rules, those who

¹⁴ Cotton farming required a lot of labor, making it unfit for a community that had a strict agricultural calendar. See previous section for the agricultural calendar.

¹⁵ Wood, R. C “Cotton Specialist Report No. 7” 21 October 1924. PRO C0691/73/267-268. Quoted in Larson (1976: 245–246)

¹⁶ Director of Agriculture to the Provincial Commissioner Eastern region. 25.10.1933. TNA 461/6/6 cited in Larson (1976: 290)

refused to grow cotton were harassed by tax collectors, and great pressure was put on chiefs to make their subjects grow cotton” (Larson, 1976: 292).

Colonial agricultural policy at the onset of WWII focused on expanding food-crop production. But this did not stop some colonial agents in the district from expanding cash-cropping as well. The District Commissioner, Lumley, in a discussion with chiefs on April 1, 1939, stressed the continuous threat of famine and pointed to the need to diversify and increase food production, but also emphasized the need to increase cotton production (Lumley, 1976: 124). For instance, in 1939, he organized markets close to the growing areas so that cotton cultivators would have their cash sources close at hand. Moreover, any disobedience from the “natives” or their chiefs to his demand of cotton cultivation warranted severe punishment. He, for example, tells a story of when, on one of his monitoring trips, he saw large fields planted with rice. But what interested him more was to see that people cultivated cotton. Being an ambitious man and ready to use all means possible to expand cotton production, he made an abrupt stop at the rice fields guarded by women and children and told them to inform their men to plant cotton as soon as the rice was harvested (ibid: 126).

His determination to expand cotton production was so enormous that he threatened to depose of the chiefs of Mofu and Wandamba – Salehe and Ndole respectively. He extended this threat to all their sub-chiefs because they were uncooperative. They did not actively support his agricultural campaign, particularly, his cotton campaign. He wrote that:

“My first official action on my return [from the monitoring trip] was to write to the Provincial Commissioner asking for the disposition of Chief Salehe and Chief Ndole with all his sub-chiefs. Salehe I described as a compulsive drunkard; Ndole as semi-blind, unintelligent and a drug addict; his sub-chiefs as drunkards, drug addicts and of low intelligence.... I recommended that the District Commissioner be appointed Chief of the Wandamba, a procedure permissible under the Native Authority Ordinance, with a view to building up a fresh administration. The disposition of Salehe was approved just before I left the district, but no reply was vouchsafed to my proposals for the Wandamba” (Lumley, 1976: 129)

Because of their resistance to his policies, he described the Wandamba people as a “useless lot of drunken loafers” and said he “could only reproach them for their idle habits and warn them of consequences if they disregarded” his “orders for an intensive agricultural campaign” (ibid). Such rhetoric and actual compulsions would dominate the next 20 years of colonial rule. I argue, however, that this reflected the disgruntlement and the determination of the smallholder farmers to stay out of the colonial cotton improvement campaign for as long as they could.

Planned villages for human control and crop production

Precolonial Kilombero valley was characterized by dispersed settlements, made up, in some cases, of only a few households (see Culwick and Culwick, 1935). German colonial administration did little, if anything, to interfere with such forms of settlements. This might have been because of their focus on European plantation, ignoring much of smallholder African farming. British agricultural efforts, on the other hand, emphasized smallholder production and the need to improve it. It, nevertheless, proved difficult to control the local population, who, because of colonial hegemony, resisted the colonial version of agricultural improvement. After efforts, such as indirect rule, seemed to fall short of colonial expectations in controlling the population and implementing their agricultural improvement agenda, compulsion into settlements became necessary. This was disguised as efforts: to control the spread of the trypanosomiasis transmitting tse-tse fly¹⁷; to protect the crops of the local population from vermin (Lumley, 1976: 135); and to conserve the soil¹⁸, and later, as Dreier (2014) argues, as efforts towards rural development.

For instance, there had been a long-established seasonal movement of people from the highland areas to the lowland floodplains, to grow the wetland *faya* paddy. This movement culminated with the increasing price for *faya* paddy and later with people’s desire to grow more cotton to pay their taxes (Culwick and Culwick, 1935: 281–286). Thus, in 1937, in an event where the population from Masagati had taken their temporary settlement in the low lands, the callous District Officer prohibited cultivation on the Masagati hillside, quoting rhetoric of anti-erosion measures (Larson, 1976: 300). This, Larson argues, was a planned resettlement since the D.O ignored the skills the farmers had exhibited for generations of controlling erosion on these slopes (ibid). This prohibition saw a rather permanent settlement of the drifters resulting in their

¹⁷ A. T. Culwick used this argument to start concentrating people in the valley in 1937. see Larson (1976: 301).

¹⁸ TNA. H1/6/2/169. Assistant Director of Agriculture to the Director of Agriculture. “Sleeping sickness settlements”. 13th March 1958.

concentration along the valley low-lands. The ones who remained on the highlands moved to and concentrated in areas which favored the cultivation of *Meri* rice (ibid).

Similarly, in 1939, D.O Lumley, in efforts to expand cash and food-crop production intensified efforts to reorganize farmers into villages to be able to control them, protect them from vermin, and connect them to the market. Reflecting on one of his monitoring trips, he wrote:

“My purpose on this trip was to encourage and if necessary compel people who were living in isolated settlements to concentrate in larger villages. Otherwise it was difficult for the game scouts to protect their crops. [...] to persuade these people to change the habits of generations and live in organized settlements instead of small family groups was never easy. Often compulsion was the only way.” (Lumley, 1976: 135)

This quotation summarizes not only the deliberate efforts of resettlement for agricultural production, but the attitudes of the inhabitants of the valley towards such policies in the 1930s. And yet in the following two decades, compulsions, evictions and resettlements by the colonial administration continued in the valley. This continuity should however, be examined in different contexts. For instance, because of British involvement in mobilization of resources for the WWII and international criticisms on colonialism, and the failures of colonial administrators to effectively control the populations, the beginning of the 1940s saw a change in attitudes from colonial officials towards a Fabian approach to bring about social and economic progress through more direct interventions (see Kelemen 2007: 81-82; Hodge, 2007: 179-180). This approach focused on institutional building to mediate the central authority with the local population and one of the ways the colonial authorities in the valley did this was through settlements controlled by chiefs they appointed. Hence, Luhombero settlement was created in 1941 and a settlement was established in the Ruaha valley in 1942. In 1943, Kichangani concentration was established in Lupiro. In the same year, three more, Iragua, Itete, and Mtimbira were concentrated. Sofi in Majiji was established in 1944. Kelemen (2007: 81) argues further that in post-war Fabianism no new set of policy approaches but were rather ambiguous with a focus on production. By 1948 there were 12 village settlements in the valley with a total tax-paying population of 14,873¹⁹ (see table 3 below) and an

¹⁹ TNA. H1/6/2. Saving Telegram. District Commissioner Mahenge to the Senior Agricultural Officer Morogoro. 19th April 1948. This saving telegram lists the village settlements with tax-paying population. There were probably more

increasing campaign to produce cotton and paddy. By 1958, the number of settlements had reached 16²⁰ and this was further linked to the failures of the previous agricultural development and a new way to focus on progressive farmers.

Table 3: Settlements and their respective tax paying population in Kilombero valley, 1948

Source: TNA. H1/6/2. Saving Telegram. 19th April 1968

Place	Tax-paying population
1. Ifakara	1909
2. Mbingu	1355
3. Mngeta	1045
4. Lupiro	912
5. Iragua	627
6. Mtimbira	2524
7. Malinyi	1357
8. Utegule	1694
9. Mgombo	1165
10. Lugoda	314
11. Kotakota	616
12. Kiberege Ruaha area	1355
Total	14,873

Apart from the periodical reasons outlined above, settlements were created because colonial administration sought to easily monitor and control the local population. In this way, they could easily screen farm output and collect taxes. These settlements were also spaces for experiments on agricultural improvement²¹. They were intended to habit new crops, new ways of planting, simplify markets and introduce mechanized technology. Essentially, settlements were a social engineering

people in the settlements. Kjekshus (1977: 172) notes that roughly 13,500 people were moved to the southern side of the valley in 1941 and 1942 and about 26,000 people by 1945.

²⁰TNA. H1/6/2/169. Assistant Director of Agriculture to the Director of Agriculture. "Sleeping sickness settlements". 13th March 1958

²¹ TNA. H1/6/2. Report from Agricultural Officer. The report shows an example of two health officers in Mahenge, Mr. R Ollendorff and Mr. J. Allen who established cassava propagation plots on the new settlements.

project – a people simplified into tax-paying subjects and concentrations legible to the colonial administration, which was ready to steer them towards a high modernist agenda.

Even a certain level of specialization for the settlements was suggested. For example, the report on sleeping sickness settlements, written by the Assistant Director of Agriculture to the Director of Agriculture Eastern Province proposed, for the settlements on the right bank of the river Kilombero, a trial introduction of cattle, building a trial rice dam in Itete settlement, and trial areas for Hibiscus fiber as an alternative cash-crop to cotton²². The settlements on the left bank of the river Kilombero which included Kiberege, Ifakara, Mofu, Mbingu, Mgeta, Chitamera were marked as the porches for experiments in new crops. This is because they enjoyed a higher amount of rainfall than their counterparts on the right bank. The major policy in these settlements (on the left bank) was to concentrate on the expansion of the high yielding Afaa rice crop and other permanent crops, like rubber, oil palms, cocoa, and robusta coffee. In the Ruaha and Luhombero settlements the main policy suggested was to improve cotton cultivation and introduce cotton dusting.

However, compelling people into concentrations located in ‘foreign’ areas would prove both unpopular to the local population and ecologically disastrous. As we shall see later in the examples of paddy and cotton, long-established trade links were outlawed, and new formal markets installed, the rice planting routine was interfered with and mechanisms of planting which allowed a fallow period became limited. While the first two affected the socio-economy of the valley, the latter increased the exhaustion of land settled on which resulted in poor yields²³. This mainly affected the settlements on the right bank of the river Kilombero, where the concentration of people per square mile was much higher and did not allow for a reasonable fallow period. Dreier (2014: 152) has further argued that although sleeping sickness in the Kilombero valley was controlled in a short time, the concentration processes led to the infection of people with numerous other diseases. These included leprosy, hookworm, roundworm and filaria and schistosoma. He seems to agree with one of the Senior Colonial Medical Officers²⁴ who saw a direct link between

²² TNA. H1/6/2/169. Assistant Director of Agriculture to the Director of Agriculture. “Sleeping sickness settlements”. 13th March 1958. See also TNA. H1/6/2/165. “Annual review of agricultural work in Eastern Province, 1957”. 30th December 1957.

²³ TNA. H1/6/2/169. Assistant Director of Agriculture to the Director of Agriculture. “Sleeping sickness settlements”. 13th March 1958.

²⁴ TNA: 450/439: W.A. Young. Report of S.M.O. to Ulanga District 10.08.1942-22.08.1942 [28.08.1942] cited in Dreier (2014: 153).

settlements and Cerebrospinal Meningitis, which was at epidemic level in the 1940s. Concentration had increased incidences of diseases because of proximity. And yet the colonial administration argued that the increased incidences of new diseases were because of dispersed settlements and called for further concentration (ibid: 153). It is little wonder many people resisted the colonial settlement policies. Dreier reports that many people fled the spheres of the chiefs and the district officials, those who remained refused to adhere to planting more food-crops to supplement the diet of maize and rice, and many others refused to participate in activities such as cleaning canals (ibid: 151-152). By 1941, A. T. Culwick wrote that:

“These people do not like being concentrated, and we must not blind ourselves to this fact and also to the fact that they hate Europeans and loath the government and desire to be as far away from both as humanly possible”²⁵

And yet this did not stop him or other colonial administrations from continuing with the settlement policies. It was already pre-determined that this would be the way to implement agricultural policies to improve agriculture in the valley. As indicated above, by the end of the 1950s, more settlements had been created and, as we shall see in the next chapter, efforts to improve paddy and cotton production and marketing were intensified. Resistance of the local population to such efforts also became rampant.

Essentially, the failure of these settlement schemes can be viewed in line with failure in the purposes they were created for – agricultural improvement and control of the population. Nevertheless, in the mid-1950s, colonial Tanganyika instituted the Focal Point Approach after the failures of their agricultural transformation policies. The FPA was the last hope of rejuvenating the imagined functionality of settlements – a progressive farmer in one settlement would have a model farm which would provide an example for others to follow. With this logic, the Assistant Director of Agriculture, wrote, in 1958, that:

“The first task is, therefore, to look for an influential go-ahead cultivator who is prepared to try – possibly the “jumbe Mkuu” – and get him to carry out as much as possible of the policy. Once a start is made and followed up in one of these settlements it should be possible to initiate similar work in other places. ... A

²⁵ TNA. 61/14/141/H/1. Annual report: Mahenge Division of Ulanga District, 1941. Cited in Larson (1976: 303)

success in this direction will make easier the introduction of the other recommendations”²⁶.

In short, settlements formed the basis for implementing agricultural improvement policies and a means to control the local populations in the valley in the 1940s and 1950s.

Changes and continuities in market structures and trade dynamics.

A large body of literature demonstrates extensively how markets and market structures were organized in pre-colonial Tanzania (Iliffe, 1971: 11; Moffett, 1958: 1958; Monson, 1993: 113-114; Sayers, 1930: 45-52). Iliffe (1971: 11) has particularly noted the link between the vibrant Zanzibar slave plantation economy, which not only required slaves to work on the sisal plantations, but depended on the supply of food-crops from the interior. Sayers (1930: 45-52) reconstructs trade histories between the groups that inhabited the coastal areas of East Africa and Arabia, the Chinese empire, Indian traders and Portuguese explorers. Moffett (1958: 35) maps the dominant long-distance trade routes that ran from the coastal areas of Lindi and Mikindani, Mchinga and Kilwa, among others, to lake Nyasa, Lake Victoria and up to the Buganda Kingdom. These trade routes enabled the exchange of goods (especially trade in ivory) within the interior and beyond the coast of Tanganyika. For example, Oscar Baumann, a German traveler noted in 1890 that:

The Wazigua produce considerably more grain than they need for their own consumption. As a result [sic] they export grain in very considerable quantities to Sadani and Pangani. Because of this continuous trade with the coast [...], the door has been opened wide to the import of European goods and the spread of the culture of the coast... In Mgera [in the heart of Uzigua] everyone wears fine white cloth, muskets and powder are common and almost every child speaks Swahili²⁷ (quoted in Iliffe 1971: 10).

The trade routes not only enabled regional and global markets but, brought in new crops as well. Iliffe (1971: 8) suggests, for example, that maize must have entered the interior from the East to Unyamwezi, where Unyamwezi traders spread it to other places like Ukimbu and Karagwe. He

²⁶TNA. H1/6/2/169. Assistant Director of Agriculture to the Director of Agriculture. “Sleeping sickness settlements” 13th March 1958.

²⁷ Oscar Baumann, *Usambara und seine Nachbargebiete* (Berlin, 1891: 273). Translation credited to Mrs. M. A. Godfredsen

notes that it must have probably been widely grown in the Kilombero valley in the 1880s (ibid: 9). Rice, whose mobility is harder to trace, must have been introduced first to Madagascar by the Portuguese explorers, then through trade to the coast and eventually the interior of Tanganyika in the 19th century (Badawi et al., 2010: 373).

The Kilombero valley fitted well in this macro trade circuit. Caravan routes adjoined from the coast to Liwawala, then northwards to Mahenge and Kilombero (Monson, 1993: 113–115). Indian merchants established trading posts along these caravan routes to boost trade in rubber in the 19th century. Similarly, an examination of the migration history into the valley clearly indicates the abundance of trade between the valley and the outside world. The Kilombero and Ruaha rivers were trade routes that connected the inner valley to Rufiji and Iringa. The Ubena, kept in touch with their relatives on the Iringa highlands bartering goods and services. Within the valley, trade in food-crop, art crafts, tools, and exchange of labor were prevalent. Certainly, commercial exchange before European colonialism in Tanganyika and, in particular, the Kilombero valley was a common phenomenon.

The type of trade in which the African smallholder farmers in the valley indulged seemed unsatisfactory to the colonial masters, for this type of trade involved small scale exchanges, barter and was elusive to the colonialists. Colonial administrators yearned to control produce of the land as well as the producers. Culwick did this by demanding producers and traders to trade in bulk arguing that this would set standards that would increase competition (Larson, 1976: 296). This would enable easy monitoring of exchanges and record-keeping – a form of legibility for tax collection. The Provincial Commissioner Eastern region, to justify an imposition of cash trade, noted that barter trade “handicaps the native in his efforts to obtain cash for his Hut tax”²⁸. In effect, barter trade was abolished and resale of agricultural produce outside the district was restricted to cash exchange. At the same time, private companies began to emerge. Noteworthy is Messrs. Vithaldas Haridas and Company, an Indian-owned business which had earlier accumulated its capital investments in Uganda was gaining monopoly power in purchasing rice through the Ifakara market system (ibid: 296).

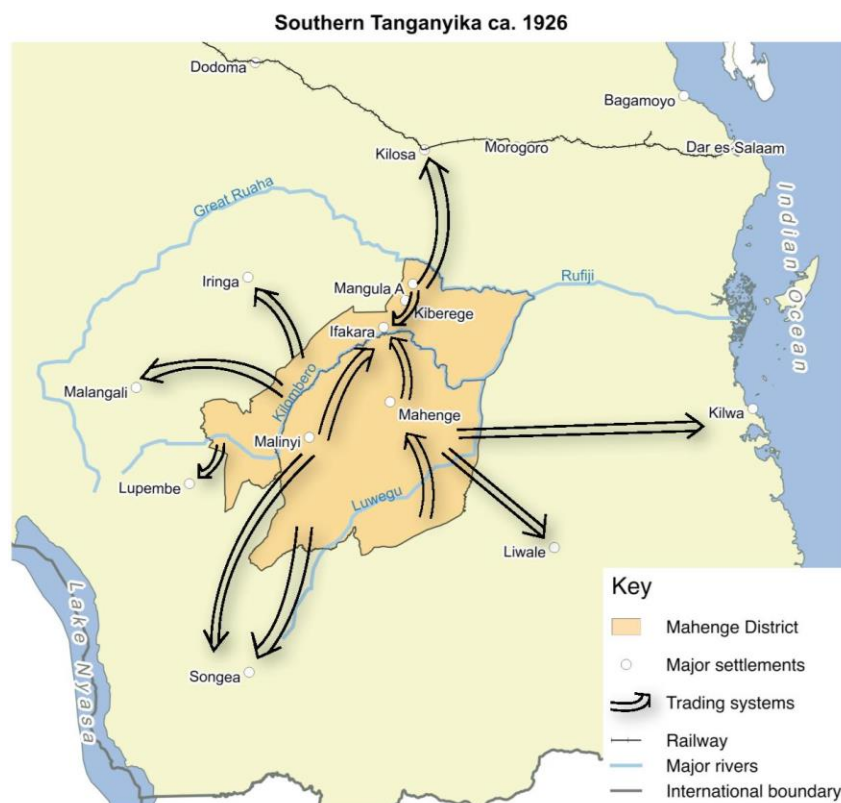
Nonetheless, by 1932, all listed produce for resale within the jurisdiction of the Native Authority market were to be channeled through the markets gazetted by the colonialists and rice

²⁸ TNA. 461/5/4. Provincial Commissioner Eastern Province to Chief Secretary. 5th August 1932. Cited in Larson (1976: 292–294)

was to be sold in bulk to the highest bidder. Eventually, two major trading networks emerged: Larson categorizes them as ‘the Ifakara system’ and ‘the regional system’ (see figure 8 below).

According to Larson (1976: 234–235) the Ifakara system had its center in Ifakara (see figure 9 below) and was controlled by Indian merchants. In the 1930s, these merchants applied for and got itinerary trading licenses from the district offices and sent their African agents to buy rice from selected points along the Kilombero river. The agents bought the rice in cash and sent it back by canoe to Ifakara, from where it would be transported to the railway head in Kilosa.

Figure 8: Kilombero trading networks in the early British colonial period



Source: adapted from Larson (1976: 236)²⁹.

Note: The arrows pointing inwards towards Ifakara illustrate the Ifakara system while the arrows pointing outwards illustrate the regional System.

²⁹ Map was drawn by Veronika Steffens (2017). Student Assistant Global South Studies Center, University of Cologne.

On other hand, a regional system operated in the periphery of the Kilombero valley. African producers sold their agricultural produce to southern highland towns of Iringa, Malagali and Lupembe. The main buyers in the regional system were Indian traders, European plantations, missions and local markets. Unlike the Ifakara system that concentrated on the trade of – mainly – Faya rice, the regional system had a variety of crops. It (the regional system) benefited the local African producers since they had direct contact to the buyers, had a degree of freedom on what to produce and the trade involved both cash and barter.

However, by the end of the 1930s, a move towards tighter market control was underway. For instance, by 1939, the Territorial Economic Control Board established compulsory sales quotas at fixed prices for districts in Tanganyika. And by 1943, twenty market posts had been gazette in Ulanga district, each with a market administrator who monitored sales and made sure every trader had a trading license. The regional market system was outlawed as well. The major crops of interest affected by this were paddy and cotton, whose prices were fixed annually by the Produce Controller in Dar es Salaam, sometimes with advice from the DO/C and the PC. Basically, by 1943, a political and an economic hegemony, control of the population and entrenchment of state bureaucracy in the rural areas were being consolidated.

3.3 A valley reorganized. What next?

The story of colonialism and changes in practices in the Kilombero valley in the late 19th and early 20th centuries is a story of both a rapid institutional reorganization initiated from above, and incremental shifts within the social-economic arrangements that occurred among the valley's inhabitants. And yet, at the end of the 1930s, Marius Fortie, traversing the territory, observed the unsuitability of colonial policies to the “natives”. He wrote that the introduction of taxes to increase production of cash-crops, by 1938, only left, huge chunks of plantations of sisal, rubber, tea, coffee, and cotton abandoned, and the standard of living of the local farmer had not changed as from his first observations from 30 years earlier (Fortie, 1938: 543-544).

The next two decades would see more interventionist policies, not only in the valley but in the country. It could be argued, however, that whereas low production of crops played a role in influencing this interventionist policy, the consequences of WWII on social political processes in Britain were at the forefront of it. For WWII saw politicians in Britain deliberating over means of governance that would benefit the metropole and the colonies of which the outcome was a Fabian

approach to governance, aimed at increasing production, controlling the populations in the colonies and preparing them for independence³⁰.

³⁰ See Kelemen (2007: 81–86) for this discussion.

4 Paddy and cotton improvement? Market monopoly, production control and the uncaptured peasantry: 1940-1961

“As owners of their own means of production and reproduction, and still forming a large proportion of total populations, it is here that peasants themselves influence the transformation of the state, for they can and often do withhold that contribution³¹” (Jiggins, 2007: 90).

4.1 British colonial agricultural policies and schemes in Tanganyika: 1940 – 1960

Fabianism which formed an important colonial policy approach in the colonies after 1940 resulted from increasing international criticism of colonialism and Britain’s involvement in the mobilization of resources for WWII, both which altered the attitudes of colonial officials in Britain (Kelemen, 2007: 81). Colonial officials agreed that socio-economic progress of the colonies could not be left to the vagaries of the market but to direct state management (ibid). A significant move was the passing of the Colonial Welfare and Development Act of 1940 which directed imperial aid to help improve living standards in the colonies (Hodge, 2007: 79-80). This, however, was not philanthropy but rather a move to prevent anticipated social turmoil in the colonies (ibid: 80) Hence, in the 1940s, East African countries saw changes in colonial imperial policies – from one that, only a few years before, avoided direct large-scale intervention of the state into the colonies (Esselborn, 2013: 63–64), to one that subscribed to a Fabian vision of a proactive involvement in the colonial states in the production of primary materials and provision of social benefits to the colonial population (Kelemen 2007 cited in Esselborn, 2013: 64). According to Burton and Jennings (2007: 4), the overarching policy was the project of modernizing African society, which included “transformation of resource-poor, tradition-bound, subsistence societies into communities of individuals engaged in market production (through cultivation of cash-crops or wage employment), enjoying improved social infrastructure, with a civic awareness of the obligations and responsibility owed to – as well as rights derived from – the state”. Accordingly, the colonial

³¹ Hydén (1980) argues that in a situation where subsistence producers begin to be integrated as consumers in the larger socio-economy, they are expected to make some contribution to it

Government in Tanganyika intensified its developmentalist schemes, which saw direct involvement in production or control of resources and of people that used them. Noteworthy here, and following Coulson (1977), are three grand policies/schemes that featured in the 1940s and 1950s: the groundnut scheme; the land-improvement and soil-conservation scheme, and the focal point approach³².

These three schemes had different backgrounds but shared a similar goal – to improve agricultural production in Tanganyika. The groundnut scheme, for example, emerged as a result of the post-war food crisis and the demand for cooking oil and fats in Britain (Richason, 1951: 150). This need arose because many countries had ceased exporting oil seed to Britain, and the United States had stopped its support to its allies (Esselborn, 2013; Richason, 1951; Rizzo, 2006). Clement Atlee’s labor Government, therefore, looked to its overseas territories for supply.

On the other hand, the land-improvement and soil-conservation schemes sprouted from the narratives of poor soil management and agricultural techniques of smallholder farmers that were purported to cause erosion. The solution in the 1930s was to persuade the local farmers to use improved land-use methods, a decision based on constraints of funds to implement land use schemes (Rapp et al., 1972: 105). But as seen in the previous chapter, a series of compulsions complimented such persuasions. However, with a new Government in Britain after WWII, funds were made available under the Colonial Development and Welfare Act, which prompted more intervention in soil conservation and land development (ibid). The colonial administration, therefore, introduced the Tanganyika Development Plan which had a budget of 19 Million Pounds, of which one and a quarter million were allocated to 8 large agricultural schemes (Fuggles-Couchman, 1964: 78–79). These schemes formed the backbone of agricultural policy in the mid-1950s (Coulson 1977).

The focal point approach was one of the last major colonial agricultural improvement schemes in Tanganyika that emerged out of the frustrations of the previous agricultural development policies. Therefore, if the majority of the local “peasants” were not willing to be helped, then the few who were compliant with colonial agricultural policy would be the group to work with. Demonstration farmers were identified and rewarded. According to Iliffe (1971: 40), by 1959, about 270 Africans in the northern province of Tanganyika were farming more than 50

³² Coulson (1977) adds the Transformation, Cooperative and Ujamaa and villagization, schemes which I do not discuss here but highlight in the next chapter.

acres each, while in the mid-1950s, in the densely populated lake plains of Rungwe, plots of 25 acres were spotted where the average holding was 1.5 – 2 acres per family. In the case of Mbulu, these progressive farmers acquired large chunks of the best portions of land (Raikes 1971: 95 cited in Coulson 1977: 70). A study by Awiti (1972) found that in Ismani 9% the farmers held 53% of cultivated land and 96% of the capital equipment. They produced 69% of maize and earned 76% of the cash derived from maize (Cited in Coulson 1977: 78).

The three grand schemes reflected colonial interventionist policies in the Tanganyika Territory in the last 15 years of colonial rule. The emphasis at the time was to bring highly mechanized cultivation to the territory, and to develop the land and conserve the soils with an overall aim to improve agricultural production and marketing. Many of these policies were unpopular with the local smallholder farmers, and the interventions characterized by stringent rules and autocracy intensified the apprehensions of smallholder farmers towards the policies and schemes. These farmers resisted such policies in various ways including riots, non-conformity, burning down their crops, and destroying terraces, among others (see Fuggles-Couchman, 1964: 79; Maguire, 1969: 30–31; Ruthenberg, 1964: 53–54). The continuous resistance from the farmers led to the collapse of many of these schemes, and when the rules were finally relaxed in the mid-1950s, widespread abandonment of the new farming measures followed. Nevertheless, how did the attempts to expand production and markets play out in the Kilombero valley? While arguing that the technical principles and political ideologies of agricultural improvement in the valley aligned with those at the national level, I explore in the next section the dynamics of such principles and ideologies in the valley.

4.2 Paddy and cotton production and control in the valley: 1940 – 1960

4.2.1 Paddy and rice control: 1943-1960

There are four points regarding paddy and rice demonstrated in the previous chapter which should be referred to at this point in this section. The first is that by the time of colonial intrusion, paddy was the major crop cultivated in the valley. Secondly, that the calendar routine for rice production, sale or exchange, and consumption fitted with the social life of the valley inhabitants. Thirdly, that paddy was hand-hulled, and in other cases its husks and premature rice served as a delicacy in the valley. Fourthly, that of the two market systems, the regional was preferred by the local smallholder farmers because it enabled autonomy on the part of farmers and allowed a variety

of crops to be exchanged. In 1943, strict marketing and consumption policies which would affect smallholder farming and marketing processes were adopted by the colonial administrators in the valley. The subsection describes these policies and shows their implementation and how smallholder farmers reacted to them.

Value addition, production and marketing of paddy and rice

By 1943, the other East African countries including Zanzibar and Seychelles needed to import more rice for their populations. Tanganyika was considered the main supplier of rice in the East Africa British territories and, hence, was charged with the responsibility to supply rice to the other East African countries. The Produce Controller in Tanganyika, finding it difficult to estimate the quantity of rice production but recognizing that production had drastically reduced in Tanganyika as well, sent directives to all Provincial Commissioners (PCs) on how to monitor production and marketing and secure the surplus³³. In this letter, he stated the need for “acute and strict control” of marketing and consumption of rice³⁴. He directed the PCs to ensure that “the maximum quantities of paddy should be directed into the hands of the millers”³⁵. Millers were then directed to “complete a return for rice and paddy separately” and submit it to the office of the Produce Controller or to the provincial offices of the Economic Control Board twice a month³⁶. After milling, the Government would purchase the rice and store it in a central storage, exporting the surplus to the East African countries. Finally, he directed that the consumption within each province must be held down to an absolute minimum so as to get as much surplus as possible³⁷.

The task of value addition being pertinent and official, Messrs. Vithaldas Haridas and Company seized the opportunity and built a rice mill at Ifakara in 1943. They also received the mandate to be the sole buyers of paddy in the valley, giving them a monopoly power. It therefore follows that the company demanded to standardize the products that they bought and sold – a strategy of control and legibility that suited the interest the DC of Ulanga, A.T. Culwick, the PC in Morogoro and the Produce Controller in Dar es Salaam. The mills would have to grade the rice into three grades, the highest being first-grade rice, which received the highest price, followed by

³³ TNA. H1/6/2/17-19. Produce Controller to all Provincial Commissioners. “Rice”. 8th October 1943

³⁴ *ibid*

³⁵ *ibid*

³⁶ *ibid*

³⁷ *ibid*

the second- and third-grade rice. This meant three things (keeping in mind that these dynamics were taking place in settlements, albeit not solely there). The first was that hand-hulled rice, which had formed the traditional and local economy, was outlawed. The second was that selling and buying would be restricted to specific market posts gazetted by the colonial administration; the third was that the colonial administration would fix prices of paddy for the producer and of rice for the millers, and quantity produced and supplied would be monitored. Part of the policy recommendation was, therefore, the compulsory selling of paddy to the mills. This was principally organized such that agricultural officers compelled farmers to bring their paddy to the market points.

Outlawing the sale of hand-hulled rice had the logic of profit maximization. If the sale of hand-hulled rice was left to continue, the mills would receive reduced supply of paddy, rendering the new mode of production unprofitable. Therefore, what followed, after the establishment of the Ifakara Rice Mill, was the campaign to discourage hand-hulling of paddy performed by the smallholder African producers. At its opening, the then Governor, Sir Wilfrid Edward F. Jackson, resounded this view as the official policy and called for the gradual discouragement of hand-hulled rice, except for a negligible percentage³⁸. Until 1947, marketing of hand-hulled rice was, therefore, confined to the discretion of the District Commissioner. In this sense, as pointed out by the District Commissioner Mahenge, “the quantity of hand-hulled rice sold at markets was directly related to the needs of the consumers who purchased hand-hulled rice as opposed to those growers who hull their own paddy”³⁹.

To enable the marketing of machine-milled and graded rice, 20 market posts were created by the colonial administrators, many of which were in village settlements, or near road infrastructure so that they were accessible to both the producers and the buyers (see table 4 below). These markets were only open at the beginning of harvest. Market days were then allotted to each of them. Essentially, the established market systems, especially the regional system, were outlawed. The Provincial Commissioner Morogoro wrote to the District Commissioner Mahenge that “great care should be taken to see that no hand-hulled rice should be exported outside the district, either towards Kilosa or towards Iringa or Njombe from the western Ulanga and Ubena”⁴⁰.

³⁸ TNA. 61/574/13/30. Devjibhai K. Hindocha (Tanganyika) limited to the Provincial Commissioner Eastern Region and the District Commissioner, Mahenge. “Rice in Ulanga district, season 1947”. 27th February 1947.

³⁹ TNA. 61/574/13/30. Saving telegram. Provincial Commissioner Eastern region to DC Mahenge saving. “Purchase of paddy and hand-hulled rice”. 14th March 1947.

⁴⁰ TNA. 61/574/13/47/77. Provincial Commissioner to the District Commissioner, Mahenge. 29th April 1944.

Eventually, the Agricultural Officer Kiberege reported that the “natives”, who had sold their rice to planters in Mufindi in the earlier years, could not do so anymore because “this market is now closed, any outward movement at present would appear to be confined to inter-native exchange of produce...”⁴¹. Similarly, the people on the Mahenge plateau, reportedly, had been prevented from buying rice from the low-lands as had been their custom.

Table 4: Market posts in Kilombero valley, 1943

Source: TNA 1943⁴²

Number	Market	Distance from Ifakara Rice Mill (miles)	Means of transport
1	Ifakara	0	Road
2	Kiberege	24	Road
3	Sanje	39	Road
4	Lupiro	18 (Gazetted after 1943)	Road
5	Machangani	21	Road
6	Chilombola	63	Road
7	Mwaya	68 (Gazetted after 1943)	Road
8	Luhombero	77	Road
9	Iragwa	35	Road
10	Itete	50	Road
11	Matimbira	64	Road
12	Sofi	76	Road
13	Malinyi	85	River
14	Gombho	95	River
15	Kilosa kwa mpepo	108	River
16	Utegule	112	River
17	Kotakota	42	River
18	Moffu	39	River
19	Bhingu	30	River
20	Mageta/Merera	51	River
21	Madabada	31	road

The process of selling and buying paddy in 1943/44 was such that the Ifakara Rice Mill owners purchased the crop through an association of local Indian traders who were responsible for

⁴¹ TNA. H1/6/2. Report from Agricultural Officer Kiberege, 1944.

⁴² Adapted from TNA. H1/6/2/98. Provincial Commissioner Eastern region to ESSUP Dar es Salaam. “Your ECB.240/165 of 20/5/44”. 25th May 1944.

buying and bagging paddy at 16 out of the 20 markets in the district⁴³. The other 4 markets were reserved for only 2 buyers: Messrs. Vithaldas Haridas and Company, who bought from Chilombola and Luhombero; and Mr. Gokle, who bought from Kiberege and Sanje⁴⁴. However, these restrictions would prove futile for the improvements they were intended for.

Already by 1943 a cue indicating the incipient failure of this new marketing arrangement was seen. The traders, who were the middlemen between the producers and the millers, were ill equipped. With limited capital, they could not afford to buy in bulk, bag the paddy, and transport it to the mills within the designated market days respective to the market posts. It was then necessary to get credit, and they sought this from Messrs. Vithaldas Haridas and company. This was a complicated process that disenfranchised them as middlemen. For instance, because Messrs. Vithaldas Haridas and company were interested in cutting out the middlemen, they seldom offered credit, and if they did, it was on bad terms. There were eventually delays in buying and in delivery to the mills. On the other hand, in situations where the paddy was brought by producers to the market on a designated market day, but buying was delayed⁴⁵, inconveniences of protection from theft or losses in case it rained made this way of marketing significantly unattractive to the producers. In effect, the Senior Agricultural Officer (Senagri) in Morogoro complained about the poor performance from the 16 buying posts. Since these traders (the association of local Indian traders) were ill prepared with limited operating capital, he recommended that Messrs. Vithaldas Haridas and company take over all 20 buying posts in the district. This recommendation was taken up in the subsequent meeting held in December 1943, where Senagri's proposal was adopted and Messrs. Vithaldas Haridas and company took up the monopoly of buying rice from all the 20 markets in the district⁴⁶.

This monopoly not only created conflicts with other Asians interested in the rice trade⁴⁷, it increased tensions between the company itself and the colonial administration. It would later increase resentment from the "native" producers whose choices for marketing were restricted (see below). Meanwhile, the tension between the colonialists and the company, which continued through the 1940s and the 1950s, had one main contestation – price fixing of paddy and rice. This

⁴³ TNA. 61/574/13/47/1. Senior Agricultural Officer Eastern Province to Provincial Commissioner Eastern Province. "Marketing of the Ulanga Paddy crop". 20th November 1943.

⁴⁴ *ibid*

⁴⁵ Sometimes for days

⁴⁶ TNA. 61/574/13/47/18. Provincial Commissioner to Messrs. N. Gokhle and Co. 20th January 1944.

⁴⁷ Notably between Mr Gokle and Messrs. Vathaldas Haridas

had two prongs: the first was that the Government had fixed the prices at which to buy milled rice from the millers. This was based on the calculated cost of production in 1943 when the Ifakara Rice Mill was established. When the company became responsible for buying the paddy from the various market points at various locations, the transport costs rose. At the same time, imported bags became expensive, making the whole milling operation more expensive than planned. The company certainly complained about the increasing operating costs and demanded that the Government pay a higher price for the milled rice to cover the profit margins – a demand the DC, PC, Senagri, and Produce Controller were reluctant to agree to.

The second prong was as a result of low supply from the producers. By 1944, the input into these mills was not meeting the planned expectations. The company's management reckoned that the reason producers did not want to bring their paddy to the mills was because they received low prices. The company, therefore, engaged the colonial administrators in a negotiation to increase producer prices of paddy. The District Commissioner, however, maintained that prices would remain as before⁴⁸. He insisted that local producers be given the same pay as in 1943, except for Ifakara, where there would be an increase of 1 cent per kilogram since the paddy was brought to the mill by the producer implying an additional (transport) cost. Continuous negotiations and persistence by Messrs. Vithaldas Harridas and Company prompted the District Commissioner to snap. He wrote:

“...your costs have risen to such a high figure, far higher than that you quoted originally before the mill was built, that I am tempted to think that your enterprise is no longer economic, and am examining the possibility of once again exporting hand-hulled rice, the processing of which would appear to be a more paying proposition than milling”⁴⁹.

Indeed, the enterprise was far from being economical. The immediate effect was a loss of revenue for the company, and the long-term effect an eventual collapse and rebranding. The company reported to have lost 20,000 shillings in revenue in 1944⁵⁰. Since both sides were not budging in their demands, the company requested to be allowed to buy hand-hulled rice. However, the reintroduction of the sale of hand-hulled rice was refused at this time by the Provincial

⁴⁸ TNA. 61/574/13/47. District commissioner to Messrs. Vithaldas Harridas and co. 19th February 1944.

⁴⁹ TNA. 61/574/13/47/1/60. District Commissioner to manager Messrs. Vithaldas Harridas. 24th March 1944.

⁵⁰ TNA. 61/574/13/47/1/91. Messrs. Vithaldas Harridas to the Provincial Commissioner. 18th May 1944.

Commissioner. His idea was still to increase efficiency by trading in bulk and increasing the value of the produce despite the cost. It became apparent, however, that there was a shortage of milled rice. Producers simply did not bring their paddy to the mills, but hand-hulled it despite the curfew on marketing hand-hulled rice. The Manager of the company wrote that:

“there are reports from our buyers at Mwaya and Chilombola that certain natives in the said centers refuse to sell their paddy to us though they have got big quantities of paddy with them ... We are further informed that natives of Mwaya and Chilombola have parted, up till now, with a small portion of paddy reserving big quantities with them”⁵¹

Despite strict control, the “natives” seemed to have maintained their outlet markets in the regional system discussed earlier and established a local network with the “non-natives” in the district. In a saving telegram, the District Commissioner Mahenge explained that many “non-natives” were buying hand-hulled rice from the “natives” in considerable quantities and no amount of monitoring could prevent this⁵². The rice was disposed of quickly and, when it was not, and it was discovered, many excuses were given. This, he complained, affected the quantity of paddy brought to the milling machine⁵³. His recommendation was to induce the growers from “different but complementary angles”, to bring the paddy to the market⁵⁴. Compulsion was not novel to the district, but it was, as a policy of compulsory selling, reemphasized since 1943⁵⁵.

Between 1943 and 1946, many cases of growers resisting the new market system were reported and instances of compulsion intensified. For instance, in 1944, farmers in Luhombero were forced to sell 185 kilograms of paddy at 8 cents per kilogram. A combined protest from Native Authorities stated that:

“...if the sale of paddy was made voluntary and compulsion removed very little would be sold at present prices. It was considered that the quantity requested

⁵¹TNA. 461/30/7/219. Devjibhai K. Hindocha (Tanganyika) limited to the District Commissioner Ulanga. 25th August 1947

⁵² TNA. H1/6/2/60. District Commissioner to ESSUP. 24th July 1944

⁵³ *ibid*

⁵⁴ *ibid*

⁵⁵ See for example, TNA. H1/6/2/17-19. Produce Controller to all Provincial Commissioners. “Rice” 8th October 1943.

from this [Kiberege] division was too great to be produced without hardship and discontent”⁵⁶

Similarly, the Wandamba “tribe”, earlier shown as more inclined to fishing, avoided rice farming unless when coerced into it. Their persistence in fishing and the circumvention of rice cultivation angered the District Commission. He wrote a letter to captain R. G. Fairweather who was the then crop supervisor in the district that:

“As regards the Wandamba try and get them off the river and into the rice fields now [...] I told them that if I caught any on the river this and next month they would go in after the fish! Take a good strong line with them. I need not tell you how difficult it is to get them down to a good day’s hoeing”⁵⁷

These examples show not only that compulsion was rampant but that the attitude of farmers towards the whole hegemonic establishment was one of antagonism. The “natives” had continued trading in hand-hulled rice and did not want to participate in the formal markets. If the colonial administration was ready to impose its will on the producers, the producers were willing to withdraw to the periphery of colonial administration and production.

This, however, seemed incomprehensible to the colonial administrators. They believed that what they had envisioned as agricultural improvement should work at all costs, and if it was not working then the problem must be either with the “native” producers or with the company they had instituted as a monopoly to buy paddy and mill it into rice in the district. But since the attempts to compel the “native” to produce more paddy and sell it had been in vain, the blame was then placed on the company. The District Officer, in a letter to the Provincial Commissioner wrote that:

“I wish to draw your attention to the growing danger to the welfare of this district presented by Messrs. Vithaldas Harridas and Company who are fast gaining a stronghold on the entire economic and transport system of Ulanga. [...] You will recollect the sugary promises made regarding the cheapness and efficiency of their proposed rice mill, and will no doubt compare them with the outrageous demands made by them now they consider the mill established. [...] Government,

⁵⁶ TNA. 61/1/H/III/7. Minutes of a meeting of chiefs and sub-chiefs of Kiberege division, Ulanga district. 14th November 1944. Cited in Larson (1976: 309)

⁵⁷ TNA. 61/574/13/30/II/27. District Commissioner Mahenge to Captain R. G. Fairweather, Crop Supervisor. 4th November 1946.

acting as it does as a buffer between the monopolists it itself has created and the native producer, is in a most awkward position already, though that is nothing compared with the situation in which the raising of control will find us. [...] I therefore suggest that as Vithaldis Haridas and Company state they cannot mill our rice for the figure originally agreed, and as we are therefore absolved from our obligation to protect their interests, we can, and should, stimulate competition by allowing the export of hand hulled rice for which there is ready market.”⁵⁸

This change of heart, though it comes as a surprise, should be looked at from the point of view of complexities between discourse and practice in development (see Cooper and Packard, 1997: 18 for discussions on discourses and practices in development). For as van Beusekom and Hodgson (2000: 33) have argued, “Development practice may diverge from official discourse, may be shaped by local struggles and may inform and redefine official discourse”. Thus, in the second half of the 1940s, it was certain that banning hand-hulled rice from the market was not practical. A more plausible way was to adopt it within the market economy prevailing at the time, something of a reversion to the pre-1943 dynamics. Eventually, at the end of 1946, provisions of the order prohibiting the sale of hand-hulled rice in the whole of the Eastern Province were lifted.⁵⁹ This was a victory for the smallholder farmers. However, in efforts to maintain control by colonial officials, prices for hand-hulled rice were fixed alongside that of milled rice. And to boost the production and marketing of paddy, paddy prices were increased by 5 cents per kilogram for the 1947 season.⁶⁰

The reaction of the monopoly company was, however, paradoxical. The same company that had begged to be allowed to buy hand-hulled rice in 1944 took up the excuse the colonial administration had given then. Messrs. Vithaldas Haridas and company, to avoid total collapse, had rebranded themselves as Messrs. Devjibhai and Hindocha (Tanganyika) Limited⁶¹, and in a shady manner received the tender in 1947 as sole buyers of paddy in the valley. A few months into their contract, they argued that encouraging the marketing of hand-hulled rice was detrimental to

⁵⁸ TNA. 61/574/13/47/II. District Commissioner Mahenge to the Provincial Commissioner Eastern region. 25th May 1944

⁵⁹ TNA. 61/574/13/47/I/43. P.E.C.O to the Provincial Commissioners Bagamoyo, Kilosa, Morogoro, Rufigi, Ulanga, Uzaromo “Hand-hulled rice”. 30th December 1946.

⁶⁰ TNA. 61/574/13/47/II/44. Economic Control Board to all Provincial Commissioners, Economic Control Board representatives and District Commissioners. “Paddy and rice prices 1947”. 6th May 1947.

⁶¹ In the 1950s, there was another transition in the company. Messrs. Devjibhai and Hindocha (Tanganyika) limited became Ulanga Cotton and Rice Company (UlangaCo).

their milling enterprise, reminding the colonial officers that the intensions of the millers and the district administrators since 1943 had been to move away from hand-hulled rice to a higher-quality rice, milled and bagged. They wrote further that:

“we do not see any reason why the population of this District should not eat milled rice when the whole Territory and the whole world is facing the food shortage in these days; if the local consumers do not wish to have polished rice, then unpolished or partly polished rice can be supplied according to the requirements, but why all the unnecessary wastage of food and labor for hand-hulling when there exists a rice mill in the District. Moreover, milled rice is consumed all over the country and it is also under control”⁶²

The rice mills were private companies that sought to earn a profit in this value addition effort. To remove the ban on marketing hand-hulled rice would reduce their chance of getting enough paddy to mill, hence reducing their profit margins or even resulting in losses. Nevertheless, such complaints did not reverse the colonial policy on selling hand-hulled rice.

The challenge that remained for the colonial administration, however, was that the local producers were still apprehensive about bringing hand-hulled rice to the formal markets. In 1947, for instance, the expected amount of hand-hulled rice purchased in different market posts was much less than the expected quantity anticipated (see table 5 below)⁶³. This gradually expanded in the following years, although minimally. Only later do we see substantial increase. In 1956, for instance, the amount of hand-hulled rice sold in all the formal markets in Ulanga was only 160 tons, and the following year it was 372 tons⁶⁴.

Although the exact statistics of total hand-hulled rice in the valley at a given time are absent, the minimal amount of hand-hulled rice brought to the formal markets cannot be interpreted as an indication that more paddy was brought to the milling machines.

⁶² TNA. 61/574/13/47/II. Messrs. Devjibhai and Hindocha (Tanganyika) limited to the Provincial Commissioner eastern region and District Commissioner Mahenge. “Hand-hulled rice 1947 season”. Received on 17th February 1947.

⁶³ TNA. 461/30/7. “Statement showing hand-hulled rice allowed to be purchased and quantity purchased up to 31-7-1947 on different centers in Ulanga district by D.K. Hindocha (Tang) Limited”.

⁶⁴ TNA. H1/6/2/165. Tanganyika Department of Agriculture, Eastern province to Director of Agriculture, Dar es Salaam. “Annual review of agricultural work in Eastern Province, 1957”. 30th December 1957.

Table 5: Anticipated and actual purchase of hand-hulled rice at different market posts in Ulanga district by D.K Hindocha (Tang) Limited, 1947

Source: TNA. 461/30/7. 31st June 1947

Name of center	Quantity of hand-hulled rice	
	To be purchased (tons)	Purchased up to 31.7.47
Ifakara	9	1 ton
Kiberege	5	1 ton
Lupiro & Machangani	9	15 tons
Chilombola-Mwaya	10	1 ton
Luhombero	5	673 kilos
Bhingu	7	-
Kotakota	9	-
Malinyini	9	5
Matimbira	9	5
Iragwa	9	2
Sanje	9	1
Total	90	31

Data on the amount of paddy brought to the mills show a decline or a stagnation between 1943 and 1957. 1943 and 1944 recorded 2,896.6 tons and 2,883.8 tons of paddy brought to the market respectively⁶⁵, compared to 1,268 tons in 1957 (see table 6 below). The average quantity brought to the mills between 1949 and 1957 (excluding 1953, for which data is lacking) is only 1,642 tons per year (see table 6 below). Besides, the Government had always fixed a higher price for Ulanga rice to boost production and marketing of rice in the 1940s and 1950s, but production statistics show that this did not happen⁶⁶. Over a period of more than 15 years, no significant expansion of paddy production was noted.

The low amount of paddy brought to the formal markets must have led the colonial administration to keep reversing their policy regarding the selling of hand-hulled rice. Continuous verbal and written calls to abandon hand-hulling of paddy continued throughout the 1950s. In the Grainstore Circular of 1954, for instance, the Produce Controller G.H. Rulf wrote to the Provincial and District Commissioners urging them to urgently prohibit marketing of hand-hulled rice⁶⁷.

⁶⁵ TNA. H1/6/2. "Produce market returns, Ulanga district, 1944"; TNA. H1/6/2. "Paddy purchases – Ulanga district 1944"

⁶⁶ TNA. 461/30/5/42. UlangaCo to the Director of Grain Storage. "Paddy prices for Ulanga district". 9th June 1952.

⁶⁷ TNA. 461/30/5/160. Grainstore circular No. 14 of 1954. Produce Controller to District Commissioners and Provincial Commissioners. "Paddy and rice prices: 1954/55 season". 10th April 1954.

Table 6: Quantity of paddy sold in Ulanga district between 1949 – 1957

Sources: adapted from TNA. H1/6/2⁶⁸

Year	1949	1950	1951	1952	1953	1954	1955	1956	1957
Paddy sold in tons	1,540	2,093	1,547	1,891	-	1,936	2,344	518	1,268

*

*

*

As a final thought about this subsection, the foundations of colonial agricultural improvement as regards expanding production and marketing of high-quality rice in the Kilombero valley in the last 20 years of colonial period were built on uncertain ground. This hegemonic architecture was complemented by compulsion – two recipes the local producers detested.

4.2.2 Cotton control: 1940-1961

The events related to the campaigns to improve cotton production in the valley before the 1940s shaped the colonial administration’s policies on cotton production in the 1940s and 1950s. It was evident that compulsion alone only offered a temporary solution to the cotton “improvement problem”. Compulsion was, therefore, augmented by subsidies in seed-cotton and increase in prices for seed cotton paid to the smallholder farmers. Despite such subsidies and price increase, by the beginning of the 1950s, seed cotton produced in the Eastern Province had fallen below the pre-war period (see table 7 below).

The reasons for this decline are manifold – building on Larson’s arguments for the decline of cotton production in the 1920s, I contend that at the forefront of the failures of the endeavor to expand cotton production in the valley were reasons related to colonial hegemony, which not only ignored an already established system of production but sought to dismantle it. Secondly, I emphasize the shortage of labor which could not hold up to the colonial demands of crop diversification. Thirdly, despite the hard work invested in cotton growing, the “native” African was still minimally rewarded compared to his Asian counterpart. These reasons foreshadowed the

⁶⁸ TNA. H1/6/2. Tanganyika Department of Agriculture, Eastern and Central provinces to Director of Agriculture, Dar es Salaam. “Annual review of the agricultural work in the Eastern and Central provinces, 1952” 22nd January 1953; and TNA. H1/6/2/165/11. Tanganyika Department of Agriculture, Eastern province to Director of Agriculture, Dar es Salaam. “Annual review of agricultural work in Eastern Province, 1957”. 30th December 1957.

increase in cotton price paid to the smallholder farmer in the 1940s and 1950s. The remainder of this subsection will attempt to substantiate these claims.

Table 7: Production of native-grown cotton lint in the Eastern Province (in bales of 400lb)

Source: TNA. 616/6/6/234⁶⁹

Year	Bales
1937	16,503
1938	12,979
1939	14,727
1940	13,163,
1941	11,690
1942	9,246
1943	8,258
1944	5,226
1945	4,887
1946	5,712
1947	6,053
1948	6,079
1949	9,600
1950/51	7,000

Towards the end of the 1930s, the colonial administrators, Lumley and Culwick, sought to introduce new crops in the valley to combat famine. What they did not consider, however, was the impracticality of devoting maximum cultivation efforts to both the old and the new crops. In the previous chapter, we saw a high level of out-migration from the valley to nearby plantations. This was composed mostly of young men who went to earn money to pay their taxes and/or increase their household incomes. Farm labor, therefore, fundamentally reduced. This strained the production of many crops especially the labor-intensive cotton crop. Similarly, we saw that rice

⁶⁹ TNA. 616/6/6/234. Adapted from the minutes "Plans for developing cotton production through an Eastern Province African Cotton Board". 23rd, June 1950. Unfortunately, the data acquired during the research does not go beyond 1951/52.

cultivation was already labor-intensive and had its annual routine. To briefly review the rice calendar year, rice cultivation began in November with the clearing of the shamba, followed by planting, weeding, protection from birds and vermin, harvesting, and planting dry-season rice. The month of March, which was the beginning of the long rains, was also the time for planting paddy. The end of March was when the maize crop and wet-season paddy were harvested. Fundamentally, households were engaged in cultivation work between the months of November to July or August the following year, when the last harvests were collected.

Nonetheless, colonial officers demanded that farmers plant their cotton early (at the beginning of the rainy season, in March) in order to realize high yields. At the same time, it was made compulsory to plant new crops like mohogo (cassava)⁷⁰. Although this is a perennial crop, it still required protection from vermin and theft, and labor for weeding. This had adverse effects on cotton production. Ulanga Cotton and Rice Industries Limited (UlangaCo), the monopoly company contracted to supply seed cotton to the farmers and to buy the harvest, complained in 1951 that cotton production was adversely affected, since the planting time of cotton (which was also in March), coincided with that of mohogo.⁷¹ Thus, the colonial administration's ambitions to introduce new food-crops and expand cash-crop production only undermined an established way of rice production, overburdened the labor, and limited the production of all crops.

Moreover, in the process of cotton production, it was required that the African growers go through the time-consuming and laborious tasks of sorting and grading their cotton into first, second, and third grades. Meanwhile, their "non-native" counterparts (Asian growers) were not obliged to sort and grade their cotton. This disparity was further deeply felt by the "natives" when the "non-native" growers were paid much more than the "native" grower for the same amount of cotton. For one kilogram of graded seed cotton, the "native" grower was paid 59 cents while the "non-native" planter who was not required to sort and grade his cotton was paid shs. 1/10. One of the outcomes of such disparities was that the Asian growers opted to buy graded cotton at a price slightly higher than 59 cents and resold this to the Government at shs. 1/10. This would reduce the amount of cotton cultivated by the Asian growers in the district, hence affecting the overall production. Meanwhile, such disparities also led to non-compliance by the African growers. This is discussed below.

⁷⁰ TNA. 616/6/6. Ulanga Cotton and Rice Industries Limited to the Regional Assistant Director of Agriculture, Morogoro. 19th February 1951.

⁷¹ Ibid.

Unlike in places like Uluguru, which saw riots by smallholder farmers in protest against colonial policies on terracing, protests in the valley were more discreet. Many refused to collect the subsidized cotton seeds from the distribution points; those who collected delayed planting them; and those who planted simply did not pick the cotton from the shambas during harvest time. It was also a good post-harvest practice (and a by-law) that growers had to uproot and burn cotton stalks after picking to control spread of cotton pest and diseases. However, many growers did not do this, and those who did simply delayed uprooting or burning the stalks. These points can be exemplified in the following examples between 1945 and 1955.

In November 1945, John Ndege, a chief in Ruaha village, complained in a letter to the Agricultural Officer that “his people” were not harvesting their cotton crops despite his attempts to make them harvest⁷². This was not exclusive to Ruaha village, or to 1945. Such complaints continued across the valley into the 1950s. In 1952, for instance, the Regional Assistant Director of Agriculture complaint in a letter to the Agricultural Assistant, Mahenge, that “certainly much of the cotton planted around Mwaya last season was late planted and for some reason best known to the natives little trouble was taken to pick it at the correct time”⁷³. In another letter from UlangaCo to the Field Officer Mahenge, written in 1955⁷⁴, there were complaints that growers in Luhombero, Ikangao, Chilombola, and Mwaya were in a habit of not picking their grade-3 seed cotton.

Similarly acts of resistance were demonstrated in the areas of planting. In February 1946, the Agricultural Officer complained that chiefs had been asked to bring their people to get seeds for planting but it was not done because growers refused to comply despite the increase in cotton prices for the season⁷⁵. They were instead, in his word, “dribbling”. Refusing to collect seed cotton for planting was common place in the valley in the 1940s and 1950s. In 1950, the management of UlangaCo wrote a letter to the Agricultural Assistant, Mahenge, to complain about the poor planting of cotton in many parts of the district especially Ruaha, Mwaya, Ilonga, Mgeta, Ifakara

⁷² TNA. 616/6/6. Agricultural Officer to the District Commissioner Mahenge. “Attached letter from African Johanna Ndege, Ruaha”. 5th November 1945.

⁷³ TNA. 616/6/6/280. Regional Assistant Director of Agriculture to the Agricultural Assistant Mahenge. 26th February 1951.

⁷⁴ TNA. H1/6/2/123. Ulanga Cotton and Rice Industries Limited to the Field Officer (Agriculture) Mahenge. 29th October 1955.

⁷⁵ TNA. 616/6/6. Agricultural Officer to the District Commissioner Mahenge. “Cotton seed distribution”. 16th February 1946.

and Kiberege⁷⁶. In Ruaha, Mwaya and Ilonga, for instance, out of the 130 tons reserved as seed in 1950, only 56 tons had been planted by 8th of April⁷⁷.

Colonial administration responses contradicted between diplomacy and use of further force. In the attempts to rectify the disparities in cotton production and pricing, the colonial administration (already in 1946), after much deliberation, increased the price payable to a local smallholder producer for their seed-cotton. At the same time, they subsidized the enterprise by giving free seed cotton to farmers to plant. Later after 1950, “non-native” growers were required to also sort and grade their cotton, and prices were streamlined across races⁷⁸. However, again as in the case with rice, small-holders opted to remain at the fringes of cotton production. This is because compulsion continued throughout the 1950s, threats of punishments to chiefs and growers were rampant, and demand for labor was still overwhelming. Thus, those who found themselves immersed into the cotton production eventually figured out ways to withdraw and withhold their contributions from the enterprise.

The colonial administration saw the failures of their cotton improvement endeavors as resulting from the “native” being “lazy” and/ or from impediments brought about by the local leaders, in this case, the “native authorities”. Threats were therefore made to the Native Authorities to ensure that colonial policies on cultivating cotton were implemented. When, for instance, the Native court of the Wandamba tribe in Lugoda wrote to the District Commissioner in April 1948 that the growers did not want to farm cotton because of the threat made to their chiefs by the Government,⁷⁹ the frustrated District Commissioner replied with an order to the chiefs demanding that their subjects plant cotton that year or face severe punishments⁸⁰. Such threats only created further dismay and elicited more resistance from the “native” growers.

⁷⁶ TNA. 616/6/6/225. Ulanga Cotton and Rice Industries Limited to the Agricultural Assistant Mahenge. “Planting of Cotton seed”. 12th April 1950.

⁷⁷ Planting time would have been at the beginning of the rainy season which is end of February/beginning of March.

⁷⁸ TNA. 616/6/6. “Minutes of the meeting of an Eastern Province African Cotton Committee held at Morogoro at 8.45 am on Wednesday 31st May, 1950”. 31st May 1950. By 1950, there was a general acknowledgement of the failures of both cotton and rice planting and marketing policies. A meeting in May 1950 acknowledged these failures and recommended setting up an Eastern Province Cotton Board, which would include Africans in the management and administration. It also recommended the removal of racial discrimination by treating the “natives” and “non-natives” according to the same standards – both would have to sort and grade their cotton and would get fair prices for the products. Colonial policy, however, did not necessarily change at the beginning of the 1950s. It was not until the middle of the 1950s that the colonial administration realized that improving agriculture, not only in the valley but in the country, was failing. Their response was to focus on a few cooperative farmers labelled progressive farmers.

⁷⁹ Wandamba tribe Native Court, Lugoda to the District Commissioner Mahenge. 15/4/1948. Agriculture: cotton correspondence 1944-51

⁸⁰ TNA. 616/6/6/127. District Commissioner Mahenge to Chief Adam. 26th April 1948.

4.3 Connections: paddy and cotton

The agricultural improvement activities that dominated the 1940s and 1950s in the Kilombero valley were not only pre-empted by the accounts discussed in the previous chapter, but were also located within the larger political and economic proceedings of the 1940s and 1950s in the territory. The late British colonial period of transforming Africa saw a seemingly more legitimized intervention of the imperialists into the colonies as the state engaged in institutional development, relied on faith in Western technology and rationality, and worked towards the provision of social welfare and gradual but half-hearted democratization (Burton and Jennings, 2007: 4–6).

Colonial endeavors to improve agricultural production in the valley focused on simplifying the production and marketing processes into a rigid and specialized system. These were limited to value addition and value chaining, grouping farmers into settlements, emphasis on conservation of soils and introducing new crop inputs. Large-scale farming was only alluded to but not implemented. It was only at the end of the 1950s and beginning of 1960s that the Kilombero large-scale sugar plantation was established. Such attempts were foregrounded in the groundnut, the land-improvement and conservation, and the focal-point schemes.

The activities that surrounded paddy and cotton control in the Kilombero valley in the 1940s and 1950s optimized how such policies worked at a micro level – authoritarian and interventionist: Compulsions were rampant, new markets were gazzetted while “informal” and old ones were outlawed, value was added to paddy, and at the same time, marketing hand-hulled rice became criminalized, selling one’s produce became compulsory, and new crops were introduced. However, like the demise of the groundnut scheme and the land and development schemes, expanding paddy and cotton production in the Kilombero valley was unsuccessful. What the colonial administration did not foresee was that the complex local socio-economic organizations they tried to forcibly obliterate were valuable to the people in the valley. Since the new forms imposed were inconsistent with local formations of labor, and rewards were unfair to the African smallholder farmers compared to their Asian counterparts, the African smallholder farmers in the valley devised various ways to evade them.

Autocracy was perhaps the Achilles’ heel in the fiascos of the colonial agricultural development approaches in the valley. Such hegemony molded resentment towards colonialists

and their policies. Possibly the most resonant portrayal of such resentment in the valley is taken from diaries of Ramandhani Willbald Ligonja. He wrote that:

“We do not want foreigners to rule Tanganyika... European rule has brought us much difficulty, denying us the things that God has created... The European was poor when he arrived in this country; now he is rich and fat. Even the Indians have amassed much wealth in our country.... Every year we suffer a loss on our foodstuffs. Europeans and viheshi (Ulanga Rice and Cotton Industries ltd) and Indians take our food bure (free), but this year, 1955, we will husband our food, and ask the government to bring us other merchants.... Of what use is the Bwana Shamba (Agricultural Officer)? His assistants do not take the jembe and cultivate, yet they receive wages....” (cited in Larson, 1976: 366)⁸¹.

Larson notes that the sentiments in Ligonja’s diaries reflected the general discontent in the valley. Such autocracy reflects the desire by the colonial administrators, not only to improve agricultural production but to gain control of the population. Restricting markets, controlling the value chain, expanding settlements, introducing new technology like mills and conservation campaigns served to entrench state control on the population.

⁸¹ Notes taken from the diaries of Ramandhani Willbald Ligonja after his death in 1970. He was one of the first Pogoro Christians who later converted to Islam. According to Larson, the originals have apparently been misplaced.

5 Post-colonial agriculture in Kilombero: A nationalist vision, global shadows or a colonial mirror? 1960-1980

“In a socialist Tanzania then, our agricultural organization would be predominantly that of co-operative living and working for the good of all. This means that most of our farming would be done in groups of people who live as a community and work as a community. They would live together in a village; they would farm together; market together; and undertake the provision of local services and small local requirements as a community” (Nyerere, 1968a: 124)

“Those who controlled the State consistently misunderstood fundamental aspects of peasant agriculture, and over-estimated what the use of State power could achieve in rural development” (Coulson, 1977: 74)

The events that took place in Tanzania’s agricultural development between 1960 and 1980 were shaped by contradictions, mainly between the aspirations of the ruling Tanganyika African National Union (TANU) party, whose public discourses seemed to oppose a number of colonial agricultural development policies and the party’s actions that mirrored some of the agricultural development strategies they were against. In focus here is Nyerere’s idea of a post-colonial⁸² Tanzanian society which would offer equal opportunities and shares of Tanzania’s resources to all its citizens as opposed to capitalism which, as he observed, was groomed in the country by colonialism and was the root cause of not only poverty, but inhumanity⁸³. In his writings, he professed agricultural improvement as the basis for economic development and social equality. His agricultural policies centered around establishing settlements, Ujamaa villages, villagization, and cooperatives as the main strategies for agricultural improvement. Fundamentally, these strategies enveloped the ideas of groupings, value addition and value chain, conservation, large-scale farming, and input use. With the use of ethnography, literature research and political discourses taken from speeches and writings of Julius Nyerere, this chapter discusses the development of these policies and their applications and contradictions as displayed in the Kilombero valley between

⁸² Tanzania gained independence on December 9th, 1961

⁸³ This idea is expressed in his essays on socialism. See for instance, Ujamaa – the basis of African socialism, April 1962; The Arusha declaration, February 5, 1967; Socialism is not racialism, February 14, 1967; and socialism and rural development, September 1967. In Nyerere (1968b).

1960 and 1980. Insofar as the contributions to my arguments of persistence in the agricultural improvement ideas in the Kilombero valley go, the chapter seeks to show that Nyerere and TANU attempted to break away from the agricultural development ideas, already established in a capitalistic colonial setting, but continued to apply some of them in a post-colonial and socialist environment. In taking this course, the chapter highlights the monolithic dimension of certain agricultural development ideas and the practices of agricultural improvement in Kilombero valley. It also argues that Nyerere's government was genuinely interested in developing agriculture and elevating farmers from poverty but also depoliticized bureaucratic state intervention in rural development projects to be able to control the population.

5.1 Framing Tanzania's post-colonial agricultural policies within global and colonial development trajectories

Two critical progressions must be emphasized here to locate the agricultural development policies of independent Tanzania (1960 and 1980):

The first critical progression is the unsatisfactory outcome, and explanations thereof, of the agricultural development processes implemented from the 1920s to the 1950s. These processes only realized limited success in the view of the colonial administration in their attempt to produce a "progressive" and capitalist society. This resulted in efforts to explain these "debacles", and many pointed towards the underpinnings of the modernization theory. The "reading of history backwards" and interpreting of European agrarian transformation towards capitalism as a one-way linear movement, pre-empted explanations that blamed the African farmers for being irrational, static, and subsumed in cultural values and practices that they did not want to part from – traditionalism. Therefore, if tradition was the inhibition, a strategy for development would be to change the attitudes of the "tribes" and form local and national structures that would enable a transformation into a modern society – in other words, create a dual system, comprising "traditional" that represented pre-capitalism, along with a modern or nation state that represented capitalist development (see Edelman and Haugerud, 2005: 12 for discussion). In such a dual system, development would then be realized by assimilating the traditional society into the progressive capitalist one (ibid). Little wonder then that in the preparations for Tanganyika's independence, the contemporary experts and administrators emphasized the idea of community development which, as Coulson (1982: 157) argued, "was to soften up traditional communities

who were resisting the cash economy”. The years following independence in Tanganyika saw the implementation of such programs through the “improvement” and “transformation” approaches (see below).

The second critical progression, which was in part the offspring of the first, yet also provided a nourishment for it, was the creation of international and global institutions to tackle the problem of poverty in the aftermath of WWII. These institutions, mainly the UNO, USAID, and Bretton Woods financial bodies, sought to stabilize and oversee world peace, and to boost development especially in poorer countries. At the same time, the state was thought of as the actor “best suited” to lift its citizens out of poverty through service provision and controlling the market (Edelman and Haugerud 2005: 6). The Bretton Woods policies, hence, bestowed the responsibility for fixing exchange rates to the state, left the state with permission to allow or reject capital movement across national boundaries, and conferred the task of planning economies to the state with the goal of maximizing growth (Leys 1996: 6-7; Edelman and Haugerud 2005: 6). However, for many poorer nations, many of them still under colonial rule at the time, the path towards development hinged on recommendations from these global institutions. Moreover, in the same period (mid-20th century), the move towards decolonization coupled with the cold war, Cooper and Packard (1997: 8) argue, meant the imperial powers risked losing their dream of shaping the future. Therefore, those powers’ conceited view that other people “had to adopt new ways of living was internationalized, making development simultaneously a global issue and a concern of the state” (ibid). Escobar (1995: 45) has argued that this creation of new institutional fields with a set of relations from local to global “from which discourses are produced, recorded, stabilized, modified and put into circulation” was when the development apparatus was invented. What followed in the next three or four decades was a situation in which the state, with support from the World Bank, the International Monetary Fund, the United Nations bodies, former colonial masters and Western countries with their respective “development arms”⁸⁴, divulged resources in the public sector ranging from infrastructure, education, civil service, and conservation to big agricultural initiatives with the goal of eradicating poverty, disease, and “ignorance” and of raising the living standards of its citizens. How then did these frameworks shape Tanzania’s agricultural policies?

Towards the end of the 1950s, the Government in Tanganyika, which was run by the colonial administration and the United Kingdom as the Administrative Authority under the United

⁸⁴ For example, USAID, UKAID, GIZ, DANIDA

Nations Trusteeship, requested the International Bank for Reconstruction and Development (IBRD), now the World Bank (hereafter World Bank, except for the references), to assess the resources available for future development of the country, to weigh up how such resources could be used for social and economic development programs, and to make recommendations as well as offer projections of financial implications regarding such developments (see IBRD, 1961: vii). The World Bank team, with support from the state (colonial administrators), spent no more than 3 months in the country carrying out their research. They produced a report in 1961 that would shape Tanzania's agricultural development strategies for at least the next 20 years. The recommendations, of course, lay within the frameworks already initiated or envisioned by the colonial administration and those framed within the global institutional complex, whose understanding of development pointed toward a universal linear idea of progress; strategies envisaged to achieve such progress lay in central planning, changes in values from traditional to modern, and infrastructural development, all under the auspices of a welfare state. Thus, the ideas within the recommendations of "improvement" and the "transformation" approaches were domesticated in the 3-year and, thereafter, the next three 5-year development plans that formed Nyerere's Governments.

The baseline in this approach was on value addition and value chaining – mainly to concentrate input and extension services towards particular (cash) crops and areas. It emphasized an improved use of extension work and marketing cooperatives, two points Nyerere would stress in his development plans for Tanzania. Post-independence Tanzania hence saw an investment in agricultural education with an emphasis on cash-cropping and modern farming techniques and a proliferation of cooperative associations mainly run by Government agents (Cliffe and Saul, 1973; Coulson, 1982: 187).

The transformation approach meant a shift by many farmers towards an agricultural system characterized by groupings, conservation, and large-scale agriculture. The experts who wrote the 1961 World Bank report lamented the poor farming methods used, and the destruction of the soils by the smallholder farmers, and recommended a more "permanent use of the land by efficiently run, planned farms of economic size" (IBRD, 1961: 6). The report hence emphasized the reorganizing of farmers into both old and new settlements, and the founding of state farms. The major strategy for the transformation approach centered around changing the land use and land tenure practices. Under land use, the report criticized the "traditional" farming methods of Africans, including extensive cropping, extensive livestock farming, setting of bushfires, and shifting cultivation (ibid: 77-84). It claimed that such farming methods resulted in low yields and

degradation of soils (ibid). Under land tenure, it criticized communal tenure, which the report claimed did not allow farmers to take care of and develop their land, made it difficult to introduce intensive and planned farming, complicated efforts to prevent unproductive or destructive land use, limited possibilities for compelling people, and that such land could not serve as a basis for securing loans (ibid: 94).

In the transition from the colonial Government to the independent Government led by the TANU party, many members of the colonial administration stayed on as Government officials. They worked with donor countries, organizations, and institutions to initiate economic development in the country. It is not surprising then that although Nyerere and TANU tried to escape from the implications of colonial capitalism, some elements were still emulated in post-colonial development policies of Tanzania. Table 8 below is an attempt to relate some of the colonial and post-colonial agricultural policies in Tanzania.

Table 8: Summary of Government agricultural policies in mainland Tanzania, 1946-76

Table adapted from Coulson (1977: 100)

Year	Policy	Description	Comments
1946 - 1955	The Groundnut Scheme	3 sites – 50,000 acres cleared, but very little harvested. Cost 35 million Pounds	Relates to policies of State farms of 1969-1976
1946 - 1953	The White Settler Scheme	Settlers encouraged to re-open farms abandoned during the war, and some new land alienated. Abandoned after the Tanganyika African Association took the Meru Land Case to the UN in 1953	
1946 - 1956	Land Development and Soil Conservation Schemes	6 big schemes, but smaller schemes covered virtually the whole country. Based on by-laws which every farmer had to follow. Abandoned in 1956 after peasant opposition.	Relates to settlement and conservation schemes
1956 - 1967	The Focal Point Approach, or the Improvement Approach	Extension workers concentrated on progressive farmers or groups. Renamed the Improvement Approach after independence to avoid the impression that only certain groups were covered, but the policy stayed much the same	

Table 8 (continuation)

Year	Policy	Description	Comments
1953 - 1974	Marketing Cooperatives selling to Government Marketing Boards	Cooperatives expanded (with some Government assistance) to cover the whole country by the early 1960s	Relates to market oligarchies of the 1940s and 1950s
1962 - 1963	“Spontaneous” Settlement Schemes	Perhaps 1000 groups started villages and communal farms but only a handful survived after 1963	
1963 - 1966	“Planned” Settlement schemes, including river basin development (The Transformation Approach)	The main agricultural policy of the 1964-69 Development Plan. But only 23 schemes were started most of which were expensive over capitalized failures	Relates to forced settlements in colonial times and later Ujamaa villages and villagization policies
1967 - 1969	Ujaama Villages	Socialist communities – small groups of committed individuals carrying out communal agriculture. There were about 800 of these by the end 1968	Relates to forced settlements in colonial times and later villagization policies
1969 - 1976	Villagization	Starting with “operation Rufiji” in 1969, the Government moved all the people living in an area into “planned villages”. Communal cultivation was de-emphasized. In 1973 the policy was extended to cover the whole country. By the end of 1976, 13 million people were living in 7,684 villages	Relates to forced settlements in colonial times and Ujamaa villages
1969 - 1976	State farms	These became national policy in 1969 and 50 of them were included in the 1969-74 Development Plan. Most of these failed, but the Government continued to seek foreign partners to develop new state farms or plantations	Relates to the Groundnut schemes
1972 - 1976	Crop authorities	The Marketing Boards gradually extended their activities to cover extension, provision of agricultural inputs, and processing, so that, over time, they gradually made Cooperative Unions redundant. These were abolished in 1976. Under the 1974 Ujamaa Villages Act, the new villages took over the crop purchasing functions of the cooperative primary societies.	Relates to market oligarchies of the 1940s and 1950s

By the early-1970s, Tanzania's agricultural development was anchored on encouraging the formation of cooperative societies and trade unions; supporting the use of modern methods for farming including fertilizer inputs and extension services; inducing farmers to engage in the value chains and expand markets for their (cash) crops; demarcating or calling for the demarcation of conservation areas, citing poor farming methods of smallholder farmers as justification; and grouping people into villages, even forcefully.

The outcomes of the above framework were marked by a push towards the commercialization of agriculture. Commercialization and capital accumulation seemed to be the over-arching goal of both the colonial and Nyerere's Governments. The marked difference was in their purpose. While the colonial administrators thought of commercialization and capital accumulation for the purposes of self-sufficiency of the individual, the communities, and the British metropole (especially after WWII), Nyerere's purpose was to be able to distribute and redistribute resources for the benefit of the communities and the nation rather than the individual. In both cases, however, efforts towards the commercialization of agriculture and accumulation of capital in the rural areas took the form of structural reorganization of people, institutions, and resources – administrative structures, markets, settlements, and crops. Nonetheless, while the colonial state reorganized people through the creation of tribal and ethnic boundaries, Nyerere's attempts towards national unity and a socialist ideology de-emphasized tribal and ethnic boundaries. Tribal and ethnic demarcations then became less important to national development than communities that transcended these boundaries. Among these communities were cooperatives, settlements, and villages which were not bound by ethnicity but by need. These reformulated cooperatives, settlements, and villages became spaces in which commercialization and accumulation would be organized, and served as examples of improved farming to the “traditional” farmers. Through these groups, the state would be able to provide resources and services to the people, organize value addition and marketing through marketing cooperatives, introduce new crops and technologies, and educate people about aspects of farming, especially intensive cultivation, erosion control, and environment conservation. How then did this play out in the Kilombero valley?

5.2 Nothing learned, nothing forgotten in Kilombero valley

5.2.1 Cooperatives, settlements and villages in Kilombero

Development of cooperatives societies in Kilombero valley before 1960

Any fair analysis of cooperative societies in Tanzania between 1960 and 1980 would require a recognition of their affinity to settlements and villages. In fact, some authors who have discussed villages and settlements in Tanzania, refer to them as “cooperative villages”, “cooperative village settlements” or “cooperative settlements” (see Cliffe and Cunningham, 1973; Cliffe and Saul, 1973; Saul, 1973). Cooperative societies were a strategy to enhance settlement or village agriculture – to make agriculture commercial through value chaining. In his president’s inaugural address on 10th December 1962, while speaking on the theme of initiating village communities, Nyerere elaborated that it was “the Government’s intention to extend the cooperative movement into ... every village and every hamlet in Tanganyika...” (Nyerere, 1966: 184). Nyerere would later comment, in his Socialism and Rural development essay, that “...most of our farming would be done by groups of people who live in a community... They would live together in a village; they would farm together; market together...” (Nyerere, 1968a: 124). This became the trend for the Ujamaa villages and villagization policies.

However, since this relationship (between cooperatives and villages or settlements) was only strengthened after independence, it is also fair to discuss the development of cooperatives separately. Doing so would help to trace its roots, which are specific to certain economic and political settings. It would also help to explain its demise after the independent state hijacked the movement. Moreover, the focus on only cooperative societies gives emphasis to the idea of commercialization of agricultural production centered on the strategy of value chaining, albeit in a different course from that followed in the colonial times. While the colonialists used Asian middlemen to “initiate” commercialization and value chaining (state initiative), the cooperative movement in Tanzania was initiated by local African elites as a response to colonial imperialism and Asian monopoly of trade. The rest of the subsection will discuss this development.

Mutual cooperation had long existed in many parts of what is now Tanzania before and during colonialism. Such strategies were limited to, and varied in degree according to specific social organizations like families, clans, and chiefdoms. Chapter three of this dissertation showed examples of how families in the valley took turns to scare away birds and vermin during planting,

weeding, and harvesting times of the year. However, the first record of an African cooperative society in the country is the Kilimanjaro Native Planters Association (KNPA) of the Chagga, which was started in 1925 in northern Tanzania. The KNPA was initiated by Joseph Merinyo, a local clerk and interpreter in the District Office of Moshi who wanted to protect the African coffee growers in the Kilimanjaro region from price exploitation and, unfair loans from Indian money-lenders, and to shield the African farmers from unfair competition from European settlers who sought more fertile land for their agricultural expansion (Rogers, 1974: 95–96). The movement was supported in its initial years by colonial officers, particularly Dundas (Political Officer and Secretary for Native Affairs), and Clark (Acting Senior Commissioner and on request of KNPA agreed to be the KNPA president) (ibid). This support should be understood in terms of three levels. At the first level, Dundas and Clark saw such local initiatives as opportunities for secure income for the territory. Secondly, their support to KNPA and, hence, disinterest in backing the needs of European settlers was aligned with the mandate of the League of Nations, which “precluded any large role, economic or political, for the Territory's European settlers” (ibid). Thirdly, this support should also be understood in line with British Labour Party’s early policy, which sought to defend Africans from capitalist penetration and advocate for a model where, in the view of C. R. Buxton⁸⁵, land is supposed to be treated as the property of the “native communities” and not to be alienated to Europeans so as to encourage “the African to make the most economic use of his own land” (cited in Kelemen, 2007: 77).

As with the reasons for its formation, the reasons for KNPA’s demise are likewise accorded to the actions of certain colonial administrators and the policies of the British Labour Party. Although the KNPA prospered economically, the arrival of Donald Cameron as the new Governor of Tanganyika, and the appointment of a new D.O. of Moshi, F.C Hallier, saw not only a systematic withdrawal of Government support, but a direct reproach towards the KNPA. By this time (late 1920s), as Kelemen (2007: 79–80) notes, the Labour Party’s policy towards African development was ambiguous – the party was making a transition away from the idea of preserving a “pre-capitalist Africa”, and toward an acknowledgment of capitalist penetration. It therefore recognized the contributions of European settlers and companies to African economies (ibid). In this sense, Cameron tended towards supporting settlers’ interests while (with Hallier, a religious supporter of Cameron’s “indirect rule”) ensuring the protection of the powers and prestige of chiefs (Rogers,

⁸⁵ Member of Labour Party’s Advisory Committee on Imperial Questions

1974: 98). Since the KNPA had challenged the authority of the chiefs, the new administration became the guardian angel of the royals. Moreover, as the cooperative amassed more support from many local farmers, it became a direct threat to colonial authority. Eventually, KNPA was accused of meddling in politics, and its leaders accused (some framed) of corruption, and by the early 1930s, the cooperative had run short of money and support, bringing about its collapse (ibid: 102-109).

Meanwhile, the need to protect wage labor and the hope of restoring a “traditional Africa” still lingered on in the Labour Party, and in 1933, the Party pledged to foster cooperative societies in the colonies (Kelemen 2007: 80). Beyond the Labour Party, many colonial officers saw the cooperative organizations as a way to enable efficient marketing and tax collection, and hence advocated for the formation and formalization of cooperative associations (ibid). The cooperative movement in Tanganyika was thus formalized in 1932 with the enactment of the Cooperative Societies Ordinance number 7 of 1932 (Rogers, 1974: 109). The new colonial administrators had managed to disentangle the KNPA and replace it with one in which they had direct influence and control over, the Kilimanjaro Native Planters Union (KNPU).

The cooperative movement in Tanganyika, however, remained sporadic until the late 1940s. Two reasons can however, explain why the cooperative movement became formidable in the 1940s. The post-WWII economic demands and nationalistic movement saw increased sentiments among Africans in favor of both economic and political control. Maguire (1969) has demonstrated how the Tanganyika African Association (TAA), an African elite social club that had been started in Dar es Salaam and had spread across the country in the 1920s and 1930s, developed its focus into economic and political matters in the post-war era, and how the Sukuma Union that had sought to unite all Sukumas spread across the country developed into a cooperative movement to tackle both economic and political hurdles faced by Africans in a similar time. Similar movements sprung up across the country⁸⁶ (see Maghimbi, 2010). A second reason was the renewed efforts by colonial authorities to support cooperatives. With a Fabian approach to development of the colonies in post-WWII, cooperatives became the institution to mediate the colonial government in Tanganyika and the local population. However, as Kelemen (2007: 85) has argued, cooperatives also provided the colonial authorities with instruments of control and supervision. Therefore, instead of fighting

⁸⁶ Examples taken from Maghimbi (2010) include the Bugufi Coffee Cooperative Society in Ngara district, the Mwakaleli Coffee Growers Association in the Rungwe district, the Bukoba Native Cooperative Union in Bukoba district, and the Victoria Federation of Cooperative organizations. The latter became “the largest African-owned and -operated cooperative organization on the continent and the single largest enterprise in the Tanganyikan economy” (Maguire 1969: 81).

against their formations, especially in the northern areas, some colonial administrators supported their formation but extended their authority in them.

Although cooperative societies in the Kilombero valley were scanty in the colonial period, and did not form a formidable movement, their grounding and presence, as in the northern part of the country, should be understood in the context of the post-war economic frustrations experienced by the Africans and the rise of national sentiments. The emergence of formal cooperatives in the valley dates back to 1945 when 10 elders from Ifakara formed a local association called the Ifakara African Union (IAU), which served as a branch of the TAA (Larson, 1976: 352). Their goal was vaguely stated as being to ensure "...closed co-operation among the Africans residing around here either old or youth should it be found necessary..."⁸⁷. This goal, however, stemmed less from the frustrations of Africans and more from the intentions of the TAA to expand their secretive political and economic agenda in the district. IAU lacked coherence and the impact of its work was hardly felt anywhere in the valley. Its existence, however, must have inspired frustrated African traders to unite against the Indian middlemen. In 1947, some African traders joined the IAU, and rebranded it the African Association in order to be able to connect and cooperate with the African communities in the valley. This "new" association soon expanded its branches to different parts of the valley (ibid: 353). In 1948, the traders formed the Ulanga African Traders Association (UATA) as an umbrella union in order to put more pressure on the colonial administrators to cancel the monopoly of the Asian traders Deji bhai k. Hindocha (Tanganyika) limited and extend control of markets to the African traders (ibid: 360). This demand was boosted by increased complaints from African smallholder producers, which led to a review of the marketing of cotton and rice in the valley by the colonial officers. The beginning of the 1950s saw an increased recognition of African traders and of the vagaries of Asian buyers. However, UATA faded into nonexistence soon after 1952. No clear reasons are accorded to this, but Larson (1976: 361) thinks that UATA must have been satisfied with its recent acknowledgements and the availability of traded goods that they lacked a common problem to unite against anymore.

Closely linked to the fight against economic imperialisms was the continued dismay against the chiefs and Native Authorities in the 1950s. Because the Bena Chief, Towegale Kiwanga, cooperated closely with the British colonialists, his chiefdom had been awarded control of part of

⁸⁷ Sub-branch of the African Association Ifakara, Ulanga District, Special Record. 1 July 1947. AOM A. 6/23/1/1 (cited in Larson 1977: 352)

the Ndamba and Hehe chiefdoms. The conducts of the Bena Chief, however, instigated resistance from the annexed tribes in the late 1940s and 1950s. He is reported to have been brutal toward his subjects, demanding heavy work from them with no pay at all (Monson, 2000a: 545, 550-551). However, since the complaints from the annexed groups were ignored by the colonial officials, the coming of the TAA and later TANU, with promises of political and economic independence, amassed many followers in the valley. The 1950s, therefore, saw annexed groups in the valley revolting against the Bena chief and devising strategies to evade his jurisdictions. TANU offered empowerment to these groups through cooperative associations. In this way they would be able to control their produce themselves. Some cooperative associations, hence, mushroomed in the valley before independence.

Larson has further argued that the high migration patterns of the valley inhabitants in search of work in plantations in Morogoro and in the northern part of Tanganyika where they witnessed the operations of other cooperative societies must have inspired them to start their own cooperative associations when they returned. Nevertheless, the will of the colonial administrators to establish cooperatives in the valley was low, if present at all. In 1953, the Provincial Cooperative Officer reported that “I was informed that they heard of the existence of the Uluguru and Tchenzema Farmers’ Cooperative Societies (which sell vegetables on behalf of their members) and they were anxious to know whether it would be possible to have such arrangements extended to their area (Malinyi) for marketing of native grown produce. Paddy and maize were mentioned”⁸⁸. The views of the District Officer in the first part of the 1950s was an opposition to farmers being independent of the state. He, for instance, wrote in a separate letter in 1954 that: “it will not be easy to attempt a rice-marketing cooperative as long as rice remains subject to produce control regulations and the government agents continue to run their services as efficiently as they have done up to the present”⁸⁹. It was only in 1956 that the monopoly of UlangaCo was lifted, and with the efforts from the TANU to work through cooperatives in order to achieve its political and economic agendas, trade unionism entered the valley in 1958.

It should, however, be emphasized here that unlike in the northern part of the country where cooperative societies were economically and politically formidable and the movement strong, operations of cooperative societies in the valley remained sporadic even after independence. the

⁸⁸ ROM C/2/2/1. Co-operative Officer Eastern Province to DC Mahenge, 10 December 1953. Cited in Larson (1976: 367).

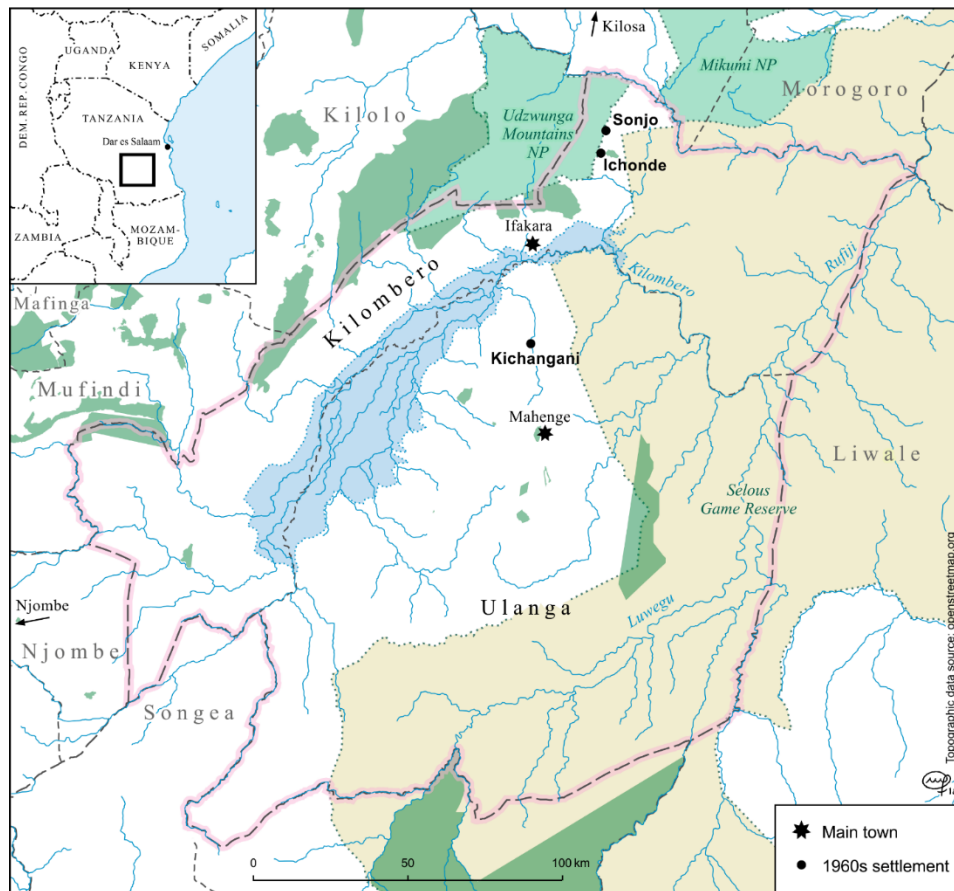
⁸⁹ ROM C 2/2/3. Telegram, Political Mahenge to Co-op Officer Morogoro. 1954. Cited in Larson (1976: 368).

formations of cooperatives in the northern part of the country had been boosted by the high production and markets for coffee and cotton. These cooperatives also formed a formidable movement towards independence as some of its members and leaders became strongholds in the TANU party and later ministers in Nyerere's government. However, after independence the government put efforts in multiplying the numbers of cooperatives in the country. Their numbers increased tremendously but were marred by corruption. Participation was low and most of the cooperatives were inefficient. By 1976, after they proved to be inefficient, they collapsed and were replaced by the Crop Authority, a government parastatal to buy crops from the farmers. However, like in the colonial times, cooperatives in Nyerere's government served to entrench state power and control the rural population. Many of the leaders in cooperatives went on to work for the government.

Kilombero settlement Schemes

Kilombero valley was among the first areas in the country after independence to experience on the ground the agricultural improvement initiatives (improvement and transformation approaches) discussed in the previous section. Three settlement areas, which lay adjacent to the Kilombero Sugar Estate, had been established by 1965. Beck (1964) and Baum (1968) give some general characteristics of these settlements as follows: Sonjo, established in 1960 comprised 400 acres and was an attempt to provide a home for the urban unemployed people to grow sugarcane. By 1963, Sonjo comprised 50 members, all resettled from Dar es Salaam. Ichonde had about 450 acres of crop land by 1965 and was the settlement mainly for unemployed people who had come from Morogoro. By 1965, there were 75 settlers farming in Ichonde. Finally, Kichangani, that comprised of members both from Dar es salaam and locals from the valley cultivated over 500 acres by 1965. Between 1962 and 1963, Tanganyika Agricultural Association (TAC), the company that replaced the United Kingdom Overseas Corporation in 1955, took over the management of these settlements. The Rural Settlement Commission (RSC) with its executive organ, the Village Settlement Agency (VSA), tasked to develop settlement schemes in the country, took over the management of many of these schemes in the country in 1965 (Newiger, 1968: 251), the Kilombero settlements inclusive. Moreover, each scheme had a Village Development Committee (VDC) to educate and train settlers cooperatively (ibid: 260). These were political officials who would contradict their roles and interfere with management of the schemes (see below).

Figure 9: Map of Kilombero valley showing the locations of settlement schemes of the 1960s



To establish these “planned farms of economic size”⁹⁰ in the valley, the state cleared new land in the 3 areas named above. It demarcated plots and allotted them to the new settlers for settlement and for crop cultivation. Baum (1968: 44) explains that the management of the settlement provided the seed cane to the settlers, and later transported the harvested cane to the sugar factory and helped with its sale. Since the settlements had a “no-gift policy”, costs connected with services like tractors, ploughing, input, and other running costs were deducted from the proceeds before the settler could receive his/her net income (ibid). Only instructions and advice were free. On the other hand, all that settlers had to do was to abide by the rules (Ibid).

However, by the end of the decade, these settlements had dissolved, and different reasons are attributed to this, among which are the complex relations among organizational and

⁹⁰ As stated in the World Bank report – IBRD (1961: 91)

management structures, economies of scale, restricted marketing channels, and types of crops cultivated. The following paragraphs will review these reasons.

Since the main aim of these settlements was to increase production for the market, a way to begin tracing their demise is to find out how necessary these planned settlement and farms were at the time. The question that emerges here is whether there was really a need to increase paddy production, and if so, whether the strategies applied were the right ones. Written records and memories of smallholder farmers who had observed and/or participated in paddy cultivation in the 1960s can help to ascertain this. Different sources point to the valley's fertile land and bountiful harvest of paddy in the 1960s. In the oral histories I conducted between September 2014 and May 2015, smallholder farmers who had cultivated crops in the valley but who were not part of the settlements in the 1960s, acknowledged the vast harvests they got from their plots. Take, for instance, the testimony from Mzee Tito. When my research assistant and I visited him in October 2014, he was approaching 80 years of age. By then, he had been widowed by his first wife, and two subsequent wives had apparently left him. He was sharing his advanced age with a fourth wife, probably in her forties. As he narrated his story about paddy cultivation, he halted at one point, and asked his wife to bring him samples of rice from the store hidden inside his big house. "This is Mbaombili" he said when she brought it. "This is what we used to farm in the 1960s. It had high yields; an acre was enough to reap 7 bags". His face then turned a little sad. "Seven bags" he repeated. "And that was just me and my first wife! By the time I had three wives, each of them was cultivating about 2 acres. Food was in abundance...". Another old man, Mzee Mbiti, remembered "getting lots of crops *those days*...". Jemusi, who might have been in his late 70s, also recalled a time when "the land was still virgin and fertile" in that "on the same plot as now", he was "getting a lot of yields of crops". Lukati recollected more specifically: "you know in *those* years, it is not like this time, in those days before 1970s, the land was so fertile someone can just cultivate half acre and get 5 bags...the soil was not like nowadays where you have to use chemical fertilizers or other stuff; in *those* years, no need".

Although memory might be strained for individuals, Mzee Tito, Mzee Mbiti, Jemusi and Lukati seemed to have an agreement – their testimonies indicate a past characterized by an abundance of harvest, at least for individual farmers. Moreover, they were not alone in this view. There seemed to be, as Jewsiewicki and Mudimbe (1993: 11) might suggest, a dialogue between individual memory and collective memory. Many other formal and informal interviews I conducted in the valley attested to a handsome production of paddy in the 1960s. Those who found it hard to

place their memory to a specific time, estimated this “golden age” to be before the 1970s. These narratives are similar to the records of researchers and observers of the time. A farmer⁹¹ is quoted in Raum (1964: 14) as saying “The indolence of the inhabitants of Ulanga is the result of the agricultural wealth of the area. Half an acre of land, easily cultivated by women and children, yields five bags of rice, enough to feed a family for a year. It happens that some peasants do not bother to harvest more: they leave the surplus on the blade!” In a different spirit⁹², Baum (1968: 29) indicated that “a small area of fertile land is enough to satisfy a family’s subsistence needs” at the time.

The argument here is that smallholder farmers were producing enough for their needs, and had a surplus, which meant that they did not need an alternative formation to boost their productivity so long as the old one was working well. Moreover, it can be said, eventually, that the alternative formation (settlements) provided the same, if not worse, returns than the so-called traditional means. Baum (1968: 45–47) evaluated the performance of the Kilombero settlements and concluded that the economic situation of settlers was, if anything, only slightly better than that “of the farmers producing mountain-rice or rice and cotton, but by no means more favorable than that of the valley-rice-growers and significantly lower than that of rice-sugarcane cultivators outside the settlement”. He observed further that “the variations in income and returns per acre and per labourer in the settlement holdings are about the same as outside the settlement” and “A correlation between the crop acreage and gross return, or between the labour force and gross return is just as unrecognizable for settlers as for farmers not affiliated to the settlement” (ibid: 47). One reason there was such a poor performance of the settlements is associated with the crop-labor relations. As for cotton in the colonial times, farm labor was divided between sugar cane and rice. Harvest times coincided with the beginnings of the first rains. Settlers preferred to return to their homes or individual family farms to prepare for the upcoming rainy season before returning to the settlements. This drift was strengthened by the fact that sugarcane, a cash-crop, could not be used as a food-crop. And given the minimal profits (if any) the settlers made from it, it could not create access to enough food.

Further reasons can be derived from those observed across the country to explain the failures of these Village Settlement Schemes. Newiger (1968: 259–260) points out that

⁹¹ Raum does not specify what kind of farmer he is, but judging from his wording, which is synonymous with thinking from colonial development thought, he must have been a commercial farmer, probably European estate farmer.

⁹² Baum made this point in reference to factors that determined farm sizes in the Kiberege strip, Kilombero valley.

management was poor in these schemes as the managers had neither prior experiences nor the will to develop the settlements, and where they were capable, they did not have enough power to enforce them. This is because the real power fell in the hands of the Village Development Committees, who were political leaders with political rather than socio-economic or technical interests, and hence conflicted with the managers (ibid: 260). Finally, the schemes were expensive not only to the settlers as shown above but also to the state. These included management, service, capital, and input costs. Nyerere himself, in accounting for the failures of the settlement schemes in his *Freedom and Development* paper, published on 16th October 1968, wrote that

“Ever since 1959... TANU has encouraged people to go in groups to farm in the rural areas, and our TANU Government has initiated settlement schemes of many kinds. But we can now see that we have committed many mistakes, and it is important that we should learn the right lessons.

When we tried to promote rural development in the past, we sometimes spent huge sums of money on establishing a settlement, and supplying it with modern equipment, and social services, as well as often providing it with a management hierarchy. In other cases, we just encouraged young men to leave the towns for a particular rural area and then left them to their own devices.... we acted on the assumption that there was a short cut to development in these rural areas. All too often, therefore, we persuaded people to go to new settlements by promising them that they could quickly grow rich there, or that Government would give them services and equipment which they could not hope to receive either in towns or in their traditional farming places. In very few cases was any ideology involved: we thought and talked of in terms of greatly increased output, and of things being provided for the settlers.

What we were doing, in fact, was thinking of development in terms of things, and not of people. Further we thought in terms of monetary investment in order to achieve the increases in output we were aiming at. In effect, we said that capital equipment, or other forms of investment, would lead to increased output, and this would lead to a transformation in lives of the people involved. The people were secondary; the first priority was the output. As a result, there have

been very many cases where heavy capital investment has resulted in no increase in output – where the investment has been wasted. And in most of the officially sponsored or supported schemes, the majority of the people who went to settle lost their enthusiasm, and either left the schemes altogether, or failed to carry out the orders of the outsiders who were put in charge – and who were not themselves involved in the success or failure of the project” (in Nyerere 1973: 66-67).

When the World Bank in 1961 recommended farming as a “business activity on efficiently run, planned farms of economic size ... achieving a much higher level of productivity...” (IBRD, 1961: 91) and when the TANU party decided to establish these ideal World Bank settlements in the Kilombero valley, they failed to account for the complexities involved in organizing individuals in groups, especially in groups similar to those of the colonial period which were abhorred by smallholder farmers. Nonetheless, despite the inefficiency of these settlements and many others across the country, and the recognized possibilities of progress of individual smallholder farming, the state and the World Bank still stuck with the idea of groupings.

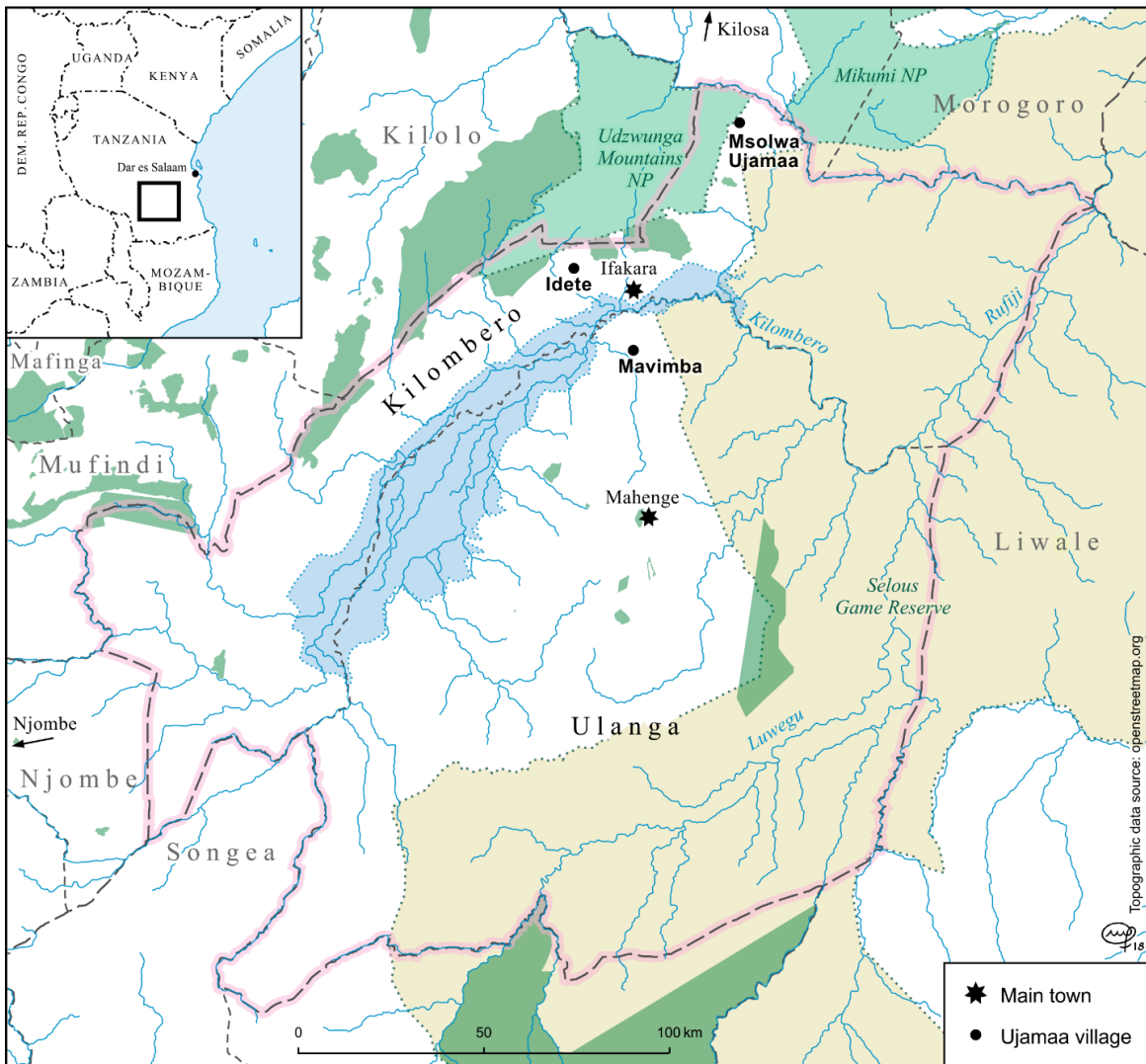
Ujamaa villages and villagization in the valley

The policies of Ujamaa and villagization in Tanzania have been extensively researched and written about in various disciplines, especially sociology, political science, history, and anthropology. The research includes its roots, design, organization, applications, successes and failures, and the reasons thereof⁹³. An analysis of these topics would be redundant here, for the conclusions drawn about different Ujamaa villages and villagization processes in the different parts of the country could easily be drawn for the Kilombero valley as well. However, to elaborate the main argument of this thesis – that agricultural development ideas in Kilombero have been centered around certain discursive practices, this sub-section, focusing on improvement of production and continuity of old agricultural development ideas, will briefly review Ujamaa villages and villagization processes in the valley.

⁹³ For Ujamaa’s roots, design, organization, applications, successes and failures and the reasons thereof, see for example Coulson (1982); Freyhold (1979); Hydén (1980); Scott (1998).

Ujamaa villages in the valley, of which one interviewee stated were no less than 15 between 1970 and 1975, mushroomed as easily as they disappeared⁹⁴. It is, however, probable that the actual number was much lower and that the degree to which they could be called Ujamaa villages varied.

Figure 10: Map of Kilombero valley showing the locations of three Ujamaa villages of the 1970s



Some writers (see, for example, Coulson, 1982; Freyhold, 1979; Hydén, 1980; Scott, 1998) warn of the political interests in inflating the number of villages claimed to exist across the country. Because political success depended on the number of villages created, some bureaucrats

⁹⁴ Interview with a retired Agricultural Extension Officer who worked in the valley between 1971 and 1995. He is still living in the valley as a member of a cooperative society.

easily exaggerated the numbers in their jurisdictions. Hydén (1980: 104), for instance, argues that some villages were registered despite unsuccessful or non-existent community efforts, and that some villages were not new creations but an expansion of old ones. During my field work in some villages like Mahutanga, Mofu and Katulikira, inhabitants reported these villages as having been part of Ujamaa but at the same time claimed that no one came in from outside in the creation of their village, and that neither did anyone move or was anyone moved as an effort to be part of another village. They barely remembered communal farming or extension services in the period the policy was being implemented. For these reasons, I will concentrate my analysis on three well-known Ujamaa villages in the valley – Msolwa Ujamaa, Idete and Semka Mavimba (see figure 10 above).

Often the idea of grouping comes with plans for how the groups should be organized, expectations of cooperation, and strategies indicating what groups should do in order to meet the goals of those who visualized them. A retired Agricultural Extension Officer (see footnote 97) explained that in the process of establishing the three Ujamaa villages (Msolwa Ujamaa, Idete and Semka) in the valley in 1970/71, he and his team designed land use plans – detailing where, for instance, a communal shamba in a village would be located, or where housing and other social services like schools and water sources would be placed. The villages were encouraged to work communally on these shambas, to plant cash-crops, mainly cotton and soya, and also to market their produce together as a cooperative. The Government, through this extension worker, and many others like him, offered fertilizer and weed spray inputs and infrastructural development to the villages. Initially, such inputs were offered as aid but eventually the occupants of the villages had to meet the costs. What was free were agricultural training sessions and advice such as spacing of seedlings, and where to market. With this kind of organization, cooperation, and service provision coupled with the use of modern agricultural inputs, the farmers were expected to realize economies of scale, and increase production and profits. However, as was the case elsewhere (see, for example, Mapolu and Phillipson, 1976), such expectations were barely realized in the villages in the valley.

While the Extension Officer contended that the villages were well planned and that lots of infrastructural development accompanied the creation of these villages, he doubted their impact in terms of increased production of crops. Different reasons might account for this, but four explanations can be emphasized here to explain this insufficient output in Ujamaa villages in the valley. The first was the high cost of inputs for the farmers; the second, the focus on cash-crops; third, labor distribution between cash-crops and food-crops; and finally, minimal participation.

Because farmers had to meet the costs of fertilizer, weed spray, tractor, and seed inputs, the cost of farming was raised. The high costs of production in Ujamaa villages undermined production in communal farms. It therefore became difficult to meet the input costs as profits were marginal, if any. One farmer I interviewed confessed that when he received a loan of fertilizer inputs, it was hard for him to pay it back because even if his harvest was good, the profits were very low⁹⁵. As was the case with many Ujamaa villages in the 1970s, such costs became even less affordable in cases of disasters (fall in world market prices, floods, and droughts) (see Hydén, 1980: 129–131). Ibura, another farmer born in 1954, explained that there had been several floods that reduced their output, but the worst was around 1975. Because of that flood, many farmers lost their crops and could not pay back their loans. Since it was the cooperative societies that had extended the loans to them, he accords the collapse of these cooperatives to the bad debt. The collapse of cooperatives across the country in the mid-1970s had its political and economic reasons, but Ibura's argument is not implausible. Hyden (1980: 111-112) argues that the National Development Credit Agency (NDCA) and the Co-operative Bank which preceded the Tanzania Rural Development Bank (TRDB) had collapsed because of unpaid debts from the smallholder farmers. The point, however, is that because of high costs of production, Ujamaa villages in the valley, as elsewhere, failed to produce the output expected of them. This was reminiscent of the situation of farmers in the Kilombero settlements in the 1960s.

Secondly, the focus on cash-crops greatly weakened the production capacity of communal villages. This was mainly regarding the flexibility and usability of food-crops compared to cash-crops. The retired Extension Officer captured this flexibility and usability in this way: “The problem was that in case cotton was not bought, the farmer could not eat the cotton; that's why they avoided planting it. But those who grew rice could eat it in case they failed to sell it”. This is a good reason to plant food-crops in subsistence economies. They offer security in terms of availability of food, the flexibility to sell them when need be, and reduce the risks associated with to cash-crops in times of disasters. Therefore, with worsening terms of trade by 1974, farmers in these villages were discouraged from continuing to cultivate the cash-crop cotton.

The third explanation, which is similar to that already alluded to in chapter 4, is the distribution of labor between food-crops and cash-crops. Since cash-crops were essentially designated for communal farms and paddy for private farms, the proportion of labor accorded to

⁹⁵ Interview 4.10.2014. The farmer had lived in Idete Ujamaa village in the 1970s.

communal farms was reduced as preference was given to private farms. Mapolu and Phillipson (1976) found similar results in Handeni. The shortage of labor, especially on communal farms, was enhanced by the fact that many farmers possessed private farms elsewhere. It was only after finishing work on private farms that some farmers went ahead to participate on communal land. However, considering that cotton required maximum labor, as planting, weeding, harvesting, sorting, grading, and bagging were mostly done by hand, the withdrawal of labor to private farms weakened further the production of cotton on communal farms. Similar results have been noted elsewhere (see, for example, Freyhold, 1979; Hydén, 1980; McHenry, 1977).

Finally, the ideal of pooling people for a common cause requires that the members of the group participate fully towards the cause. However, this was seldom the case in Ujamaa villages in the valley. The above discussions point towards a lack of participation in communal clearance of shambas, farming, weeding, and harvesting. Beyond farm work was marketing. Since Ujamaa villages doubled as primary cooperatives, members were expected to market their produce as a group. The main challenge the retired Extension Officer saw with the villages was a lack of commitment to selling their crops together. Instead, many of the village members preferred to sell to small buyers who moved from door to door buying crops, or who were stationed in certain places in the villages where smallholder farmers could find them. The reason as to why these farmers sold to these middlemen was less due to better prices as Coulson (1982) has suggested, and more due to the flexibility afforded by this arrangement. Middlemen, who resold their produce to the Cooperative Union, bought crops in tins called *Kimbo* whose measurements were ambiguous, and prices might have been unfavorable to the farmers if they had sold in groups directly to the Cooperative Union. However, Cooperative Societies and Unions seemed to be too bureaucratic and restrictive, so that smallholder farmers tried to avoid them where they could. These unions had formal weighing scales and paid in cash. In situations where a Cooperative Society/Ujamaa village group had taken credit for inputs from the Cooperative Union, the Cooperative Union deducted what was due to it before paying the Cooperative Society/members of the Ujamaa village group. In many cases, as some respondents reported, the Cooperative Societies and Unions took the farmers' crops and only paid them back after the crops had been sold off. Sometimes this took months. On the other hand, selling to middlemen was time-saving, and met the immediate needs of the farmers. For instance, one sold only a part of their harvest in order to earn some money for a specific need – say, school fees for the children or money to pay health bills. Apart from the convenience of selling to middlemen, farmers also found it more convenient to exchange material

goods amongst each other than sell to the cooperative. Still using the Kimbo as the medium of measurement, they exchanged rice for sugar, salt, maize or fish. The point here is that since the smallholder farmers had alternative and more convenient means to meet their needs, they did not find it necessary to participate in group marketing, let alone farming. With little participation, communal production fell.

These four reasons, although discussed separately, were not exclusive of each other. Participation, for instance, was required throughout the whole value chain and not only during marketing. And less participation would also explain why input costs must have been higher than planned. Low productivity was not unique to the Ujamaa villages in the valley. A study by the Tanzania Rural Development Bank (TRDB) in 1974⁹⁶ found out that in the 1971/2 season, communal farmers had a lower average yield compared to individual farmers although communal farmers used fertilizers and individual farmers did not (TRDB 1974 cited in Hydén, 1980: 111). Similarly, after examining the production of Ujamaa villages versus individual farming in Handeni, Sukumaland, and Lushoto districts in northern Tanzania, Mapolu and Phillipson (1976) argued that productivity was lower in Ujamaa villages than on individual farms. This is reminiscent of settlements of the 1960s or of the colonial era in Tanganyika.

Therefore, although Nyerere claimed that the Ujamaa villages would not be a revival of the old village settlements but an establishment to avoid their (past village settlements) mistakes while emulating their successes, the practices fell right back into some of the strategies experienced in settlements of the colonial and early post-colonial times. It is true though that he attempted to avoid many of the earlier mistakes like compulsion but as Coulson (1982: 297-299) shows, there were little consultations if any in starting some of the Ujamaa villages and coercion was widely employed.

It is not surprising that smallholder farmers in the valley disliked these villages. The Extension Officer thought many of those who joined Ujamaa villages in the valley did so because they expected some immediate financial and material gains. However, since these villages were expected to be self-reliant, the costs being met by the inhabitants, farmers often moved back to their private farms. This is not a far-fetched testimony. Again, in Freyhold's (Freyhold, 1979: 170-

⁹⁶Tanzania Rural Development Bank, 1974. Trends in maize production in Ismani and other parts of Iringa region. Mimeographed report.

184) research a village like Stahabu only became and remained a village because of excessive aid or pampering.

5.3 A concluding remark

The dawn of Tanganyika's independence saw attempts of Nyerere to break away from colonial agricultural development policies, but we see a persistence of some of these policies. What might be the explanation for this?

It is possible that the post-colonial state of Tanzania had little choice to accept or reject globally and externally doctored policies if these did not suit them. For instance, when the World Bank report of 1961 came out, many of the administrators in Tanganyika Government were part of the colonial administration, and the queen of England was symbolically the head of state. The political atmosphere might have changed but the people in power still held onto the same ideas as the colonial administration. Moreover, as Freyhold (1979: 133–144) argued, even though, in theory, no country receives a World Bank project it has not asked for, in practice the processes are more complicated than that. She explains that usually, the World Bank develops a project idea, sends its experts to assess its viability in the country where it wants to implement the project, and then proposes the projects to the country – and even if the proposal is initially rejected, it uses a system of local experts permanently based in the country to stir the process, and the country usually ends up amalgamating its projects into the bigger picture of the World Bank idea (ibid).

Also, Ferguson (1990: 266-267) has argued that the expansion of state interventions in rural Tanzania were disguised in rural development projects that effectively depoliticizing state bureaucracy. Cooperatives, settlements and Ujamaa villages although attempting to improve agricultural production also served to expand state control and bureaucracy. Hyden (1976: 11) for instance, notes that the success of cooperatives in post-colonial Tanzania were measured, not by economic success but by the number of new cooperatives created and registered since high numbers signified more control of the rural farmer and capture of the market. Moreover, a Cooperative Societies Act that increased the powers of the Commissioner for Cooperative Development (CCD) was passed in 1968, in spite of recommendations from an independent commission that the CCD should only have emergency and temporary powers (ibid: 13). Hyden, therefore, suggests that it the powers given to the CCD was a desire for the Party (government) to control cooperatives in accordance to newly adopted socialist polies (ibid: 13-14). Similarly, despite the idea that

settlements and Ujamaa villages would be formed and managed democratically by local farmers, the institution of Government workers such as the Village Development Committees to manage these collectivities signified the extension of state bureaucracy and control to these groups.

The persistence of groupings such as settlements and villages can also be seen as motivated from below by individuals and groups that positioned themselves to benefit from the infrastructure and capital that such projects offered. For instance, John Sender found that 5 out of 7 villages he studied in Lushoto district were started in order to get possession of land previously owned by settlers or demarcated as forest reserves (Sender 1974 cited in Coulson 1982: 290). Moreover, actors who implemented the Ujamaa villagization policies exaggerated numbers while extensive aid disguised performance to paint a picture that the villages were working well.

These reasons summarize the persistence of the discursive practices that were implemented in the colonial period but still practiced by a post-colonial government though with attempts to break away from them. The question that remains is how agricultural development turned out in the neo-liberal era. Were the discursive practices persistent or did agricultural development policies change drastically? I will extend this discussion to the next three chapters which focus on the period after 1980.

6 Cooperative societies and agricultural improvement: 1980 - 2015

Old habits die hard (common English adage)

The historical chapters in this thesis have demonstrated Government plans to modernize agricultural production among the rural populations of Tanganyika (and later Tanzania) and to improve their conditions of living as perceived by the “modernizers”. Although Nyerere’s Government tried to break away from many of the strategies employed by many colonial administrators to improve agricultural production, many of the approaches in settlements, villagization and cooperatives reflected those employed by the colonial administrators. When, however, the attempts to “capture the peasant’s social and economic behavior” with the state at the center fell far short of the state’s expectations by the end of the 1970s, this approach became subtle. Two things became explicit at the beginning of the 1980s: one was the shift towards a more democratic process of rural development, and the other an increasing level of decentralization (and micro-ordering) in the management of development projects. At the forefront of this ideological shift was the resurgence of the urge to improve agricultural production in the wake of massive economic stress in the country and an increasing pressure from the World Bank and the International Monetary Fund to restructure public services and liberalize the economy. This chapter and the next two will examine the persistence and changes in agricultural development strategies in the neo-liberal era.

A stark idea of how to improve agricultural production in the country at the beginning of the 1980s was the need to revive the defunct cooperative societies. This need emerged belief that organizing the rural society into collective farming groups was the most efficient way to promote individual, community, and national wellbeing, economic growth, and good governance⁹⁷. Whereas this perception of cooperatives is advocated for by some (see, for instance, Savage et al., 1982; Wanyama et al., 2009) it is contested by others, like Deininger (1995: 1320-1321) who has forwarded arguments that cooperatives do not operate more efficiently than individual farmers because of labor complexes between smallholder farms and the collective, low profitability due to agency and supervision costs, and complexities in adopting new technologies (ibid). This chapter

⁹⁷ This idea is reflected in the explanations of the functions of a cooperative society in all the four Cooperative Society Acts – 1982, 1991, 2003 and 2013.

then sets off to evaluate the extent to which cooperative societies in the valley have been and are meeting both material and social goals that planners set them up for. To do this, the new cooperatives in Kilombero district are examined over a long period (1982-2015) with reference to three parameters: farmers' participation (in common cooperative farm/shamba la darasa, in meetings and in storage and marketing); level of input use; and level of output/production. The chapter, therefore, starts by describing the reestablishment and evolution of cooperatives in Tanzania and particularly in the Kilombero valley since the 1980s. It then examines the aforementioned parameters regarding cooperatives in the Kilombero district. Finally, the idea of cooperatives as vehicles for improving agricultural production is analyzed while stressing the points that make it a persistent strategy.

6.1 The evolution of cooperative society frameworks in Tanzania: 1980 and 2015

Notwithstanding the historical developments discussed in the previous chapters, cooperatives in Tanzania since the 1980s have gone through an evolutionary transition to become democratic bodies with a relatively high degree of autonomy. The revival process in the early 1980s was initiated from the realization that Government parastatals that had replaced cooperative societies in 1975-76 had failed, showing only a low level of agricultural production (Gibbon, 2001: 395-396; Maghimbi, 2010: 5; Savage et al., 1982: 1, 10). The economic stress induced the Government to review its agricultural policies concerning organization of production and marketing. The political technocrats' confidence and belief in cooperatives had not waned, either internationally or nationally. A Committee of Inquiry was set up to review the possibilities of reestablishing cooperatives (Gibbon, 2001: 395). The committee's report, among others, claimed that cooperatives of the 1970s were working well and recommended their reestablishment (ibid). The Government then solicited information from donor countries, development partners, and internal committees as to whether cooperative societies should be reinstated, and if so, how this could be done (see Savage et al., 1982: 9-10). The Government received assistance to reestablish cooperatives from different aid agencies and governments including USAID and the Nordic countries. The Nordic countries, for instance, offered a cooperative technical advisor for each region, offered financial assistance of 133 million Danish Kroner to assist in build of a cooperative college and offered a capital fund of 5 million US dollars as loans to cooperative unions (ibid: 7).

What was born out of this was the Cooperative Society Act of 1982. Three elements of this Act discussed below will provide the talking points for analysis of the transformations in the subsequent 1991, 2003, and 2013 Acts. These are the tier structure, the level of democracy and autonomy, and the political function of cooperative societies. These elements can be extended to evaluate the aforementioned parameters, particularly the level of participation.

The 1982 Cooperative Societies Act provided a three-tier structure as opposed to the problematic two-tier structure of the previous decade. The Government parastatal, the Crop Authority, which had monopolized the supply of inputs since the mid-1970s, was abolished in 1984 when the new cooperative laws were passed (Lyimo, 2012: 87). In the new tier structure, the Primary Societies, which were agricultural cooperative societies at the village level, were now responsible for collecting produce from their individual members and delivering them for sale; the Cooperative Union, which was an amalgamation of Primary Societies in a district or a region, was charged with collecting produce from member Primary Societies, and processing and delivering the agricultural produce for marketing⁹⁸. Finally, at the top was the Apex at the national level, which was composed of amalgamated Cooperative Unions (ibid). The Apex represented both ideological and business interests of the cooperative movement. In-as-much as such a structure was meant to allow more independence of operation, continued high Government interference rendered it incapable.

Increasing Government patronage continued until the early 1990s, limiting the extent of democracy and autonomy at all three levels of the cooperative society⁹⁹. The ruling party (formally *Chama Cha Mapenduzi*, formed as a merger between TANU and Zanzibar's Afro-Shirazi Party) still had the right to screen candidates for membership of regional cooperatives (Cooperative Unions) and the registrar of cooperatives had the power to amalgamate or to divide two or more societies as he deemed necessary (Gibbon, 2001: 400; Lyimo, 2012: 114). He could dissolve elected committees and remove members of the society and appoint a fit and proper person to carry out the functions of the committee (Lyimo, 2012: 114–115). This was intended, at least in principle, to curb corruption in cooperative societies.

⁹⁸ United Republic of Tanzania (1982: 16)

⁹⁹ The term cooperative society from here onwards, unless stated otherwise, will capture all the tiers of the cooperative society acts accordingly. That is, a 2-tier before the 1980s, a three tier after the 1982 Act and a four tier after the 1991 Act

In practice this entrenched Government bureaucracy. Cooperative societies still acted as a political tool of control and an extension of political interest from Dar es Salaam as opposed to the interests of the members of these societies. This was done in two ways: the first was the obligatory membership of each person living in the village who had attained the age of 18 years in the cooperative society in that village, despite their different interests¹⁰⁰. Secondly, the main objective of the cooperative society was stated as building socialism and bringing about socialist development in rural areas¹⁰¹. Cooperative societies, therefore, had the responsibility of disseminating the Government political agenda within their respective memberships (villages) across the country.

Even against recommendation, the Government maintained these elements of the Act, which were reminiscent of the cooperatives 1968 Act. The arguments posed in the 1960s to explain the weak performance of cooperative societies were reignited to explain the failures of the 1980s. For instance, Cliffe and Cunningham (1973: 137) had argued that the close supervision by the Government complicated the bureaucracy, and the lack of democracy resulted in partial involvement in the affairs of, and eventual rejection of cooperative societies by, the rural people. Similarly, recent publications (Gibbon, 2001; Lyimo, 2012; Maghimbi, 2010) forward similar arguments for the failures in the 1980s. In essence, despite the process of micro-ordering, the state's desire for control was still central.

Renewed pressure from the World Bank and the International Monetary Fund with their Structural Adjustment Policies and call for the liberalization of the economy saw a gradual withdrawal of the state from cooperative affairs. A consequent review of the 1982 Cooperative Society Act and the enactment of the 1991 Cooperative Society Act saw higher levels of democracy and autonomy in cooperative societies¹⁰². Members could now voluntarily join a primary cooperative society, not necessarily of the same village where they lived (Yeo, 1992)¹⁰³. Meanwhile, the socialist outlook was omitted from the understanding of what cooperatives are (ibid). The registrar's role shifted from control to giving advice, promotion, and inspection (ibid). He could no longer amalgamate and divide primary cooperative societies. This could now be done on a voluntary basis subject to the interest of the respective societies. The Apex shifted meaning,

¹⁰⁰ United Republic of Tanzania (1982).

¹⁰¹ Ibid: 9

¹⁰² United Republic of Tanzania (1991).

¹⁰³ Internet document – Tanzania Affairs. See bibliography.

from being a main tool of Government control with reflections of the party organs, to becoming separate sectoral Apexes which could voluntarily join to form a National Federation¹⁰⁴. This Act was regarded by some as “an outstandingly well-written piece of legislation” (Yeo, 1992). However, it is argued that the 1991 Cooperative Societies Act was still restrictive in provisions concerning formation, constitution, registration, and operation (Lyimo, 2012: 118). The old theme of corruption of board members was still aflame, as was the problem of high-level political meddling.

In 2003 a new cooperative act was put in place, the Cooperative Societies Act 2003¹⁰⁵. The positive components of the 1991 Cooperative Societies Act of voluntary participation and democratic organization were maintained. To ease formation and registration, the so called "Pre-cooperative groups" were recognized¹⁰⁶. These were defined as organizations of an economic and social nature set up voluntarily by individuals having common interests and working together as a society¹⁰⁷. The group should be composed of at least five members, should have fewer bureaucratic measures for registration, and could operate for at least three years before transitioning into a full cooperative society. However, although this act was intended to ease the formation of cooperative societies, the Act itself was doubled-edged in this instance. This is because the number of members necessary to make up a Primary Cooperative Society was raised from at least ten in the 1991 Act to at least fifty for the 2003 Act. The formation of a full cooperative society, therefore, became more bureaucratic and complicated than before. Meanwhile, the political interference in the affairs of cooperative societies still lingered on. This led to discussions about creating a semi-autonomous body which would decouple cooperative movements from Government ministry (Maghimbi, 2010: 10).

A Presidential Order sanctioning the formation of the Commission was therefore issued on 13th January 2009 (ibid). After consultations with various stakeholders, the matter was discussed in cabinet, which accepted the new measure (ibid). The 2013 Cooperative Society Act¹⁰⁸, therefore, introduced the Tanzania Cooperative Development Commission, which is mandated to regulate and promote development of the cooperative sector. The extent to which this has been successful is yet to be evaluated as this act only came mildly into force in 2016. However, what can be said

¹⁰⁴ United Republic of Tanzania (1991: 16)

¹⁰⁵ United Republic of Tanzania (2004)

¹⁰⁶ Ibid: 10, 22

¹⁰⁷ United Republic of Tanzania (2004: 10).

¹⁰⁸ United Republic of Tanzania (2014)

at this point is that as much as the decoupling is theoretically creating more autonomy to the cooperative movement, the act might echo the 1968 and 1982 elements of high patronage. Section 91 subsection 1, for example, gives power to the registrar to direct and authorize some persons to hold an inquiry into the bylaws, activities, and financial affairs of the registered society. Nonetheless, this act also recognizes the flaw of raising the number of members of a primary cooperative society from at least 10 as it was in the 1991 Act to at least 50 as per the 2003 Act. The current number is 20 to 30 members before a cooperative society can be registered.

To sum up, the evolution of cooperative societies in Tanzania from the 1980s has been a directional trend towards democracy and autonomy. It also reflects three things: the first is the broader political transition powered by global forces which directed the state to detach itself from the civil society while encouraging more private operation of the public sectors. The second is that the subsequent changes in the formation and management of cooperative societies also reflect a shift towards micro-ordering as opposed to the historical large-scale schemes. The third is that this operation has a focus on markets, market competitions, and economic development. This neoliberal restructuring therefore led to a new understanding of what cooperative societies are. Although earlier cooperatives looked out for market opportunities as well, the neo-liberal cooperatives are neither the traditional, egalitarian, self-help groups proclaimed by Nyerere's socialist Government, nor are they a symbol of resistance against stooge chiefs, cheating traders and colonial hegemony as accurately expressed by some authors (Larson, 1976; Maguire, 1969). They are more business-oriented entities with economic gains as their major incentive. The cultural and social elements are seldom emphasized or acted upon. Essentially, in all the definitions attached to cooperative societies in Tanzania¹⁰⁹, a dominant theme is that these entities act as vehicles for material gains, modernization, and improving lives. The next section will reflect on the cooperative movement in the Kilombero area between 1980 and 2015 in relation to the above-mentioned umbrella evolution.

6.2 Remembering cooperatives in Kilombero district

The use of memory as a method of inquiry helps not only to retrieve details of past events but also to understand how people remember them. This can be used to determine the feelings and perceptions of current events in relation to the past. For memory is “one of the ways societies give meaning to the past and connect it to present experience” (Monson 2000: 350). It also helps to

¹⁰⁹ See footnote 99.

reevaluate, compliment and analyze official and written narratives of that event through lived experience (Jewsiewicki and Mudimbe 1993: 11). Therefore, in reviewing the transformations of cooperatives in the valley since the 1980s, this section will reflect on memory and narratives of local valley inhabitants in order to establish the impacts of these changes.

The policy statutes described above seemed elusive to the poor rural farmers in Kilombero, at least up until 2008/9. In most people's memories, the "days of cooperative societies", as commonly referred to in the valley, are taken to have been before the mid-1970s. Between 1980 and 2008, only a few individuals participated actively in the proceedings of cooperatives. Only very few of the respondents knew a person who had participated in one of the primary cooperative societies in the 1980s or 1990s. However, to the average smallholder farmer, farming activities and marketing experiences had been independent of cooperatives ever since their collapse in the 1970s. Nevertheless, the few who experienced them in the 1980s and 1990s have stories that reveal that these cooperatives were to a large extent intangible, or, in cases where they were perceptible, even avoided. Farmers had, essentially, lost confidence in cooperative societies, but the Government, politicians and technocrats operated oblivious to this fact. This could not be expressed more clearly than by the experience of one of the respondents who was also a former village councilor at the time of the interview¹¹⁰.

She was born in Mahenge in 1961, moved to Mahutanga village in Kilombero district in 1979, got married in 1981, and had three children by 1985. She had participated in many social, political and economic activities related to farming in the valley. She explained that since she got married she had not marketed her crops through cooperative societies but through barter trade and small markets".

"People feared that cooperatives cheated them like in the 1970s, so we didn't want to be a part of it anymore. We sold our produce ourselves and when people did not have money, we exchanged physical goods. We measured our produce in kimbo¹¹¹. This went on for about ten years before people turned to normal local markets"¹¹².

¹¹⁰ I interviewed her twice – In September 2014 and April 2015.

¹¹¹ The capacity of a Kimbo is a little more than a liter.

¹¹² This quote is taken from the interview in September 2014. Since she was very open and bitter about corruption of local councilors, she asked to remain anonymous.

This shows that despite membership of a village cooperative society being compulsory in the 1980s, people were not willing to participate in its activities. It was not only this mistrust and the aforementioned weaknesses of the 1982 Act that drove people to the periphery of cooperative activities in the valley; other factors equally weighed in.

A profound weakness of the cooperative movement in the 1980s was that the Government urged the village cooperative members to grow certain crops while neglecting others. The colonial and high-modernist ideals of monoculture farming of cash-crops remained in the policies of the new Government of Ali Hassan Mwinyi, who had succeeded Nyerere in 1985. A long-serving former Extension Officer¹¹³ explained, in one of my interviews, that the Government encouraged villages in the 1980s to grow cotton instead of rice and other food-crops. This was meant to increase money in the hands of the farmers – to create wealth. It has been established elsewhere (Beck, 1964; Futoshi, 2007; Jätzold and Baum, 1968; Kangalawe and Liwenga, 2005) and in the earlier chapters of this thesis that rice has been the main crop grown in the valley. Its cultural values, in being a major ingredient for making local brew and serving as the staple food, and its strict yearly calendar with regard to planting and harvesting would pose a challenge to growing the labor-intensive cotton crop (as in the 1930s, 1940s and 1950s). In his (Joseph Bao's) view the people in the cooperative societies (villages) of Kilombero were not interested because "most people feared that when you grow cotton, and no one buys it, it is a loss. But rice can be eaten!". He said that because of this reality, people in Ujamaa villages had abandoned cotton growing and he did not understand why Government reintroduced cotton in the 1980s.

For the few cooperatives that existed in the district, management was also a challenge. In a group interview with members of the board of one of the cooperatives in the Kilombero the claim by the Government of continued corruption in cooperatives of the 1980s and 1990s was substantiated. The cooperative in question was started as KIMBA, an acronym for Kibaoni, Kibasa and Kikwawila cooperative society¹¹⁴ in the 1970s and according to the current chairman;

"It grew big, even had tractors and a warehouse. But it also had its problems. There was misuse of funds. When cooperatives were revived, there was low participation and poor use of money. The members did not organize themselves

¹¹³ Joseph Bao, retired Agricultural Extension Officer Kilombero district. He served between 1971 and 1996. Interview held on March 9th 2015

¹¹⁴ These are village names. This reveals that limiting a primary cooperative society to a village was not strictly adhered to.

well. It eventually collapsed around 1989. In the early 1990s, the Government of Tanzania called for the reinitiating of cooperatives countrywide. That's when we started this association. We registered it on 28/03/1994. We called it Kapollo Agriculture and Marketing Primary Cooperative Society Limited (KAMCOS). Today KAMCO has 5 villages because it is a ward association. These include Kikwawila, Mbasia, Kibauni, Kilama, and Lungongole" (KAMCOS Chairman. 19/04/2015).

This excerpt, apart from revealing internal weaknesses of cooperative societies, shows when the cooperatives in the 1990s were revived in the district. Cooperative societies did not take strong root in the 1980s when they were reintroduced. The newer acts (the Cooperative Societies Act, 1991 and 2003) opened up more space for formation. In effect, a few cooperative societies cropped up between 1994 and 2007/08. Membership and activities were, however, only "on paper". Some of the cooperative society members took as long as 5 years before they could get together for a meeting and, to some, the only meeting they had was before the registration of the cooperative. These "paper cooperatives" had the hope that through such a formation, the Government would provide them with inputs and markets for their goods. When this hope was shattered, the activities of the cooperative were never started, and if they did, they were ambiguous.

At this stage of the chapter, if we link these narratives and impressions from the local smallholder farmers to the statutory evolution of cooperative societies in the country, it goes without saying that the cooperative movement was very weak. The statutes might have offered more democracy and autonomy, expanded the tier levels, and reduced Government interference compared to 1982 or the earlier years, but participation, input use, and production (our parameters to measure cooperatives as vehicles for agricultural improvement) were still low. The whole economic justification of agricultural improvement through cooperative societies was therefore not realized. As much as this general narrative guides us to understand the practical applications of cooperative societies until the years 2008/2009, it does not yet suffice as a basis upon which to arrive at conclusions unless combined with further empirical data on the internal organization and functioning of the cooperative societies in terms of participation, input use, and production. The next part of the chapter will contribute to that with a focus on cooperatives operating after 2009.

6.3 Organization and functioning of cooperative societies in Kilombero after 2009

Why the year 2009? Two reasons can be put forward for this. The first is that little empirical data, if any, on the internal organizations and functions of cooperative societies can be found for before 2010. This is mainly because only a few organizations existed then, and in those that did participation was minimal. The second reason is that the years 2008-2009 saw the beginning of a proliferation of primary agricultural cooperatives in Kilombero district. The Government had started working on an agricultural policy that actively integrated the private sector, the non-governmental organizations, and development partners. This resulted in the *Kilimo Kwanza* or “Agriculture First” policy which was launched in 2009.

The *Kilimo Kwanza* puts the private sector at the forefront of agricultural and economic growth and mandates it as the leading implementing agency. The policy aims to raise small-scale farmers into the mainstream of “modern” and commercial agricultural economy, and this includes an holistic approach to addressing the value chains of agriculture. As stated in the first chapter, this policy framework laid ground for the Southern Agricultural Growth Corridor, of which Kilombero valley was among the first three experimental sites. The idea that cooperative societies are the main vehicles for agricultural modernization fitted well with the new stakeholders. They in effect turned to supporting existing cooperative societies and to promoting the formation of new ones since the year 2009.

As new cooperative societies formed, new members joined. The general number of people joining a respective cooperative association increased in the consecutive years from when each cooperative society was formed (see table 9 below as an example). This is associated with the promises cooperative societies offered the local farmers which included the input supplies, economies of scale, and a widener market base, among others.

Table 9: Changes in number of members in 12 cooperative societies

Number	Name of primary cooperative society	Date registered	Number of members		Supporting organization
			When cooperative was started	Presently (2015)	
1	Kapollo Agricultural Marketing Primary Cooperative Society Limited (KAMCOS)	1970s/1994	65	182	
2	Mangula A Farmers' Association	1994/2007	33	107	RUDI/USAID
3	Akirigo*	1994	6	45	RUDI, USAID, SACAO, GoT
4	Katulikira Farmers' Association	2009	56	147/80 active	RUDI, NORAD
5	Chama Cha Wakulima Mchenga	2010	100	30	Nafaka, Vestfarm
6	Mkasu	2010	25	210	USAID
7	Mkoroshini	2012	38	44	Nafaka, USAID
8	Mshikamano Kikweta	2012	64	370	Nafaka, USAID
9	Lumemo A	2014	40	44	WISE
10	Jumia ya Wakulima Upendo	2014	60	60	WISE
11	Mlimani Farmers' Association	2014	60	60	WISE
12	Mkula Farmers' Association	1978	4	148	Caritas Australia, USAID, Government of Tanzania, Government of Ireland

*Akirigo is the exception. It was originally a primary cooperative society, but now functions as a Cooperative Union. To some extent, it maintains the primary cooperative society section as well.

The recent structure of primary cooperative societies is anchored on the statutory acts, especially the 2003 Act. However, the dynamics vary from cooperative to cooperative. The general structure, which I deduced from interviews with primary cooperative society leaders, was that the board is at the top followed by the executive council. The executive council includes the chairman,

the vice chairman, the treasurer, and the secretary. At a lower level are the various committees with their committee heads and members. A marketing committee and disciplinary committee are common. More established cooperative organizations have a warehouse committee and the milling committees. Some of the cooperative societies that do not possess a warehouse seasonally rent one or encourage members to store privately but market together. The committees, the executive, and the board are elected by the members of the primary cooperative society. All of these cooperatives have a demonstration plot where improved farming methods are taught and learnt. The members have the duty to participate in the activities of the cooperative, especially attending meetings, paying a fee, and being part of the demonstration farms. Given this background of the structures, we now turn to evaluate the functioning of these primary cooperative societies.

6.3.1 Levels of participation

For cooperative societies to be successful, the level of participation in cooperative activities should be adequate. This is because, as Wanyama et al. (2009: 362) contend, “Participating members tap the energies of group effort and economies of scale to engage in economic activities that they would not have otherwise been able to carry out on their own, thereby enhancing their chances of improving their living conditions”. Fischer and Qaim (2012: 1266) recently concluded in their research on smallholder farmer’s cooperatives in Kenya that it is not group membership *per se* that matters but the degree to which members participate in certain group activities. Therefore, all or most of the members of a cooperative society should get involved in the activities of the that society. Hence, to analyze the level of participation of cooperative members in Kilombero district, we need first to establish what group activities there are. All the interviews with primary cooperatives in the district revealed at least three key group activities – having a common farm, attending meetings, and storage and marketing. We shall examine these sub-parameters to determine the levels of participation.

Participating in activities of a cooperative farm (shamba la darasa).

All the primary cooperative societies affirmed that they have a common farm, or rather a demonstration farm. These farms serve to educate and sensitize farmers regarding good and improved farming methods. These range from, but are not limited to, how and when to apply chemical fertilizers, experimenting with new crops, and techniques for spacing different types of

rice crops. All members of a cooperative society must participate in these activities including clearing the plot, weeding, and harvesting. In interviews with the leaders of the 11 cooperative societies, less than 5% of the members in each cooperative society participated in such activities in the 3-year period asked about (2012-2014), and since their formation for those formed after 2012. In many cases, it was the cooperative society executives who were active in the shamba la darasa or communal farms. They reported respectively that members of the cooperative preferred to work on their own shambas other than participating in group farming. This, they argued, was because farmers did not see any direct benefit in group farming. On the other hand, members of the cooperative groups who are not in leadership positions claimed that shamba la darasa is good, but there was no need to participate all the time because it was time consuming. They “had other things to do”, as one respondent put it. This resonates with findings of cooperation in Ujamaa villages of the 1970s and settlements of the 1960s in the valley – smallholder farmers would rather apportion more labor and time to their individual farms than to cooperative farms. And since the free inputs they expected, as a benefit of belonging to a cooperative, were not delivered, they did not have much motivation to participate in their activities. They also reasoned that they already knew what would be demonstrated, or contended that what was taught was not relevant.

Participating in/attending cooperative society meetings.

The rule in many of these primary cooperatives regarding attendance of meetings was that each member must attend at least three meetings per year. The penalty for not meeting this requirement would be a fine or dismissal when this persists. The purpose of such meetings is to plan how to farm together, how to market crops, to share information on loans, and to elect leaders, among others. The protagonists for cooperatives suggest that continuous dialogue strengthened the sense of solidarity in the group. However, my interviews reveal that participation in meetings was much lower than anticipated. As much as the list of records of meetings was missing, together with leaders of the cooperative societies, we estimated that less than 30% of members of each cooperative society attended at least 3 meetings per year in 2013. Similarly, for each of the three meetings, we estimated that less than 20% of members attended. For those formed in 2014, it was only the first meeting that attracted a quorum of over 80% attendance. The subsequent two fell below 50%. In my visits to the groups, I would send information a week in advance asking for a meeting with the society members. The chairman and his committee were charged with mobilization. However, the common people who attended were members of the committee, plus

only a couple of cooperative members without management positions. This happened in October when farm activities were low; March, when they were high; and April, when they waited to start the harvest.

Participation in common storage and marketing

When one moves across the valley, one will certainly notice sign posts stressing not only the presence of a primary cooperative but what they offer as well. What becomes apparent after a couple of encounters with similar sign-posts are two services – warehouse receipt system, and milling. It also becomes clear that the need for improvement calls for better storage systems, adding value through milling in order to expand markets and attain better prices. This is of course supported by donors – an element I will return to in course of this section. But first I will examine the functioning of the storage and marketing within these primary cooperatives.

All the cooperative societies I interviewed have a marketing committee which is composed of the marketing officer and an average of four committee members. They are charged with finding a market for the produce of the cooperative society. In principle, the marketing officer and his committee members are supposed to go to bigger cities, like Dar es Salaam, Dodoma, and Morogoro to find buyers and negotiate prices. A price range is agreed upon beforehand by members of the cooperative, and this guides the negotiating process. Upon an agreement, the buyer drives to the store of the cooperative, pays the store manager, and collects his/her produce. The store manager and the finance officer convene a meeting and pay the members of the group according to the quantity of paddy/rice they stored. It is necessary to mention at this point that cooperative members bring their paddy to the stores which usually have a milling machine, the milling section mills their paddy on credit, and when the rice is bought, the milling section takes back the credit forwarded, as does the storage section. The farmer then receives his/her pay. The interviews and review of some documents from the cooperative societies revealed a general difficulty where some members of the cooperative societies were unwilling to store their paddy in the cooperative warehouse.

One example/case study will help to demonstrate the dilemma with common storage and marketing. This is from Mkasu farmers group. It was formed in 2010 under the auspices of Rural Urban Development Initiative (RUDI). In 2010 it had only 25 members, and in 2015, the number of members had grown to 210 (see table 9 above). The group started storing and marketing together in the 2011/2012 season because they could take over an old cotton ginnery in the village for a

warehouse. In the season of 2011/2012, twenty-three members of the group stored and marketed their rice through the group's store. They sold a Kilogram of rice at TSh 980. The following season, 2012/2013, twenty-four members stored and sold their paddy through the group's store. Each kilogram was sold at TSh 780. The following season 2013/2014, only fourteen members stored and sold through the cooperative society and the number dropped to nine in the season 2014/2015. I have not included the total number of people here because the secretary and chairman were not sure about the numbers. But they agreed that already by the second season (2012/2013) of operation, the number was above one hundred and as shown in the table above, the number was 210 in 2015. If we take 100 as the total number of members in the season 2012/2013 then the percentage of those who participated in storage and marketing for that season was only 24%, and for 2014/2015, it was only 7%. Interviews with other societies reveal a similar trend. Three general reasons account for this:

The first was that some farmers had to transport their paddy a long distance to the warehouse, and therefore would demand a higher price for their paddy. But if the other group members agreed on a lower price, this would not be profitable for them. Similarly, (this is the second reason), it was not easy to agree on a time to sell. Given the different needs of the cooperative society members, some preferred to sell their rice between May and July, when markets are generally vast. However, supply was also high between May and July, making prices relatively lower than in September when supply was low. Therefore, cooperative members who were not satisfied with prices set by the group stored their produce separately. Thirdly, many argued that they stored the paddy in their houses because sometimes they needed to use part of it for food or to sell the rice on a regular retail scale depending on the need. The rules of group storage did not provide for this flexibility. No one complained about the costs of storage, though, which was an affordable price of TSh 2,000 (approximately one Euro as of 2014/2015 years) per bag (size notwithstanding) per six months.

Given these reasons, it is not surprising, therefore, that all cooperative leadership interviewed complained that the rate of storage not only varies from year to year, it is also generally low. This, in the long run, increases the running cost of the store making the whole enterprise more expensive.

In a general conclusion for this section, despite the high number of membership recorded for different groups, the number of members who actively participate in shamba la darasa, cooperative society meetings, and group storage and marketing activities is generally very low.

6.3.2 Levels of input use

It has been explicitly stated in many cooperative society documents in Tanzania that a core reason for the formation of farmer cooperative societies is to increase the level of input use¹¹⁵. Organizing people into groups would ease supply and reduce costs. In a rice stakeholders meeting held in February 2015, in which I took part of as an observer and researcher, supply of inputs to farmer organizations was re-emphasized, with farmer associations affirming that they would be more active in the mobilization of association members to participate in increased input use. Supply of inputs to farmers in cooperative societies is designed in such a way that the private sector and the NGOs link cooperative society groups to private input suppliers. The rationale here is that when input suppliers have a ready market for their products and can supply in bulk, they will be willing to reduce the prices because of the reduced cost of supply. When prices are reduced, farmers are projected to buy more of the inputs. To encourage this chain of events, especially on the supply end, the NGOs (donors) give grants to agro-dealers to empower their supply capacity.

That is the basic idea, but the implementation varies amongst the NGOs. Nafaka, a USAID component of Feed the Future, for instance, uses a Village Based Agricultural Advisor (VBAA) model that link input companies to provide agro inputs to villages. Vestfarm on the other hand attempts to link and empower farmers in groups in all the value chains. They are implementing a Financial Service Platform (FinSP) which is a “digital platform through which all agricultural value chain actors can increase efficiencies and improve agricultural processes”¹¹⁶. In an interview with one of the Vestfarm’s staff, he explained that a bag of inorganic fertilizer goes for TSh 50,000 to the farmers in groups, as opposed to TSh 60,000 in the open market. The long-term plan is to link farmers to machines like tractors for plowing. By the time of the interviews, farmers were paying TSh 40,000 for a tractor to plough one acre of a shamba, but this could be cheaper. Therefore, a framework that can reduce costs of supply of inputs to farmers in groups is in place. The question remains: To what extent have these services been useful to or tapped by farmers in cooperative societies? To answer this, we can refer to the case study of Mahutanga village.

In a case study survey I carried out in Mahutanga village at the start of my research, I intended to find out what percentage of smallholder farmers are part of a farmer group, and to what extent they use inputs compare to smallholder farmers who are not part of the cooperative societies.

¹¹⁵ See United Republic of Tanzania (1991, 2004, 2014)

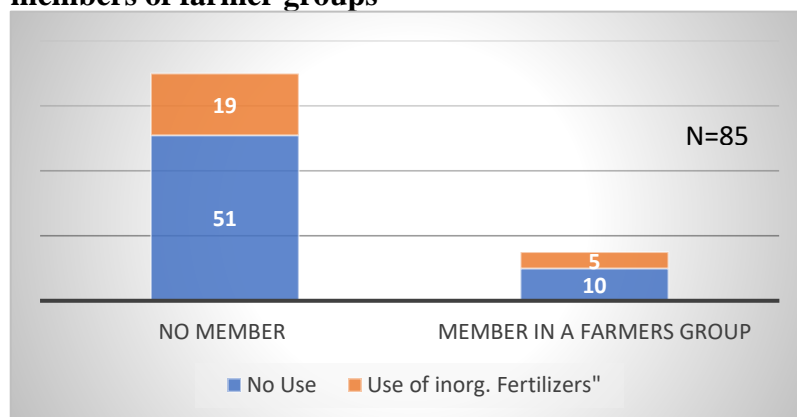
¹¹⁶ http://vestfarm.com/wordpress/?page_id=89

Preliminary interviews and observations had revealed that farmers did not use much organic manure, and those who used inorganic fertilizers did not differentiate the types in many cases. It was simply referred to as *mbolea*. Weed spray and tractors were two other common inputs. Therefore, in an effort to be precise and at the same time capture farmers' behavior regarding input use, I concentrated on inorganic fertilizers, tractors, and weed sprays. Since I was not focusing on farmers' knowledge, using the term *mbolea* to mean inorganic fertilizers usually supplied by NGOs or the private sector would suffice to explain farmer behavior. My questions in this regard, therefore, focused on knowing which farmers used *mbolea* and weed spray. In the analysis, I examined the level of inputs of individual farmers who do not belong to a cooperative society and individual farmers who belong to a cooperative society.

Results:

Fifteen members belonged to either of the two farmer groups (primary cooperative societies) within the village I conducted the survey in. Both these farmer groups were formed in 2012. My questions, therefore, tried to capture use in the past three seasons between 2012 and 2014. The survey revealed that only 28.2% of all farmers had used *mbolea* at least once in the past 3 seasons (see figure 11 below). However, of the 28%, only 20.8% were part of a farmer group, the other 79.2% being individual farmers who were not part of a farmer group. Nevertheless, the likelihood that a farmer who belonged to a group would use *mbolea* was slightly higher than that for an individual farmer who did not belong to a group, with 33.3% and 27.1% probability respectively.

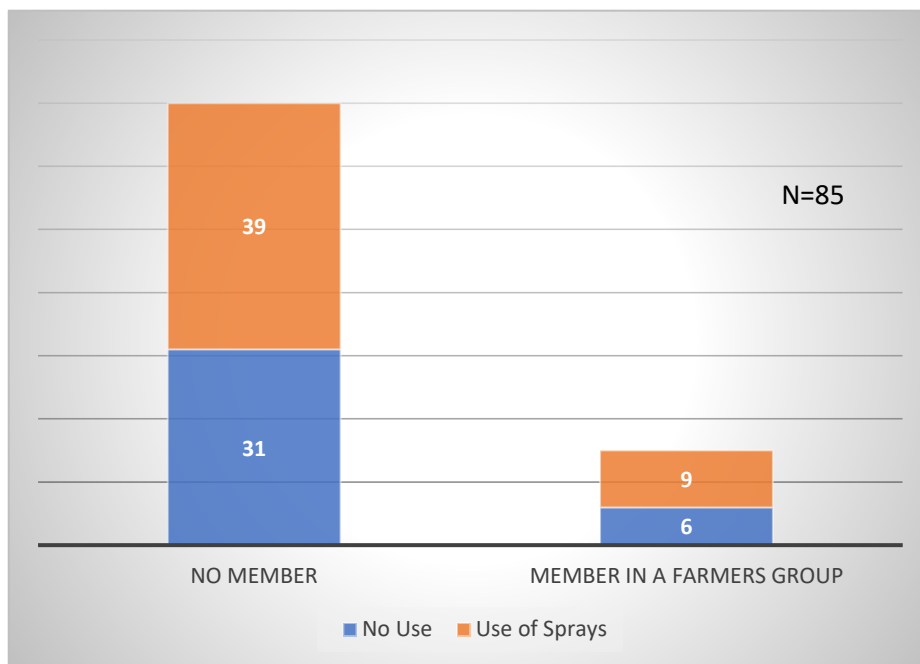
Figure 11: Use of inorganic fertilizers by members and non-members of farmer groups



Source: field survey data

On the other hand, the use of weed spray was generally higher than the use of mbolea (see figure 12 below). In total 56.5% reported to have used weed spray at least once in the past three years. Of these 81.3% were individual farmers who did not belong to a farmer group, while 18.7% were members of a farmer group. Again, the likelihood of using weed spray was higher among members of a farmer group, with 60% probability compared to 55.7% probability for individual farmers.

Figure 12: Use of weed spray by members and non-members of farmer groups



Source: field survey data

Given these results, we see a tendency that although the rate of input use is higher among individual farmers who do not belong to a cooperative group, the likelihood of use is higher among individual farmers who belong to a cooperative group. Also, the use of mbolea is generally low. In informal conversations, further interviews with farmers in cooperative societies within Mahutanga and in other villages, and with leaders of different cooperative societies in the district, I was told that only a few, if any, of the farmers applied mbolea in their private shambas. The reasons for this are because of corrupt officials, slow service delivery, and the complexities of commodity chains,

which combine to put the smallholder farmer at a disadvantage in terms of costs and gains. I discuss this in detail in the next chapter.

In conclusion, despite the efforts attempted to use cooperative societies as tools to increase input use among farmers, this goal is far from being realized. However, this should not undermine the fact that in comparison to earlier years (before 2010) the use of inputs is much higher now. There are no figures to substantiate this claim, we must rely on testimonies from farmers and interviews from district officials.

6.3.3 Output/quantity of production

If the purpose of cooperative societies is to increase production, create wealth, and improve the material wellbeing of smallholder farmers, then it is necessary to evaluate the quantity (and quality¹¹⁷) of paddy produced by the cooperative societies. This can be done in two ways. The first way would be to examine over a long period (2009-2015 for this case) the quantity of produce of individual farmers who do not belong to cooperative societies, and compare it to the production of individual farmers who belong to cooperative societies over the same period in the district. If individual farmers in cooperative societies produce more than individual farmers who are not in a cooperative society, then it would be safe to argue that the goal of increasing production is being approached. However, in the case that individual farmers who do not belong to a cooperative society produce more than those who belong to a cooperative society, then it would be safe to argue that cooperative societies do not meet the goal of increasing production. An ideal way to do this would be to get the average quantity of paddy produced per year, over several years, in the district by individual farmers who do not belong to a cooperative society and the average quantity of paddy produced in a year by individual farmers who belong to cooperative societies and compare them. The problem encountered in this method was that whereas the statistics for the total quantity of paddy produced in the previous years was available, the average individual quantity was not available since the total number of farmers was not known. The other challenge was that even if the total number of farmers were available, the total production was not separated into that from cooperative societies and that from farmers who are not part of cooperative societies. The most

¹¹⁷ I however do not have the knowledge and techniques to evaluate quality in this case. I will therefore look only at the quantity of output.

helpful cue to this evaluation could only then be got from my survey, and this brings us to the second method.

In the second method, one could get the average output of paddy in a single year by individual farmers who do not belong to a cooperative society and compare it with the average output of paddy of the same year from farmers who belong in a cooperative society in the same location (village). The case study, Mahutanga village, as indicated earlier, had two cooperative societies by the time of the survey in 2014. After a random selection of households for the survey, I posed questions in regard to quantity of paddy produced in the previous year (2013) by the selected households¹¹⁸. I considered only the previous one year because the harvest of 2014 was still ongoing in some households. Secondly, not all the households interviewed had written records of harvest, so remembering a time stretch of one year back was the most reasonable. Anything beyond that would generate more bias. In the analysis, I separated the total quantity produced by farmers belonging to cooperative societies from the total quantity produced by all in the survey. I then got, the average production of those who belonged to a cooperative society and compared it to the average quantity of those who did not belong to a cooperative society.

Results:

Total quantity of paddy produced by individual farmers who did not belong to cooperative societies (n=65, four outliers not included) = 47,390 kilograms in the year 2013. Therefore, the average quantity of paddy produced by individual farmers who did not belong to a cooperative society was 729.1 kilograms. On the other hand, the total quantity of paddy produced by farmers who belonged to cooperative societies (n=14) = 6,790 kilograms. Therefore, average quantity of paddy produced by individual farmers who belonged to a cooperative society was 485 kilograms. The results in this case study of Mahutanga village show that an individual farmer who did not belong to a cooperative society was more likely to produce almost twice as much as one who belonged to a cooperative society.

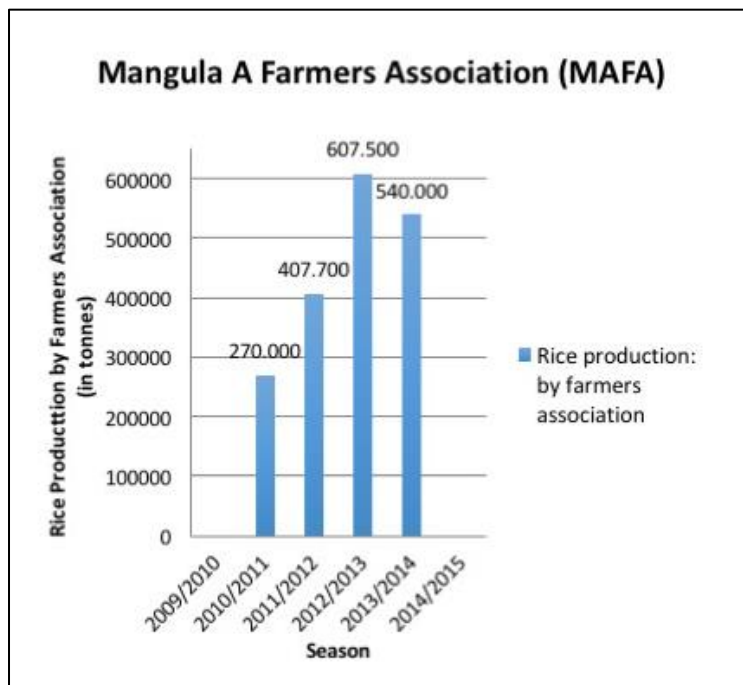
6.4 The progressive cooperatives: two case studies

Many cooperative societies did not show an increasing trend in production output over time. The two that showed increase in production, including increase in input use and marketing, had

¹¹⁸ In many cases, both household heads were present.

enormous support from donor societies. An example is Mangula A Farmers’ Association which seemed to be functioning well. This cooperative had input backing from RUDI and Vestfarm and received a grant from USAID Feed the Future initiative, to build a store. Such economic motivations backed member participation in cooperative activities. Their output is significantly higher and shows an increasing trend compared to most cooperatives in the valley (see figure 13 below).

Figure 13: Rice output from Mangula A Farmers Association



Source: field data. Mangula A record books

Similarly, Mkula Farmers’ association, one of the oldest surviving cooperatives, seemed to be flourishing from the outlook. It has up to 148 members who farm on a 100-hectare piece of land. These are aggregates of land from all the members put together side by side. In 1985, they started receiving inputs from the Government as a model scheme – and this has increased tremendously. For instance, by the time of the interview (September 2014 and again in April 2015), the cooperative was in the process of repairing their irrigation line, 2,300 meters in length at a cost of TSh 154,000,000 (77,000 Euros at the time of research) and this amount represented just part of their coffers. The former chairman of the scheme reported that they received such donations from

different organizations including Caritas Australia, USAID and Government of Tanzania among others. Members of the cooperative only provided 5% of the total cost, and this could be paid through labor contributions or contributing materials like bricks, stones, and sand. The village scheme benefits from its advantaged location – water flows down in a stream from the Udzungwa mountain range, cutting through the village and continuing to the Kilombero river (see photo 2 below).

Photo 2: Photo: A farmer showing us around the irrigation scheme of Mkula Farmers Association



Source: Innocent Mwaka. Field data.

In effect, the cooperative structures seemed to be functioning well and participation was optimum. According to the current chairman of the cooperative, members decided that they should plant the same rice variety, Salo 5, plant at the same time, and harvest in the same period as well. Productivity has expanded, as one member of the group commented: “before, we used to harvest 5 to 7 bags of paddy per hectare; now we harvest 6 to 7 tonnes per hectare”. However, both Mangula

A and Mkula cooperatives admitted that although storage was pooled, marketing of produce was still largely at individual level, since “everyone has their own problem”. Donors encourage these cooperative societies to grow the high-yielding variety, Salo 5, which the cooperatives view as a problem since buyers prefer the traditional varieties which taste better. Despite all this donor aid, these cooperatives still complained about costs of repairing infrastructure which, calls into question their sustainability.

These examples exonerate claims made by Deininger (1995: 1324) that subsidies maintain the performance of collectivities. This phenomenon is similar to that found in progressive villages in the 1960s and 1970s in Tanzania. Like Stahabu Ujamaa village of the 1970s in northern Tanzania (see Freyhold, 1979: 170-184), these cooperatives are intended to show case that collectivities work. This might be an attempt by local administrators to prove to donors that cooperative production is worthwhile so that the donations keep coming in. Or, as politicians of TANU were under pressure to show that villagization works (see Hydén, 1980; Scott, 1998), this might also indicate political pressure to prove that cooperatives work. Or it might simply be a reflection of a deep faith in organizing people into groups to realize economies of scale.

6.5 Have cooperatives in the valley met their expectations?

This chapter set out to evaluate the extent to which cooperative societies in the valley have been and are meeting both material and social goals that the Government and international organizations designed them for and proclaimed they would achieve. Cooperative society advocates contend that such organizations are the new order for agricultural development, especially in the neoliberal era (Fischer and Qaim, 2012; Wanyama et al., 2009). For instance, Wanyama et al., (2009: 375) suggest that, in many countries, neo-liberal policies might have even facilitated the “purification and revamping” of the cooperative sector in the sense that they are more productive now with higher profits. They argue that since the liberalization policies came into effect, many new cooperatives cropped up in Africa, and many of the resilient old ones reorganized themselves and adapted accordingly to international and local demands, while the few static ones collapsed (ibid: 374-375). They conclude on a positive note about the seemingly bright future of cooperative societies (ibid: 387). Their study is insightful on a macro level as it points out the differences in cooperative organizations of Anglophone and Francophone countries in Africa and the trends in the neoliberal era. However, their emphasis on numbers in terms of aggregate

increment and constitution alone at a national scale may not be reflective of micro-order dynamics of these cooperative societies. A micro-order analysis of many cooperative societies reveals the complexities associated with these bodies which require caution when adopting them. It is possible that within a given micro geographical area, cooperative societies may perform vastly differently depending on incentives, needs, and socio-economic differences, as this chapter has shown.

Following the three parameters in the analysis, it is safe to conclude that cooperative societies in Kilombero district are far from reaching their objectives. Participation in cooperative society activities, input use, and output are generally very low in relation to the efforts divulged to the movement, particularly since the year 2009, and in some cases in comparison to individual farmers who do not belong to cooperative societies. Reasons for this vary but resonate with the cooperative skeptics' critiques.

Ideally this utopian organization presumes economies of scale, promises to reduce risks, redistributes resources based on equity, and offers opportunities to adopt new technologies, among other things. The skeptics contend that the presumed economies of scale are limited in agricultural cooperative societies (Deininger, 1995: 1320-1322). Moreover, equitable distribution of risks and resources does not lead to increased production or productivity. Instead, "cooperatives do not have advantages to insure against covariate risks such as a drought, which affect production of all members equally, even if they were designed to do so, and the insurance they can provide against noncovariate risks is likely to be more costly than that to be gained by alternative social arrangements" (ibid: 1321). The cooperative movement in the Kilombero valley faces this dilemma, which reduces the need for participation in group activities.

Part of the reason for the general low levels of participation is the hopes architects of cooperative societies portray to farmers and when these hopes and promises are unfulfilled, or the message is not clearly passed, farmers tend to withdraw to their private farms. The secretary of Chama Cha Wakulima Mchenge, explained categorically that his:

"...association started with over 100 members but the numbers of members has reduced to only about 30. This is because, at the start of the association, farmers thought that they would be paid by joining the association. To their dismay, they had to contribute some money instead to be a part of the association – they fell off one by one".

This is reminiscent of Hyden's (Hydén, 1980) critique and my analysis of Ujamaa villages and villagization of the 1970s (see chapter 5 of this dissertation). Hydén (1980: 106–119) contended that since the state in the 1960s and 1970s had committed itself to providing various social services for free to the rural population, the “peasants” were not willing to replace this role with their own efforts. They entered into the Ujamaa contract with the hope of receiving even more amenities at no cost, and when these benefits seemed obscure and costs of labor and inputs increased, they turned their preferences to their private farms (ibid).

Finally, as Deininger (1995: 1321) argues, the evidence in relations to adoption of technology is scarce and mixed depending on the type of technology. It is not obvious in the valley that cooperative societies use more modern technology, let alone use it well. Related to the above quote, farmers confirmed that their assumption had been that belonging to a cooperative society would guarantee them free inputs, a hope that was easily dashed. The findings, therefore, underscore the assumption that cooperative societies are the tools for agricultural improvement in the Kilombero valley. Why, then have they persisted? The answer to this lies in the interests of strategic cooperatives/farmers, and aid saturation, and the “side effects” of cooperative societies.

The strategic-cooperatives and farmers position themselves to create the impression that the cooperative is working well. This chapter has shown how, on the one hand, some farmers created “paper cooperatives” in order to get inputs for their personal farms or businesses. On the other hand, donor aid into specific cooperative societies coupled with ecological advantages has created the impression that this type of grouping can work well, as is the case with Mkula Farmers Association and Mangula A farmers' association. But as I have argued aid only does not show that cooperatives or groupings are successful. As Hydén (1980: 112–113) concludes, such “gestures of patronage bore little relation to village capacity”; instead such aid is wasteful and is an “example of how economics is asked to feed politics...”

The “side effects” of cooperatives goes back to the beginning of the cooperative movement in the country when the colonial officials saw such organizations as an opportunity to control the rural population, monitor their production and ease the collection of taxes. The movement in the late 1940s and 1950s saw an increase in the production of cash-crops especially in the northern part of the country. In many cases cooperative societies liberated African farmers from exploitation by the Asian middlemen. The nationalist movement of TANU used this as a tool to mobilize local Tanzanians for the struggle for independence. They extended the movement beyond northern Tanzania to other rural parts of the country. The political and economic progress enjoyed by the

cooperative societies enticed the Government to make them part of the agricultural development policy in the 1960s and 1970s. Moreover, the cooperatives in the 1960s and 1970s were organized such that Government had a hand in controlling and further influencing the activities of the population. In the recent years, infrastructural benefits such as stores and milling machines donated to some cooperatives make it attractive to promote the cooperative movement by both the state and some individual farmers. Such political opportunities and infrastructural benefits have been at the forefront of re-establishing cooperative societies in the 1980s, 1990s, and in the new millennium.

7 Standardization, markets and agricultural improvement since 2008

“... attempts to positively create a market society could be as oppressive as attempts to create a planned society” (Busch, 2011: 291).

“... the conclusions that can be drawn from the failures of modern projects of social engineering are as applicable to market-driven standardization as they are to bureaucratic homogeneity” (Scott, 1998: 8).

Since 2008, there has been a rapid development and emphasis on value chain of paddy in the Kilombero valley. In tracing the persistence of value chains as a discursive practice already emphasized in the colonial, and Nyerere’s Governments, this chapter examines the socio-economic benefits of the recent applications of value chain standards in the valley. It assesses where benefits go within the value chain. And if local smallholder farmers lose out, it tries to answer the question why the state and its development partners in the neo-liberal era still emphasize the application of value chains as a way of agricultural improvement. After reviewing the renewed interests of value chains in the valley and defining the concept here, I present a biography of Ntalamu, a rice miller who owns a milling machine in Ifakara town. His story highlights the development of value-addition practices in the valley, the complexity of the process, the power relations among actors, and material gains. I will continuously use data from his milling enterprise throughout the chapter to supplement my arguments. Section three examines the transaction dynamics and value chain standards. This is done at three levels – input stage, post-harvest stage, and finally marketing and milling stage. Section four evaluates the winners and losers in the value chain, and the final section evaluates the benefits for smallholder farmers and questions the degree of inclusion and exclusion of smallholder paddy farmers in the value chain.

7.1 A renewed interest in value chain and standards in the Kilombero valley

Recent infrastructural and institutional transformations account for the new value chain standards. Government agricultural policies since the 1980s, though supporting large-scale farming, renewed the emphasis on smallholder production. The recent and over-arching strategy for economic development and poverty reduction of the Government of Tanzania is the *Klimo*

Kwanza (Agriculture First) policy. This policy, launched in 2009, aims to modernize agriculture by improving the institutional environment, strengthening the value chains, reducing transaction costs of farmers, and increasing input and output for the market (Government of Tanzania, 2013: 8; Ngaiza, 2012). It puts the private sector at the forefront of the agricultural and economic growth and mandates it as the leading implementing agency. The policy is differentiated from the past agricultural policies in that, unlike previous agricultural policies whose formulation was spearheaded by central Government, the *Kilimo Kwanza* was engineered by both the business parastatals and the central Government (Ngaiza, 2012).

A major way to articulate the *Kilimo Kwanza* policy in the valley is through the Southern Agricultural Growth Corridor of Tanzania (SAGCOT) initiative. Like other growth corridors in Africa, the SAGCOT is the new agricultural frontier made up of part of the most productive land in Tanzania. Defined broadly, the SAGCOT is “a public-private partnership explicitly designed to achieve higher rates of income growth and job creation through the development of competitive agri business value chains across the southern corridor” (Government of Tanzania, 2013: 8). It was instituted in 2010 with the aim of uplifting smallholder farmers and the rural poor into the mainstream of modern and commercial agricultural economy, which includes a holistic approach to addressing the value chains of agriculture. This involved the whole cycle including the use of inputs supplied mainly from international corporations like Yara, through international large-scale agricultural producers like Agrica, to adding value through milling and selling within and beyond Tanzania. In 2015 there are over 130 storage facilities and over 200 rice-milling machines in Kilombero district alone.

The main question that remains, and that this chapter tries to answer, is to what extent the new engagement of smallholder farmers with the recent capital markets in the valley benefits the smallholder farmers in terms of the creation of economic and social well-being. Answering this question called for an analysis of the rice value chain and standards in the valley. In a wider sense, it tracks the reasons why this value chain idea has been stable in attempts at agricultural improvement. It therefore examines its implementation, and the responses of smallholder farmers, and the reasons thereof.

7.2 Working with the concepts of value chains and standards

The concept of standards has been highlighted by several authors (Busch, 2011; Nadvi, 2008; Ponte, 2004; Ponte and Gibbon, 2005). The concept of standards, they all agree, is a complicated one to define. However, to bring meaning to it, Busch (2011: 25) describes standards variously as what “may imply that something is the best, or that it may be used as an exemplary measure or weight; or they may emphasize the moral character of someone or the superb qualities of something. Standards may also refer to rules or norms that embody the ideal or merely the average. Finally, standards may refer to tolerances permitted for both people and things. These various meanings are inextricably linked together. All say something about moral, political, economic, and technical authority”. In this myriad of intertwined but also highly differentiated meanings of standards, one element sticks out – there is an affiliation with a stance or a position. As Nadvi (2008: 325) has suggested, standards are commonly accepted benchmarks. These “benchmarks” or positions communicate information about the attributes of a product to the end users (Nadvi, 2008: 325; Ponte, 2004: 7; Ponte and Gibbon, 2005: 2). This suggests that this position is measured against other positions, which gives it its value. Put differently, “all standards standardize and all differentiate” (Busch, 2011: 151). Standards have been used to create a uniformity of products and behavior, and within the context of this uniformity we identify difference.

One of the areas where this uniformity has been recently applied is the value chain concept. In their widely cited book, Kaplinsky and Morris (2001: 4) defined value chains generally as “the full range of activities which are required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers, and final disposal after use”. Value chains are, therefore, a means of achieving certain prescribed standards. Dannenberg and Kulke (2014: 122) argue that the concept of a value chain is today used as an umbrella term that encompasses various approaches such as Commodity Chains, Commodity Networks and, popular today, Global Commodity Chains, Global Market Chains, and Global Production Networks.

These perspectives emphasize different points in examining value chains, but the relevant approach for this analysis is the Global Production Network (GPN), because it not only focuses on the horizontal linkages with actors outside the chain, but also on vertical and horizontal interdependencies in the examination of power. It particularly suffices for this analysis considering

that the SAGCOT area has many NGOs, CSOs, transnational agricultural and food companies, and development agencies who are working with farmers but are not directly involved in the value chain. Furthermore, the power differentiations between smallholder farmers, large-scale plantations, millers, traders, and the political manipulations in the valley need an approach that goes beyond the economics to include, as suggested by Uzzi (1997), the effects of power, trust, and reputation on value chain practices. However, although the literature on GPN focuses on an international or a transnational scale, this study has its focus on the national space with local, national, and international actors.

7.3 Ntalamu and his milling machine: a biography of a Kilombero rice miller

While in Ifakara in the year 2015, I met a 39-year-old man named Ntalamu. This was during my inquiries on the theme of rice mills. My research assistant and I had walked into a randomly chosen milling store on a hot February afternoon. After introducing ourselves and our purpose, Ntalamu seemed fascinated, not so much with what I was doing but with the idea that “young” as I was, I was already pursuing a PhD program, moreover at a German University. He would later introduce me to some of his peers as his new friend from Uganda, doing his “third degree” in Germany. The good relationship I developed with Ntalamu would grant me access to the record book of his milling machine, to a network of millers, and some of the traders. Meeting Ntalamu and other millers revealed, though, a stark difference in material wealth between this group and the smallholder farmers I had engaged with the months before.

Ntalamu was married and had three children by then. The family lived in a 4-bedroom house, tiled on the roof and the floors inside and situated in the outskirts of Ifakara town. The house is enclosed with high walls and has access to tap water and electricity. The compound was being constructed with stones. Although the finishing of the house was not yet complete, plastering and painting of the walls was underway. His house contrasted starkly with those of the smallholder farmers I had interviewed before in the valley. Similar modern houses filled this neighborhood. On my first visit to his house, I was let in by someone whom I later learnt was his wife’s younger cousin. She helped to take care of the children and the house. When I entered the living room, Ntalamu was seated on his sofa watching television, his radio simultaneously playing in the background. As always, he was happy to see me. He welcomed me to his home and offered me a bottle of Coca Cola and some *mandazis* (fried sweet bread locally made from coconut dough). He

proudly introduced his children to me. The oldest was encouraged to speak to me in English since she went to a competitive school where English language was introduced early compared to other schools in the valley. One of my then yet-to-be-assigned roles would be to visit the family more often and speak English with his daughter.

Over the next months of interaction, I learnt that Ntalamu had been ordinary smallholder farmer in Ifakara before turning to the milling business. He had been frustrated with the little income he got from farming. He wanted something better for himself. In 2010, he realized that he could get a loan to start up a business. This loan was part of the Government's efforts to empower smallholders to improve on their produce. He then set up a storage facility near Ifakara town. The idea at the time was to store produce since many people did not have storage facilities. After constructing the storage facility, he went ahead to install a milling machine. This is because people who stored their produce in such stores preferred stores with milling machines. It is less costly for them to store, mill, and sell in the same place. In my many visits to the milling machine and conversations with the people involved, I learnt in detail the operation of the business.

The stores and the milling machines are busy between the months of May and October. ¹¹⁹people usually start bringing their first paddy harvests to the milling machine in the month of May. There are a couple of ways in which the milling of paddy is organized. The first is that smallholder farmers who belong to a cooperative society but do not have a milling and storage facility bring their produce to one miller, and store, mill, and sell together. According to Ntalamu, he has deals with some of these groups in the valley. The second and most common is where small-scale middlemen buy paddy at the farm gates, bring it to the store and mill it at their leisure. In some cases, these small-scale middlemen are part of the milling enterprise. The third is where traders from bigger cities employ agents to buy paddy at the farm gates and store in one of their local facilities. These traders then collect the paddy and transport it to their machines in Dar es Salaam, for example. And a fourth way is the smallholder farmers coming occasionally with their own paddy in small quantities and milling it for household consumption.

Ntalamu charges an average of TSh 70 to mill a kilogram of paddy. He says the major challenge his business faces is the inability of smallholder farmers who prefer to store and mill with him to meet their initial costs. "Most farmers do not have the capacity to transport their paddy from their *shambas* or homes to the mills. They hire a vehicle to bring the paddy to my store and

¹¹⁹ Between 2014 and 2015, the exchange rate for 1 Euro ranged between TSh 2,000 to TSh 2,200.

pay the vehicle owner about TSh 2,000 per bag, plus TSh 1,500 for offloading a bag”, he says. He meets the cost of transport, storage, and milling, which he extends to the farmers as credit. This is easy to pay back when farmers sell their rice immediately, but frustrating when farmers wait too long to pay back their credit. This happens with the farmers who wait for the price of rice to go up before they can sell it.

In terms of buyers, Ntalamu explained that those trucks I saw on the way to Ifakara come mainly from the towns of Mtwara, Moshi, Dar es Salaam, Nchalinze, and Lindi. He says these buyers come only during the harvest time and, therefore, his business is limited to that season. Some of the buyers also prefer certain varieties of paddy. They prefer the “local” varieties called Zambia and Mbawombili. Other exotic varieties are not as marketable as these local ones. The buyers also buy different quantities of rice. “Sometimes you get one who buys 10 to 20 tons and sometimes you get those who buy only a few kilograms”, he says

7.4 Transaction dynamics and the value chain standards in Kilombero district

The transaction dynamics of rice in the valley are numerous and complex. However, for the purposes of analysis, these can be categorized into three major stages of the value chain. The first is at the input stage; the second, at the post-harvest and paddy-trade stage; and the third at the milling and marketing stage. These stages have been discussed in the previous chapter but with cooperative societies as the focus. This section will bring the value chain standard into focus and expand the analysis to include smallholder farmers in the valley who do not belong to cooperative societies. The value chain stages offer a means to analyze not only the economic transactions but also elements of power, value, and embeddedness as complex horizontal and vertical relationships of actors within and outside the chain, as suggested by the Global Network Approach (see Dannenberg and Kulke, 2014; Trienekens, 2011). This will provide the basis upon which to evaluate the position of the valley’s smallholder farmers in the value chain, and assess how they benefit or lose out from such agricultural improvement policies.

7.4.1 Input stage: smallholder farmers and adoption of farm standards in Kilombero

The next couple of paragraphs will reflect on the attempts to provide input resources and disseminate knowledge on modern farming to the smallholder farmers. It will examine the success

of such attempts. This reflection is based on the practices observed in the valley during my field research.

Fertilizer, weed spray and improved seed varieties inputs

The use of fertilizer and weed spray was occasional in Kilombero district before 2009. One smallholder farmer reported that the Government started supplying them with fertilizer and weed spray subsidies in 2009¹²⁰. Before that, only a few people had bought such inputs from the shops in Ifakara. Another smallholder farmer agrees with this assertion but adds with disappointment that the provision of these subsidies is sporadic and uncertain¹²¹. A third smallholder farmer, who agrees with the above two, adds that, “the problem is that they [input subsidies] are still expensive!”¹²² These sample answers affirm the recent period in which such inputs became available in the valley and summarize the attitudes of many smallholder farmers towards these inputs – that they are needed but are irregular, and that their costs can include or exclude smallholders from accessing them. In a similar tone, the District Statistics Officer of Kilombero, as one of my expert interviewees, indicated that the program to provide fertilizer and weed spray inputs in the district started between 2007 and 2009. He regretted that, “availability does not necessarily mean use”. He indicated that there were supplies still stuck in the Government stores because of bureaucracy, and that because supply to the farmers is irregular, they tend not to use it but rather resell it. To put these challenges into perspective, I will start by examining the strategies to provide such inputs to the farmers and the practicalities of such strategies.

To increase availability and use of fertilizer and weed sprays to the smallholder farmers in the Kilombero valley, the Government of Tanzania through the SAGCOT programs designed some input flow systems. One, as shown in the previous chapter, was working with NGOs to enable access to inputs by farmer collectivities. Where smallholder farmers did not belong to a farmers association, another input flow system with two strategies was designed. In the first strategy, the central Government, through the regional Government, provided material subsidies in terms of fertilizers and pesticides to the local Government in Kilombero. The local Government in turn forwarded this to the village council. The village council then called for a meeting and apportioned

¹²⁰ Interview carried out on 04/10/2014

¹²¹ Interview carried out on 02/10/2014

¹²² Interview carried out on 03/10/2014

the inputs to the farmers. In the second strategy, the Government used private input retailers to provide these inputs to the farmers through a system of invoicing, locally referred to as – *vocha* or “voucher”. In this instance, the farmers are given coupons which are equivalent to a subsidy. If a bag of fertilizer goes for TSh 60,000 in the market, the coupon may have a value of TSh 25,000 meaning the farmer should pay only about 58% of the total amount. The farmer goes with this voucher to the input provider (retailer) who in turn gives him or her the input. The retailer takes this voucher back to the Government with the cost supplied and gets refunded.

However, some bureaucratic challenges arise from these two strategies. A general and genuine complaint hinted at above and reverberated throughout the interviews was that farmers who do receive fertilizer input get them late. One interviewee in Mahutanga village lamented

“we get inputs very late. Sometimes we start planting in January, but the inputs come in March or April when the crops are already grown, and the yield is low. Sometimes they are even destroyed already”¹²³.

In the interview referred to earlier, with the District Statistics Officer, he mentioned that there are mainly two types of input fertilizers provided by the Government to the farmers. The first is *Minyangu Mazau* which is applied during planting, and the second is urea, applied after germination. However, he admits that due to the bureaucracy, these inputs reach the farmers at the wrong time. Eventually, the few recipients resell their inputs to private distributors (shop owners) in Ifakara.

The bureaucratic challenges are augmented by mismanagement of the whole process. One of the interviewees, who had also been part of the village councilor for 5 years, complained about her former colleagues who had been inconsiderate of the plight of smallholder farmers. She narrated that leaders in the village registered beneficiaries in the process of applying for the right quantity of fertilizer inputs that the village needed. The higher the number of beneficiaries, the higher the quantity the village would get from the Government. In this registration process, the supposed beneficiaries are told to append their signatures as a sign that they would use the inputs well. Instead, these village leaders would later use such signatures to account to the Government for the fertilizers supplied. When the fertilizer finally reached the village council stores, almost all of it was sold to the private distributors in Ifakara. This has become endemic to the extent that some

¹²³ Interview carried out on 26/09/2014

farmers do not bother anymore to try to get fertilizer inputs. One example is the disappointment expressed by Pius Ngamesho, one of the smallholder farmers I interviewed. He said:

“The plan of the Government is to help the poor. But the businessmen come and buy everything and resell it in the market. Our names are listed but we do not get anything. The community leaders just take advantage of the poor people and use everything”¹²⁴.

In the end, the number of people using fertilizer inputs, let alone using them regularly and sufficiently, is far below expectation.

Closely related to the above is the use of improved seed varieties and planting techniques. The planners of the SAGCOT intend to increase the use of improved seed varieties to maximize yields and production. The provision of improved seed varieties follows the above criteria described for inorganic fertilizer inputs. My observations and interviews in the valley reveal that only a few people use improved seed varieties for similar reasons explained above for the case of inorganic fertilizer inputs. However, those who used the improved seeds applied only to part of the *shamba*. The reasons for not using at all or using them in only part of the *shamba*, apart from the bureaucratic reasons and access reasons indicated above, lie in the characteristics of the available improved varieties and the costs.

Some of the farmers admitted that they did not plant improved varieties because they required intensification which was costly. For instance, the woman in the picture below (photo 3) said she would need to hire two workers to plant half an acre on time. But each laborer would demand TSh 60,000. She would then need to buy fertilizer inputs, which would cost TSh 100,000. “The rest, I would leave to nature” she commented. If it did not flood, she would get back her investment, but that was not for certain. If it flooded and her *shamba* was destroyed, she said her life would be worse because the creditors would “not give her breathing space”¹²⁵. However, in other cases, farmers did not like the improved seeds¹²⁶ because the stalks broke with floods or the seeds were fragile and cracked easily, making them unmarketable. Therefore, allocating only a fraction of one’s *shamba* to the improved variety of paddy was a strategy employed to minimize risks and uncertainty.

¹²⁴ Interview carried out on 27/09/2014

¹²⁵ As translated by my research assistant

¹²⁶ The most common high yielding variety provided to the farmers is the paddy hybrid seed variety Saro 5 TDX306.

Photo 3: A farmer showing me around part of her shamba that is intensively cultivated



Source: Innocent Mwaka. Field data.

Extension services

The Government of Tanzania has encouraged the services of extension workers and the training smallholder of farmers to ensure appropriate use of inputs and application of farming techniques. To estimate their impact, I asked smallholder farmers, in the case study of Mahutanga village, if they had heard of and used extension services in the past 10 years (2005-2014). If they did use them, the follow-up questions asked about the frequency and the types of services they received. And if they did not use them, I probed as to the reasons why. The results indicated that 17% of the 94 respondents interviewed worked with extension workers, while 71% did not (see table 10 below).

Table 10: Use of extension services between 2005 and 2014

Value	Number of cases	Frequency (%)
NA	10	10.6
Yes	16	17.0
No	67	71.3
Sometimes	1	1.1

Source: field work survey

In the interviews within Mahutanga and in other villages (Mofu, Idete, Katulikira; Namawala, Michenga, Kikwawila, Kiberege, Mkasu, Mangula A, and Mbingu), farmers complained that they had not seen any extension worker, or that it had taken up to 3 years before they saw one. One of the elderly farmers commented that “in the colonial period, extension workers came to the *shambas* to advice people on how to plant but today, they only stay in their offices”. In my analysis, I amalgamated some quotes from the free responses to this question.

Report F: Extension Services. Q. 64. Free responses.

I have not seen any extension worker myself but I heard that they are there.

I heard that they work with groups but me, I didn't join any group

They only come during flood years

We don't care about them so I don't know

We have shamba la darasa where they come and teach us how to cultivate

Fishing extension workers come to teach us how to fish

Fishing officers come and educate us

There is only one extension officer who comes to groups

I know that the extension workers are present but we don't know how to get them

I want to use them but we don't have them in the village

No extension officer since the year 2000

They come but do not provide any services to us

There are no extension workers

We last saw an agricultural extension officer three years ago

These testimonies and the table above reveal that only a few farmers use extension services. For those who have worked with extension workers, the frequency with which they do so tends to be low. Some affirm to have last seen an extension worker 3 or more years prior to the interview in July 2014. From these results, we can surmise that the effectiveness of extension services in the valley is far below optimal. Even for those who have regular or irregular contact with the extension workers, it is still not guaranteed that they will take up their advice. As one farmer commented, “the problem is that we are poor, so we cannot follow advice from extension workers”¹²⁷.

These challenges to input use are compounded in some years by floods, which destroy a large portion of their crops. Eventually, smallholder farmers remain in a weak position to participate in the value chain. To substantiate this, the case study survey examined the quantity of paddy harvested in 2013 by the smallholder farmers in Mahutanga village, and, from that harvest, the quantity sold (see table 11 and table 12 below).

Table 11: Quantity of paddy produced and sold for the year 2013

Year /2013	Mean	Standard Deviation	N	Minimum	Maximum
Paddy harvested (kg)	823.32	893.18	82	22	5,500
Paddy sold (kg)	429.62	576.40	66	30	3,300
Total value of paddy sold (TSh.)	163,677.96	122,010.24	59	10,000	500,000

Source: field work survey¹²⁸

¹²⁷ *ibid*

¹²⁸ By the time of the interviews, July and August 2014, all the paddy from the year 2013 had been sold.

The results show a low output for the year, but a high participation in selling paddy. As I will show in the next subsection, these smallholder farmers only seldom participate in the paddy processing activities.

7.4.2 Post-harvest trade stage: smallholder farmers, middlemen and selling paddy

While collecting this data, I observed many middlemen¹²⁹ going to farm gates and homes in small tractor engines with a wagon, to buy paddy. This is what prompted me in the first place to include questions on trade and marketing in the survey questionnaire. A general question to check market behavior tendency was posed. The answers showed a general tendency of farmers to engaging in selling their crops after harvest (see table 12 below).

Table 12: Report B. Q51. Do you sell your crops? Where N=94

Value	No. of cases	Percentage	Cumulative Percentage
NA	10	10.6	10.6
Yes	71	75.6	86.2
No	2	2.1	88.3
Sometimes	11	11.7	100.0

Source: field work survey

The next point of interest would be the state in which the crop is sold. In my survey, all individual households who sold their produce for that year (2013) sold it as paddy. They either sold it at the *shamba* or from their homes. This finding resonates with that of Nkuba et al. (2016: 80) who found out that 93% rice farmers in Mkula and Komtonga villages, found in Kilombero and Mvomero districts respectively, sold their produce as paddy at the farm gate. For the Kilombero valley, the main reason that smallholder farmers sell their produce as paddy at the farm gate is because then they do not have to transport the paddy themselves to the milling machines since this process is costly. Further analysis of this point follows in the section on inclusion and exclusion (see below).

Small quantities (ranging from 10kgs to 200kgs of paddy) are bought, and after enough has been collected to fill the small wagon, it is transported to the milling machine and either sold

¹²⁹ I refer to them as middlemen because they buy paddy from the producers in small quantities and bring it to the millers.

to the miller or only stored, milled, and sold by the middleman to a buyer, who may come from within or beyond the valley. In some cases, mill owners have their own employees who perform the activities of middlemen, except that the paddy eventually belongs to the mill owner. In 2013, the farmers sold their paddy at an average of TSh 380 per kilogram, and earned an average of only TSh 164,000 for the year. We shall compare this to the millers in the next section.

7.4.3 Milling and marketing stage: middlemen, millers, and traders

Scenarios for transactions

Milling and trading paddy becomes complex when it leaves the producers. There are at least 5 general actors and at least 8 general ways in which these transactions take place. The first is a transaction between the miller and the middleman; the second is between the miller and the trader; the third between the miller and the retailers, the fourth between the middleman and the trader via the miller, and the fifth is between the middleman and the retailer. The sixth is between the individual smallholder farmers and traders, the seventh between individual smallholder farmers and millers, and the eighth between individual smallholder farmers and retailers. I have not included cooperatives here since I have discussed them in the previous chapter. Let us briefly consider the activities of each of the actors and the categories of transactions at this stage of the value chain in the following paragraphs. This can be explained with reference to 4 scenarios:

In the first scenario, the middleman brings the paddy to the miller (in cases where they are not employed by the miller) where they may sell the paddy to the miller. It is, however, rare that the miller will buy from the middleman since it is easier to store and mill the middleman's paddy than buy it. In case the miller buys the paddy, he owns, mills, and sells it at his convenience. However, the common case is that the middleman sells his rice to the traders from the bigger cities or to retailers. Here, the miller only stores and mills the paddy. Consider the story of Mohammed Mutawira:

“We do not buy the paddy ourselves but rather store and process and help linking rice owners to the buyers. When the buyers come from outside of Kilombero, they meet with the rice owners, negotiate the price and the transaction takes

place. I have some regular buyers but every year there are new buyers who come in but they are not regular".¹³⁰

A kilogram of paddy is milled at a cost ranging between TSh 65 to TSh 75 per kilogram depending on the year and the grade. In the years 2014 and 2015 when I conducted my field, the average milling price was TSh 70 per kilogram of paddy. In some cases, the middleman negotiates the price with the buyer in advance before milling, and when a price is agreed upon, the paddy is milled, and the trader comes and picks it up. In other cases, the middleman sells to retailers in Kilombero district.

In a second scenario, individual farmers bring all or part of their paddy to the miller (this is also very rare and none of my respondents did it for the 2013 harvest) but do not sell it to him. In this case, they may store their paddy with the miller until the market price is right, then mill it and sell the rice either to retailers or to the bulk traders. In other cases, they bring the paddy to the miller and mill it right away and then seek buyers who are either retailers or bulk traders. I was told by the millers that only farmers who have large harvests might do this do this.

A third scenario is where the millers buy the paddy from individual farmers through his employee middlemen. These millers then store the paddy and mill it after a negotiation with their customers, who are usually large traders from outside the valley. Many of the millers negotiate prices before hand by telephone communication with these traders. Like Mohammed Mutawira quoted above, many of the millers have regular bulk buyers who make buying contracts with them every season.

A fourth scenario is where the traders and exporters in Dar es Salaam bypass parts of the value chain by having their agents in the Kilombero valley. These agents buy the paddy from smallholder farmers and store it in one of their stores in the valley before transporting it to Dar es Salaam for milling, packaging, and retailing or exporting. During data collection, I gained access to the record books of one of the associations of traders and buyers in Dar es Salaam, called Tandika. I could extract the daily reception of paddy brought to their Kiberege store from the months of January 2014 to April 2015. They collected a total of 12,802 bags of paddy.

¹³⁰ Interview with Mohammed Mutawira. Mill Owner. March 2015

Valuing and pricing rice at the mills

Valuing and pricing of rice after milling in Kilombero takes mainly two ways. The first depends on the time of the season and the second, the grading. Observations, interviews and data from milling companies show that milling of paddy is highest in the months of May to September. The quantity then reduces for the rest of the year. Where supply is high, price of paddy is low, and so is the relative¹³¹ price of milled rice. In cases where actors selling rice or paddy at this stage of the value chain prefer higher prices, the paddy will be stored until the market price rises, usually after October. It is then milled and sold off at a higher price.

The second way rice gains value is through grading. There are two types of milling machines in the Kilombero district – one that grades the rice into three grades (first, second, and third) and one that does not (see photo 4 below).

Photo 4: Grader (left) and non-grader (right) milling machines



Source: Innocent Mwaka. Field data.

When the rice is graded, the different grades are sold at different prices. The first-grade rice is sold at between TSh 1,400 and TSh 1,700 per kilograms, the second-grade rice is sold at between TSh 1,200 and TSh 1,500 while the third-grade rice is sold at between TSh 800 and TSh 1,000 per kilogram¹³². The first-grade rice is usually transported and sold to retailers in Dar es Salaam. The second grade is sold to retailers at the local markets, while the third grade (usually broken rice

¹³¹ Relative because this depends on the grade of the rice as well.

¹³² This depends on the time of the year and the supply. For example, the price of first grade rice ranges from TSh 1,400 in times of abundance (May – September) to TSh 1,700 in times of scarcity.

grains) is fed to domestic animals and birds or sold locally to the poor. The last two grades are often retailed next to the milling machines, stores and the local market areas.

The transaction dynamics in the value chain described above merely guide us in understanding the relationships between the actors in the value chain. They also reflect how Government institutions shape such relations, especially at the input stage. As much as such reflections are valuable in understanding the horizontal and vertical relationships of actors in the value chain, a deeper analysis of, not only the economics, but also power, trust, and reputation, as suggested by Uzzi (1997), are necessary in understanding the impacts on such relationships. The question of who benefits from such relationships then arises. The next section will attempt such an analysis to answer such a question before drawing a conclusion to the chapter.

7.5 Winners and losers in the value chain: Positioning benefits for smallholder farmers in Kilombero

Agricultural policies in Tanzania seek ways of improving the material well-being of smallholder farmers. Integrating smallholder farmers into the value chain is, therefore, argued to achieve this goal (Biénabe et al., 2011; Ngaiza, 2012; SAGCOT, 2013). The section above has, however, shown the difficulties in integrating farmers and their full and consistent participation in the value chain. This consequently has an impact on the degree of accumulation between the different actors. I will briefly discuss two examples in relation to this. The first is the diametrical difference in benefits seen between the millers and the smallholder producers, and the second is the indebtedness of smallholder out-grower farmers because of their contracts with the Kilombero Plantation Limited.

In the first example, I analyzed from the survey, the output and benefits from paddy for the year 2013 for the smallholder farmers in Mahutanga village and compared this with benefits from Ntalamu's mill for the same period. Ntalamu provided me with access to his milling record book, from which I could extract the number of people bringing their paddy to his mill, the quantity of paddy they brought, and the value Ntalamu received from milling the paddy. Since Ntalamu's milling machine is a single grader, problems of evaluating prices per grade were minimized. Ntalamu also did not buy the paddy but only milled and stored it, and connected the sellers to buyers. The results show that in the year 2013, he milled 568,654 kilograms of paddy, and received a gross monetary return of 38,256,290 Tanzania shillings (see table 13 below).

Table 13: Quantity of paddy brought and milled in Ntalamu's rice mill for seasons 2013-2014 and 2014-2015

Season 2013-2014

Month	Number of people	Number of bags brought to the mill	Quantity in kilograms	Value in Tanzania shillings	Comment
May	7	67	5,852	349,000	
June	52	659.5	55,351	2,569,340	
July	102	997.5	69,848	4,889,340	
August	96	923	94,846	6,639,220	
September	26	216.5	17,040	1,009,200	Transformer broke down
October	97	1,179.5	107,278	7,509,460	
November	87	1,201	108,590	7,601,300	
December	93	1,233	109,849	7,689,430	
January	80	1,223.5	63,003	4,410,210	
February	39	689.5	58,110	4,067,700	
March	22	766	63,711	4,814,900	
April	8	372	32,293	2,260,514	

Season 2014-2015

May	1	8	707	56,500	
June	36	357	31,005	2,170,400	
July	56	608	47,174	3,302,180	
August	112	1,513.5	141,113	9,877,910	
September	87	1,364	133,170	9,321,950	
October	47	907.5	76,377	5,346,400	
November	58	800	62,285	4,360,000	
December	58	607	49,574	3,470,200	
January	47	476.5	38,391	2,687,420	
February	18	422.5	33,601	2,352,070	
March	10	268	22,776	1,594,320	

Source: field data – Ntalamu's record books

This, compared to local smallholder farmers, is a substantial difference. A local smallholder farmer from Mahutanga in 2014 sold on average 429 kilograms of paddy for TSh 380 per kilogram. Their average return was TSh 163,677. With such returns from the milling business, it is no surprise that Ntalamu (described above) seemed materially comfortable while for most smallholder farmers, their material gain and wellbeing has not improved with the proliferation of milling machines and the campaign for value addition.

On the other hand, contract farming in the valley has had its detriments as well. It has been argued that one strategy to achieve integration of smallholder farmers into the value chain is through contract farming (Dannenberg and Kulke, 2014: 123). Contract farming means “a system of vertical coordination between grower and buyer, where the buyer, commonly a private retail or agri-business firm, can specify or control the conditions of production through contractual obligations” (Little and Watts 1994, cited in Vicol, 2014: 143). The power that the contracting firm has over control of production might, however, reinforce the disadvantaged position of the poor smallholder farmers. The second example demonstrates such reinforcements. It is taken from the research by the Oakland Institute which was carried out between 2012 and 2014. Their report (The Oakland Institute, 2015) shows how attempts to integrate smallholder farmers into the value chain has led to the indebtedness of such farmers. The case covers only the farmers living around, and working as out-growers for, the Kilombero Plantation Limited (KPL).

The KPL is a large-scale rice-farming subsidiary business of the Agrica¹³³. It farms on the 5,818 Ha Mngeta farm, which was formerly a North Korean and Government of Tanzania initiative to improve agriculture through mechanized large-scale farms, but which collapsed in the early 1990s¹³⁴ (see also The Oakland Institute, 2015: 7). According to an interview¹³⁵ with Carter Coleman, Founder and CEO of KPL, Agrica took over the land in 2006 and started work in the valley soon afterwards. Agrica, through their KPL project, embarked on a modern large-scale, mechanized rice production both for national supply and for export. According to their website¹³⁶, Agrica was awarded the National Strategic Investor status by the Government of Tanzania in the year 2010. The following year, they became the show-case project for the SAGCOT.

One of the aims of KPL, as stated on the Agrica website¹³⁷, is to transform an innovative smallholder technology to boost food security. One of the ways they do this is through out-grower schemes. In a discussion with an official from the USAID project Nafaka, he explained that the idea of out-growers is that smallholder farmers living around the KPL plantation grow their own paddy and sell it to KPL. In this way, a ready market is available, and this is supposed to encourage high production and better quality. KPL has, over the years partnered with many organizations and

¹³³ <http://www.agrica.com/html/project1.html>

¹³⁴ See interview with Carter Coleman, founder and CEO of KPL. <https://www.farmlandgrab.org/post/view/24987-interview-with-carter-coleman-founder-and-ceo-of-kilombero-plantation-limited-kpl>

¹³⁵ <http://www.africaag.org/2015/06/08/interview-with-carter-coleman-founder-ceo-of-kilombero-plantation-ltd-kpl/>

¹³⁶ <http://www.agrica.com/html/background.html>

¹³⁷ <http://www.agrica.com/indexflash.html>

funding agencies, including the United States Agency for International Development (USAID), to train smallholder farmers in the System for Rice Intensification (SRI), and with Yara, a Norwegian fertilizer company, for input supply, specifically inorganic fertilizers (The Oakland Institute, 2015: 18). In a featured BBC report¹³⁸ in 2014, KPL was praised for their transformative impact on smallholder rice production and social responsibility. However, the Oakland Institute report of 2015 reveals a desperate situation for the smallholder farmers living in and around KPL.

The report found out that ways in which integration of smallholder out-growers into the value chain was attempted were in many cases damaging to their livelihoods. For instance, after the training of farmers in SRI, KPL worked with micro-finance institutions in the valley to extended credit to the farmers to buy inputs. Many of the smallholder farmers welcomed this strategy and signed up for the credit. KPL, knowing that agriculture is usually a risky investment, rightly sought measures not only to ensure that the farmers would benefit from the project, but also that they would not default on their loans. The measure arrived at, however, restricted farmer innovation, local knowledge, expertise and flexibility. On the one hand, the measure was part of the contract that those who received the credit from this project would apply modern farming methods (The Oakland Institute, 2015: 18). On the other hand, to reduce risks of default, the financial institutions designed a 10-stage loan-repayment strategy. Of the TSh 400,000 advanced, the first instalment of TSh 15,000 was already demanded already only 2 weeks after receiving the loan (ibid). This 2-weekly demand of loan repayment would go on for the subsequent 5 months and farmers complained about the short durations of repayment (ibid). In 2013, the debt burden was made worse when, as the CEO of KPL Carter Coleman describes “with no forewarning or consultation with producers or consultation with the East-African community, the Tanzanian government allowed 80,000 tons of Pakistani rice to be imported exempt from the common external tariff of the East-African community. First the wholesale price of rice plunged 54 % in Tanzania. Then Uganda, Rwanda and Burundi, which are key export markets for Tanzania’s surplus imposed the common external tariff on all Tanzania rice. It was a major double blow that destroyed the domestic market and the export market”¹³⁹. The effect was that farmers were underpaid. Some farmers claim that KPL paid them only TSh 3,000 per *debe* (20kg)¹⁴⁰ instead of the TSh 6,000 in the contract, while

¹³⁸ <http://www.bbc.com/news/business-26191078>

¹³⁹ See interview: <https://www.farmlandgrab.org/post/view/24987-interview-with-carter-coleman-founder-and-ceo-of-kilombero-plantation-limited-kpl>

¹⁴⁰ The respondents in the Oakland Institute research claim that a *debe* is 20 kilograms of paddy, while in a response to the report, the KPL CEO Carter Coleman disputes this quantity claiming that a *debe* is 13.5 kilograms of

KPL maintains that despite the fall in the market price, they still paid the farmers the TSh 6,000 stipulated in the contract (The Oakland Institute, 2015: 18).

What is fascinating about these figures (considering my analysis in the above section) is that smallholder farmers elsewhere were paid an average of TSh 380 per kilogram of paddy. Even when KPL would have paid their out-growers TSh 6,000 per *debe*, that would only amount to TSh 300 per kilogram. Even before the cost of inputs are factored in, this does not improve the life of the smallholder farmer. A selection of testimonies from some of the out-grower farmers interviewed by the Oakland Institute show a situation that they described as worse than before they became caught in the contract. Consider these examples:

“I was just about able to clear my debt to KPL, but when I had repaid everything I remained with no rice and no money. I even had to use some of the rice I had saved for food to pay back the loan. So in order to feed my children I was forced to earn additional income on the side by selling some small things I make.” November 2 2014 (The Oakland Institute, 2015: 19)

“If a person is not able to repay his debt, then KPL informs the MFI [Micro-Finance Institution]. Then they [the MFI] will come and take his belongings, like his bed, bicycles, and mattress, anything of value. Many people here have suffered from this situation. Some people have even been forced to sell their house.” November 3, 2014 (ibid: 19-20)

“Before I entered into the outgrower scheme, my life was not very easy, but it was ok. After joining the scheme, my situation became much harder. It was stressful to think about the loan and about not being able to get enough harvest. I was not free.” November 2, 2014 (ibid: 20).

The report was taken as an accusation of hypocrisy on the part of Agrica and their funding partners. It drew critical and heated reactions from the CEO and founder of Agrica¹⁴¹ and from

paddy. See

[https://www.oaklandinstitute.org/sites/oaklandinstitute.org/files/Agrica's Response to Oakland Institute Green peace Africa-May-29-2015.pdf](https://www.oaklandinstitute.org/sites/oaklandinstitute.org/files/Agrica's%20Response%20to%20Oakland%20Institute%20Green%20peace%20Africa-May-29-2015.pdf)

¹⁴¹ see

[https://www.oaklandinstitute.org/sites/oaklandinstitute.org/files/Agrica%27s Response to Oakland Institute Greenpeace Africa-May-29-2015.pdf](https://www.oaklandinstitute.org/sites/oaklandinstitute.org/files/Agrica%27s%20Response%20to%20Oakland%20Institute%20Greenpeace%20Africa-May-29-2015.pdf)

Norfund¹⁴², a partner of the project. Despite their views on the validity of the data and the integrity of either side, all parties agree on the indebtedness of the out-grower farmers. Some of the smallholder farmers therefore resolved to simply quit the scheme. For instance, one of the responses in the interview from the Oakland Institute was:

“When I realized that taking part in this brought me more costs than benefits, I decided to quit. In fact, I gave them more than what I got back. It is much better to work by yourself than to be working for thieves. That is what they are”

November 3, 2014 (The Oakland Institute, 2015: 20)

Similar findings have been reflected elsewhere. In his research in a rural village in India, Vicol (2014: 146) argues that contract farming reinforced the disadvantaged position of the poor, minimally improved that of the middle-income group, and only benefited a small group of farmers who already owned more land, could afford wage labor, and were economically better off than other farmers before the scheme began.

7.6 Inclusion and exclusion of Kilombero smallholder farmers in the value chain: final thoughts

The stories of Ntalamu and many other millers reveal a concentration of benefits in the value chain to the millers while the stories of many of the smallholder farmers reveal continuous deficiency and in some cases exploitation. Ntalamu, who joined the milling business, might be able to afford to live in a permanent house in comparative luxury, while Ibrahim Mpunda and many others who have farmed all their lives cannot afford what the policy makers promised them – wealth. The report from the Oklahoma Institute reveals a worse-off state for some of the farmers than before the institution of contract farming by the KPL. The question that arises here is how value chain standards have failed to benefit the primary producers while supporting the millers and large-scale farmers. The answer lies within the arguments of power, economies of scale and the levels of participation.

Power can be used to position a farm to negotiate for greater benefits from the policy side. This power is, however, usually relative to the size of the farm. Johnson and Ruttan (1994: 693)

¹⁴² The internet link to Norfund’s response cannot be found anymore (16/03/2017) but the English translation can be found here <https://mikaelbergius.wordpress.com/2015/06/29/norfund-response-to-recent-report-by-the-oakland-institute/>

have argued that because of “pecuniary economies and policy distortions”, large-scale farms often enjoy external economies of scale where such farms “experience advantages in terms of access to inputs, credit, services, storage facilities, or marketing and distribution opportunities relative to smaller farms”. Since such farms are driven by profit maximization, such advantages may lead to the neglect of smallholder farmers living around the farm, or even to their exploitation. The example of KPL and their out-growers could not make this point much clearer. KPL has attracted partner investors like Norfund, Capricon, and AgriDev and has influenced policy in their favor.

Likewise, the arguments for value addition lie in the idea that higher-value products will attract greater benefits. As much as this claim might be true, the dynamics of value addition may not support those farmers who are not in a good bargaining position. In the Kilombero valley, the position of weakness of smallholder farmers is disadvantageous to them in two ways. Firstly, they may not be able to afford the inputs in the open markets to boost their production for the market standards. Secondly, even when subsidies are provided, smallholder farmers lose out in the corruption activities of the channels of input supplies. And if they do receive a fraction of it, the application is poor since the extension services are grossly inefficient. This enhances their weak position such that the quality of their produce does not attract much financial benefits. Those individual farmers in the valley who attempt to engage in modern input use as required may not enjoy economies of scale in sectors like transportation and storage infrastructure, eventually turning back to selling paddy. Traders heighten the cost of hiring a truck for transportation of paddy to the mill. It is then only logical that the farmers in the valley sell their produce as paddy at the farm gate or from their homes. The consequence is that due to the nature of their produce, their bargaining power remains minimal compared to that of the traders or the processors. However, if their cost of production has been much higher because they borrowed or bought fertilizer inputs, it will render their profits, if any, much lower and/or their debts much higher. For the subsequent farming season, the likelihood of farmers reverting to their “traditional” farming methods is high. These dynamics maintain a cycle of weakness for the smallholder farmers.

Ultimately, the draw-backs for smallholder farmers in the valley affect their continued participation in the value chain, and in the worst cases, may lead to an outright rejection of the attempted improvement. The reasons farmers gave in the interviews for not participating in input use or for not milling their paddy before they would sell was (respectively) that they did not realize the increased production from input use, nor did they realize profits from processing their paddy. It was more beneficial to broadcast their rice during planting and to sell it as paddy than to intensify

production and process the paddy into rice. In the cases of some of the out-growers, they promised themselves they would not engage in input credit and the marketing chain anymore since this had left them in a worse state than before they engaged in such activities.

These reasons can be summarized in the debates on why smallholder farmers lose out in the value chain. It is argued that downstream lead firms coordinate and control upstream suppliers through standardization of products, centralized procurement, and specialized wholesalers, in the process defining the relations in the chain (see Neilson and Pritchard, 2009). This process of control also excludes the smallholder farmers either because they cannot meet the required standards or because the actors higher in the chain take up the value chain activities from the farm gate. This is possible because smallholder farmers usually cannot afford the capital required to perform activities throughout the chain. It is further argued that even when the smallholder farmers manage to gain access to capital inputs such as the required technology, financial capital and organization, they cannot avoid getting exploited and excluded because the higher cost of land and labor efficiency of small production no longer gives them a comparative advantage (Bienabe et al. 2007, cited in Neilson and Pritchard, 2009: 188). The next chapter expounds on this dilemma by demonstrating how the SAGCOT has led to expulsion and land grab, further alienating the farmers it is supposed to assist.

The question that essentially comes up is that if the value chain is not benefiting smallholder farmers, why is it continuously pursued by Government agricultural improvement policies? The answers to this can be found, as with the other discursive practices, in side effects of value chain projects and the depoliticized bureaucratic intervention of value chain projects. The promises of subsidized inputs create an impression of Government support which might be useful to the political leaders when campaigning for votes. They also create the right impression for the donor communities involved in the input supply. Moreover, infrastructural supply of milling machines is commended by farmers, millers, and the state alike. And finally, as already extensively discussed above, there are logical reasons to believe that value addition and commodity chains expand marketability of crops, which in turn would lead farmers out of poverty. This sustains the idea of value chaining in agricultural development, not only in the valley but in Tanzania as a whole.

8 Contested areas, evictions and agricultural improvement?

“Why are you asking about conflicts with pastoralists? The main conflicts that we see every day are actually among farmers themselves. That is what you should be asking me. Those are the cases village leaders are trying to resolve daily. This is more urgent than conflicts with pastoralists”. Interview with a farmer in Mahutanga village. February 2015.

In the recent 2 decades, conservation and large-scale farming have been reemphasized in the agricultural development discourse in the Kilombero valley by the state and its development partners. However, the state is also interested in promoting smallholder farming. This chapter explores the implementation of policies that seem contradictory because both large-scale farming and conservation require big areas of land but with increasing population in the valley, arable areas are continuously constricted. In the past 15 years however, there has been cases of expulsion of smallholders to give way for large-scale farming and conservation. The chapter therefore, traces the reasons for the persistence of large-scale farming and conservation as discursive practices. I use field observations, documents got from local officials, and narratives of and interviews with smallholder groups who face compulsion. I also refer to secondary data on the topic. The compulsion of pastoralists in the valley in 2012 was highly documented in the media, thus I review media discourses on the subject.

The next section, therefore, introduces the discourses and narratives that triggered the expulsions. Section two examines the conflicts. Section three forms a discussion situating the problem within the context of land area constriction. Finally, the fourth section outlines a conclusion.

8.1 Political discourses and public validations – narratives and policy actions in the valley

In his inaugural speech to parliament in December 2005, the then newly elected president of Tanzania, Jakaya Kikwete, laid out his plan for pastoral production and modernization. He is quoted as saying:

“... we must modernize animal husbandry. We will have no alternative. We must abandon nomadic pastoralism which makes the whole country pastureland...The

cattle are bony and the pastoralists are sacks of skeletons. We cannot move forward with this type of pastoralism in the twenty first century” (Ndaskoi 2011: 4, cited in, Maganga et al., 2016: 16)

He went on to direct Government officials across the country to resettle pastoralists and their livestock from the water catchments in order to save the environment from abuse (Nindi et al., 2014: 175). The president later commented that:

“I am committed to taking unpopular steps in order to protect the environment for the benefit of the nation and future generations” (The Guardian, March 2, 2006, cited in PINGO's Forum, n.d.: 5)

The threats and directives from the president set forth a policy direction which called for the “sedentarization” of pastoralists so that they could be turned into modern livestock keepers (see IWGIA report, 2016). In 2006, the Government passed the National Livestock Policy, which plans a “commercially run, modern and sustainable livestock sector using improved highly productive livestock to ensure food security by 2055” (The United Republic of Tanzania, 2006: 1). Such policy directions would soon after take the form of evictions in the name of conservation and agricultural improvement. There are four main arguments propagated to justify the threats of evictions, or the actual evictions, of pastoralists within Tanzania. Two of these arguments are reflected in the president’s speeches quoted above. The first is the narrative that pastoralists degrade the environment through their activities of extensive grazing. The second is that the pastoral way of life (nomadic and transhumance) is unproductive because it is extensive. A third argument, which is not reflected in the quotes above, but which became a dominant narrative for many politicians in the valley, is that pastoralists cause conflicts with their settled agricultural counterparts. It is claimed, as we shall see below, that they (pastoralists) invaded the land of “peace-loving progressive farmers” who were then only prompted to return the favor (see similar arguments in Benjaminsen et al., 2011; Maganga et al., 2007). The fourth argument is the autochthony debate. Many of the pastoralists evicted are regarded as “outsiders” or “visitors”, and therefore, have no right to own or use certain spaces unless such rights are granted to them by the “indigenous” or “autochthonous” owners. However, the autochthony argument is used less by the so-called indigenous inhabitants of the valley than by the political figures from regional and national offices. These four arguments have been variously applied within the Kilombero valley since 2006.

In April 2006, the then vice president directed the pastoralists settled in the Kilombero valley flood plains to leave voluntarily or face forceful eviction (Nindi et al., 2014: 175–176). Although similar demands and directives had culminated quickly into evictions in other parts of the country, (eg in Kilosa and Nsungu plains) it would take five to seven more years before they would be implemented in Kilombero valley. Nevertheless, between 2006 and 2012, there were increased threats from the national to the local levels. Important Government ministries propagated the arguments outlined above and took up the policy directives to plan and implement the evictions. Kasumi, writing for The Citizen Newspaper, for example, reported that:

“Recently, the minister for Natural Resources and Tourism, Mr Ezekiel Maige, and the minister responsible for Environment in the Vice President's Office (VPO), Dr Terezya Luoga, urged Kilombero valley pastoralists to abide by the directive of moving out of the wetlands with their cattle. The minister was quoted by the press as saying that the pastoralists who keep large numbers of livestock in the wetlands of Kilombero were doing so illegally. He said the government would not tolerate their defiance because it was causing unnecessary land disputes. For his part, the minister for environment said the pastoralists have been degrading the environment, stressing, therefore, that the directive must be obeyed. The ministers who went to Ulanga District to settle land disputes between pastoralists and farmers said that the Vice-President's directive was still intact” (Kasumuni, 2012)¹⁴³.

Such rhetoric had already been picked up at the local district level and was being viciously fed to the public. What was prominent at the local district level was the emphasis that pastoralists were outsiders in the valley. The Acting District Director Freddy Eliasaph was a master-mind of the autochthony argument. In the News outlet, Tanzania Daily News, a reporter stated that:

The Acting District Executive Director Freddy Eliasaph conceded that pastoralist are a big problem that seems to be growing out of hand ... partly due to the manner in which the pastoralists arrive into the district. “They come from different directions walking with their large herds through the bush; they don't

¹⁴³ Newspaper and news outlet captions and reports in this chapter do not have page numbers because they were got from their online archives which do not indicate the page numbers.

use any road or known path. Others transport their herds in trucks during the night... While the powers that be continue to turn a blind eye to what is happening in Kilombero valley, the indigenous farmers and fishers who have always cared for the environment continue to suffer from humiliation and loss of livelihoods. With the continued destruction of natural resources, these people will sink deeper into poverty” (Mfugale, 2011).

Mr. Eliasaph was particularly emphatic that the pastoralists should leave the valley. He continued raging about the destruction of natural resources going on in the district, commenting that if nothing was done “we should put a maximum of 10 years as remaining lifespan of the Kilombero valley and its unique resources” (Mfugale, 2011). In some cases, the reporter, Deo Mfugale exaggerated the situation, or added dramatic conclusions. The caption below from the PINGO's Forum (n.d.: 8–9) explains just that:

Box 1

Deo Mfugale wrote a 2-part story in the State-owned Daily News captioned “Death of Kilombero Valley is coming.” He wrote, “*The Acting Kilombero District Executive Director, Freddy Eliasaph puts ten years as the minimum remaining life of Kilombero Valley. District Wildlife Officer, Madaraka Amani, thinks there are only five years left for the unique natural resources which are endemic to the district to disappear.*” He further wrote that their team “concluded that it will take just about three years before almost all unique natural resources disappear [in the Kilombero Valley].” Mfugale then cleared his chest making a slip of tongue when he wrote, “*It doesn't matter whether these predictions are correct or not*” (Daily News [Dar es Salaam] September 20, 2011).

Such narratives were the mainstream public discourse of pastoralism in the valley. Eventually, actual steps towards the expulsion of pastoralists and farmers started. In 2010, the Government embarked on programs to sensitize the people living in the valley about the importance of conservation and the necessity of land-use planning. Afterwards, there were joint community and Government endeavors to demarcated areas for conservation and draw land-use plans. However, as we shall see in the arguments below, the beacons marking boundaries were later shifted by the Wildlife Division without the knowledge of the local village population. At a similar

time, branding of pastoralists' cattle began. The logic here was to ration the number of cattle per household through a quota system. The cattle that were not branded were supposed to be evicted. And again, as we shall see below, the process was marred by corruption. In 2011, the Government gave permission to the local Governments in the valley to evict the pastoralists. It was reported in The Citizen news media that:

“The government has directed the Kilombero District administration to evict all pastoralists who invaded the area with large herds of cattle. However, during the exercise the district should leave pastoralists who were living in the district legally, but target those who have encroached farming areas. This was said in the Parliament yesterday by the deputy minister in the Prime Minister's Office in charge of Regional Administration and Local Governments, Mr Aggrey Mwanri, when reacting to supplementary questions from Dr Getrude Lwakatare (Special Seats-CCM)” (Chidawali, 2011).

On December 7, 2011, the Kilombero district council ordered fishermen to stop fishing in the Kilombero river for 6 months. Lilian Lucas, reporting for The Citizen new wrote that the council also demanded that pastoralists remove their cattle from the Kilombero river since they led to the destruction of the breeding grounds of the fish (Lucas, 2011). Such threats of expulsion continued through to 2012 (see table 14 below). By September 2012, ultimatums were being set. The Tanzania Daily News, for instance, reported that:

“MORE than 2,000 illegal pastoralists and fishermen in Kilombero Valley in Morogoro Region now face forceful eviction come next Saturday which is an extension of another order that wanted them relocate on their own by last Friday. The move comes as an implementation of a number of government directives in the past that called for intruders in the internationally recognized valley to find their way out of the place in order to save the area from environmental destruction and abuse” (Rugonzibwa, 2012).

Table 14: Timeline over evictions in Operation Save Kilombero Valley, 2010-2013

Adapted from IWGIA report (2016: 48)

2010	March	Boundary beacons set for Ramsar site in collaboration between WD and communities.
2012	March	Regional Commissioner starts to “sensitize” people to leave Kilombero Valley. 17 March – eight unarmed men shot at by PDF in Ulanga District. Five of the men die.
	August	14 Aug. Decision to remove people from Kilombero Valley reached in Ifakara. WD moves Ramsar boundary beacons without agreement of villages. Village leaders report illegal boundary changes to Ulanga and Kilombero DCs.
	September	Pastoralists pay to have cattle officially branded, having been promised that only unmarked livestock will be evicted from the villages. Fact-finding mission comprised of CSOs and journalists visits the Kilombero Valley.
	October	30 Oct - Operation Save Kilombero Valley is launched by RC Evictions start 31 Oct – 2,023 pastoralists from 51 villages file case 212 of 2012 against the evictions.
	November	11-15 November – CSOs and journalists go on another fact-finding mission to investigate reports of legal and human rights violations in the conduct of Operation Save Kilombero 12 November – Three unarmed men are shot by police in Kilombero District during forced evictions. One of the men dies 20 November – the High Court issues a court injunction against the evictions.
	November-December	Evictions continue: burning of houses, impoundment, theft and forced sale of livestock, extortion, corruption and shootings.
	December	19 December – High court issues summons to Morogoro RC, Kilombero and Ulanga DCs, plus four police officers, to answer charges of contempt of court. Parliament orders evictions to stop but evictions continue.
2013	January	31 January - One unarmed man shot and killed in Ulanga District 31 January - Evictions officially halted.
	Ongoing November	Government agents reportedly continue to harass pastoralists and extort money from them.
2014-2015	June 2014-May 2015	Reports of evicted pastoralists returning to the valley.

The major evictions were carried out between September 2012 and January 2013 under the code name *Operation Save Kilombero Valley*. It is reported that the Government employed game rangers and the army to help with the evictions (PINGO's Forum, n.d.: 12)

In a nutshell, the events describe above had one purpose: to get rid of pastoralists from the valley. And yet, as I will show below, the arguments accorded to justify the evictions were unfounded.

8.2 Agro-pastoral conflicts in the Kilombero valley – myths and realities

An orthodox narrative among politicians, the media, and some smallholder farmers is that the valley is historically solely a crop-cultivation area – pastoralists, hence, only arrived in recently. Thus, the claims of environmental degradation and the recent “surge in conflicts” is correlated with the recent influx of animals into the valley. However, the arguments about the former absence of pastoralism in the valley might be as exaggerated just as the narratives about the surge in agro-pastoral conflicts have been. This section will examine these two possibilities, starting with a review of literature on pastoralism in the valley and then weighing in on the intensity of the conflicts in the recent period.

There are several indications that pastoralism formed a major livelihood strategy among the valley inhabitants at the beginning of the 20th century, and in some areas up to the 1950s. Dr. Stolowsky, who traversed the valley in the 1890s, was impressed by the “splendid looking herd of cattle which thrives marvelously” in the valley (Kjekshus, 1977: 60). The Culwicks, using oral history and observations, described how the Ubena were first pastoral migrants before transforming into agro-pastoralists and eventually just farmers (Culwick and Culwick, 1935: 26). They supposed this transformation to be induced by the tse-tse and trypanosomiasis prevalence, in the valley which must have made it hard work to engage in extensive livestock keeping. However, the presence of the Ubena in the valley acculturated other non-pastoral groups into the pastoral ways of life. Fülleborn (1906: 564), for instance, suggested that the Ndamba, who had previously predominantly fished for a living, adopted pastoralism around the turn of the 20th century when they encountered the Wabena. Beyond the Wabena and Wandamba, other “tribal groupings” within the valley have been identified with pastoralism to a greater or lesser extent in the 20th century.

Although the turn of the 20th century saw a significant reduction in the number of animals in the valley (Culwick and Culwick, 1935; Fülleborn, 1906), extensive cattle production persisted

there throughout the colonial period. The British colonial administration carried out a stock census in the valley in 1927. In this census, the Wapogoro, who numbered about 49,468, were found to possess 872 goats, 56 sheep and 51 heads of cattle. The Wabunga who had a population of 13,854 had 756 goats, 167 sheep, and 206 heads of cattle. The Wabena, who numbered no more than 12,998, had 163 goats, 84 sheep and 376 heads of cattle. The Wangoni, whose population was 3,284, and the Wangindo, who numbered 4,427, had a total of 61 goats and only 4 sheep¹⁴⁴.

Even though Jätzold and Baum (1968: 67) suggested that because of the trypanosomiasis epidemic, it was only the Ngoni who managed to keep cattle in the valley until 1945 and goats until 1955, they reported the presence of at least 2,000 heads of cattle, mainly in the Biro-Ngombo area, in the valley in the 1960s. They further observed and described the pastoral behavior of the Wandamba in the 1960s, confirming prevalent pastoral activities. They wrote that:

“The skills in cattle raising acquired by the Ndamba in the last 5 decades is reflected above all in their highly developed methods. We find a form of communal herding: several cattle owners, usually related, combine their animals to form a sizable herd, which has to be tended for a certain time by each of them in turn. In this way, the herds are made up to an economic average size of 20–100 head. Still more interesting is the system of boarding out livestock. Farmers from neighbouring areas infested with tse-tse flies lodge their livestock with relatives or acquaintances in the open flood grassland, giving them every second or third calf in return. This is customary among the Bena of the Utegule district in particular. As an old cattle-rearing tribe, they were thus able to retain the possession of cattle, which carry a great deal of prestige value, even after their migration to the lowlands” (Jätzold and Baum, 1968: 69).

The archival literature is, however, scanty on the development of animal husbandry in the valley. This might be because the focus of the colonialists was on promoting rice and cotton cultivation as opposed to the problematic trypanosomiasis-prone animals. However, there is no evidence that point to the presence of livestock, or the lack of it in the valley during the period from the 1970s to the early 1980s. Some Maasai pastoralists I talked to however, claimed to have come

¹⁴⁴ TNA. District Office Mahenge. No.2. Human population census was taken in April 1928 while the animal population census was taken in October 1927.

to the valley in the 1980s and 1990s. Like in the 1960s, they have since traded their products with farmers.

By the time of data collection for this research, the predominant cattle keepers in Kilombero district were the Maasai, the Barabaig, and the Sukuma. Their total population in 2012 (before the eviction exercise) was 3,431 people, which is 0.8% of the total population of 407,880 people in Kilombero district¹⁴⁵. The total number of cattle possessed in the same year was 53, 697¹⁴⁶ (see table 15 below). That would be an average of 16 cattle per individual pastoralists.

Table 15: Number of livestock branded in Kilombero district between August and October 2012

Area	No.	Ward	No.	Village	Number of Livestock keepers	Total number of cattle branded
Kidatu	1	Kidatu	1	Msolwa St.	24	432
Mang'ula	2	Kiberege	2	Kiberege	34	810
			3	Signal	67	1,935
			4	Sagamaganga	58	1,230
Ifakara	3	Kibaoni	5	Lungongole	43	1,999
			6	Kikwawila	17	432
	4	Lumemo	7	Mahutanga	12	841
			8	Ihanga	34	791
	5	Idete	9	Namawala	133	4,292
			10	Miwangani	38	1,342
			11	Kisegese	44	174
			12	Idete (Magereza)	13	229

¹⁴⁵ The statistics for the population of people in the valley are from the National Census of 2012. The total number of pastoralists and the numbers of animals are from the District Livestock Office. I am indebted to Elia Shemtoi, the District Livestock Officer, Kilombero, for providing me with the statistics.

¹⁴⁶ This number could be much smaller. The numbers are from a time when the urge to evict pastoralists from the valley was at its peak.

Table 15: continuation

Area	No.	Ward	No.	Village	Number of Livestock keepers	Total number of cattle branded
Mngeta	6	Mofu	13	Mofu	65	3,518
			14	Ikwambi	94	696
	7	Mbingu	15	Mbingu	212	650
			16	Ngajengwa	19	411
			17	Igima	158	453
	8	Mchombe	18	Mkangawalo	173	2,937
			19	Lukolongo	92	4,085
			20	Mngeta	62	1,696
			21	Njage	144	0
			22	Mchombe	418	0
	9	Chita	23	Ikule	81	219
			24	Merera	201	6,484
			25	Chita	132	1,223
			26	Udagaji	8	42
Mlimba	10	Mlimba	27	Kalengakelo	158	3,443
			28	Msolwa	103	1,642
			29	Chisano	53	2,219
			30	Mwembeni	236	3,031
	11	Utengule	31	Utengule	79	972
			32	Mpanga	190	2,828
			33	Ngalimila	236	2,073
12	Uchindile	34	Uchindile		568	

Source: field work – unpublished documents from the Kilombero District Livestock Offices¹⁴⁷

¹⁴⁷ Elia Shemtoi indicated to me that all the animals in the valley were branded before the evictions took place. This might explain why pastoralists complained that despite their animals being branded, they were still confiscated, contradicting the Government agreement that only non-branded animals would be confiscated.

Several interviews with the pastoral groups and farmers reveal that the pastoralists and the agro-pastoralists moved to inner Kilombero in the last 30 to 40 years. Their movement was such that they entered the valley from the Western and North-Western routes and settled mainly in Mbingu and Mofu areas, which are in the western part of Kilombero district. With time, sections (the younger boys and their families) of the groups moved eastwards towards Ifakara because of outbreaks of animal diseases (mostly foot-and-mouth disease) in the flood-prone western part of the district. The problem of disease was intensified when conservation areas expanded, thereby constricting space for grazing. The following quote reveals a general story of their recent migration:

“You see, when our parents first came here, they settled in Mofu, Itete and Mbingu. But those areas get flooded easily and the spread of cattle disease is easy. And 10 years ago, Ramsar came in. We had nowhere to graze. We kept on coming eastwards and gradually the first people reached Mahutanga and Ifakara around 2008. So we moved here to Ifakara. Not all of us. Mostly the children moved here. It was to create space and also to control disease” (Interview with Maasai pastoralists August 2014).

This quote not only sums up the recent pastoral movement into the valley but also leads us to the second goal of this section – examining the agro-pastoral conflicts. Two related issues form the basis for the conflict. The first is animal disease, and the second a constricted space for grazing.

According to the Maasai pastoralists, the recent expansion of the Ramsar conservation area which enforced the Game Protection Areas along the Kilombero river constricted the space for grazing. This increased the chances that animals would contract foot-and-mouth disease. Subsequent activities, thereafter, were intended to escape the disease and continue to access water and food for the animals. During such attempts, they crossed over to farmers’ shambas which raised tensions and conflicts between the two groups. The farmers complained that the pastoralists destroyed their crops, while the pastoralists claimed that they only extended their grazing to shambas after all the rice had been harvested. They admitted that when they looked for new paths to the rivers and streams, sometimes, although rarely, one or two of their cattle strayed onto the farmers’ shambas. But they claimed this was an innocent mistake. A Maasai pastoralist in Mahutanga village reflected in an interview that:

“When we came here, this place was empty. The farmers did not want to use it. It was abandoned. You see, they said it is far away from their homes and it is not good for agriculture. We didn’t want land for agriculture but for grazing our cattle. Here we found this empty land and settled in it. We did not disturb anybody and nobody disturbed us. If we wanted water, we went to the river Kilombero. Then a few years ago, the farmers became jealous. They started claiming this land saying it is theirs and for their ancestors. That is when the problems started. They told us that if we wanted this land we had to rent it from them. We took the case to the district but they supported them. They did not support us. So we started to rent the land. Then they said our cattle destroyed their crops. But that is not true. I mean sometimes yes but we try to avoid that. You see, we used to go to the river and also go on the other side of the village. Then Ramsar came and stopped us. They said we cannot go to that area because it is now a reserve. So sometimes we pass near their shambas but we try to control our animals. We mostly pass there after the harvest but the farmers still complain. They want money. They stop us and we go to the village council. They usually charge us a lot of money. This is not fair” (September 2014).

The pastoralists also claimed that the violence associated with them is unfounded. They claimed that they did not beat anyone up, as the district officials and media had suggested. In one of the group interviews, one Maasai in the group said:

“The Maasai try to be peaceful. We are visitors here so there is no use to fight. When our cattle destroy people’s shambas, it is a mistake and we pay a fine for that. I know of only a few cases when our cattle destroyed part of the shambas of the neighbors. But we also had to pay a fine. The violent people are the Sukumas. They have many cattle and when their animals destroy the crops of the farmers, they tell them that it was the Maasai not the Sukuma. You see the Sukuma want a lot of land because they also plant maize. So they take their cattle to the shambas and when the farmers try to confront them, they fight them instead. That is not good but that is what they do” (September 2014).

Getting an interview with the Sukuma was, however, not easy. In the first attempts, my assistant and I were turned away. We first approached the area where we were told the Sukuma people lived in October 2014. This was south of Mahutanga village and bordering a Maasai area to the east. Compared to the central part of the village, this area was flat, with a few trees randomly distributed across the landscape. The dry season was closing in so our small scooter was able to raise a little dust. It was evident that, like the area the Maasai occupied, this place was marginal. As the Maasai had explained, farmers did not want this area. On approaching the village, we found mostly women and children, just like in our first attempts to reach the Maasai. But unlike in the case of the Maasai, where some men eventually came to meet us, here we were told to return another day. When we returned, we found only one man who investigated us and our intentions for about half an hour before he asked us to organize a group discussion. This he insisted should be organized by the village leaders. When we were finally able to have the group discussion, the following year in March, only 10 people showed up, and only two of them were women. In the discussions, only one person talked back. Efforts to engage everybody in the discussions were futile, as they had agreed beforehand that one person would represent their views. The information we got from them was similar to that we got from the Maasai only this time the blame for violence was deflected back to the Maasai. Subsequent attempts to reach Sukuma pastoralists were also futile.

The blame traded between different groups of pastoralists can be seen in two lights. In the first, if it was true that both sides' involvement in the conflicts was limited, then it was the political discourse of conflict in the valley that might have driven pastoralists and the agro-pastoralists to blame each other. The second explanation would be that the blames were traded because it was easy to blame the other group and claim innocence. It was therefore only paramount to get the perspective of what the state had labelled the "victims" – the farmers.

There were two major reactions from farmers regarding this conflict. In the first, farmers claimed that pastoralists were destroying their crops, were aggressive people, and did not belong to the valley. The narratives were similar to the national political discourse discussed in the previous section. In the second reaction (which was even some present in people who responded that pastoralists were "bad people"), the farmers could not recall any major conflicts with pastoralists, and if they did, these were uncommon. In an interview about the incidences of the conflicts, the secretary to the village council to Mahutanga village even claimed that such conflicts have been rare. He said:

“Instead, we cooperate a lot with the pastoralists. For example, they sell to us milk every morning and it is much cheaper than when you buy it from Ifakara. They even sell their meat to us but that is not so much. We do not have any problems with the pastoralists” (Secretary Village Council, Mahutanga. 26 March 2015).

The pastoralists agreed that they trade with the farmers. In a group interview with Maasai pastoralists, one of them stated that: “They sell us paddy and maize and we sell them milk. It is in most cases a good relationship”. This resonates with the claims from Jätzold and Baum (1968: 70) about how Ndamba pastoralists in the valley traded their milk, local butter (*Samli*) and meat with non-pastoral groups. In the present day, this cooperation is not limited to exchange of food stuffs. A big part of this relationship is anchored on rent. When the village members reclaimed their land from the pastoralists, the pastoralists were inclined to rent the land from the farmers. This compromise seems to make both parties happy since the farmers make money from rent and the Sukumas and, recently, Maasai cultivate rice and maize on the land. Such forms of cooperation are, however, not mentioned in the political discourses about agro-pastoral conflicts in the valley.

This section does not intend to deny the presence of agro-pastoral conflicts in the valley. Instead, it confirms that the incidences of such conflicts might have increased, but not for the same reasons that the state gives. There are indications that pastoralism existed to varying degrees in the valley before, during, and after colonial rule. And the tendencies at these different times were towards cooperation other than conflict. However, when the state expanded the conservation area by demarcating part of the valley as a protected Ramsar site, reports of increasing conflicts emerged. But what is also revealed is that the conflicts between the pastoralists and farmers might be exaggerated or even misunderstood. The quote at the top of this chapter was from a post-interview conversation with one of the farmers. In a series of repetitions intended as a form of emphasis, he said: “it is true that we have occasionally had conflicts with pastoralists. But this is not greater than the conflicts that we have with fellow farmers. Go to the fields right now and ask about conflicts with farmers. There are many boundary conflicts”. This was confirmed by the village leader, although he did not have figures to back it up. He mentioned that there are more incidences of farmer-farmer conflict than agro-pastoral conflicts. I did not investigate conflicts between farmers though.

The question that arises then is why the Government and the local media maintain narratives of the “evil pastoralist” who must leave the valley at all costs. I argued at the beginning of the chapter that this is to meet two salient interests of the state and those with whom they worked. The first interest is related to the need to gain and enclose space for conservation, and the second, to gaining and enclosing space for modernized agriculture through large-scale farming. The next section attempts to substantiate this claim.

8.3 Land, water, and enclosures in the valley: a brief overview

Compulsion and displacement for agricultural improvement and conservation in the Kilombero valley should be placed in the context of a general analysis of land and property rights as these have been manipulated, misconstrued or ignored to deny smallholder farmers of ownership or use-rights, hence causing or intensifying contestations over space. Questions of how economic development, in general, and particularly development in agriculture, can be achieved in Africa have long leaned towards questions of property and how property can be converted to capital. In a vastly agricultural continent, the major property referred to by the colonialists, post-colonial Government and donor communities, is land. Past and present debates on land as property rests on the nature of rights over such property. This debate, if not cyclic, is at times polarized.

Peters (2013: 539-540) has argued that the understanding of what property in many African societies means has been misunderstood, first by the colonial Governments then by the post-colonial states. The translation of property in the colonial period, she argues, rested on an evolutionary understanding in which communal¹⁴⁸ property was placed at the beginning of an evolution towards individual property rights (ibid). Marking individual property rights by creating enclosures and titling them was (and still is, implicitly) assumed to be the basis for economic development because, they are assumed to encourage investment in land, offer security and can be used as collateral (IBRD, 1961 emphasis added; Peters, 2009, 2013). It was thus concluded that for modernization of agriculture to be achieved, communal and customary land rights should be converted to individual rights. Although this was not carried out by the colonial administrations for fear of losing control over land and its occupants, many post-colonial regimes, with the backing of the World Bank, embarked on a land titling process between the 1960s and 1980s. The results,

¹⁴⁸ Communal or customary tenure she argues is a making of tenure system by people from outside specific parts of Africa who assumed that land tenure systems were undifferentiated across the continent.

however, revealed that individual rights and titling did not necessarily create an investment in land, did not guarantee the use of property as collateral for loans, and did not increase productivity (see Peters, 2013: 541 for this debate and references). Instead, proponents of customary tenure suggested that customary land ownership was already embedded within rights that included the possibility of transferring property in terms of rent, sale, or as a gift (ibid). They also concluded that customary tenure did not necessarily hinder investment in land and that titling led to the dispossession of the poor of their land (ibid).

However, although many African states recognized customary tenure, the development nexus implicitly encouraged private land formalization. The new impetus towards development combined with research that showed increasing land conflicts, inequalities, transfers, and individual claims have reignited debates on formalization of individual land rights (see, for instance, Anseeuw and Alden, 2010; Maganga et al., 2016). The protagonists maintain that securing individual property right would encourage investment in, and would reduce conflict over land, in the face of population growth (Deininger, 2003: 36), or as Feder et al. (1988: 103) concluded in their research in Thailand, farmers with security of ownership and titling of land have a greater likelihood of land improvement. Similarly, they argued that productivity is greater on titled land with more secure ownership because such farmers would have more access to institutional credit with benefits such as economies of scale for inputs (ibid). But recent antagonists to these propositions maintain that formalizing individual rights does not increase investment in land, and neither does it increase productivity or guarantee credit (Bromley, 2009; Parsa et al., 2011). Rather, it leads to dispossession (Action Aid International, 2015; Benjaminsen et al., 2011; Maganga et al., 2016). However, the tendencies of the donor communities and many states in Africa remain to consider formalizing property rights, especially in the turn of the 21st century. How then did such ideological shifts play out in Tanzania and Kilombero valley?

Significant changes in land governance through formal enclosures in Tanzania began in 1885 when an imperial decree introduced by the German colonialists declared all land in the Tanganyika Territory to be Crown Land vested in the German empire (The United Republic of Tanzania, 1997: 6). In this way, the imperialists could alienate certain land resources for plantations, mainly for European and “non-native” planters. However, in the aftermath of WWI, when the British took over the Tanganyika Territory, the focus turned to promoting smallholder production. All land was declared public land, with rights of occupancy held by the Governor (ibid:

7). It was still possible and still relatively easy for the British colonial administration to continue alienating land for purposes that suited them.

The period after independence juggled with laws that attempted to secure land tenure for the smallholder farmer while maintaining the state's grip on the control of access to and use of land. Freehold titles under the British system were converted to leasehold in the 1963 Land Ordinance, and later changed to Rights of Occupancy under the Government Leaseholds of 1969 (ibid: 7). And yet, as seen in chapter 6 of this dissertation, the Ujamaa and villagization policies saw mass compulsion into villages in the 1970s in further attempts to improve agricultural production. But as widely documented, the attempt was a fiasco. What remained from these policies however was a confusion over land rights, especially when some people tried to return to the homes that they had occupied before the compulsion, after those areas had been secluded for conservation or large-scale investments (Ndagala, 1982). In the wake of Structural Adjustment Policies, subsequent land laws and policies endeavored to relax the state's grip on land, advocating for decentralization. However, increased privatization and private investments created new fears about crippling the land security of smallholder farmers who largely occupied customary land. The fear of disenfranchising the smallholder farmer revitalized and strengthened the colonial arguments of individual rights to property as a means for improvement and development. Strong arguments were thus presented to formalize individual property rights to protect small-scale farmers and pastoralists from land grabbing and to reduce conflict (Maganga et al., 2016: 3).

Although Tanzania leaned towards titling and ensuring land rights, it maintained a central grip on control. For instance, in the land reforms of the late 1990s, the 1997 Land Policy¹⁴⁹ separated land in Tanzania into three types: general land; reserve land; and village land. While this land policy delegates village land to the jurisdiction of the village council, it still maintains that all land in the country is public land, vested in the president as trustee on behalf of its citizens (The United Republic of Tanzania, 1997: 9). On the other hand, the Land Act (1999) and Village Land Act (1999) strengthen the idea of enclosing and registering village land in addition to opening it up for privatization of holdings (Maganga et al., 2016: 4–5). And since the Land Act 1999 still names the president as trustee on behalf of its citizens, formalization only equates to Right of Occupancy (ibid). A Certificate of Occupancy, therefore, gives rights to land for 33, 66, or 99 years, and this applies to urban residents and investors, while the Certificate of Customary Rights of Occupancy,

¹⁴⁹ The United Republic of Tanzania (1997)

introduced in 2004, recognizes individual rights to village lands (ibid). The general and reserve land are still managed by the central Government (ibid). In this land-tenure system in the country the state still has the authority to claim certain lands within the country for “public interest”. For instance, the state can redefine and identify “sensitive areas” like forests, parks, rivers, river basins, and areas of high bio diversity and transfer them from individuals to the state or an organized group (The United Republic of Tanzania, 1997: 13–15). The affinity of the Tanzanian state with land formalization and the prerogative of the state to alienate land was recently exemplified through the re-demarcating of land for individual titling – countrywide since 2004 (Maganga et al., 2016) and accelerated in the SAGCOT since 2012 (Action Aid International, 2015).

Parallel but closely related to the descriptions regarding land-tenure and rights are conservation policies and laws in Tanzania and in Kilombero valley. The conservation paradigm which had sought to distinguish between pristine nature and human habitats had spread in the southern part of Africa by the turn of the 20th century (Carruthers, 1995). By 1891, the German colonialists in Tanganyika set up regulations to control hunting, and, thereafter, gazetted the first game reserves to protect the big animals (Nelson et al., 2009; The United Republic of Tanzania, 2007). The 1896 Game Ordinance saw the introduction of the idea of exclusive game reserves in Tanganyika Territory and introduced hunting permits and gun licenses which cost the African 3 times what a European hunter had to pay (Kjekshus, 1977: 78). The British consolidated these game reserves in the Game Ordinance of 1921 which, until the 1940s, maintained that certain groups¹⁵⁰ of natives could kill an animal for food (Neumann 1998: 100 cited in Nelson et al., 2009). The separation of people and parks with the Game Ordinance of 1940 and National Park Ordinance of 1948 prompted massive expulsions and resettlements all over the country. In the Kilombero valley in 1940, it saw massive relocation of the Ngindo and Wapogoro to expand the Selous Game Reserve. After independence fortress conservation was re-emphasized as a valid strategy for economic development, during the socialist Government (Kjekshus, 1977: 79). It is therefore not surprising that the 1974 Wildlife Conservation Act saw a greater control of wildlife and elimination of local rights (Nelson et al., 2009). Probably the directive was aimed at pastoralists, who by now had been labelled not only as aggressive toward their neighbors but also toward nature as well (see

¹⁵⁰ Certain “hunter tribes” (Wabahi, Watindiga, and Wandorobo) could hunt food animals without a license (Thomas 1963) cited in Kjekshus (1977: 79)

Ndagala, 1990). What followed were continuous alienations of pastoral land and endeavors to resettle pastoralists outside of conservation space and to make them sedentary¹⁵¹.

In the wake of the 1990s with its economic liberalization, efforts towards delegating powers of control and management of wildlife by local communities and the private sector were pursued by the state. This was done by creating wildlife buffer zones, called Wildlife Management Areas (WMAs), which would be managed through Community-Based Natural Resource Management (CBNRM). These are areas mainly of communal land or village land set aside exclusively as habitats for wildlife by member villages (Baldus and Cauldwell, 2004: 6). Such developments culminated into the Wild Life Policy of 1998 which, although, it delegates to village communities and private land-holders to manage wildlife in the intersection of village land and general land for their benefits, maintains core parks and reserves which are mostly part of the general land in the hands of the central Government (Nelson et al., 2009). Critics therefore argue that it is the state and not the community that has control of such wildlife, and not the community (Nelson et al., 2009; Woodhouse et al., 2000) and that the nature of CBNRM in Tanzania instead exposes village land to further land grabs (Benjaminsen et al., 2011).

* * *

This section has so far sketched frameworks that have governed or are still governing land use and conservation in Tanzania and in the valley. The current positions defined by recent policy frameworks call for formalization of land rights, including customary land, and advocate for conservation – in all cases for the purposes of poverty reduction and development. Thus, they reflect the colonial ideals of agricultural improvement. However, the dynamics of these developments are intended to place our analysis in a wider historical and political context which created a space for the current contestations. The triggers of the wrangles in the valley cannot be uprooted from past and present conservation and land policies.

As discussed in the section before, the narrative that pastoralism is only a recent phenomenon in the valley and hence the trigger of contestations is more a myth than a fact. I argue rather the new conservation initiatives, which constricted space for grazing and the development of large-scale enterprises through the Southern Agricultural Growth Corridor of Tanzania

¹⁵¹ See for instance “operation Imparnati” Ndagala (1982)

(SAGCOT), are the two main triggers of contestations over land and water in the valley. The next subsections will examine these two triggers.

8.3.1 Ramsar site and contested spaces

Tanzania became a signatory of the Ramsar convention in the year 2000. This convention seeks to protect wetlands from exploitation by their users. It advocates for the “wise use” principle, which is described as “conservation and sustainable use of wetlands and all the services they provide, for the benefit of people and nature”¹⁵². It therefore encourages the coexistence and symbiotic mutual benefit of people and nature. In 2002, Kilombero valley was demarcated as one of the Ramsar wetlands in Tanzania. It was gazetted because it met the requirements set by the Ramsar convention – It is rich in biodiversity and is a habitat for some of the world’s rare animal species. For instance, it is home to the Kihansi Spray Toad, which is endemic to the Kihansi Gorge in the valley (PINGO's Forum, n.d.: 26). It is also the habitat of about 75% of the world’s Puku antelope, which were first brought to the valley from Zambia in the 1970s (ibid). Various wild-life species including the Hippopotamus, the African Buffalo, and many others inhabit or transit through corridors within the valley from the Selous Game Reserve to Mikumi National Park (see figure 17 below). Since some of the valley’s fauna and flora are under threat from human activity, demarcating a 7,967-hectare¹⁵³ area of the valley as a Ramsar site was intended to protect its biodiversity.

Enforcing the management in the Kilombero wetlands under the Ramsar policies has been done under two separate but interrelated projects. The first was the Kilombero Valley Ramsar site project, which started in 2004 with funding from the Belgium Technical Cooperation and DANIDA (IWGIA report, 2016: 46). Although the Ramsar institution upholds a “wise use” principle, this project centered on “protection” by keeping local inhabitants and Game Control Areas separate. Such enclosures, however, did not prevent human activities from taking place there. The areas had been part of the landscapes that local populations had for long used for their livelihood activities. The rivers had been the source of fish for the fishermen, while the watered banks served as shambas or grazing areas for cattle. One fisherman I interviewed commented that:

¹⁵² <http://www.ramsar.org/about/the-wise-use-of-wetlands>

¹⁵³ http://archive.ramsar.org/cda/en/ramsar-documents-list-anno-tanzania/main/ramsar/1-31-218%5E15888_4000_0

“The Government stopped us from fishing in the Kilombero. But fishing went on. The fishermen bribed the Government officials when they were caught. Even sometimes, when the Government plans an operation to surprise and arrest the fishermen, some of the officials send the message to the fishermen ahead of time. During the operation, they find no one. One hour after the operation, everyone is back catching fish” (interview July 2014).

Both the lack of capacity to implement the Ramsar protectionist policies and the persistence of encroachment of wetland users into the gazetted spaces induced the state, the media, and conservationists to refer to the “land degradation” narrative and channel the blame toward smallholders. The immediate target was the pastoralists. They were accused of resource degradation and violent conflicts. In Jakaya Kikwete’s meta-narratives of pastoral evils, *The Citizen* news reported that:

“The bloody conflict between local peasants and the newcomers who are pastoralists is based on misuse of the abundant resources available in the district. A good part of Kilombero District is within the Ramsar Site which covers 7,679 square kilometres¹⁵⁴. This wetland of international importance boasts of unique species of flora and fauna. Natives, however, say that the situation started changing since 2006 and the abundant natural resources in the valley have now become more of a curse than a blessing. In 2006 Kilombero Valley woke up to an influx of pastoralists who brought with them thousands of cattle, sheep and goats. Today the valley has a total of about 52,000 animals comprising cattle, goats and sheep” (Mfugale, 2010).

The accusations of land degradation were extended to farmers and fishermen. It was therefore decided by the Government that to control intrusion, beacons had to be put to mark the boundaries of the Ramsar wildlife protection sites and people whose land was located within the boundaries of the Ramsar site would be relocated. In 2010, the Government, through the Wildlife Department (WD) and some acclaimed land-use experts, embarked a program to sensitize the local people to the necessity of conservation (IWGIA report 2016: 46). The WD together with the local people and the local village council agreed on land-use activities for the villages, and demarcated

¹⁵⁴ This was an exaggeration. The unit is hectares and not square kilometers.

village and Ramsar site boundaries (ibid). Beacons were then erected for the Ramsar site by March 2010¹⁵⁵. However, it is reported that the WD moved the beacons in 31 villages without consulting the local communities (ibid: 47). Therefore, when Operation Save Kilombero Valley was launched in August 2012, up to 5,000 farmers, fishermen, and pastoralists were adversely affected because of the shifted beacons (ibid: 49). Operation Save Kilombero Valley was heavily criticized for its illegal activities, such as corruption and theft, and for violating human rights (see IWGIA report, 2016; PINGO's Forum, n.d.).

Either as a consequence of this criticism, or due to a change of heart, the Ramsar secretariat in Tanzania and the Wildlife Division decided to embrace an approach that called for a greater involvement of the local population in their conservation initiative. The second project, which replaced the first in 2013, the Kilombero and Lower Rufiji Wetlands Ecosystem Management project (Kilorwemp), embraced both conservation and “wise use” principles with a focus on CBNRM¹⁵⁶. Kilorwemp is a five-year project (2013-2017) funded by the European Union (3 Million Euros) and the Belgian Government (4 Million Euros)¹⁵⁷. The CBNRM is, however, designed such that management and decision-making responsibilities remain with the state. In a recent research from Bamford et al. (2014), in the eight villages in Kilombero valley where they conducted their research, villagers did not know of a CBNRM which had presumably been in their village for some time. In the interviews I conducted, the local communities were not aware of any village projects regarding conservation. In my interviews with officials from the Ramsar offices, what they saw as CBNRM was the fact that a fisherman could now legally access fishing grounds along the Kilombero valley if he/she bought a fishing license at TSh 40,000 per year.

The interests of the state and conservation institutions in creating demarcations and formalizing land tenure have, however, been questioned. It has been argued that part of the reason for an extensive activity on the part of the Government to formalize land use in the SACGOT by completing land-use plans, issuing certificates of occupancy, and transferring the remaining “unused” land to the general land under the Tanzania Investment Authority was to strip smallholder farmers of their land, which would then be leased to investors (Action Aid International, 2015; Schutter, 2015).

¹⁵⁵ Interview with Julius, Ramsar Office, Ifakara. June 2014.

¹⁵⁶ ibid

¹⁵⁷ https://www.tnrf.org/files/cbnrm_kilorwemp_.pdf

Therefore, in-as-much as conservation policies and ideology in Tanzania shifted from a state-centered fortress conservation to community-based or “wise-use” focus, the state of Tanzania remains the sole custodian of conservation areas, and policy application remains largely that of protectionism. Moreover, the creation of wildlife areas for CBNRM merely enables more land alienation for conservation purposes. This mismatch of policy and application plus the prerogative to alienate space, whether on public, village or reserve land not only intensifies ambiguity of ownership and use rights but also creates and intensifies conflicts among parties interested in using the space. It is not surprising that the narratives of agro-pastoral conflicts in the valley intensified with the campaign of fortress conservation encouraged by the Kilombero Valley Ramsar site project. These narratives would intensify in 2009/2010 with the establishment of the Southern Agricultural Growth Corridor of Tanzania (SAGCOT).

8.3.2 SAGCOT, largescale farming and contested spaces

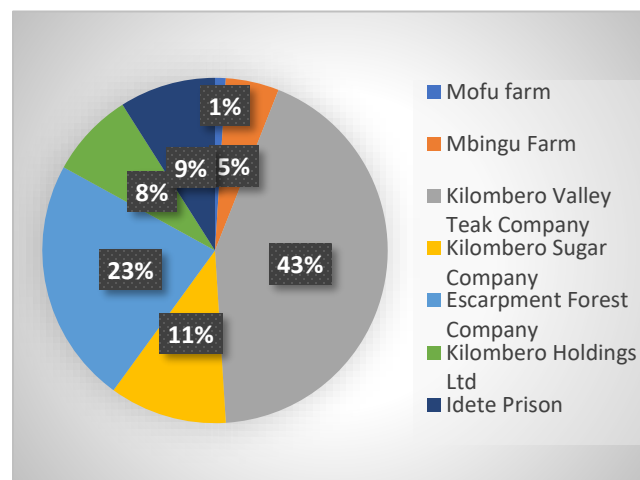
The SAGCOT falls within the African Agricultural Growth Corridor (AAGC) initiative, which was first proposed at the UN General Assembly in 2008 and later at the World Economic Forum and the New Alliance Initiative. The logic behind the AAGC initiative is that the state is a deterrent to agricultural improvement, and hence needs the private sector to invest in the neglected areas of infrastructure to generate sufficient economies of scale and lower unit cost for production to make agriculture profitable (Maganga et al., 2016: 17). The recommendation was that the initiative would identify suitable land for investors to support infrastructural development including supply of agricultural inputs like fertilizers and improved seeds, access to credit, and access to markets (Paul and Steinbrecher, 2013: 4). A public-private partnership was therefore proposed. In Tanzania, this saw many multinational agri-business, food chain, and fertilizer companies coming on board. The co-chair of the SAGCOT initiative, for instance, is the Vice President of Unilever and the executive is composed of the large Norwegian fertilizer company Yara, AGRA, USAID, and the Irish embassy (Maganga et al., 2016: 16). The partner list “represents the whole supply chain from seeds, chemical inputs, production, processing, transport and trade, to supermarkets” (Paul and Steinbrecher, 2013: 2) which are mostly situated in the Global North. The interests of these donors and investors include expanding land for investment (Action Aid International, 2015: 23; SAGCOT, 2011: 7). The report Action Aid depicts the magnitude of the intended expansion of large-scale production (see caption in box 2 below).

Box 2

New Alliance documents state that Tanzania is developing 350,000 hectares for “commercial farmland” (meaning large-scale farms) and 330,000 hectares for “enhanced smallholder farmlands (outgrowers)”. This is partly under SAGCOT and partly under the government’s Big Results Now initiative, part-funded by DFID, which plans to establish 25 commercial farms in the country. [...] The government has already issued land titles for investment by companies totaling 83,000 hectares, which are being earmarked for rice and sugar. Crucially, the New Alliance Framework Agreement commits the government to “demarcating” “all village land in SAGCOT region”, completing “land use plans”, and issuing Certificates of Occupancy, in 40% of villages by June 2016. By November 2012, 391 Village Land Use Plans had been completed, involving 900,000 hectares of “potential land for investment”(Action Aid International, 2015: 23)

Such an initiative mirrors the ideologies of donor communities and their perception of how agricultural improvement can be achieved. It is for such reasons that the Kilombero valley has embarked on providing space for medium- and large-scale farms. There were already a couple of large-scale farming projects in the valley before the launch of the SAGCOT (see figure 14 below) but the number increased in its wake.

Figure 14: Proportion of land holdings among large-scale farmers in Kilombero valley



Source: MNRT: 2007 cited in (Mombo et al., 2011: 157)

While the Ministry for Natural Resources and Tourism (MNRT) in Tanzania identified seven large-scale farming initiatives in Kilombero valley in 2007 (Mombo et al., 2011: 157), my assistant and I identified, in 2015, from the District Lands Registry, 13 large-scale farmers holding a combined land area of 62,137.4 ha (see table 16 below). We also identified 52 medium-scale farms which are largely owned by local elite farmers possessing a combined area of 21,754.53 hectares of land (see table 17 below).

Table 16: List of farms in Kilombero district council owned by corporate farmers, 2015

No.	OWNER	LOCATION	AREA (HA)	USE	STATUS
1.	Merera Plantation Ltd	Merera	10,000	Commercial Plantation	Not developed*
2.	Usafirishaji mikoani union ltd (UMU)	Mbingu	2,404	General Agriculture	Not developed
3.	General Tyres E.A	Mang'ula	3.5	Farming & Industrial	Not developed
4.	Green resources	Uchindile	12.121	Farming & Industrial	Developed**
5.	Registered Trustees of Diocese of Mahenge	Mahenge	3,621	General Agriculture	Developed
6.	Registered Trustees of Kalambwana HTF	Kiberege	9.125	General Agriculture	Developed
7.	Kilombero Sugar Company	kidatu	10,445	Farming & Industrial	Developed
8.	Kilombero Farm Ltd	Mofu	202.43	General Agriculture	Developed
9.	Mbega Farm Ltd (Salmin & Sons Ltd)	Sanje	206.39	General Agriculture	Developed
10.	Ex Sygen Ltd	Merera	12,140.6	General Agriculture	Developed
11.	Kilombero Valley Teak Company (KVTC)	Kilombero and Ulanga	14,000	Farming & Industrial	Developed

Table 16: continuation

No.	OWNER	LOCATION	AREA (HA)	USE	STATUS
12.	KPL	Mngeta	5,817.8	General Agriculture	Developed
			26.1	Industrial & Offices	
13.	Mafura Farm	Idete	3,278	General Agriculture	Developed
Total			62,137.4		
Source: field data. Information retrieved from District Lands Office, Kilombero district					
*Not Developed means that there is no agricultural infrastructure or activities in place					
**Developed means that agricultural infrastructure and activities are in place.					

Table 17: List of medium-scale farmers in Kilombero district council, 2015

Some names have been erased – black shaded cells – to anonymized private landowners

No.	OWNER	LOCATION	AREA (Ha)	STATUS
1	M/S ratifa EC7 Dev Group	Kisegese	18.34	Developed**
2		Sagamaganga	38.5	Developed
3		Lungongole	46.23	Developed
4		Kisegese	198.7	Developed
5		Lungongole	158.31	Developed
6		Msolwa Ujamaa	11.24	Developed
7		Lungongole	1.4	Developed
		Merera	887.44	Not Developed*
8		Kiberege	8.162	Developed
9	RUBADA/KPLO (50/50)	Mhelule	5,818	Developed
10		Mbingu	4.34	Developed
11		Kiberege	3.48	Developed
12		Mhelule	7.721	Developed
13		Mhelule	5.637	Developed
14		Mhelule	2.71	Developed
15		Lungongole	37.37	Developed
16		Kalengakelo	4.53	Developed
17		Kikwawila	11.2	Developed

Table 17: continuation

No.	OWNER	LOCATION	AREA (Ha)	STATUS
18		Idete Ifakara	202.34 3.65	Developed Developed
19	TANAPA	Mangula	23.34	Developed
20		Mkula	2	Developed
21		Msolwa Ujamaa	27.78	Developed
22	MMMT-Mangula	Mangula	26.3046	Developed
23	MMMT-Twiga Hotel	Mangula	20.9902	Developed
24		Mhelule	2.978	Developed
25		Lungongole	17.488	Developed
26		Kikwawila	34.25	Developed
27		Lungongole	45.375	Developed
28		Zignali	42.892	Developed
29		Msolwa Ujamaa	17.551	Developed
30		Zignali	13.303	Developed
31	M/S RUBADA	Ngalimila	5128.5	Developed
32	Ngwasi River Valley Farm	Kalengakelo	607.03	Developed
33		Sanje	154.14	Developed
34		Msolwa Ujamaa	196.2	Not Developed
35		Kisegese	198.54	Developed
36		Sanje	153.72	Developed
37		Miwangani	30.1	Developed
38		Kiningina	41.3	Not Developed
39		Lumome Kikwawila	119.4 12	Developed Developed
40		Lugongole	4.969	Developed
41		Miwangani	30.451	Developed
42		Lipangangalala	35	Developed
43	Env. Camping Hunting & Adventure Safari	Msolwa Station	32.9	Developed
44		Lungongole	147	Developed
45	Sugar Board of Tanzania	Ruipa	6893.03	Developed
46		Idete	16.9	Developed
47		Kisegese	10	Developed
48		Sanje	62.2	Developed
49		Ngalimila	Not known	Not Developed

Table 17: continuation

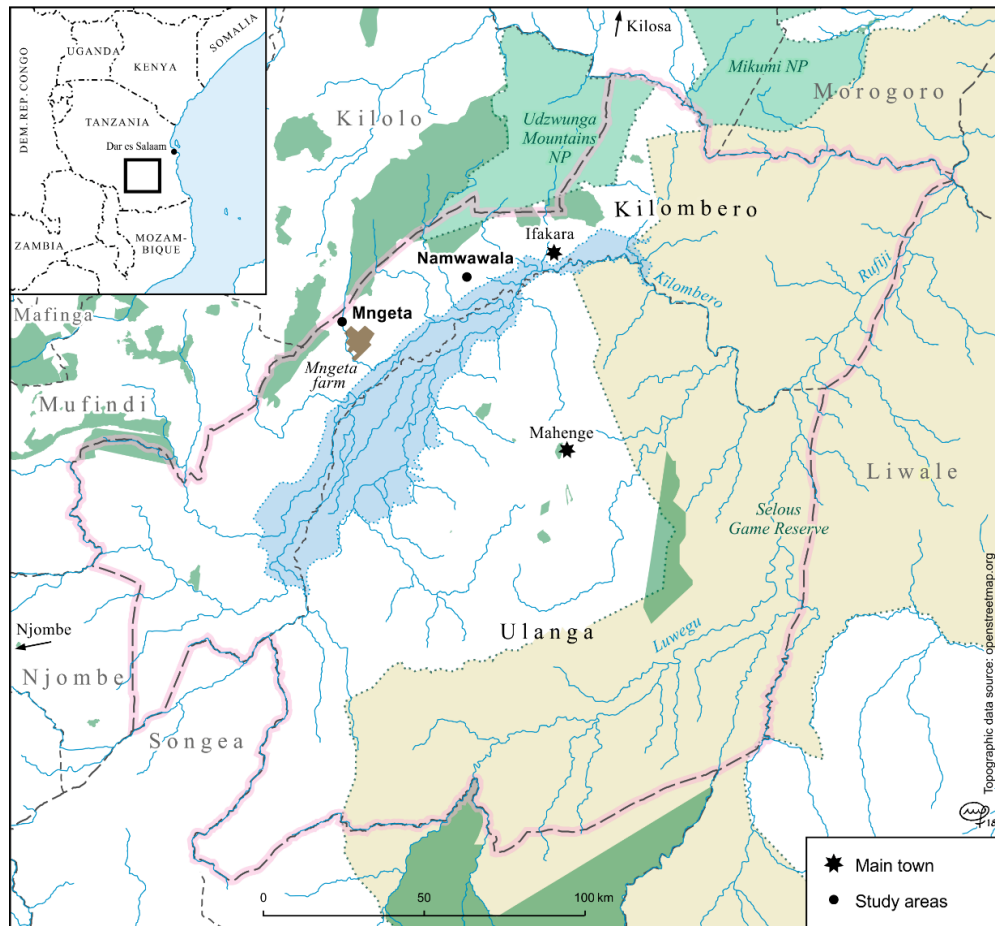
No.	OWNER	LOCATION	AREA (Ha)	STATUS
50		Msolwa Ujamaa	Not known	Not Developed
51		Kalengakelo	Not known	Developed
52		Namwawala	137.6	Developed
Total			21,754.53	
Source: field data. Information retrieved from District Lands Office, Kilombero district				
*Not Developed means that there is no agricultural infrastructure or activities in place				
**Developed means that agricultural infrastructure and activities are in place.				

This grouping was done by the Lands Office in Kilombero district. It should be noted here that these two tables represent an impression of the Government’s ideas of what large-scale and medium-scale versus small-scale are. It is not clear why the Sugar Board of Tanzania and RUBADA are classified as medium-scale despite their massive land holdings while General Tyres E.A, Green Resources, and Registered Trustees of Kalambwana HTF with their smaller land holdings are considered large-scale farms. Moreover, of the large-scale farms identified earlier by the Ministry for Natural Resources and Tourism, only Kilombero Valley Teak Company and Kilombero Sugar Cooperation are reflected in the new list of large-scale farms. Nevertheless, the number of companies and individuals holding land areas above the average (2.5 acres) of what a smallholder farmer possesses in the valley has increased in the recent years. The expansion of middle-scale farmers is not due to emergent farmers but rather new and mostly elite holdings in the valley. Considering the arguments posed in the previous subsection, where land area was constricted due to conservation, the expansion of large-scale farming only intensified the problem. The SAGCOT report 2013 indicates that only 23% of the total area under cultivation in the Kilombero valley is cultivated by smallholder farming and the remaining 77% is owned by large-scale farmers (SAGCOT, 2013: 2).

In an already constricted space, someone had to make way to accommodate the new agriculturalists. Pastoralists, smallholder farmers, and fishermen became the victims of the struggle for space. While the central basis for evicting pastoralists lay in accusations of violence, degradation, and pastoralists “being outsiders”, the possibility of evicting farmers lay in ambiguous land rights. Since the state has an interest in large-scale investment, it manipulated this ambiguity to evict farmers from certain spaces within the valley. This has happened on various occasions, but

one case study is worth highlighting. It comes from the activities of Kilombero Plantation Limited in the Mgeta farm (see figure 15 below).

Figure 15: Map of Kilombero valley showing the location of Mgeta farm



The Mgeta farm was originally a joint venture between the Governments of Tanzania and North Korea (KOTACO). It was surveyed and cleared and some infrastructure was installed in 1986 (The Oakland Institute, 2015: 7). KOTACO then started producing rice on 2,500 ha of the 5,818-ha land demarcated to the enterprise but the venture was liquidated in 1993, and subsequently Rufiji Basin Development Authority (RUBADA)¹⁵⁸ took over the land (ibid). The land lay idle till

¹⁵⁸ RUBADA is described on their website as “philanthropic Government organization” which was established by the Act of Parliament No. 5 of 1975. It is charged with the “Multi-Sectoral responsibility of promoting, regulating, co-ordinating and facilitating sustainable and balanced by term Ecological and socio Economic development in the Sector of Energy, agriculture, fisheries, forestry, tourism, mining, industry, transport and environment in the basin” <http://www.rubada.go.tz/aboutus/about-rubada>.

1998 when it was contracted to Kilombero Holdings Company (KIHOCO) (ibid). KIHOCO could not develop more than 400 ha, and after falling behind in debt repayments it was forced out and in 2007 Agrica, a UK-based agricultural company, took over, forming a joint venture with RUBADA (ibid: 7-8). In 2015 when I carried out my field work, Agrica had 97.54% of the shares while RUBADA held only 2.46%¹⁵⁹. This formed the Kilombero Plantation Limited (KPL). During the period of changes of ownership, many smallholders occupied and used the land (The Oakland Institute, 2015: 9).

When KPL was formed, it needed the whole 5,818 ha for its large-scale rice enterprise. Directives from Government, therefore, were that the smallholder farmers who had settled within the 5,818 hectares of the Mgeta farm should leave. The Citizen news outlet, for instance reported that:

“The Government has ordered 2000 squatters out of land meant for large-scale paddy farming in Kilombero district, Morogoro region. The Prime Minister, Mr Mizengo Pinda issued the order on Saturday when he visited the 5000-hectare Mgeta Farm owned by the Rufiji Basin Development Authority (RUBADA) that has entered into a joint venture agreement with a British company, Agrica for large scale farming. [...]” (The Citizen, 2009).

Since the area where the farm is located was demarcated under general land, the state could withdraw it from its occupants for projects the state deemed relevant. However, compensation to people evicted, even from general land, is required. In the eviction and resettlement process, people who had occupied the land were moved to marginal areas where agriculture could not be practiced, or were in many cases under-compensated. See the following example.

“They asked me ‘do you want money to buy land yourself, or do you want us to give you a new land area?’ Then they told me that if I wanted to buy new land myself, the value for a three-acre area would be TZS 90,000 (\$49.77). Therefore I decided it was more secure to be compensated with new land of three acres, even though I had an 11 acre farm before” (The Oakland Institute, 2015: 12).

159

http://www.fao.org/fileadmin/templates/est/Investment/Tanzania/KPL_Responsible_Ag_Investment_Jan_2015_Revised.pdf

One of the major criticisms of the ways land is acquired in the SAGCOT is how cheap it is (see Schutter, 2015). This is compounded by the fear of under compensation of smallholders in terms of their underpayment and being awarded marginal land (see Boudreaux, 2012: 3). The above quote shows that these fears and criticisms are not unfounded. Such actions deprive the smallholder farmers of their source of livelihoods, disempowering them further.

A couple of other important research point as well to the constriction of land and intensification of conflicts resulting from the SAGCOT (See for instance, Action Aid International, 2015; Bergius, 2016; Paul and Steinbrecher, 2013; PINGO's Forum, n.d.). On their website, Just Conservation Network¹⁶⁰ restated the nexus between large-scale agriculture in the Kilombero valley and the need for space. They argue, in a similar way that I do, that the increased tensions in the valley are due to the increase in the numbers of big investors. Hints from analysts who preferred anonymity during a conference of the Alliance for a Green Revolution in Africa in Arusha suggest that this is not an unfounded claim (Just Conservation. 11 November, 2012). However, when Just Conservation sought some comments on the foreign investments, “the DC acknowledged the presence of some investors but he dismissed the idea that evictions were linked with foreign investments” (ibid).

8.4 What futures? – a concluding remark

The goal of the neoliberal state of Tanzania is to achieve economic development and lift its people out of poverty. A longstanding means has been to expand agricultural production for the market. Although the means to this end is contested, the state of Tanzania leans towards large-scale agricultural practices including its keenness regarding modern agro-inputs, mechanization and agribusiness. But such ventures require fertile land with water, and a large capital input. The limited ability of the state to provide such capital has pushed it to partner with big capitalist companies who provide the capital while the state provides the land resources. However, the process has turned out to be contentious. Tanzania relies largely on smallholder agriculture, and with population growth and increased calls for conservation, space for large-scale production is limited. One means to create such space has therefore been through taking land away from smallholder users.

¹⁶⁰ <http://www.justconservation.org/three-sides-of-kilombero-evictions-drive-rare-species,-cattle-burden,-foreign-investments>

Evictions in the Kilombero valley can be viewed as a means to create space for agricultural improvement through large-scale farming and conservation. In as much as this is controversial, the ambiguity of land laws, the keenness towards formalization, and the adoption of narratives that obliterate the activities of smallholders, rationalize the evictions in the public sphere.

Although these tactics are promulgated by many state actors, they are augmented by the international development discourses presented by international donors and transnational corporations. Present forces in this discussion are on the one hand the conservation initiatives, and on the other hand, transnational food corporations, and the G8, substantiated by their works in the Kilombero valley. Conservationists have extended their conservation narratives to include development and poverty alleviation discourses. This is especially emphasized through the CBNRM approach. Similarly, the recent international development discourses frame poverty in terms of the failure of the nation state to provide agricultural infrastructure and to formalize land rights which would enable investment in land. The recommendations that follow these arguments are that states should engage in public-private-partnerships and that formalization of private land rights. What is also emphasized (sometimes implied) is large-scale intensive farming as opposed to smallholder farming.

Apart from many smallholder farmers losing out in the agricultural development process in the valley, the other point this chapter has highlighted is the possibilities of the state to expand its control the population. Although branding animals and expelling many of the pastoralists from the valley was not received well by the human rights groups, the government managed to gain control of pastoral livelihoods by identifying how many livestock they possess and trying to limit the numbers. This process also enabled the identification of the owners of the livestock.

9 Finding connections and linkages: a conclusion

This dissertation has sought to tell the history of agricultural improvement in the Kilombero valley since the turn of the 20th century. It has shown: the socio-economic and political practices that were present in pre-European period; the impacts of German and British colonial ideas on agricultural practices in different time periods; and the attempts of post-colonial governments to break away from colonial approaches to agricultural development and the continuities of colonial agricultural development ideologies in the post-colonial state in the valley. It has also demonstrated how such continuities have been augmented by the transnational and global institutions. In telling this history, the dissertation has consequently highlighted hegemonic agricultural development discourses that seek to modernize agricultural practices in the valley, and also demonstrated the roles (responses) local individuals and groups played against or in support of agricultural “modernization”. These narratives, accordingly, foregrounded data to disentangle the paradox of why the agricultural development idea in the valley persisted despite the failures of most agricultural development initiatives to improve smallholder production for the market.

In the quest to find answers to this paradox, the narratives revealed five entwined discursive practices under which the state of Tanzania since the colonial period (and its development partners since the mid-20th century) has worked to improve agricultural production in the Kilombero valley. These discursive practices are:

1. “groupings”, which involves organizing farmers into cooperative societies and village settlements to realize economies of scale;
2. intensification and use of modern technology;
3. engaging smallholder farmers in commercial value chains;
4. using large-scale farms to serve as models for modern farming, to increase the quality and quantity of agricultural produce, and to provide spill-off benefits to smallholder farmers; and
5. conservation¹⁶¹ of the soil, the flora and the fauna.

These discursive practices, I have argued, are informed by a knowledge construct based on the notion of “development” which follows a linear and evolutionary logic of a movement towards a betterment. Hence an improved agriculture in the valley, circumscribed within these discursive realms, would show a substantially increased quantity and quality of agricultural produce and an

¹⁶¹ Although conservation is in many cases only a means to force people into the first 5 measures

improved standard of living of the farmers in the valley. The dissertation has, however, shown that this vision has not been met, and in some cases the reverse has been the case. This chapter will therefore summarize the reasons for the failures of agricultural development initiatives and the persistence of agricultural development ideas in the Kilombero valley. While doing this, it will show the connections among the discursive practices and attempt to find linkages that go beyond the valley. The chapter is therefore structured as a summary and analysis of the five discursive practices.

9.1 The discursive practices of agricultural improvement in Kilombero valley

9.1.1 Groupings – cooperative societies, villages and settlements

Cooperative societies have had an ambiguous history in the Kilombero Valley. Chapter 3 of the dissertation explained the different livelihoods practices and forms of organization by the inhabitants of the valley before European colonialism. There were forms of cooperation among individuals that indicated ways in which the labor resource was shared. For example, how different families joined together to take turns in keeping birds away from rice fields. However, the idea of a cooperative society as a modern institution within the structures of the colonial and post-colonial states came only in the 1930s. The structures were the result of political processes from colonial administrators in London who deliberated on how to organize the colonies at different times between 1920s and 195s, and process of political and economic struggles in the northern part of the country which saw contestations between local farmers, Asian middlemen, and British colonial officials. These deliberations and contestations led to the establishment and the cooperative movement in the northern part of the country, but such a movement was weak in the Kilombero valley. Semblances of a marketing cooperative society started in the mid-1940s in the valley but did not draw quorum from local smallholder farmers and traders. After independence, the socialist Government, claiming that cooperatives were a traditional African way of organizing production, and having interests in controlling these entities and the population, replicated the cooperative structures from the northern part of Tanzania in the rest of the rural areas of the country. Although, among other reasons, their failure to meet the goals of increased production led to their disintegration in 1976, they were revived in 1982 due to recommendations from the World Bank, USAID, and other groups of national and international experts. The aim was again to increase production and marketing of the smallholder farmers. This dissertation has shown that the evolution

of these cooperative societies in the valley between 1982 and 2010 did not meet this goal. And yet again with the introduction of the Kilimo Kwanza and SAGCOT, and with the interest in the valley as an area for agricultural modernization, the main strategy was to organize farmers into cooperative societies. Since then we see that the farmers belonging to cooperative societies do not in any way succeed better than those not in these societies. This begs the question of why this strategy is still being pursued and replicated in the valley and in other places.

In the northern part of the country, the relationships between the colonial state and cooperative societies was equivocal. At the beginning, the state gave some support to local groups because their economic growth meant higher taxes for the state. After 1925, and with the change in some individuals in Government, the relationships fluctuated between support and outright animosity towards African cooperative societies. This was because of the fear that when the locals gained economic freedom, it boosted their political goals, which threatened the position of the colonial state. It is only when the state had a stronghold in the cooperative societies that their formation and maintenance was encouraged. This logic continued through the colonial times and the post-colonial states. Therefore, although these in many instances failed to increase the intended production and marketing promised by the state, the state expanded its reach to the population in the country. Government's direct involvement in the affairs of the cooperatives in the 1960s and 1970s entrenched its powers and bureaucracy to the population. One can therefore conclude, following ideas from Ferguson (1990), that the interest in using cooperative societies as an agricultural development tool is not only to minimize cost and maximize benefits but also to entrench state power and bureaucracy. However, leaving the explanation at that would be simplistic, since we see individuals and groups in the target communities positioning themselves to promote the idea of cooperative societies. This dissertation has shown examples of those who form cooperative societies in order to receive inputs which they in turn sell on to traders, use only in one part of the field, or create "paper" cooperatives. Finally, the successful cooperative societies have been show-case cooperatives which receive more in terms of Government and donor funds than what they contribute. It seems that the Government and its development partners would rather spend a fortune to demonstrate the possibilities of a utopian society.

In a similar way, village settlements have been used as a way to increase productivity. However, unlike cooperative societies, from the beginning of agricultural improvement in the valley, forced movement into the settlements were called for, and the goal was to increase control of the masses for easy management. In this way the colonial authority could introduce new crops,

and force people to cultivate them and to sell them. Post-colonial government of Julius Nyerere encouraged settlements and later Ujamaa villages as a way of organizing production. However, they tried to break away from colonial approaches by letting these villages be democratic. It is only later in the late 1960s and early 1970s that tendencies of compulsion came in. Settlements therefore served to improve crop production, and like cooperatives, to subdue the rural population and entrench state powers and bureaucracy. In most of the cases, failures to meet the goals of increased productivity were due to the centralized planning, which ignored the social economic and ecological situations of the people in the valley. Eventually people subverted these policies, leading to their abandonment and to changes.

9.1.2 Intensification and use of modern technology

The focus of colonial authorities in the 1920s and 1930s in the valley was on consolidating their control of the population. They therefore focused their energy on reorganizing systems of governance and settlements before embarking on introducing modern technologies. It was only in the early 1940s that an emphasis on introduction of certain technologies became apparent in the valley. One of the main goals of the colonial administrators in the 1940s and 1950s was to increase the production and quality of agricultural produce in the valley for the market. For instance, seed cotton was provided through the middlemen while milling and ginning machines were installed. By decrees from the Produce Controller in Dar es Salaam and colonial administrators in the valley, all paddy was to go through the milling machines run by Indian merchants. Furthermore, chapters 4 and 5 have shown how, towards the end of British colonialism in Tanzania and in the era of the socialist state respectively, new technologies and farming methods were introduced. In many cases, these initiatives were supported by the UNFAO, the World Bank, USAID, the Nordic European countries, and China among others. Recently, the neoliberal state of Tanzania has created the “good business climate” that Harvey (2006: 25) insinuates, which has attracted many transnational corporations, and supra-national institutions now actively engaged in Tanzania and in the valley to provided modern agricultural technology. For instance, in September 2015, Yara launched an over 20-million-dollar fertilizer terminal in Dar es Salaam with a long-term goal to become the national fertilizer distribution hub¹⁶².

¹⁶² See <http://www.afrikareporter.com/multi-million-dollar-fertilizer-factory-opens-in-dar-es-salaam/> or <https://www.tanzaniainvest.com/transport/dar-es-salaam-port-launches-new-fertiliser-terminal>

This dissertation has also shown the varieties of responses of smallholder farmers to these initiatives. In the 1940s, when the use of force to reorganize local populations into groups in order to introduce new technology was predominant, the main response was that of resistance to these technologies. This was enhanced by the disconnect between the interests and plans of the colonial administration and those of the local population. In the Kilombero, when cotton production was emphasized in the 1940s, labor regimes were not considered. Cotton was not popular in the valley and lacked the quality of being able to serve as food, whereas rice was a staple food-crop and served to make a local brew used for cultural ceremonies. Besides, given the unfair marketing and pricing conditions between local black farmers and Asian farmers and traders, farming cotton (a labor- and capital-intensive crop) was a bad bargain compared to rice which could be hand-hulled, sold clandestinely or consumed by the farmer. Similar challenges were met in the attempts to introduce wheat, cassava, sesame, and groundnuts in the 1940s and 1950s. In the 1960s and 1970s, the technologies were either expensive to maintain or incompatible with the environmental structures. In the neo-liberal era fertilizers and modern seed inputs are introduced through cooperative societies which, as discussed in chapter 8, are not fully embraced by the local farmers. The level of adoption of modern technologies is, therefore, still very low in the valley. Similar findings on low levels of adoption, albeit due to different factors, are seen in Mbeya, another rice growing region in Tanzania (see Mwaseba et al., 2006). The general sense, however, is that adoption of modern technology in agriculture in Tanzania is still low (Kherallah et al., 2000: 16–17).

9.1.3 Engaging smallholder farmers in commercial value chains

Chapters 3 and 4 have shown increased calls from and policy implementations by colonial administrators in the valley to add value to agricultural produce. Milling and ginning machines were installed, and standard packaging was introduced. At the same time, hand-hulling of rice, barter trade, and marketing through “informal” markets were outlawed. However, because such initiatives ignored the interests of local farmers and local traders, many farmers abandoned them. The idea that adding value to agricultural products would expand the market and increase income was well engrained in the socialist state. Therefore, efforts to integrate smallholder farmers into a commercial value chain continued in the 1960s and 1970s, albeit most pronounced in the settlements and Ujamaa villages. However, they collapsed with the failure of the villages, only to be revived in the neo-liberal era, especially since 2010.

This dissertation has shown that the strategies that have been used within the commercial value chain in the valley have in many cases impoverished the smallholder farmers. For instance, in the value-addition endeavors related to cotton and paddy in the 1940s, the colonial authorities in the valley had lower prices for local smallholder farmers compared to Indian farmers and traders. Today, because smallholder farmers use limited input technology (for various reasons including high costs, limited knowledge, and because some of the agro-chemical subsidies are distributed late after planting, weeding or harvesting), the overall market price for paddy is kept low. Middlemen and the large-scale farms prey on these low prices, undercutting the benefits of subsidies. In this case, farmers who had received input subsidies fall into debt which they have to pay back in the following planting season. In cases where debts accumulate, the poverty and vulnerability of the smallholder farmer is increased. Smallholder farmers also lack crop insurance; hence, in events of floods, droughts or outbreaks of pests and diseases, the loss is felt by the farmer, who is consequently further indebted.

The dissertation, however, discussed that those who gain from this system of commercial value chain are the middlemen, the millers, and the large-scale farmers. For example, in the 1940s, Asian middlemen and traders were favored as they were offered better prices by the colonial government and in the last 10 years, because of their resource endowments, middlemen and millers purchase paddy at the farm gates at low prices. Also in the last 10 years, buyers in Dar es Salaam set up collection points in the valley, thereby weakening the process of value addition to the smallholder farmer. The outcome is that the smallholder farmer remains poor while the actors higher in the value chain accumulate more wealth. There have been cases where farmers had to sell their land or part of it to cover their debts, thereby entrenching their poverty (see the Oakland institute report, 2015: 10-12). This confirms the fears of development critics who think development serves to impoverish the poor and widen the gap between the rich and the poor (see Edelman and Haugerud, 2005; 8-9).

These dynamics generated some responses from the various actors involved. In the colonial period, the responses on the part of the smallholder African farmers were resistance and subversions as shown in chapter 4 of this thesis. The post-independence period saw more of a differentiated reaction, ranging from resistance to collaboration. Today, smallholder farmers tend to reduce their participation in the commercial value chain endeavors since their gains are minimal. This includes apprehensions about using agrochemical inputs or about accepting subsidies from large-scale farms. However, the groups higher in the value chain (large-scale farms, middlemen,

millers, traders) tend to welcome the idea and actively engage in the activities within the value chains.

9.1.4 Large-scale farming

Large-scale farms have been variously discredited for their lack of internal economies of scale (see Johnson and Ruttan, 1994: 693) and inverse productivity (see Barrett, 1996) when compared with compared to small farms, and also for their social and ecological costs (see The Oakland Institute, 2015: 10-11). This dissertation has demonstrated two things in this regard. First, although economies of scale cannot be easily substantiated because of the difficulties of including all economic input variables and their exponential output, the discourses about failures of large-scale farms in Tanzania reveal the poor economies of scale of large-scale farm projects. Secondly, contemporary processes to create large-scale farms in Tanzania reveal extensive socio-economic and ecological damage. Accusations of exploitation through land alienation, and underpayment from these large-scale farms, have been rampant (ibid). The housing infrastructure has been contended to be on marginal land prone to flooding, while the schools and health centers are underserved (ibid).

Therefore, if large-scale farms are economically, socially, and ecologically costly, why then does the Tanzanian Government, donors, and private investors continue to pursue them, even prioritizing them over the other discursive practices sometimes? The answer to this lies in the skepticism of developers regarding small-scale farmers vis-à-vis their ability to feed the world, and the “side-effects” of large-scale farms, which may include an increased influence on the part of international bodies in national issues, and/or the benefits of infrastructural development in the areas in which development is being pursued.

The skeptics question the ability of smallholder farmers to produce enough food to feed the current and fast-growing population (eg. Collier 2014: 92). This is all the more so when advocates for smallholder farming (for instance, La Via Campesina) call for a pre-industrial, pre-capitalist mode of production as an opposition to what they consider an economically exploitative and ecologically destructive capitalist production (Bernstein, 2013: 10-11). Skeptics of smallholder farming often refer to contributions to increased food production that large-scale capitalist farming has so far historically demonstrated (at least in western Europe and North America) (ibid). The concrete agricultural outputs from large-scale farms with their technological developments are

quite convincing, whereas the fragility of smallholder agriculture undermines evidence of the inverse productivity relationship with regard to farm size.

This skepticism is juxtaposed with the side-effects of large-scale farms to the locales they are in. This can be seen from the reasons Deininger and Byerlee (2011: 10) suggest as to why large-scale investments in agricultural farms are called for. These are the belief that they would contribute to the development in social infrastructure; create employment and jobs; create more access to markets and technology for local producers; and contribute larger local and national tax revenues (ibid). Such side-effects might be the reason, following Ferguson's arguments, why large-scale farms are set up in the first place. The Mgeta farm in the valley has certainly employed several local farmers, and constructed schools and health centers. The Kilombero Sugar company has done the same.

9.1.5 Conservation

Conservation of soils and nature in colonial times served to alienate the populations from their land. This was aided by the use of force. Across the country, various land-development and soil-conservation schemes and measures were implemented by authoritarian means. The number of extension staff was increased, and these staff were militarized (Coulson, 1977; Ruthenberg, 1964). Ostensibly a group intended to give advice to farmers, these extension staff and technical officers ensured that the numerous agricultural decrees were implemented. For instance, while the erosion narrative on the Uluguru mountain saw enforced terracing and tree planting, farmers in the area complained that the "instructors treated them as school boys" and that "they could not understand why they should work intensively 2–3 days per week for something which reduced their income" (Ruthenberg, 1964: 53). Elsewhere in the Usambara slopes, erosion control saw the unfolding of stringent ordinances including compulsory restriction of cattle to stables, and the prohibition of cultivation on slopes exceeding 25% (ibid: 52). Such authoritarianism only led to resistance to colonial agricultural policies (see Fuggles-Couchman, 1964: 79; Maguire, 1969: 30–31; Ruthenberg, 1964: 53–54).

Although such schemes were later abandoned, there has been a continuity or revamping of such agricultural improvement initiatives. For instance, land has recently been alienated from smallholder farmers, fishermen, and pastoralists for wetland conservation in the valley. The previous occupants have been evicted with the claim that they used unsustainable livelihood methods which were destroying the wetland. Claims that pastoralists are outsiders in the valley

further added to the reasons to expel them in 2012. However, the possibility that large-scale farms and companies are expanding into the wetland and destroying the fauna and flora is not even considered. It is the small-holder farmers who are blamed, thereby justifying further interventions.

9.2 Synergies

I have to emphasize here that these discursive practices are seldom exclusive of each other in time and place. For instance, it would be quite simplistic to separate the imposition of cooperative societies from the attempts to introduce new technologies or attempts to integrate farmers into commercial value chains. All the discursive practices are intertwined, although they might be emphasized differently depending on place and/or time. We have seen that although pastoralists might be asked to turn to farming, farmers might also be forced to give up their shambas, with the claim that large-scale farming is more useful, or conservation is more urgent. In-as-much as history shows that encapsulating smallholders within the five discursive practices mentioned above has but limited results in terms of the envisioned improvement in agriculture, the tragedy lies in their replication, although with variance from the past applications. Why then do these practices persist? The following final paragraphs of the dissertation will summarize the reasons.

The past and present attempts at agricultural improvement demonstrate that once a smallholder group does not fit within the five discursive practices, the state will try to force such “outliers” into its envisioned logic of agricultural improvement. A typical example here is the position of pastoralists not only in the Kilombero valley but across Tanzania. The narratives that they do not belong, that they are violent both to their neighbors and to nature, and that they do not contribute to the national economy are old, and have been variously disputed, but have also been repeated with more or less similar zeal. The goal has been to change pastoralists into intensive cattle keepers or even farmers. Generally, those smallholders who fall out of, or circumvent, these measures risk being punished or marginalized by state policies. This marginalization may include, though in no case is it limited to, enacting policies that favor one group of smallholders at the expense others (for instance, farmers over pastoralists). Eventually, the fear of punishment may force the smallholders to align with and propagate state policies for agricultural development. However, there are many instances as well where the resistance forces the state to change their policies and integrate the interests of smallholders. An example is in the 1940s when smallholders

continued marketing hand-hulled rice despite its ban. Eventually, the colonial administrators in the valley formalized trade in hand-hulled rice.

This then brings us to the second explanation, extended from the work of Ferguson (1990: 252) – the “side effects” of development as the reasons why development projects are replicate. This can be viewed through two lenses: the first suggests that the state is interested in extending its powers and bureaucracy to the population. This dissertation has provided examples to support this statement, showing the use of cooperatives and village settlements as a way for the state to extend its bureaucratic powers to the smallholder farmers in the Kilombero valley. The second side effect has been in the form of infrastructural development. Because of the agricultural interest in the valley, the British colonial authorities built new roads and improved old ones. Moreover, with the interest in the valley as part of an agricultural growth corridor, many milling machines have found their way into the valley, stores are being constructed, bridges are being rebuilt, and several local individuals are now employed as researchers and workers for the NGOs coming into the valley. Such benefits motivate the continued implementation of development projects. They also act as a political tool that the state uses to justify their relevance.

However, this dissertation has also demonstrated the interests of the smallholder farmer in feeding into the agricultural development strategies in the Kilombero valley. From the 1930s, chief Towegale of the Wabena, for instance, aligned his interests and cooperated with the British colonial administrators in the valley. For this reason, his chiefdom was given jurisdiction over the Wandamba and the Wahehe in the valley, as the Wabena were perceived as progressive and could foster the endeavors of agricultural development in the valley. The 1950s saw attempts to consolidate agricultural improvement by using progressive farmers. These were farmers who had cooperated and had followed recommendations from the British agricultural extension workers, and hence, gained land and inputs for their agricultural purposes. This was beneficial for them both financially and socially. Recently, we see many “paper” cooperative societies, accepting the power and bureaucracy of the state but gaining on the other hand financially. Many smallholder farmers also join the cooperatives with expectations of gaining financially, and their levels of participation are only proportional to their level of gain.

The narratives have thus formed an argument pertaining to three central aspects. The first is that the colonial and postcolonial state of Tanzania and administrators and development partners in the Kilombero valley have limited their agricultural development initiative within the context of the five discursive practices discussed in the dissertation. However, the implementations have

differed at some points within different colonial officials, and postcolonial governments. The second is that the logic behind failures in agricultural improvement within these five discursive practices in the valley is premised in the disconnect between these realms and the socio-economic conditions and expectations of farmers in the valley. However, and this is the third argument, persistence in the development idea (the five discursive practices) in the valley rests on the interest in expanding the powers of the state and global corporations and institutions through these development initiatives; the “side effects” of such development initiatives; the desire to manipulate the development initiatives by some members of the target group; and the fear of punishment by the population.

References

- 1TZ003 (2002) Information sheet on RAMSER wetlands. Categories approved by recommendation 4 of the Conference of the Contracting Parties.
- Abu-Lughod L (1991) Writing against culture: Seminar: Papers. In: Fox RG (ed.) *Recapturing anthropology: Working in the present*. Santa Fe, N.M.: School of American Research Press: Distributed by the University of Washington Press, pp. 137–161.
- Adesina AA and Baidu-Forson J (1995) Farmers' perceptions and adoption of new agricultural technology: Evidence from analysis in Burkina Faso and Guinea, West Africa. *Agricultural Economics* 13(1): 1–9.
- Altieri MA and Nicholls CI (2012) Agroecology Scaling Up for Food Sovereignty and Resiliency. In: Lichtfouse E (ed.) *Sustainable agriculture reviews*. Volume 11. Dordrecht, London: Springer, pp. 1–29.
- Angrosino MV (2005) Recontextualizing observation: Ethnography, pedagogy, and the prospects for a progressive political agenda. In: Denzin NK and Lincoln YS (eds) *The SAGE handbook of qualitative research*. Thousand Oaks, London: Sage Publications, pp. 729–745.
- Anseuw W and Alden C (2010) *The struggle over land in Africa: Conflicts, politics & change*. Cape Town, South Africa: HSRC Press.
- Askew K, Maganga F and Odgaard R (2013) Of land and legitimacy: A tale of two lawsuits. *Africa* 83(01): 120–141.
- Badawi AAT, Maximos MA, Aidy IR, Olaoye RA and Sharma SD (2010) History of Rice in Africa. In: Sharma SD (ed.) *Rice: Origin, Antiquity and History*: Science Publishers, pp. 373–410.
- Baldus RD and Cauldwell AE (2004) *Tourist hunting and its role in development of Wildlife Management Areas in Tanzania*. Dar es Salam.
- Bamford AJ, Ferrol-Schulte D and Wathan J (2014) Human and wildlife usage of a protected area buffer zone in an area of high immigration. *Oryx* 48(04): 504–513.
- Barrett CB (1996) On price risk and the inverse farm size-productivity relationship. *Journal of Development Economics* 51(2): 193–215.
- Barrett CB, Bellemare MF and Hou JY (2010) Reconsidering Conventional Explanations of the Inverse Productivity–Size Relationship. *World Development* 38(1): 88–97.
- Barume AK (2010) *Land rights of indigenous peoples in Africa: With special focus on Central, Eastern and Southern Africa*. Copenhagen: International Work Group for Indigenous Affairs.
- Baum E (1968) Land use in the Kilombero Valley: from shifting cultivation towards permanent farming. In: Ruthenberg H (ed.) *Smallholder farming and smallholder development in Tanzania: Ten case studies*. München: Weltforum Verlag, pp. 21–50.

- Baum E (1971) Land use and labor productivity under growing land shortage: with special reference to conditions in the Kilombero Valley. In: Kempe ME and Smith LD (eds) *Strategies for improving rural welfare*. Nairobi: Institute for development studies, University of Nairobi.
- Beck AD (1964) The Kilombero Valley of South-Central Tanzania. *East African Geographical Review*(2): 37–43 (accessed 09/30.2015).
- Beinart W (2000) African history and environmental history. *African Affairs* 99(395): 269–302.
- Benjaminsen TA, Bryceson I, Maganga F and Refseth T (2011) Conservation and Land grabbing in Tanzania. The Land Deals Politics Initiative. International Conference on Global Land Grabbing. Institute of Development Studies, University of Sussex. April 6-8, 2011.
- Bergius M (2016) Expanding the Corporate Food Regime in Africa through Agricultural Growth Corridors: The Case of Tanzania.
- Bernard HR (2000) *Social research methods: Qualitative and quantitative approaches*. Thousand Oaks, Calif., London: Sage Publications.
- Bernard HR (2011) *Research methods in anthropology: Qualitative and quantitative approaches*. Lanham Md. AltaMira Press.
- Bernstein H (2006) Is there an agrarian question in the 21st century? *Canadian Journal of Development Studies/Revue canadienne d'études du développement* 27(4): 449–460.
- Bernstein H (2009) 'The peasantry' in global capitalism: Who, where and why? *Socialist register* 37(37).
- Bernstein H (2013) Food Sovereignty: A skeptical view. Conference paper 1. Food Sovereignty: a critical dialogue. International conference Yale. September 14-15, 2013. Yale University.
- Biénabe E, Berdegú J and Peppelenbos LPC (2011) Reconnecting markets: Innovative global practices in connecting small-scale producers with dynamic food markets. Farnham: Ashgate.
- Boholm Å, Henning A and Krzyworzeka A (2013) Anthropology and decision making: An introduction. *Focaal* 2013(65): 97.
- Bonarius H (1975) Physical properties of soil in the Kilombero Valley (Tanzania). Eschborn: German Agency for Technical Cooperation.
- Bornat J (2001) Reminiscence and oral history: Parallel universes or shared endeavour? *Ageing & Society* 21(02).
- Boudreaux K (2012) An assessment of concerns related to land tenure in the SAGCOT region. Unpublished Report for USAID Tanzania.
- Braun K (1906) Der Reis in Deutsch-Ostafrika. In: *Deutsch-Ostafrika* (ed.) *Berichte über Land- und Forstwirtschaft in Deutsch-Ostafrika*, pp. 167–217.

- Bromley DW (2009) Formalising property relations in the developing world: The wrong prescription for the wrong malady. *Land Use Policy* 26(1): 20–27.
- Buckingham A and Saunders P (2004) *The survey methods workbook: From design to analysis*. Cambridge, Malden, Mass. Polity.
- Burton A and Jennings M (2007) Introduction: The Emperor's New Clothes? Continuities in Governance in Late Colonial and Early Postcolonial East Africa. *The International Journal of African Historical Studies* 40(1): 1–25.
- Busch L (2011) *Standards: Recipes for reality*. Cambridge, Mass. MIT Press.
- Carruthers J (1995) *The Kruger National Park: A social and political history*. Pietermaritzburg: University of Natal Press.
- Chamwali A (2000) *Survival and accumulation strategies at the rural-urban interface: A study of Ifakara town, Tanzania. Research report on poverty alleviation*. Dar es Salaam: REPOA.
- Cliffe L and Cunningham GL (1973) Ideology, organisation and the settlement experience in Tanzania. In: Cliffe L and Saul JS (eds) *Socialism in Tanzania: An interdisciplinary reader*. Nairobi: East African Publishing House, pp. 131–140.
- Cliffe L and Saul JS (1973) *Socialism in Tanzania: An interdisciplinary reader*. Nairobi: East African Publishing House.
- Clifford J (1983) On Ethnographic Authority. *Representations*(2): 118–146.
- Collier P (1983) Malfunctioning of African rural factor markets: Theory and a Kenyan example. *Oxford Bulletin of Economics and Statistics* 45(2): 141–172.
- Conley T and Udry C (2001) *Social Learning through Networks: The Adoption of New Agricultural Technologies in Ghana*. *American Journal of Agricultural Economics* 83(3): 668–673.
- Cooper F and Packard RM (1997) *International development and the social sciences: Essays on the history and politics of knowledge*. Berkeley, Calif., London: University of California Press.
- Coulson A (1977) Agricultural Policies in Mainland Tanzania. *Review of African Political Economy*(10): 74–100.
- Coulson A (1982) *Tanzania: A political economy*. Oxford: Clarendon.
- Cousins B (2010) What is a ‘smallholder’? PLAAS, University of the Western Cape, Working Paper 16.
- Cowen MP and Shenton RW (1996) *Doctrines of development*. London: Routledge.

- Crowder M (1964) Indirect rule: French and British style. *Africa: Journal of the International African Institute* 34(3): 197–205 (accessed 22 May 2018).
- Culwick AT (1934) The Hoe in Ulanga. *Man* 34: 9.
- Culwick AT and Culwick GM (1935) *Ubena of the Rivers*. London: George Allen & Unwin Ltd.
- Dannenberg P and Kulke E (2014) Editorial: Dynamics in agricultural value chains. *DIE ERDE—Journal of the Geographical Society of Berlin* 145(3): 121–126.
- Davies CA (2008) *Reflexive ethnography: A guide to researching selves and others*. London: Routledge.
- Deininger K (1995) Collective agricultural production: A solution for transition economies? *World Development* 23(8): 1317–1334.
- Deininger K and Byerlee D (2011) The rise of large farms in land abundant countries: Do they have a future? The World Bank.
- Deininger KW (2003) *Land policies for growth and poverty reduction*. Washington, D.C. World Bank; Oxford University Press.
- DeLong JB (1999) Seeing One's Intellectual Roots: A review essay. *The Review of Austrian Economics* 12(2): 245–255.
- Dorward AR, Kirsten JF, Omamo SW, Poulton C, and Vink N (2009) Institutions and the agricultural development challenge in Africa. In: Kirsten JF, Dorward AR, Poulton C and Vink N (eds) *Institutional economics perspectives on African agricultural development*. Washington, DC: Internat. Food Policy Research Inst. pp. 3–34.
- Doss C and Morris ML (2001) How does gender affect the adoption of agricultural innovations? The case of improved maize technology in Ghana. *Agricultural Economics* 25(1): 27–39.
- Durrenberger EP (2001) Anthropology and globalization. *American Anthropologist* 103(2): 531–535.
- Edelman M and Haugerud A (2005) *The anthropology of development and globalization: From classical political economy to contemporary neoliberalism*. Malden, Mass., Oxford: Blackwell Publishing Ltd.
- Ensminger J (1998) Anthropology and the new institutionalism. *Journal of Institutional and Theoretical Economics* 154(4): 774–789 (accessed 19 May 2016).
- Escobar A (1995) *Encountering development: The making and unmaking of the third world*. Princeton, N.J., Chichester: Princeton University Press.
- Esselborn S (2013) Environment, Memory, and the Groundnut Scheme: Britain's Largest Colonial Agricultural Development Project and Its Global Legacy. *Global Environment* 6(11): 58–93.

- Fairhead J and Leach M (1996a) Enriching the landscape: Social history and the management of transition ecology in the forest–savanna mosaic of the Republic of Guinea. *Africa* 66(01): 14–36.
- Fairhead J and Leach M (1996b) Reframing forest history. *Time-Scales and Environmental Change*: 169–195.
- FAO (1960) The Rufiji Basin Tanganyika: FAO report to the Government of Tanganyika on the preliminary reconnaissance survey of the Rufiji Basin. Volume 2. Hydrology and water resources. Rome.
- Feder G, Onchan T, Chalamwong Y and Hongladarom C (1988) Land policies and farm productivity in Thailand. Baltimore, London: published for the World Bank [by] Johns Hopkins University Press.
- Ferguson J (1990) The anti-politics machine: 'development', depoliticization and bureaucratic power in Lesotho: CUP Archive.
- Ferguson J (1997) Anthropology and its evil twin: "Development" in the constitution of a discipline. In: Cooper F and Packard RM (eds) *International development and the social sciences: Essays on the history and politics of knowledge*. Berkeley, Calif., London: University of California Press, pp. 150–175.
- Fischer E and Qaim M (2012) Linking Smallholders to Markets: Determinants and Impacts of Farmer Collective Action in Kenya. *World Development* 40(6): 1255–1268.
- Fortie M (1938) On foot through Tanganyika. *The Scientific Monthly* 46(6): 529–554 (accessed 17 February 2016).
- Freyhold Mv (1979) *Ujamaa villages in Tanzania: Analysis of a social experiment*. London: Heinemann.
- Friedman J (2014) On Text and Con-text: toward an anthropology in development. In: Venkatesan S and Yarrow T (eds) *Differentiating development: Beyond an anthropology of critique*. New York: Berghahn Books.
- Fuggles-Couchman NR (1964) *Agricultural change in Tanganyika: 1945-1960*. Studies in Tropical Development. Stanford California: Food Research Institute, Stanford University.
- Fülleborn F (1906) *Das Deutsche Njassa- und Ruwuma- Gebiet: Land und Leute. Nebst Bemerkungen über die Schire-Länder*. Berlin: Deutsch-Ost-Afrika.
- Futoshi K (2007) Development of a major rice cultivation area in the Kilombero Valley, Tanzania. *African Study Monographs Supplementary issue*. 36: 3–18.
- Gibbon P (2001) Cooperative Cotton Marketing, Liberalization and 'Civil Society' in Tanzania. *Journal of Agrarian Change* 1(3): 389–439.
- Gillman C (1927) South-West Tanganyika Territory. *The Geographical Journal* 69(2): 97.

- Gordon R (2010) *Going abroad. Traveling like an Anthropologist*. Paradigm publishers.
- Green M (2014) *The development state: Aid, culture & civil society in Tanzania*: Boydell & Brewer Ltd.
- Gulliver PH (1974) Political evolution in the Songea Ngoni chiefdoms, 1850–1905. *Bulletin of the School of Oriental and African Studies* 37(01): 82.
- Gupta A and Ferguson J (1992) Beyond “Culture”: Space, Identity, and the Politics of Difference. *Cultural Anthropology* 7(1): 6–23.
- Hardy T (1891) *Tess of the D'Urbervilles*. London: Penguin Books.
- Harvey D (2003) *The new imperialism*. Oxford: Oxford University Press.
- Harvey D (2006) *Spaces of global capitalism*. London: Verso.
- Hazell P, Poulton C, Wiggins S and Dorward A (2010) The Future of Small Farms: Trajectories and Policy Priorities. *World Development* 38(10): 1349–1361.
- Heinrich J (2001) Decision-making, cultural transmission and adaptation in economic anthropology. In: Ensminger J (ed.) *Theory in economic anthropology*: Rowman Altamira, pp. 251–295.
- Hickel J (2012) Social Engineering and Revolutionary Consciousness: Domestic Transformations in Colonial South Africa. *History and Anthropology* 23(3): 301–322.
- Hill JFR and Moffett JP (1955) *Tanganyika: A review of its resources and their development*. Dar es Salaam: Government of Tanganyika.
- Hoag HJ (2013) *Developing the rivers of East and West Africa: An environmental history*. London: Bloomsbury.
- Hodge JM (2007) *Triumph of the expert: Agrarian doctrines of development and the legacies of British colonialism*. Ohio University Press.
- Hodgson AGO (1926) Some Notes on the Wahehe of Mahenge District, Tanganyika Territory. *The Journal of the Royal Anthropological Institute of Great Britain and Ireland* 56: 37.
- Hydén G (1980) *Beyond Ujamaa in Tanzania: Underdevelopment and an uncaptured peasantry*: University of California Press.
- Hydén G (1976) The politics of cooperatives in Tanzania. In: Mutaha AZ and Hydén G (eds) *Cooperatives in Tanzania. Problems of organization building*. Department of Political Science. University of Dar es Salaam. Tanzania Publishing House, Dar es Salaam, pp. 7–20
- IBRD (1961) *The economic development of Tanganyika: report of a mission organized by the International Bank for Reconstruction and Development at the request of the governments of Tanganyika and the United Kingdom*. Baltimore: John Hopkins Press.

- Iliffe J (1969) *Tanganyika under German rule, 1905-1912*. London: Cambridge University Press.
- Iliffe J (1971) *Agricultural change in modern Tanganyika*: East African Publishing House.
- Iliffe J (1979) *A modern history of Tanganyika*. Cambridge: Cambridge University Press.
- Isaacman A and Roberts RL (1995) *Cotton, colonialism, and social history in Sub-Saharan Africa*. Portsmouth, N.H.: Heinemann; London: James Currey.
- Isham J (2002) The effect of social capital on fertiliser adoption: Evidence from rural Tanzania. *Journal of African Economies* 11(1): 39–60.
- Jack EM (1932) Railway Development in Tanganyika Territory. *The Geographical Journal* 79(2): 117.
- Jätzold R and Baum E (1968) *The Kilombero Valley (Tanzania): Characteristic features of the economic geography of a semihumid East African flood plain and its margins*. München: Weltforum Verlag.
- Jewsiewicki B and Mudimbe VY (1993) Africans' Memories and Contemporary History of Africa. *History and Theory* 32(4): 1.
- Jiggins J (2007) Beyond Ujamaa in Tanzania. *Third World Quarterly* 3(1): 88–95.
- Johnson NL and Ruttan VW (1994) Why are farms so small? *World Development* 22(5): 691–706.
- Kangalawe RYM and Liwenga ET (2005) Livelihoods in the wetlands of Kilombero Valley in Tanzania: Opportunities and challenges to integrated water resource management. *Physics and Chemistry of the Earth, Parts A/B/C* 30(11-16): 968–975.
- Kaplinsky R and Morris M (2001) *A handbook for value chain research*: IDRC Ottawa.
- Kelemen P (2007) Planning for Africa: The British Labour Party's Colonial Development Policy, 1920–1964. *Journal of Agrarian Change* 7(1): 76–98.
- Kherallah MW, Delgado CL, Gabre-Madhin E and Johnson M (2000) *The road half traveled: Agricultural market reform in Sub-Saharan Africa*. Washington, DC: IFPRI.
- Kirsten JF, Dorward AR, Poulton C and Vink N (2009) *Institutional economics perspectives on African agricultural development*. Washington, DC: Internat. Food Policy Research Inst.
- Kjekshus H (1977) *Ecology control and economic development in East African history: The case of Tanganyika, 1850-1950*. London: Heinemann Educational.
- Kjekshus H (1996) *Ecology control & economic development in East African history: The case of Tanganyika 1850-1950*. London: James Currey.

- Kouritzin SG (2000) Bringing Life to Research: Life History Research and ESL. *TESL Canada Journal* 17(2): 1.
- Langness LL and Frank G (1981) *Lives: An anthropological approach to biography*. Novato, Calif.: Chandler & Sharp Publishers.
- Leys C (1996) *The rise & fall of development theory*. Nairobi: EAEP; London: James Currey.
- Li TM (2005) Beyond "the State" and failed schemes. *American Anthropologist* 107(3): 383–394.
- Lumley EK (1976) *Forgotten mandate: A British District Officer in Tanganyika*. London: C. Hurst.
- Lussy PK (1951) Die Wapogoro: Notizen über Land und Leute. *Anthropos* 46(3/4): 431–441 (accessed 17 February 2016).
- Lyimo FF (2012) *Rural cooperation in the cooperative movement in Tanzania*. Dar es Salaam: Mkuki na Nyota.
- MacKenzie JM (1988) *The empire of nature: Hunting, conservation and British imperialism*. Manchester: Manchester University Press.
- Maganga F, Askew K, Odgaard R and Stein H (2016) Dispossession through Formalization. *Asian Journal of African Studies*(40): 3–49.
- Maganga F, Odgaard R and Sjaastad E (2007) Contested identities and resource conflicts in Morogoro Region, Tanzania: Who is indigenous? *Citizenship, Identity and Conflicts over Land and Water in Contemporary Africa*: 202–214.
- Maghimbi S (2010) *Cooperatives in Tanzania mainland: Revival and growth*. Dar es Salaam: ILO.
- Maguire GA (1969) *Toward 'Uhuru' in Tanzania: The politics of participation*. London: Cambridge U.P.
- Mamdani M (1996) *Citizen and subject: Contemporary Africa and the legacy of late colonialism*. Princeton, N.J., Chichester: Princeton University Press.
- Mapolu H and Phillipson G (1976) *Agricultural Cooperation and the Development of the Productive Forces: Some Lessons from Tanzania*. *Africa Development / Afrique et Développement* 1(1): 42–58.
- Mariano MJ, Villano R and Fleming E (2012) Factors influencing farmers' adoption of modern rice technologies and good management practices in the Philippines. *Agricultural Systems* 110: 41–53.

- Marra M, Pannell DJ and Abadi Ghadim A (2003) The economics of risk, uncertainty and learning in the adoption of new agricultural technologies: Where are we on the learning curve? *Agricultural Systems* 75(2-3): 215–234.
- McHenry DE (1977) Peasant Participation in Communal Farming: The Tanzanian Experience. *African Studies Review* 20(3): 43.
- Meinzen-Dick R and Mwangi E (2009) Cutting the web of interests: Pitfalls of formalizing property rights. *Land Use Policy* 26(1): 36–43.
- Meinzen-Dick RS and Pradhan R (2002) Legal pluralism and dynamic property rights: CGIAR Systemwide Program on Collective Action and Property Rights, International Food Policy Research Institute Washington.
- Migot-Adholla SE, Place F and Oluoch-Kosura W (1994) Security of tenure and land productivity in Kenya. In: Bruce JW and Migot-Adholla SE (eds) *Searching for land tenure security in Africa*. Dubuque, Iowa: Kendall/Hunt, 119-140.
- Moffett JP (1958) *Handbook of Tanganyika*. Dar es Salaam: Government of Tanganyika.
- Mombo FM, Speelman S, van Huylbroeck G, Hella J, Pantaleo M and Moe S (2011) Ratification of the Ramsar convention and sustainable wetlands management: Situation analysis of the Kilombero Valley wetlands in Tanzania. *Journal of Agricultural Extension and Rural Development* 3(9): 153–164.
- Monson J (1993) From Commerce to Colonization: A History of the Rubber Trade in the Kilombero Valley of Tanzania, 1890-1914. *African Economic History*(21): 113–130.
- Monson J (1995) Rice and cotton, ritual and resistance: cash cropping in southern Tanganyika in the 1930s. In: Isaacman A and Roberts RL (eds) *Cotton, colonialism, and social history in Sub-Saharan Africa*. Portsmouth, N.H.: Heinemann; London: James Currey, pp. 268–284.
- Monson J (2000a) Claims to History and the Politics of Memory in Southern Tanzania, 1940-1960. *The International Journal of African Historical Studies* 33(3): 543.
- Monson J (2000b) Memory, migration and the authority of history in southern Tanzania, 1860–1960. *Journal of African History* 41(3): 347–372 (accessed 15 April 2016).
- Moore HL and Vaughan M (1994) *Cutting down trees: Gender, nutrition, and agricultural change in the Northern Province of Zambia, 1890-1990*. Portsmouth, NH: Heinemann; London: Currey.
- Mwaseba DL, Kaarhus R, Johnsen FH, Mvena ZSK and Mattee AZ (2006) Beyond Adoption/Rejection of Agricultural Innovations. *Outlook on Agriculture* 35(4): 263–272.
- Nadvi K (2008) Global standards, global governance and the organization of global value chains. *Journal of Economic Geography* 8(3): 323–343.

- Nagayets O (2005) Small farms: Current status and key trends. In: International Food Policy Research Institute (ed.) *The future of small farms: Proceedings of a research workshop*: International Food Policy Research Institute, pp. 355–367.
- Nakano Y and Kajisa K (2011) The impact of Access to Credit and Training on Technological Adoption: A Case of the Rice Sector in Tanzania. 2011 Annual Meeting, July 24-26, 2011, Pittsburgh, Pennsylvania.
- Ndagala DK (1982) "Operation Imparnati": The sedentarization of the pastoral Maasai in Tanzania. *Nomadic Peoples*(10): 28–39.
- Ndagala DK (1990) Pastoralists and the State in Tanzania. *Nomadic Peoples*(25/27): 51–64.
- Neilson J and Pritchard B (2009) Value chain struggles: Institutions and governance in the plantation districts of South India. Chichester, U.K: Wiley-Blackwell.
- Nelson F, Gardner B, Igoe J and Williams A (2009) Community-based conservation and Maasai livelihoods in Tanzania. In: Homewood K, Kristjanson P and Trench P (eds) *Staying Maasai? Livelihoods, conservation and development in East African rangelands*. New York: Springer, pp. 299–333.
- Netting RM (1993) Smallholders, householders: Farm families and the ecology of intensive, sustainable agriculture. Stanford, Calif.: Stanford University Press.
- Newiger N (1968) Village settlement schemes: the problems of co-operative farming. In: Ruthenberg H (ed.) *Smallholder farming and smallholder development in Tanzania: Ten case studies*. München: Weltforum Verlag, pp. 249–274.
- Nindi SJ, Maliti H, Bakari S, Kija H and Machoke M (2014) Conflicts over land and water resources in the Kilombero Valley floodplain, Tanzania. *African Study Monographs* 50: 173–190.
- Nkuba J, Ndunguru A, Madulu R, Lwezaura D, Kajiru G, Babu A, et al. (2016) Rice value chain analysis in Tanzania: Identification of constraints, opportunities and upgrading strategies. *African Crop Science Journal* 24(1): 73.
- Nyerere JK (1966) President's inaugural address: 10th December 1962. In: Nyerere JK (ed.) *Freedom and Unity: A selection from writings and speeches. 1952-65*. London: Oxford University Press, pp. 176–187.
- Nyerere JK (1968a) Socialism and rural development. September 1967. In: Nyerere JK (ed.) *Ujamaa: Essays on socialism*. London: Oxford University Press, pp. 106–144.
- Nyerere JK (1968b) *Ujamaa: Essays on socialism*. London: Oxford University Press.
- Oya C (2007) Stories of Rural Accumulation in Africa: Trajectories and Transitions among Rural Capitalists in Senegal. *Journal of Agrarian Change* 7(4): 453–493.

- Parsa A, Nakendo F, McCluskey WJ and Page MW (2011) Impact of formalisation of property rights in informal settlements: Evidence from Dar es Salaam city. *Land Use Policy* 28(4): 695–705.
- Paul H and Steinbrecher R (2013) African agricultural growth corridors and the New Alliance for Food Security and Nutrition. Who benefits, who loses.
- Peters PE (2009) Challenges in Land Tenure and Land Reform in Africa: Anthropological Contributions. *World Development* 37(8): 1317–1325.
- Peters PE (2013) Land appropriation, surplus people and a battle over visions of agrarian futures in Africa. *Journal of Peasant Studies* 40(3): 537–562.
- Pfeil GJ (1886) *Die Erforschung des Ulanga-Gebietes*: Petermann.
- Place F and Migot-Adholla SE (1998) The Economic Effects of Land Registration on Smallholder Farms in Kenya: Evidence from Nyeri and Kakamega Districts. *Land Economics* 74(3): 360.
- Ponte S (2004) Standards and sustainability in the coffee sector. International Institute for Sustainable Development. Available at <http://www.iisd.org>.
- Ponte S and Gibbon P (2005) Quality standards, conventions and the governance of global value chains. *Economy and Society* 34(1): 1–31.
- Portes A and Kincaid AD (1989) Sociology and development in the 1990s: Critical challenges and empirical trends. *Sociological Forum* 4(4): 479–503.
- Rapley J (2007) *Understanding development: Theory and practice in the third world*. Boulder, Colo.: Lynne Rienner; London: Eurospan [distributor].
- Rapp A, Berry L and Temple PH (1972) Soil erosion and sedimentation in Tanzania. *The Project. Geografiska Annaler. Series A, Physical Geography* 54(3/4): 105–109.
- Raum FO (1964) *The human factor in the development of the Kilombero Valley*. München.
- Richason BF (1951) Britain's Groundnut Scheme in East Africa. *Journal of Geography* 50(4): 150–158.
- Rizzo M (2006) What Was Left of the Groundnut Scheme? Development Disaster and Labour Market in Southern Tanganyika 1946-1952. *Journal of Agrarian Change* 6(2): 205–238 (accessed 5 June 2017).
- Rogers SG (1974) The Kilimanjaro Native Planters Association: Administrative responses to Chagga initiatives in the 1920's. *Transafrican Journal of History* 4(1/2): 94–114 (accessed 27 June 2018).
- Ruthenberg H (1964) *Agricultural Development in Tanganyika*. Berlin, Heidelberg: Springer Berlin Heidelberg.

- Saul JS (1973) Marketing cooperatives in a developing country: The Tanzanian case. In: Cliffe L and Saul JS (eds) *Socialism in Tanzania: An interdisciplinary reader*. Nairobi: East African Publishing House, pp. 141–152.
- Savage JK, Guderyon NJ and Jordan HP (1982) Review of cooperative development in Tanzania as it relates to agriculture. Dar es Salaam.
- Sayers GF (1930) *The handbook of Tanganyika*. London: Macmillan and Co.,
- Schutter O de (2011) How not to think of land-grabbing: Three critiques of large-scale investments in farmland. *Journal of Peasant Studies* 38(2): 249–279.
- Schutter O de (2015) *The new alliance for food security and nutrition in Africa*. [Brussels]: [European Parliament].
- Scott J (1990) *A matter of record: Documentary sources in social research*. Cambridge: Polity.
- Scott JC (1998) *Seeing like a state: How certain schemes to improve the human condition have failed*. New Haven: Yale University press.
- Sheahan M and Barrett CB (2017) Ten striking facts about agricultural input use in Sub-Saharan Africa. *Food policy* 67: 12–25.
- Silverman D (2010) *Doing qualitative research: A practical handbook*. London: SAGE.
- Sjaastad E and Cousins B (2009) Formalisation of land rights in the South: An overview. *Land Use Policy* 26(1): 1–9.
- Sunseri T (1995) Peasants and the struggle for labor in cotton regimes of the Rufiji Basin, Tanzania (1890-1918). In: Isaacman A and Roberts RL (eds) *Cotton, colonialism, and social history in Sub-Saharan Africa*. Portsmouth, N.H.: Heinemann; London: James Currey, pp. 180–199.
- Sunseri T (1996) Labour migration in colonial Tanzania and the hegemony of South African Histography. *African Affairs* 95(381): 581–598 (accessed 13 May 2016).
- Telford MA (1929) *Report on the development of the Rufiji and Kilombero Valleys*. London: Crown Agents for the Colonies.
- Thomson J (1880) Journey of the Society's East African Expedition. *Proceedings of the Royal Geographical Society and Monthly Record of Geography* 2(12): 721 (accessed 17 February 2016).
- Trienekens JH (2011) Agricultural value chains in developing countries; a framework for analysis. *International Food and Agribusiness Management Review* 14(2): 51–83.
- Uzzi B (1997) Social Structure and Competition in Interfirm Networks: The Paradox of Embeddedness. *Administrative Science Quarterly* 42(1): 35.

- van Beusekom MM and Hodgson DL (2000) Lessons Learned? Development Experiences in the Late Colonial Period. *The Journal of African History* 41(1): 29–33.
- Venkatesan S and Yarrow T (2014) *Differentiating development: Beyond an anthropology of critique*. New York: Berghahn Books.
- Vicol M (2014) Potato contract farming and 'privileged spaces': preliminary insights from rural Maharashtra. *DIE ERDE–Journal of the Geographical Society of Berlin* 145(3): 142–147.
- Wanyama FO, Develtere P and Pollet I (2009) Reinventing the wheel? African cooperatives in a liberalised economic environment. *Annals of Public and Cooperative Economics* 80(3): 361–392.
- Wilson GEH (1932) 298. *The Ancient Civilization of the Rift Valley*. *Man* 32: 250.
- Woodhouse P, Bernstein H and Hulme D (2000) *African enclosures? The social dynamics of wetlands in drylands*. Oxford: James Currey.
- World development report 2008: *Agriculture for development* (2007). Washington, D.C.: World Bank; London: Eurospan [distributor].
- Zeitlyn D (2012) Anthropology in and of the Archives: Possible Futures and Contingent Pasts. *Archives as Anthropological Surrogates**. *Annual Review of Anthropology* 41(1): 461–480.

PhD Theses

- Dreier M (2014) *Health, welfare and development in Rural Africa: Catholic medical mission and the configuration of development in Ulanga/Tanzania, 1920-1970*. PhD dissertation, University of Basel. Basel.
- Larson EL (1976) *A history of the Mahenge (Ulanga) district, ca, 1860-1958*. PhD Dissertation, University of Dar es Salaam. Dar Es Salaam.
- Monson J (1991) *Agricultural transformation in the inner Kilombero Valley of Tanzania, 1840 - 1940*. PhD Dissertation, University of California. Los Angeles.

Statute or Regulation

- United Republic of Tanzania (1991) *The Cooperative Societies Act, 1991*.
- United Republic of Tanzania (2004) *The Cooperative Societies Act, 2003*.
- United Republic of Tanzania (2014) *The Cooperative Societies Act, 2013*.
- The United Republic of Tanzania (1997) *National Land Policy*.

The United Republic of Tanzania (2006) *National Livestock Policy*.

The United Republic of Tanzania (2007) *The Wildlife policy of Tanzania*.

Newspaper articles and News agency reports

Chidawali H (2011) Tanzania: Govt orders all pastoralists off Kilombero. *The Citizen*, 25 August 2011. <http://allafrica.com/stories/201108250540.html>.

Kasumuni L (2012) Tanzania: Kilombero Valley eviction directive 'doomed to fail'. *The Citizen*, 5 February 2012. <http://allafrica.com/stories/201202061875.html>.

Lucas L (2011) Tanzania: Council halts fishing for 6 months. *The Citizen*, 21 December 2011. <http://allafrica.com/stories/201112210682.html>.

Mfugale D (2010) Tanzania: Kilombero Ramsar site a poisoned Chalice. *The Citizen*, 27 December 2010. <http://allafrica.com/stories/201012280190.html>.

Mfugale D (2011) Tanzania: Countdown to the 'Death' of Kilombero Valley. *Tanzania Daily News*, 20 September 2011. <http://allafrica.com/stories/201109211500.html>.

Rugonzibwa P (2012) Tanzania: Kilombero to evicts pastoralists. *Tanzania Daily News*, 3 September 2012. <http://allafrica.com/stories/201209030940.html>.

The Citizen (2009) Tanzania: Govt orders 2000 people out of farm. *The Citizen*, 19 October 2009. <http://allafrica.com/stories/200910190372.html>.

Yeo P (1992) The new Co-operative Societies Act: *Tanzania Affairs*. Issue 43, 1 September 1992. <https://www.tzaffairs.org/1992/09/the-new-co-operative-societies-act/>.

Internet documents

Action Aid International (2015) New Alliance, new risk of land grabs: Evidence from Malawi, Nigeria, Senegal and Tanzania. Available at: <http://www.actionaid.org/sites/files/actionaid/new20alliance20new20risks20of20land20grabs.pdf> (accessed 9 May 2017).

Government of Tanzania (2013) Southern Agricultural Growth Corridor of Tanzania (SAGCOT) Investment Project: Strategic Regional Environmental and Social Assessment (SRESA). Available at: <http://documents.worldbank.org/curated/en/968601468312048448/pdf/E30750V30REV0A00Box382146B00PUBLIC0.pdf> (accessed 15 March 2017).

Illovo Sugar (2014) Tanzania socio-economic impact assessment: Internal management report.

IWGIA report (2016) Tanzanian pastoralists threatened: Evictions, human rights violations and loss of livelihoods. Available at:
http://www.iwgia.org/iwgia_files_publications_files/0727_Report_23_Tanzania_for_eb.pdf
(accessed 9 May 2017).

Just Conservation. 11 November (2012) Three sides of the Kilombero Valley evictions drive: Rare species, cattle burden, foreign investments. Available at:
<http://www.justconservation.org/three-sides-of-kilombero-evictions-drive-rare-species,-cattle-burden,-foreign-investments> (accessed 20 March 2017).

KPL (2015) Model responsible primary Ag investment. Private and confidential report. Available at:
http://www.fao.org/fileadmin/templates/est/Investment/Tanzania/KPL_Responsible_Ag_Investment_Jan_2015_Revised.pdf (accessed 22 September 2017).

Ngaiza R (2012) Kilimo Kwanza: The declaration of Tanzania's agricultural transformation.

PINGO's Forum (n.d.) Eviction of pastoralists from Kilombero and Rufiji Valleys, Tanzania. Available at: <http://www.pingosforum.or.tz/index.php/about-us/reports/current-reports/activities/17-kilombero-valley-final-june/file> (accessed 9 May 2017).

SAGCOT (2011) Southern Agricultural Growth Corridor of Tanzania: Investment Blueprint. Available at: http://www.sagcot.com/uploads/media/Invest-Blueprint-SAGCOT_High_res.pdf (accessed 12 May 2017).

SAGCOT (2013) Applying an Agriculture Green Growth Approach in the SAGCOT Clusters: Challenges and Opportunities in Kilombero, Ihemi and Mbarali. Available at:
http://legacy.ecoagriculture.org/~ecoagric/documents/files/doc_485.pdf (accessed 12 May 2017).

The Oakland Institute (2015) Irresponsible investment: Agrica's broken development model in Tanzania.

Archival sources

Tanzania National Archives (TNA), Dar es Salaam

Mahenge District Office. No. 1

Mahenge District Office. No. 2

Access Number 461. Economic Control Board

30/5. Control of Rice and Paddy. 1951-1955

30/7. Local distribution of food – Mahenge

Access Number 616. Agriculture.

6/6. Cotton correspondence. 1944-1951

Access Number 61. Control of Produce

574/13/47/II. Marketing of the Ulanga paddy crop.

574/13/19. Rice and paddy

574/13/30. Rice and wheat position in Eastern Province

H1. Agriculture

6/2. General correspondence