CONTRACT FARMING IN TANZANIA: IMPLICATIONS FOR SMALLHOLDER FARMERS' GENDER RELATIONS, LIVELIHOODS, AND SUBJECTIVITIES

A DISSERTATION SUBMITTED TO THE FACULTY OF THE GRADUATE SCHOOL OF THE UNIVERSITY OF MINNESOTA

BY

Francis Lyimo

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

Rachel Schurman, PhD
Ronald Aminzade, PhD
(Co-Advisors)

August, 2022

Acknowledgments

There is an African saying that goes; “It takes a village to raise a child”. Being a “child” in academics, I have had many people and organizations that have been instrumental in guiding and supporting me. Although the opinions, weaknesses, and limitations of my work are my whole responsibility. I owe a great deal of gratitude to my advisors, Professors Rachel Schurman and Ronald Aminzade for their selfless commitment and dedication in listening, shaping, criticizing, and challenging my rough ideas to create clearer and more focused ideas and arguments that made this work easy to read and outstanding. I have benefited a lot from the wealth of knowledge, information, and experiences on the topic that helped me find my own way and realize my vision. It means the world to me to have such a complete package of scholars who not only made a difference in my scholarly opinions but also social life. Indeed, their support is immeasurable. To these two I say, *Asanteni Sana*, thank you so much. I am grateful to my doctoral committee members Professors Michal Godman and Karen Brown for their inspiration and guidance over the years. Their constant academic chit-chat greatly helped me find the Aha moments that became the building block of my ideas. I am very privileged to have had such a great team of professors who went beyond the call of duty to make sure I grow academically, socially, and psychologically. I cannot imagine how my graduate experience would have been without them.

I wish to show my appreciation to the Department of Sociology at the U of M for the great support extended to me through fellowship funding, teaching assistantships, and instructorships. The department funding, including the Aminzade Sociology International Graduate Student Emergency Fund, made it much easier for me to concentrate on my work. I wish to extend my gratitude to the ISSS office at the U of M for their support and guidance as an international student. In the same manner, the generous predissertation and dissertation funding I received from the Interdisciplinary Center for the Study of Global Change (ICGC) deserves a mention here. Special appreciation to the ICGC interdisciplinary team of faculty, staff, and ICGC scholars who created a sense of belonging and support from an exceptional group of scholars from whom I learned a lot from.

Indeed, this endeavor would not have been possible without the funding support I received from the Fulbright Foundation through the Fulbright scholarship. The financial support I received from Fulbright through the Institute of International Education (IIE) has been key to what I have achieved today. Special thanks to the U.S. Embassy in Tanzania for allowing me the opportunity to interview with them during the selection process. I am also thankful to the University of Dar es Salaam for years of support and for allowing me to pursue my program at the University of Minnesota.

I am deeply indebted to my research participants who volunteered their time to talk, teach and share their experiences with me. In particular, I would like to thank the smallholder rice farmers in Mngeta, the NAFAKA representative Denisia Samwel, the KPL administration representative Mr. Jailos, and the Mngeta, Mkangawalo and Luvirikila village leadership. Special thanks to my research assistant Magreth Aniseth for her commitment and passion for data collection. Without her, this study would have been a much greater challenge.

I wish to extend my special thanks to my dear friend and brother Mr. Danstan Matungwa, my writing buddy, whose inspiration created a sense of resilience in me and gave me a reason to move on, and to Ebben Msuya, my brother and colleague, for his advice and support throughout my program. I would also like to express my sincere gratitude to my brother Alfa Mbena for his tireless rides to the stores and church, my cohorts and fellow scholars at the U of M: Mathew Aguilar-Champeau, Neeraj Rajasekar, Allison Nobles, Monica Jarvi, Ryan Steel, Ryan Larson, Sarah Catherine Billups, Caty Tarboda and fellow ICGC scholars for their collegial support and friendship that shaped my scholarship. The sociology department faculty and staff deserve special thanks for their mentorship and for enriching my life. Ann Miller and Becky Drasin deserve special mention for their continuous support that made my life easy at the university.

Special thanks and appreciation go to Dr. June Msechu and her husband Malaki Ruranika as well as Hellen Msechu. Recalling the first time I landed in Minnesota, the only thing that stuck with my mind to date is the smiles I received from these two amazing women that made me feel at home. Hosting me at your place for those first days of my transition ensured me of my place at your home, that you continuously welcomed not only me but my whole family whenever we felt like coming over. Your love, care, patience, understanding, and commitment to making sure I know key areas in Twin Cities are unimaginable. June, you have been such an inspiration to me not only as my undergraduate professor but also as my graduate school mentor and sister. I and my wife will always remember that the first *Uji* she had when she gave birth to our son Gian, came from you Malaki. Thank you so much for your care and love.

Words cannot express my gratitude to my beloved wife Dr. Ever Mkonyi, and our three beautiful children Ian, Gian, and Gianna Lyimo for their patience, understanding, love, prayers, and support even when the times got tougher. At times our children would feel so disappointed as they asked; "dad what is it that you are studying that has no end?" And the answer they would get was "a Ph.D.". Even though my answer did not make sense to them, they chose to understand and bear with me. Sometimes they would complain "dad you don't want to play with us because you say you do not have time, but you never run short of time for your school, you are so mean". All aside, it was a joy having my family support me during this journey. To my wife, friend, and writing buddy Dr. Ever Mkonyi, I thank you for your aspirations, encouragement, challenges, prayers, and for taking good care of me and the kids during my program. Your ambitions and long-time vision to pursue a Ph.D., inspired me, even more, to finish my program so you could have someone to look up to. Your fortitude and humor rekindled my spirit especially when I was about to give up. You are indeed a superwoman. Thank you for being such a responsible wife and mother.

As I mentioned earlier, it takes a village to raise a child and my parents and parents-in-law deserve utmost respect and gratitude. My parents-in-law, Mary Thomas, and Festo Mkonyi, not only prayed for me, but they also have been a refuge I could depend on to fulfill my wants and needs. Thank you for staying with our son Gian for over a year during my fieldwork and thereafter in the U.S. Special thanks to my sisters-in-law, Ruth Mkonyi and Regina Makundi, for taking care of our house in Tanzania when I and my wife were pursuing our academic journeys here in the US. I am also thankful to the Minnesota Swahili Community members for all the support they have given us. Their support during the birth of our two children Gian and Gianna in the U.S. and during our graduation will remain not only a memorable event but also a lifelong lesson to us. To all those I have not mentioned but contributed in one way or another to making this journey a success, I say thank you so much. Most of it all, I’m thankful to God who made all this possible. May the Almighty God bless you all for touching my life in unique ways.

Dedication

I dedicate this dissertation to my greatest teachers, mentors, and guardians, my late mother Hadija Hassan, the late grandfather Vincent Gerald Lyimo and his wife the late Martha Mapolio Shayo for showing me the world. I also dedicate this piece of work to my beloved family, my dear wife Dr. Ever Mkonyi, and our children, Ian, Gian, and Gianna Lyimo who never got tired of my "I'm sorry, I can't be with you now because I have to finish up something!" answer, whenever they wanted to spend some time with me. I dedicate this work to my co-advisors Rachel Schurman and Ronald Aminzade for their diligent tireless support and guidance. Lastly, I dedicate this work to all the smallholder farmers whose experiences and voices are represented here.

Abstract

In the attempt to transform Tanzania's agriculture and improve smallholder farmers' lives, the government of Tanzania adopted a private-public partnership (PPP) model which put smallholder farmers at its center, as potential entrepreneurs who can address the problem of food shortages and "lift themselves out of poverty". The Tanzanian government has encouraged the practice of contract farming and embraced the dominant global agricultural narrative, which considers contract farming to be the best approach for both technological transfers to smallholder farmers and smallholder farmers' market integration, while also increasing incomes, productivity, and food availability. However, there has been a debate about contract farming between neoclassical and institutional economists, who focus on the economic impacts and are proponents of this mode of production, and social scientists, including geographers, sociologists, and anthropologists, who look at a wider range of social and economic consequences and tend to be far more critical.

Drawing from feminist political ecology (FPE), the feminist post-structuralist approach (PSF), and Marxian political economy perspectives, and using mixed methods of data collection (interviews, participant observation, informal interviews, and survey method), I explore (a) how *gender relations* are affected by smallholder farmers' (SHFs) incorporation into contract farming schemes, (b) the *localized political conflicts* that these schemes generated; c) the ways the local *farmers' livelihoods* were affected by these new farming arrangements, and (d) the ways *farmer identities and subjectivities*, were affected by their incorporation into contract farming schemes at a moment when 'entrepreneurial' smallholder farmers were being celebrated.

My findings show that participation in contract farming and the adoption of new farming techniques shaped farmers' lives by changing their traditional rice production practices. The introduction of contract farming in Mngeta altered people's previous livelihood activities through increased mechanization and commercialization. With the arrival of contract farming and of new commercial opportunities afforded by KPL, the dominant company engaged in rice production more men became interested in growing rice, a crop previously considered to be exclusively a "women's crop." Men's increased involvement in rice production provided a way for them to gain control over the rice harvest and over the money they generated from selling rice to outside buyers, an encroachment on what had formerly been a woman's domain.

Additionally, the training designed by NAFAKA to instill entrepreneurial skills led some farmers to adopt neoliberal subjectivities, encouraging these small farmers to understand the problems they faced- of low productivity, a lack of markets, the absence of credit, and food insecurity- as a product of personal shortcomings, such as a lack of entrepreneurial initiative or persisting traditional mindsets, rather than as rooted in relations of power and inequality. Technologies of the self, involving the desire to become a "modern farmer", produced a lending system that tied smallholder farmers to debt relations without which they could not meet the expectations of "modern farming". Moreover, broader relations of production and distribution between the company and its contract farmers created the conditions for dissatisfaction and mistrust, and political contentions between the two parties, leading to the collapse of the scheme and the subsequent collapse of KPL. The study analyzes the broader significance of this research and recommends areas for further research and policy interventions

Keywords: Contract Framing, gender relations, relations of power, livelihoods, neoliberal subjectivities, entrepreneurs, technologies of the self.

Table of Contents

List of Tables

List of Figures

List of Abbreviations

ACDI	Agricultural Cooperative Development International
AfDB	African Development Bank
ASDP	Agricultural Sector Development Plan
CCM	Chama cha Mapinduzi
CDC	Commonwealth Development Corporation
CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CEO	Chief Executive Officer
CF	Contract Farming
CHADEMA	Chama cha Demokrasia na Maendeleo
COSTECH	Commission for Science and Technology
CSR	Corporate Social Responsibility
DFID	Department for International Development
DRC	Democratic Republic of Congo
FAO	Food and Agriculture Organization
FPE	Feminist Political Economy
FPE	Feminist Political Ecology
FPS	Feminist Post-Structuralist
HR	Human Resource
ILO	International Labor Organization
IRB	Institutional Review Board
KOTACO	Korean-Tanzania Cooperation
KIHOCO	Kilombero Holding Company
KPL	Kilombero Plantation Limited
LHRC	Legal and Human Rights Center
NAP	National Action Plan
NGOs	Non-Governmental Organizations
NIE	New Institutional Economic
NMB	National Microfinance Bank

Norfund	Norwegian Investment Fund for Development
OECD	Organization for Economic Cooperation and Development
PASS	Private Agricultural Sector Support
PPP	Public-Private Partnership
RAS	Regional Administrative Secretary
RUBADA	Rural Basin Development Agency
SAGCOT	Southern Agricultural Growth Corridor of Tanzania
SAPs	Structural Adjustment Programs
SHFs	Smallholder Farmers
SPSS	Statistical Package for Social Sciences
SRI	Sustainable Rice Intensification
TAFSIP	Tanzania Agriculture and Food Security Investment Plan
TNCs	Transnational Corporations
TGNP	Tanzania Gender Networking Program
TNCs	Transnational Corporations
TPRI	Tropical Research Institute
TVs	Televisions
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programmes
USAID	United States Agency for International Development
USD	United States Dollar
VOCA	Volunteers in Overseas Cooperative Assistance
VICOBA	Village Community Bank
WEO	Ward Executive Officer
YOSEFO	Yetu Microfinance

Chapter One: Introduction

Contract Farming and Global Institutions in Africa

The adoption of contract farming in Tanzania, and across Africa, is part of a process that transcends the boundaries of nation-states and involves global actors. International institutions have been seeking to transform and modernize agriculture in Africa through various modes, including contract farming (CF) or “outgrower schemes” (Bergius & Buseth, 2019; Buseth, 2017). The World Bank and ILO see smallholder farmers as crucial for rural development and improved smallholder livelihoods (UNCTAD, 2009, p. 130). The 2008 World Bank report, for example, states that the “scale of economies in processing and marketing exist with fragmenting and shrinking farm size, so institutional innovations such as contract farming can reduce the transaction costs and risks of smallholders by linking smallholders to processors and retailers can also create access to more financial capital through banks-and provide technology extension, and buy-back arrangements, while monitoring food safety” (237). The need and demand for contract farming have been promoted and supported by various discourses of different global institutions. These institutions function as policy forums, or "norm entrepreneurs," and construct, frame, and circulate ideas by selecting, internalizing, and reframing ideas and enforcing these ideas through monitoring and evaluation (Nay, 2014, p. 213). These institutions are key in advancing knowledge that reflects their own interests and objectives (Nay, 2014). They are powerful actors in producing knowledge, setting standards, disseminating knowledge, and institutionalizing contract farming in agricultural and rural development policies.

The Berg report issued by the World Bank emphasizes the role of smallholders by stating that the smallholder sector should be the focus of growth for rural development. The World Bank (2008) describes smallholder farming as a more cost-effective way to raise output than other alternatives and sees them as entrepreneurs who are responsive to opportunities for profitable innovation. According to the 2008 World Development Report, small farmers have the potential to be highly productive, typically producing more from each acre than large farmers do when empowered by the private sector through the diffusion of technologies. It sees the private sector as an important vehicle for technological transfer and advice to smallholder farmers. The ILO also adds that, with this linkage, smallholder farmers will be able to secure funds that would be hard to get through financial institutions (FAO, 2012, p. 61). The 2008 World Development Report explicitly shows how smallholder farmers can partner with the private sector. The report points to contract farming as the way through which smallholder farmers can participate in value chains through vertical coordination (World Bank, 2007, p. 134). Similarly, the 2011 World Bank Development Report (also known as the Deininger report) sees contract farming as a key pillar for rural development as it links the processors and exporters via contract or other forms of productive partnership (Deininger & Byerlee, 2011, p. 142).

Global actors envision a central role for states, not just the private sector, in the promotion and spread of contract farming. In the public-private partnership model that they espouse, the state must create an enabling environment for market development and improve the investment climate for the private sector by introducing incentives and assigning property rights. According to the (UNCTAD, 2009, p. 130), "contract farming is a key channel for linkages between TNCs located at various stages of the agribusiness value chain – both upstream and downstream of agriculture – and in agriculture itself." The role of the State from this perspective is, first, to formulate an integrated strategic policy and regulatory framework for TNC activities in agricultural production, and second, to promote contract farming between TNCs and local farmers to enhance farmers' predictable income, productive capacities, and benefits from global value chains (UNCTAD, 2009, p. xviii).

While the World Bank (2008) sees contract farming as an institutional innovation that can support smallholder farmers with technical and marketing skills, inputs, and credit, the Deininger report sees it as an alternative to land acquisition and smallholder dispossession, suggesting that large-scale investors should enter into a partnership with smallholder farmers who own land (Deininger & Byerlee, 2011, p. 34; FAO, 2012). The World Investment Report (UNCTAD, 2009, 2011) sees contract farming as a way through which TNCs can create a win-win situation through the creation and retention of value-added in host countries (UNCTAD, 2009, p. 175). Their justification for the benefits of contract farming is drawn from India and China, where technology transfer has improved rice and coffee growers farming practices respectively, and increased yields and incomes (UNCTAD, 2001, p. 27, 2011).

The contract farming narrative has further been promoted by the African Development Bank (AfDB), Organization for Economic Cooperation and Development (OECD) and the United Nations Development Programmes (UNDP) especially in their commitment to improving agriculture in Africa. These institutions focuses more on expanding private sector agribusiness and the role of the private sector in improving rural households through contract farming and other outgrower schemes (African Development Bank, et al., 2014). Similar to the World Bank, they see smallholder farmers as potential entrepreneurs capable of adopting modern farming technology. This requires a shift from a highly diversified subsistence-oriented agriculture to a more commercially oriented agriculture coupled with improved market access and strong linkages with agro-industry. The AfDB, OED and UNDP see contract farming as an important agricultural strategy that can help improve smallholder farmers' income, and yields, add value to agriculture, minimize post-harvest loss, generate job opportunities, and transfer technology to farmers.

Proponents of agricultural modernization and transformation in Africa often adopt a view of the process as a "linear progression”, viewing smallholder farmers as potential entrepreneurs, who can be transformed from smallholder farmers to large-scale farmers engaged in industrial agriculture, linked with the global markets (Van Der Ploeg, 2010). In their perspective, this transformation can be possible through overcoming the constraints that smallholder farmers face and strengthening their agricultural practices and livelihood strategies (McKeon, 2015). This narrative is coupled with the ideas of protecting the environment, mitigating climate change, and alleviating poverty through the intensification of smallholder agricultural practices. Such initiatives, they argue, should include the State, the private sector, and smallholder farmers.

Contract farming is driven by changes in the politics of development discourse, which places smallholders at the center of development. Dominant global agricultural transformation discourses and agribusiness narratives suggest that the introduction of contract farming aims to improve smallholder farmers’ productivity and livelihoods through increased mechanization and commercialization (Brooks et al., 2013) and that it was promoted as a tool for rural agricultural development (Little & Watts, 1994). In fact, contract farming is a significant component of rural development as it plays a key role in food security effects, sector-wide technological innovation, and livelihood resilience. (Oya, 2012) argues that the desire to promote agribusiness interests with a pro-smallholder development discourse has revitalized the significance of contract farming in agriculture in developing countries.

According to (Eaton & Shepherd, 2001) contract farming refers to agricultural production carried out according to a prior agreement in which the farmer commits to producing a given product in a given manner, and the buyer commits to purchasing it at a pre-set price. Often, the buyer provides the farmer with technical assistance, seeds, fertilizer, and other inputs on credit and offers a guaranteed price for the output, i.e. The buyer/contracting company typically provides inputs -- or credit to buy inputs -- to farmers in exchange for being able to buy their crop at a pre-set price. The farmers must pay back the cost of the inputs when they sell their crops. Some contracts involve clauses about how a farmer should grow and harvest their crop. CF schemes are classified according to various factors ranging from 1) land ownership and management, and the presence or not of a nucleus estate; 2) the type of crop (whether it is perishable and requires high quality -fresh fruit and vegetables, tea, sugar; 3) whether it requires immediate processing (palm oil, dairy products, tea, tobacco) and 4) whether it is more labor-intensive (e.g., highly labor-intensive French beans) or less labor-intensive (e.g., palm oil). Another factor concerns ownership structures, i.e., whether it is fully controlled by the state, or a public-private partnership, PPP, or fully controlled by private agribusiness, with full state control dominating the CF landscape before the 1980s in Tanzania. Contractual arrangements range from a simple buying deal with some seasonal credit and little intervention by the buyer in the production process to market specification and resource contracts. The nature of the contract depends on the degree of involvement in input distribution, the purpose of production (whether it is for export or local market), and the position of contract farmers in the value chains (Oya, 2012).

Factors Facilitating the Spread of Contract Farming in Africa

Contract farming is popular both because it relies on large-scale private sector actors to invest in the agricultural sector – thereby solving the problem of where investment is going to come from –*and* because it can incorporate smallholder farmers as outgrowers – thereby addressing the problems of rural poverty and hunger. According to the agribusiness discourse, CF is driven by risk management, which the private sector export companies attempt to minimize. These include production risk in terms of harvest failure, lower yields or lower quality; asset (mainly land) expropriation risk; and labor risks-that is the possibility of conflicts with a large, unionized plantation labor force (Felgenhauer & Wolter, 2008; Herath & Weersink, 2009; Swinnen, 2007). Hence, contracting out helps the companies to lower the costs associated with the risk spreading without direct ownership of assets. On the other hand, political economy literature highlights the importance of attempts by agribusiness to reduce supervision costs by engaging outgrowers (Herath & Weersink, 2009) thereby moving from direct exploitation through wage labor to indirect exploitation of household labor (Little & Watts, 1994). This shift enables companies to avoid labor union conflicts and circumvent labor laws and results in poorer working conditions for laborers in smallholder farms than on estate wages (De Schutter, 2011).

The preference for contract farming in Tanzania was motivated by political reasons, such as avoiding inherent risks in land ownership, labor conflicts, the relative lack of collective action power of scattered smallholders, and in many cases the need for public relations exercises to maintain profitable traditional operations. The establishment of CF in Tanzania was a “political creation” following a growing threat of expropriation against foreign business interests in property, especially land, and therefore the perceived weakening of property rights (Oya, 2012).

In Tanzania, the history of contract farming goes back to the mid-1990s and early 2000s following the problems created by land grabbing. In the 1990s and early 2000, there had been an intense debate about land grabbing in Tanzania. This debate provided the context for the government to embrace and support contract farming. Though initially focused on land grabbing by foreigners in the mining sector in 1996-98, as discussed by (Aminzade, 2013), the debate later expanded to include the issue of land grabbing for agricultural purposes. The debate over land grabbing, from 2005 to 2010 provides the historical context for subsequent efforts, like *“Kilimo Kwanza”* (Agriculture first) (formulated in 2008-09) and (SAGCOT, 2011), which seeks to put the Agriculture First framework into action, to attract foreign investments but reassure the public that Tanzanian farmers would not be displaced from their lands. The SAGCOT emphasizes large-scale investments, global value chains, and private sector participation via a public-private model (PPP) using contract farming as a vehicle to ensure smallholder farmers’ participation. Contract farming offered the government a way to claim that it was possible to both attract foreign investors and create a land market AND defend the principle that the right to land would be based on use and occupancy, since contract farmers would not have to sell their land to foreign investors. Thus, contract farming in Tanzania held out the promise of keeping farmers on their ancestral lands. Although the government was eager to create a market in the land that would enable the country to attract foreign investors, a majority of the public remained wary of foreign investors. A 2001 AfroBarometer poll found that 2/3 of Tanzanians agreed that "the government should be wary of foreigners because they may gain control of our national wealth" (Aminzade, 2013, p. 297).

In the following section, I explore the history of agricultural policy shift in Tanzania since independence, I describe the study area, briefly review the debates over contract farming, and discuss the theoretical framework guiding this study. I also identify the research problem that the study investigates, present specific research questions, explain the significance of this study, and offer the reader a brief roadmap of the organization of my dissertation.

The History of Agriculture Policy in Tanzania

This section provides a history of the Tanzanian government's agricultural policies and how they came to favor private as well as foreign investment and contract farming. After independence, especially in the 1960s and 1970s, land was expropriated by the State to redistribute it among the peasantry and limits were imposed on individual land ownership. The beneficiaries were generally not entitled to sell land‒a measure that was designed to protect them from losing it. For example, the implementation of Tanzania's self-reliance policy during the socialist era involved then President, Mwalimu

Julius Kambarage Nyerere redistributing land to villagers who were mobilized to live together and work together. Land redistribution focused on rural development and agricultural modernization through collective rural production via the creation of “ujamaa villages” under this state-centered agricultural policy approach. In 1967, the Arusha Declaration was launched to foster development through self-reliance (Nyerere, 1979). ‘Ujamaa villages’ were cooperative institutions in which smallholders were encouraged to work collectively to achieve ‘economies of scale’ to adopt modern technology (Bergius et al., 2018a). During this time, the state created marketing boards to help farmers sell their crops. In many villages, including the areas I studied in my research, for example, farmers were given two acres of land for food production by the Tanganyikan government under Nyerere.

Selling land as a commodity during the Nyerere period was prohibited and all community members had access to land. Peasants did not have land titles, which was regarded by critics as an obstacle to economic growth. Lack of land titles limited people’s capacity to use their land as collateral to secure capital to invest in modern agriculture. Some critics of ‘ujamaa villages’ saw villagization as responsible for disrupting agricultural productivity and rural peoples’ livelihoods (Maghimbi et al., 2011; Stahl, 2015).

In view of this criticism, the Tanzanian government made some policy reforms. In the 1980s, the structural adjustment programs (SAPs) were adopted as a corrective to inefficient and ineffective and state-sponsored agriculture modernization programs. They called for the involvement of the private sector through contract schemes (World Bank, 2007). The adoption of the SAPs liberalized agricultural markets while also increasing foreign investments in land and agriculture in Tanzania.

In 1995 there was a land policy reform that was followed by the Land Act and Village Land Act (1999), which was adopted four years later (*Village Land Act*, 1999; Wily, 2003). These reforms created a shift from collective and customary land rights (which were regarded as contributing to rural underdevelopment) to formal, individual rights and the creation of free land markets, which could foster greater efficiency and investment in agriculture (Aminzade, 2013).

In 2004, The Tanzanian government amended the 1999 Land Act to expand the mortgage provisions in the 1999 Land Act. With this 2004 Land Amendment Act, lenders can take possession of mortgaged land and sell it if the borrower defaults on the loan (*Land Amendment Act*, 2004a). This intensely commoditized land and opened it up to marketization. Land commodification influenced investors to rush for land, leading to land grabbing issues and debates in Tanzania. The land-grabbing debate that was dominant between 2005 and 2010 created the conditions for *"Kilimo Kwanza"* (Agriculture First) formulated in 2008/2009 and the 2011 SAGCOT initiative.

Kilimo Kwanza comprised ten pillars, one of which was a legal transformation for land access. The legal reforms aimed at making it easy for the investors to access land and land titles, as well as gender equity in land access and use for both men and women. Thus, Kilimo Kwanza helped make possible the SAGCOT blueprint, which laid the foundations for the influx of foreign investors in agriculture, such as the Kilombero Plantation Limited (KPL) Company in Tanzania, which involved the contract scheme. The SAGCOT initiative aimed at creating a synergy between large-scale investors, global value chains, and private sector participation via an out-grower scheme under the public-private partnership (PPP) model. Contract farming was preferred to avoid problems of smallholder farmers' land dispossessions following the lessons learned from biofuel investments (Aminzade, 2013).

Contracting was inevitable, especially in the SAGCOT area, because most land (about 60 percent) was village land, followed by reserved land (32 percent) and general land which accounts for about 2 percent (Jenkins & Beanland, 2012; SAGCOT, 2011). *Kilimo Kwanza* and SAGCOT draw from the 2006-2011 Agricultural Development Strategy Plan and the Ministry of Agriculture's Tanzanian Agriculture and Food Security Investment Plan (TAFSIP) and the Big Results Now program (Aminzade et al., 2018). Whereas the TAFSIP prioritizes smallholder farmers and state intervention, the Kilimo Kwanza (Agriculture First) and SAGCOT emphasize large-scale investments, global value chains, and the private sector (Aminzade et al., 2018; Cooksey, 2013).

It is also crucial to note that the Ministry of Agriculture sees Tanzanian agriculture as suffering from several problems, including lack of modern technology, low investment, low productivity, overdependence on rain-fed agriculture, inadequate agriculture support services, poor infrastructure, weak agro-industries, low quality of agricultural produce, inadequate participation of the country's private sector in agriculture, environmental degradation and crop pests and diseases (Ministry of Agriculture, Food Security and Cooperatives, 2013). Thus, the Tanzanian government preferred CF in order to mechanize smallholder farmers' agriculture and link them to the markets while allowing the farmers to remain on their ancestral land.

Even though the Land Act of 1999 recognizes women as having the same rights as men, the 2013 National Agriculture Policy (NAP) barely mentions the promotion of "equitable participation of men and women in the production of goods and services in agriculture" (Ministry of Agriculture, Food Security and Cooperatives, 2013, p. 30). My dissertation explores whether women in Tanzania were actually as able as their male counterparts to access secure rights to land and the inputs for their farms. Studies from other areas of Africa suggest that there may be a gap between the stated intentions of policies and the reality on the ground, with respect to participation in decision-making processes and participation in farmer groups and cooperatives (Brownhill et al., 2016; Chu, 2011). My research explores whether this was also the case in Tanzania and documents the impact of changing land and agricultural development policies on the arrival of foreign investment, such as KPL, and the introduction of contract farming. I also explore how these policies, along with KPL's partnership with a USAID-funded project called NAFAKA, altered household gender relations in Tanzania and how the contract farming arrangements made possible by the policy reforms discussed above, and by the agricultural modernization initiatives discussed in the following section, affected Tanzanian smallholder farmers' gender relations, livelihoods, and subjectivities.

Despite land nationalization during the socialist era, the land tenure systems in Tanzania, as in many other African countries, are gendered such that men have more control of resources, including land than women. However, the Land Act of 1999 Amendment[1] established equal rights to land for men and women. The nature of land

[1] Among other clauses, the Act states: "Land legislation shall facilitate an equitable distribution of and access to land by all citizens and that, women shall have the same rights as men have to acquire, hold, use, deal with, and transfer land (URT, The Land Act 1999).

ownership in Tanzania determines the ways in which both men and women participate in land access, use, and management. This determines the power each group has in the production process. It is important to note that gender dynamics in agriculture are not natural, but are socially constructed, based not just on laws but also on certain norms and values held by particular communities. These norms accord both men and women different capacities to access, use and manage the resources around them but also agricultural productivity. This suggests that any analysis of the gender impact of public policies must move beyond the words and intentions on paper to explore the day-to-day social relations that shape gendered distributions of rights and responsibilities and the unequal control over scarce and valued resources. My ethnographic and interview data document the norms and values that shape the actual implementation of land policies.

A Description of the Contract Farming Case Study (KPL) and the Study Site (Mngeta).

The site of my research is Mngeta where Kilombero Plantation Company Limited (KPL) is located. The Kilombero Valley is a 220 km long and up to 70 km wide floodplain in the Rufiji river catchment in Southern Tanzania. It is located between the Udzungwa mountains and Mahenge Hills. The valley is found in the Kilombero district in Morogoro region. The main tribes in this area are Wapogoro, Wandamba, Wabena and Wambunga. Kilombero Valley is the largest agro-eco zone for rice farming in East Africa. Mngeta is one of the wards in Kilombero district and is made up of three main official villages namely Mngeta, Mkangawalo, and Luvirikila. Mngeta is home to a 5,818 hectares farm that was owned by KPL. The farm was initially known as Mngeta Farm. Mngeta is found within the Kilombero valley where the Southern Agricultural Growth

Corridor of Tanzania (SAGCOT), which emerged from a series of policy initiatives and changes, is located. SAGCOT promotes a value-chain based approach that links agribusinesses and smallholders through the establishment of nucleus farms and out-grower schemes in order to integrate smallholders in international value chains at both the output and input sides of production, which in turn will increase productivity and income through a public-private partnership model (PPP) (Bergius & Buseth, 2019; SAGCOT, 2011).

Under the PPP model, the national governments create "enabling conditions" for the operation investments. In 2006, President Jakaya Kikwete launched the Agricultural Sector Development Programme (ASDP), which acts as the national strategy for a green revolution in Tanzania (SAGCOT, 2011). ASDP aimed to increase private-sector investment in agriculture and enable better access for smallholder farmers to technology and markets thereby improving food security (Cooksey, 2013; SAGCOT, 2011). However, the ASDP failed to engage the private sector, leading to the launching of a new policy initiative called "Kilimo Kwanza" (Agriculture First) by the Tanzanian government in 2009 to address the private sector gap (Bergius et al., 2018a).

The Southern Agricultural Growth Corridor of Tanzania (also known as the 'Tazara Corridor') is an agricultural transformation initiative that runs from the coastal region of Dar es Salaam to the Northern and Central Provinces of Zambia, Malawi, and the Katanga Province in the Democratic Republic of Congo (DRC). SAGCOT covers an area of about 287,000 km square within Tanzania and serves a population of approximately nine million people (SAGCOT, 2011, p. 21). It aims to "improve agriculture through “clusters”[2] which were meant to bring together agricultural research stations, nucleus larger farms and ranches with outgrower schemes, irrigated block farming operations, processing and storage facilities, transport and logistics hubs and improved ‘last-mile infrastructure to farms and local communities” (SAGCOT, 2011, p. 17).

As of May 2014, SAGCOT had already registered 53 partners who showed interest in investing in the area. Most came from the private sector, which the government of Tanzania considered to be the main driver for agricultural transformation (Bergius, 2014). Although most of the partners are from the private sector, SAGCOT places smallholder farmers at the core of its mission as the "main beneficiaries" of the initiative (Bergius, 2014; Grow Africa, 2013; SAGCOT, 2011). Indeed, a primary aim of SAGCOT is to connect smallholder farmers to global value chains by linking smallholder farmers to large agribusiness companies through nucleus farms and outgrower schemes or contract farming. Thus, the farmers around the large-scale corporate farms will be able to access inputs, extension services, value-adding facilities, and markets (SAGCOT, 2011).

This initiative attempts to put into effective use "untamed" or "underutilized" land (Scoones et al., 2015; World Bank, 2007) through mechanization and technological advancement (Bergius et al., 2018b; Bergius & Buseth, 2019). In his speech during SAGCOT’s inauguration, President Kikwete suggested that Tanzania has a vast amount

[2] The SAGCOT 2011:18 defines ‘Clusters’ as geographic concentrations of interconnected companies, specialized suppliers, service providers, and associated institutions. This synergy includes suppliers of farm inputs, machinery, and agriculture support services (extension agents, financial services), commercial farmers (large and small), processors and providers of infrastructure such as irrigation and rural roads. Clusters also include government land other institutions, such as universities, vocational training providers, and trade associations, which provide specialized training, education, information, research, and technical support.

of land that is available for the SAGCOT project: "Tanzania has immense opportunities for agricultural development. There are 44 million hectares of arable land, only 24 percent of which is being utilized…. Tanzania's agriculture is predominantly smallholder, characterized by very low productivity due to the very limited use of modern technology and techniques of production. As a result, therefore, the country's huge agricultural potential remains unutilized" (SAGCOT, 2011, p. 4).

In its 20-year roadmap for agricultural transformation, SAGCOT promised to transform about 350,000 hectares of land into commercial production, transition 10,000 smallholders into commercial farming, create 420,000 new employment opportunities, lift two million people out of poverty, construct and rehabilitate roads, railways, dams and irrigation systems, and to generate $ 1.2 billion in annual farming revenue by 203(Porter & Phillips-Howard, 1997)0. Estimates made at the time indicated that about 30 partners had pledged almost $ 1 billion of investments in Tanzania in the SAGCOT area (SAGCOT, 2011).

According to the initiative, smallholder farmers can benefit through the establishment of links between modern agribusinesses and smallholder farmers and their communities. The SAGCOT initiative states that the nucleus farm hub and out-grower model allow smallholder and emergent farmers to benefit from access to infrastructures, such as irrigation, lower-cost inputs, processing and storage facilities, finance, and markets (SAGCOT, 2011, p. 37). The Tanzanian government considered KPL as a vehicle through which the SAGCOT plans could be implemented via contract farming.

KPL was a large agribusiness company within the SAGCOT area along the Kilombero valley that was introduced in 2007 as a public-private partnership between

Agrica Tanzania Limited and the parastatal agency, Rural Basin Development Agency (RUBADA) (Mittal, et al., 2015). KPL was comprised of 5,818 hectares-farm supported by several international institutions, such as the UK Department for International Development (DFID), the Norwegian Investment Fund for Developing Countries (Norfund), and the US-based Capricorn Investments as well as the Norwegian fertilizer company Yara and the Swiss seed and agro-chemical company Syngenta (Mittal, et al., 2015). These institutions provided both financial and or technical support to KPL (Grow Africa, 2014). KPL worked with smallholders located around the company farm through an outgrower model based on Sustainable Rice Intensification (SRI) technologies. KPL contracted rice smallholder farmers in Mngeta ward where it provided them with agricultural training related to rice farming, markets and acted as cosigners for the loans, while in return the farmers had to sell their rice to the company at pre-determined prices. It was a showcase for SAGCOT. It was one of the biggest projects that aimed to produce more food to feed the hungry population in the name of Rice Farming to help Feed a Nation" (Norfund, 2010). It was one of the largest investments in African agriculture and Tanzania's government's exemplary project for public-private partnership model of agricultural modernization within the Kilombero valley. My research explores the complex history of KPL and identifies the factors that led to the decline and eventual collapse of this important component of SAGCOT.

The following section reviews the contract farming literature, highlighting its key debates on the benefits and costs, prospects, promises, and potential pitfalls.

The Debate on Contract Farming- Prospects, Promises, and Potential Pitfalls

Even though the spread of contract farming seems to be enormous in recent years in Africa, its history goes back several decades encompassing a wide range of approaches and mechanisms with both the state and the private sectors playing a key role (Oya, 2012). The early forms of contract farming began during the colonial period and gained momentum during the early post-colonial era following some restrictions on plantation systems (Baumann, 2000; Ochieng, 2009). (Korovkin, 1992) shows that since the 1980s the growth and development of CF in the Global South has been driven by a combination of agrarian reforms, neo-liberal policies, and changes in the organization of major agro-industrial firms and food-processing chains, particularly the strategy of subcontracting or outsourcing. Agencies such as the World Bank, and the Commonwealth Development Corporation (CDC) supported a number of CF projects before the structural adjustment era (Glover, 1994). During this time, the states created state marketing boards that dominated African agriculture. Towards the mid-1980s the World Bank criticized the ineffectiveness and failure of state-sponsored agriculture modernization programs, especially the marketing boards. The World Bank suggested private CF schemes as the solution to government failures claiming that the private CF schemes would improve the bargaining power of farmers who were subject to over-taxation due to agricultural price policies. Structural adjustment programs (SAPs) promoted by the World Bank liberalized agricultural markets.

Who Benefits from Contract Farming?

Although the definition of contract farming is not highly contentious, there has not been a consensus on its benefits. Variation in scholarly assessments of the benefits and costs of contract farming, which are discussed below, can be explained by the context-dependent nature of the countries and regions studied, which had very different economic, political, and cultural contexts and different types of crops subject to contract farming. This produces unevenness across countries, and regions in the impact of CF, as well as differences/unevenness within countries and regions. While there is a rich literature on contract farming, scholars differ in their assessment of whether or not CF can and does benefit smallholder farmers (SHFs). There are two main lines of scholarship on CF. One is generated by neoclassical and institutional economists, who focus on the economic impacts and are large proponents of this mode of production, and the other is generated by geographers, sociologists, and anthropologists, who look at a wider range of social and economic consequences and tend to be far more critical. The economics scholarship generally sees CF in a positive light, suggesting that it addresses smallholder farmers' lack of credit and modern inputs and can improve their income, while other social scientists are much more dubious about CF's benefits and more vocal about its problems. My research explores the costs and benefits of contract farming thereby contributing to the debate about who benefits. Current efforts to answer that question of who benefits suffer from a failure to address a number of key issues that my dissertation explores, such as the long-term sustainability of contract farming schemes, the role of gender relations intersectionality, and local political conflicts in shaping the consequences of contract farming, and the impact of contract farming on farmers' subjectivities. By focusing on these issues, my research produces an innovative and more comprehensive answer to the question of who benefits (and who loses) from contract farming by framing the issue of costs and benefits in a much broader perspective, which includes interests and preferences rooted in gender, marital status, local community, and collective identities.

As a form of vertical coordination, contract farming involves different actors, including local farmers, a private firm/agribusiness, and the state, with different capacities mediated by the contract (Baumann, 2000; Vermeulen & Cotula, 2010b). In a contract, the contractor typically agrees to provide technical assistance, farm inputs, markets, and credit to farmers (Silva et al., 2005), while the farmers agree to produce for the contractor. Such an agreement problematically assumes that the two parties enter a contract as if they have equal legal and political powers (Little & Watts, 1994). (Eaton & Shepherd, 2001) define contract farming as "agricultural production carried out according to a prior agreement in which the farmer commits to producing a given product in a given manner, and the buyer commits to purchasing it. Often, the buyer provides the farmer with technical assistance, seeds, fertilizer, and other inputs on credit and offers a guaranteed price for the output".

As Watts and others point out, the definition of contract farming reveals that the two contracting parties have unequal powers. Reducing their relationship to a legal relationship ignores the fact that contractual relations, especially in most rural societies, are characterized by complex social relations, shaped by the local customs and culture. Hence reducing such an agreement into technical and legal terms is erroneous (Little & Watts, 1994, p. 28). The terms of the contract subordinate the farmers through various means, including the labor process, adoption of new technology, the introduction of a new crop, and the introduction of specific standards for quality assurance. Moreover, (Little & Watts, 1994) argue that the success of the contract scheme depends on many factors, including the historical, political, economic, as well as social setting within which contract farming is taking place.

Since its existence, contract farming has assumed different forms across time and space. These forms of production go far back to the colonial period, where the colonial regime established agro-export zones in then colonies, to the more recent form of global agribusiness. In each case, CF has entailed specific relations between the growers and the state and or private firms, that link farmers to central processing, export, or purchasing unit that determines prices, production, quality, technology, and credit. Although smallholder farmers are not involved in the negotiation of the standards, they strive to meet these standards by making sure they secure the necessary resources including credits. The need for credits and markets (which are provided by the contractor) deprives the smallholder farmers of some degree of their power, skills, and autonomy to control and own their production as they become dependent on the contractor's technology, credit, and markets. The credit system not only establishes the smallholder-dependent relations with the contractors but also dependent relations with the local agricultural suppliers in the area. These credit relations entangle smallholder farmers into debt relations that are constantly reproduced in the production process.

Arguments and Evidence in Support of Contract Farming

Scholars vary in their arguments, perceptions, and evidence regarding CF. While economists (neoclassical and neo-institutional) tend to see and stress the benefits of CF, other social scientists tend to see the problems associated with CF. According to the proponents of contract farming, contract farming benefits both contractors and farmers (Kirsten & Sartorius, 2002). It helps remove market imperfections in the product, capital (credit), land, labor, information, and insurance markets leading to better coordination of local production activities, which often involve initial investment in processing, extension, etc., and can reduce transaction costs (Grosh, 1994; Key & Runsten, 1999). These proponents see contract farming as a solution for protecting smallholder farmers from land grabbing and improving smallholder farmers' lives by increasing their production through mechanized agriculture and linking them to the global market through public-private partnerships. This assumption is informed by traditional neoclassical economics, which assumes that there are specific laws, codes, and social norms that allow the market to work effectively (Swinnen, 2007). Another assumption that traditional neoclassical economics makes is that the actors involved can take advantage of the market because they have complete information.

The New Institutional Economic perspective sees contract farming as a response to market imperfections in an environment of pervasive risks, incomplete markets, and information asymmetry, while at the same time creating positive multiplier effects for employment, infrastructure, and market development in the local economy (Key & Runsten, 1999). (Grosh, 1994) claims that the NIE focuses on elements that shape the design of economic institutions. This perspective believes that market institutions emerge to solve specific problems in the value chain. (Christensen, 1992) sees contract farming as an institutional arrangement for agricultural development that facilitates product exchange, ensures input availability, and promotes technological innovation.

The NIE approach is essentially a win-win approach that assumes both parties involved in the contract scheme benefit and reap the benefits of the contract arrangement. Contracting companies limit their direct involvement in production and labor supervision and out-growers get an opportunity to access markets, credit, and technology that they would have otherwise not be able to get (Oya, 2012). The (World Bank, 2007) and (Bellemare, 2012) also claim that contract farming plays a positive role in access to credits and markets. However, this perspective neglects the internal dynamics that govern people's actions and behavior. It assumes that human beings are passive actors who adhere to institutional arrangements, neglecting the fact that humans will select what seems to work for them from given arrangements and maneuver whenever things do not work in their favor.

Scholars such as (Goldsmith, 1985), (Singh, 2002), (Bijman, 2008), and (Oya, 2012), see contract farming as an effective way of incorporating smallholder farmers or growers into modern agriculture. They view contract farming as crucial in increasing smallholders' incomes, productivity, and food availability by using modern agricultural technology. For a long time, smallholder farmers have been faced with the problems of lack of information, little or no credit, market risk, and a lack of the technology necessary for commercial production. Contract farming is seen as a solution to all these problems. It facilitates and enables the integration of smallholder farmers into commercial agriculture and value chains. In his review, (Swinnen, 2007) shows that various studies reveal that the benefits of contract farming to smallholder farmers rest on technical assistance, credits, and guaranteed crop prices, which enable them to produce. Proponents of contract farming suggest that because large firms that practice large-scale farming have all these elements (information about markets, capital, technical knowledge, access to credit), they can help smallholder farmers access these key factors of production and improve their agriculture. In short, proponents of contract farming see it as a significant institution for assisting smallholder farmers in improving their yields, accessing reliable markets, and generating more income.

In assessing the impact of contract farming on income, (Warning & Key, 2002) show that the increase in gross agricultural revenues associated with contracting is statistically significant and substantial. In their study of the analysis of the impact of the contract farming program in Senegal, they found the income of participating farmers increased substantially compared to nonparticipants. Another study analyzing the impact of vegetables' contract farming on the household income among smallholder vegetable farmers in the Central Rift Valley of Ethiopia found a similar pattern of increased incomes of participating households (Mulatu et al., 2017). (Bolwig et al., 2009) compare Ugandan farmers in an organic contract farming coffee production scheme with a control group that was not involved in CF. They show that there are positive revenue effects from participating in the scheme, even after controlling for a variety of other factors, such as household endowments. They conclude by saying, "Scheme participation (organic certification) is associated with an increase in net coffee revenue of around 75% on average, equivalent to 12.5% of mean (total) household revenue. This is accounted for by the enhanced incentives provided by the scheme to engage in processing of the coffee crop, thereby enabling farmers to access guaranteed price premiums" (Bolwig et al., 2009, p. 1102).

In their study of contract farming in Nigeria, (Awotide et al., 2015) show that contract farming arrangements increased the output of participating farmers by 80%. It also showed an increase in rice yields of 55%, which contributed to a 71% increase in crop income and a 20% reduction in poverty status (*ibid*.).

Other scholars such as (Setboonsarng et al., 2008), (Bolwig et al., 2009), and (Jones & Gibbon, 2011) also show that contract farming had an increase in yields, income, and reduced poverty for those who were in the contract scheme. Studies by (Otsuka et al., 2016), (Gatto et al., 2017), and (Schipmann & Qaim, 2011) indicate that contract farming had positive effects on sector-wide technological innovation in the project area, especially in the adoption of new crops, cultivation practices, post-harvest handling and access to new markets. (Minten et al., 2009) evaluated the impacts of contract farming in Madagascar by comparing more than 10,000 small-scale farmers who grow vegetables under contract with those who are not in a scheme. They show that the contracting company provided the vegetable farmers with technical assistance and inputs and imposed strict quality standards for export to Europe. These scholars revealed that those in the scheme had higher incomes than those who were not, and they had adopted new technology, which also led to increased vegetable yields due to the spillover effect of the new technology received, and they also developed better resource management skills. The researchers further show that small farmers who participated in these contracts had higher welfare, more income stability, and shorter painful periods (the time for which they have to stay without income to spend before the next farming season). (Minten et al., 2009) thus conclude that smallholder farmers can benefit significantly from integration into the global value chain (Minten et al., 2009, p. 1737).

In summary, proponents of contract farming see contract farming as a mutually beneficial institutional arrangement that introduces smallholders to modern technologies and managerial skills, high-value crops, lucrative markets, credit, and regular cash flows while enabling agribusiness firms to access land and labor relatively cheaply, reduce political risks through “indigenization” and produce goods of high quality and quantity (Williams & Karen, 1985; World Bank, 1981).

Arguments and Evidence Critical of Contract Farming

In sharp contrast to the NIE and neoclassical economists’ perspective, critics see contract farming as a way for large firms to access the land and labor of small farmers, and in doing so indirectly control smallholder farmers' farms, labor, and production. In some places, the integration of smallholder farmers into global value chains and commercial agriculture through contract farming has led smallholder farmers into debts, risks of losing their land, and increased inequality (Little & Watts, 1994; Singh, 2002).

Drawing from different case studies of contract farming in Sub-Saharan Africa, (Little & Watts, 1994) offers a negative view of the benefits of contract farming. According to Watts smallholder farmers are institutionally captured and integrated into new production systems by the powerful companies that manipulate contracts leading to a transformation and restructuring of the family farm sector (p.36). He further contends that the captured farmers suffer the dangers of food insecurity as they focus on contract crops. He shows that contract farming has resulted in conflicts between farmers and contracting firms, the power imbalance between the two parties, intrahousehold tensions over the division of labor, the allocation of new revenues, and increased rural inequality. In assessing tea and vegetable contract farming cases in Malawi and Kenya, (Little & Watts, 1994) shows that even though the income from contract farming increased, this income was not enough to live on, and farmers had to rely on other nonfarm income. In reviewing 70 cases of contract farming in African countries, he argues that in some cases, farmers lost their land to the firms and government-run contract schemes (Little & Watts, 1994).

McMichael sees CF through the lens of his historical critique. Unlike the agro-export form of contract farming of the colonial regime, in the free-market economy era, contract farming has emerged as a solution to improving and commercializing smallholder farmers' agriculture through value chains financed through debt dependency (McMichael, 2013, p. 673). He contends that "value-chain agriculture integrates smallholders into agribusiness relations in the name of "feeding the world population," creating what Harvey 2003 calls "Spatio-temporal fix[3]". While the global discourse sees the integration of smallholders into a value-chain system as crucial for win-win outcomes, the fact is that the debt that smallholder farmers enter into becomes a technology of control, because it ties farmers into commodity relations that interfere with food self-sufficiency and local food security. The "Spatio-temporal fix" encloses smallholders in value-chain technologies financed through debt relations that appropriate value from smallholder farmers. The firms and the state's involvement in contract farming mask the role that labor plays in creating value by focusing more on the outcomes of production other than what goes on in the production process. (McMichael, 2013) claims that "the recent invocation of value-chain agriculture as the answer to feeding the world (and to rural development), will generally serve private accumulation

[3] Harvey's notion of the 'spatio-temporal fix' has a double meaning. On the one hand, the 'fix' involves a physical capitalisation of what becomes an economic resource, through the investment of capital to solve or temporally resolve an accumulation crisis. This fix involves the opening up of new territory for capital. On the other hand, the production of space, the organization of wholly new territorial divisions of labor, the opening up of new and cheaper resource complexes, of new regions as dynamic spaces of capital accumulation, and the penetration of pre-existing social formations by capitalist social relations and institutional arrangements …[to] … provide important ways to absorb capital and labor surpluses" (Harvey 2003:116).

via extraction of rents and resources from smallholders". The value chains involve farmers in competitive markets over which they have no control.

Scholars such as (White et al., 2013) and (Patel, 2012) focus on the negative impacts of contract farming on smallholder farmers. They identify a number of risks associated with contract farming. These include food insecurity resulting from monocropping, increased gender inequalities, increased debts due to the credit system, loss of autonomy in production, increased social stratification, environmental degradation, socio-political externalities in the host community, market monopsony, and the loss of traditional cultivation methods.

Similarly, (Porter & Phillips-Howard, 1997a, 1997b) show that although contract farming has the potential to raise farmers' incomes, it may also lead to power imbalance among the actors, income inequality, intra-household conflicts, external control over labor and production, and gender violence. Critics of contract farming further argue that it creates an exploitative relationship between the contracting firm and smallholder farmers where the former shifts production risks to smallholders through low prices, labor practices, and farming techniques that utilize smallholder labor more intensively (through longer working hours) and extensively (through unpaid household/family labor (Bernstein, 1996; Little & Watts, 1994; Porter & Phillips-Howard, 1997b). It also turns farmers to wage workers through restrictions on alternative land use of the farmers' land and labor. Contract farming leads to mono-cropping and deforestation, resulting in environmental degradation (Little & Watts, 1994). (Korovkin, 1992) adds that contract farming may disintegrate the peasantry by creating a peasant capitalist class that works against the interests of poor smallholder farmers (rural peasant farmers).

In an African context, (Grosh, 1994) shows that contract farming disrupts power relations and increases tensions within farm households-especially between male head-of-households and their wives and children-and has resulted in widespread price inflation that leads to mass leakage or side-selling, among growers who seek better prices. Because contract farming involves the State and powerful agro-industrial firms, the two may collude and skew policies and state resources away from or against the best interests of the peasant class. Additionally, depending on the nature of the contract and who gets contracted, contract farming can lead to more concentrated land ownership and displacement of the rural poor, especially when smallholders are excluded. Contract farming creates several problems for smallholder farmers including 1) market domination (monopsony) which makes the processing firm abuse its monopsony power by defaulting on the terms of the contract by underpaying growers, or by delaying payment because of the restricted market for the contract crop outside the contract; 2) contract rigidity, which adds more production costs (financial and time) for smallholders; and 3) leakages, or side selling (Grosh, 1994).

Overall, (Little & Watts, 1994; Raynolds, 2007; Wilson, 1986) see CF as a mechanism for agribusiness companies to escape production risk by shifting it to the farmers and gain control over farmers' land and labor. (Singh, 2002) shows that there are many other ways other than violating contracts through which contracting companies can establish exploitative and unequal relations with the farmers. These include input overpricing, overestimating the services provided to the farmers by the company as well as a shift of risks in crop failure to producers. CF worsens smallholder farmers' production and living conditions because it deprives them of the power to control their own production, aiding the wealth accumulation and labor exploitation by big agribusiness companies.

Silences in the Literature on Contract Farming and the Research Problem

Within the existing literature on CF, a number of questions have been neglected. Specifically, there is a scarcity of literature that examines: (a) the long-term sustainability of CF projects, and why projects may succeed or fail; (b) how gender relations are affected by smallholder farmers' (SHFs) incorporation into contract farming schemes as well as the intersectional impacts of CF on different kinds of farmers (e.g., young vs. old women and men; single or widowed vs. married women; (c) the localized political conflicts that these schemes may generate, and (d) the ways farmer identities and subjectivities are affected by their incorporation into CF schemes at a moment when the 'entrepreneurial' SHF is being celebrated.

My dissertation attempts to examine each of the questions above through an in-depth study of a recent CF scheme organized by the Kilombero Plantation Limited (KPL) company around rice farming in Tanzania. As I describe in more detail below, this farming operation represented a public-private partnership formed in 2009 between the government of Tanzania and the KPL. Through contract farming, the Tanzanian government sought to incorporate smallholder farmers into value chains under its broader SAGCOT policy initiative. SAGCOT is a Public-Private Partnership (PPP) initiative between the Tanzanian government, agri-companies/corporations, development partners, non-governmental organizations (NGOs), and local organizations that aim to liberate smallholder farmers from poverty, enhance food security, and promote economic development while conserving the environment (SAGCOT, 2011). According to this initiative, linking smallholder farmers to value-chains via an out-grower scheme will help the farmers to have access to credits, inputs, and modern technologies that will consequently increase their productivity and incomes (SAGCOT, 2011). Although the Tanzanian government considered KPL company as an exemplary project for the PPP model, the contract farming only lasted for about 10 years as the company unexpectedly went bankrupt by the time I was finishing up my study. My research explores the causes of the failure/bankruptcy of this project, examining both production and marketing, as well as political, factors that contributed to this outcome.

Despite contestations over the benefits, costs, and the silences of contract farming, the government of Tanzania sees contract farming (conceived as the best PPP model) as the best means to integrate smallholder farmers into global value chains and improve their production and solve the problems of food shortages and low productivity. Although contract farming has been taking place for some years now, especially in rice farming in Tanzania, its implications for smallholder farmers' household gender relations of production and wellbeing are yet to be known. This research explores the role that contract farming plays in reshaping such relations and restructuring smallholder farmers' agriculture and livelihoods.

In the attempts to transform Tanzania's agriculture and improve smallholder farmers' lives, the government of Tanzania adopted a private-public partnership (PPP) model which puts at its center smallholder farmers. Through its flagship SAGCOT project, the Tanzanian government prioritizes smallholder farmers as potential entrepreneurs who can address the problems of food shortages and increase smallholder farmers' income. Even though there is evidence from different parts of Africa, India, and

Latin America (Glover & Kusterer, 2016; Key & Runsten, 1999; Little & Watts, 1994; McMichael, 2013; Ray et al., 2021; Shrimali, 2016; Veldwisch, 2015; Vermeulen & Cotula, 2010a; Vicol, 2017; Warning & Key, 2002) which shows a contravening view, the Tanzanian government has encouraged the practice of contract farming. It embraced the dominant global agricultural narrative, which considers contract farming as the best approach for both technological transfers to smallholder farmers and smallholder farmers' market integration.

My research explores how agricultural transformations, particularly contract farming, have been implemented at the local level and why such projects succeed or fail. It also investigates their impacts on gender relations, the cooperation and conflict they have generated among men and women who are situated differently with respect to various axes of identity and resources within households, as well as their impacts on the smallholder farmers' livelihoods and subjectivities. With Mngeta, as my study site and KPL as my case, I try to answer these questions by using ethnographic as well as quantitative methods.

Theoretical Framework

Most of the literature on contract farming takes a New Institutional Economic (NIE) approach that focuses on fixing the failures of the markets and inefficient technology. Supporters of contract farming who adopt this approach see contract farming as a solution to not only protect smallholder farmers from land grabbing but also to improve smallholder farmers' lives by mechanizing their agriculture and linking them to global markets through public-private partnerships. According to the New Institutional Economic perspective, contract farming is a response to market imperfections. This perspective views the formation of institutions as a response to missing markets in an environment of pervasive risks, incomplete markets, and information asymmetry (Key & Runsten, 1999). This perspective assumes that there is a range of costs involved in the production which include those which result from imperfect markets and information costs in transactions (ibid). From the New Institutional Economic Perspective, contract farming is an institutional arrangement that allows firms to participate in, and exert control over, the production process without owning or operating the farms.

Contrary to the New Institutional Economic Perspective that dominates the study of most contract farming projects in most of the Sub-Saharan countries, this research adopts a political economy approach, combined with a feminist political ecology and feminist poststructuralist approach. It draws insights from sociology, anthropology, geography, political economy, and political science. These approaches focus on the power relationships that determine human use of the environment, seeking to understand the complex relations between nature and society and between genders through an analysis of forms of access and control over resources and their implications for the environment, health, and sustainable livelihoods (Bailey & Bryant, 1997; Bassett, 1988; Elmhirst, 2011; Jackson, 1998; Paulson et al., 2005; Peet et al., 2010; Robbins, 2019; Rocheleau, 2008; Sheppard, 2008; Walker, 2006; Watts, 2000; Wolf, 1972; Zimmerer & Bassett, 2003). Contract farming involves a multitude of power dynamics, including gendered power dynamics, at different levels which affect smallholder farmers. I am particularly interested in understanding the impact of contract farming on the exercises of gendered power, on the inclusion and exclusion of men and women farmers in particular spaces and activities, and on smallholder farmers' gender relations, livelihoods and subjectivities.

There are various approaches to gender in agriculture, such as the human rights frameworks which focus on rights and obligations, liberal economic frameworks that emphasize gender equity in policies on land and agricultural commercialization, and the feminist political economy approach (FPE), which locates itself within the broader questions of globalization and liberalization, (Dancer & Sulle, 2015; Kansanga et al., 2019). I use a feminist political ecology (FPE) approach, combined with a feminist post-structuralist approach (FPS), to explore how gender power dynamics influence men and women's involvement in farming and how their involvement affects gender relations of production (production of material goods, their distribution as well as consumption) within the context of contract farming. I also use these two approaches to show how gender in relation to other aspects of social differentiation such as class, marital status, and education, is significant in shaping and controlling resources and household agricultural decision-making in Mngeta. These theoretical perspectives focus on the gender dimension of struggles over knowledge, power, practice, politics, justice, and governance and on how these intersect with strategies and practices to understand household gendered relations (Elmhirst, 2011; Rocheleau, 2008). They assume and take into consideration the "dynamic and complex gender identities in which men and women experience both shared and divided interests and understand environmental relations as social relations" (Jackson, 1998, p. 315). They both draw from a political ecology framework that examines power dynamics at a micro-level and how people assign meaning to their interactions. These perspectives also help to understand the way people assign meanings to their practices and symbols and the way they make sense of such practices and symbols and construct their identity. It also links the micro-level analysis to macro (structural) level analysis by examining the role of the state and other institutional actors in shaping the relationship between nature and society.

The FPE and FPS approaches emphasize multi-dimensional subjectivities, where gender is constituted through other kinds of social differences and modes of power such as race, sexuality, class, and place and practices of development themselves (Butler, 2004; Elmhirst, 2011; Elmhirst & Ressurrecion, 2008; Radcliffe, 2006). The feminist political ecology approach situates gender analysis within a specific context rooted in the livelihood realities of particular groups of women, differentiated by age, ethnicity, class, or other relevant social divisions instead of universalizing generalizations (Jackson, 1998, p. 315). It assumes and takes into consideration the "dynamic and complex gender identities in which men and women experience both shared and divided interests and understands environmental relations as social relations" (ibid, p.315). This approach helps in asking detailed questions about gender divisions of labor, rights, and responsibilities, at both the household and community level, that explore the silences embedded within the household and within social relations of production. By doing so, it helps to unmask how power dynamics and other identities shape the perceived identities of both men and women.

In addition, I supplement the FPE and FPS approaches with political economy theory to explore how rice farming in Mngeta is organized. According to classical economists such as (Smith, 2010), (Ricardo & Kolthammer, 2004), and (Mill, 1884), the economy is a system separable in principle from politics and family life. They argue for the capacity of markets to regulate themselves in a strong sense identified with the policy of laissez-faire or the invisible hand. Their argument for market self-regulation treats the market system as a reality sui generis, connected to, but not a subsidiary organ of, the state. The main point of the classical theory is that economy is not, or at least need not be, political. The political economy perspective focuses on the relationship between politics and the economy and the subordination of the political to the economy. The economic part explains what we do and why we do it; politics, on the other hand, describes the context within which actors produce, how they produce, and why. From a Marxian approach, the political economy perspective stresses the importance of politics, the role of agribusiness globalization in finding spaces of accumulation and explaining shifts in labor exploitation patterns, and the implications of such production relations on capital, wages, and the struggle between capital and labor (Oya, 2012).

Whereas the classical political economy views contract farming in terms of its benefits to farmers, particularly through laissez-faire economics, the Marxian political economy argues that contracting develops when there is a diminished role of the state in agriculture, increased specialization of agricultural production processes, and agricultural markets, such as farm produce or credit, become less competitive or inefficient. The Marxian political economy approach sees contract production as a capitalist penetration of agriculture for capital accumulation and exploitation of the farming sector, leading to processes of "self-exploitation" of the farmers. At the same time, the companies gain indirect control of land (Oya, 2012). The Marxian political economy approach rejects the various rationales of contracting, such as produce perishability, crop specialization, capital intensity, etc. Instead, it argues that the social relations of production determine these aspects of the production system (Wilson, 1986). Thus, the political economy pays attention to the economics of CF and conflicts over the surplus, that is, who gets what.

My research on contract farming focuses on its impact on gender relations. This contrasts with most studies of contract farming, especially in Africa, that have not paid much attention to gender relations, despite unequal access to land in many places. This research also highlights the agency of women (Chu, 2011), rather than treating them simply as “victims”, and it documents women’s ability to negotiate and gain access to land despite large forces that threaten local land rights for all people, regardless of gender (including in contract farming I would argue). Other scholars (Rose, 2002) have shown that women resort to unconventional means to manipulate, challenge, or change the customary rules of land access. My research will explore whether Tanzanian women in the area that I studied employed such means and the range of relationships they utilized, including maternal and paternal relatives or even in-laws, in doing so.

In this dissertation, I view power, as “a social relation built on an asymmetrical distribution of resources and risks” (Hornborg, 2001, p. 1). (Butler, 1997, p. 2) argues that “we are used to thinking about power as what presses on the subject from the outside, as what subordinates…this is surely a fair description of what power does. But if following Foucault, we understand power as forming the subject as well, as providing the very condition of its existence and the trajectory of its desire, then power is not simply what we oppose but also, in a strong sense, what we depend on for our existence”. My research builds on Foucault’s approach to power by exploring how the process of subject formation takes place within the context of contract farming and how new subjectivities develop among farmers in the context of a discourse of agricultural modernization emphasizing contract farming.

Significance of the study

The debate around contract farming indicates that the evidence about the role of contract farming in improving smallholder farmers' agriculture is mixed. However, despite its severe critics, who have studied other countries in Africa, India, and Latin America, in places such as Tanzania, this system of farming has grown. Being a relatively new phenomenon in Tanzania, this study helps to examine the impacts of contract farming on smallholder farmers. Therefore, this study provides useful knowledge and insights into the role of contract farming in agricultural transformation and smallholder farmers' lives by highlighting the consequences of contract farming for smallholder farmers, and their responses to contract farming. My study challenges the dominant agricultural transformation models that consider smallholder farmers as undifferentiated and without "political agency". It is also significant in understanding: how contract farming affects gendered power dynamics at the household level within a web of different social identities, such as class, gender, marital status, education, and actors; and how gendered power dynamics shape the nature of contract farming in Tanzania. In doing so, it contributes to the discussion of intersectionality in understanding agricultural modernization in Tanzania. Studying contract farming in Tanzania can provide a useful analysis of how specific social-cultural practices, differentiation, and household arrangements are shaped by, and shape, contract farming, hence informing policymakers on how they can design inclusive policies that will ensure gender equity, and food security within the context of agricultural transformation.

Dissertation outline

This dissertation is made up of six chapters including the introduction and conclusion. *This first chapter* introduces the study, presents the background to the research problem, and reviews the literature around contract farming while highlighting the key debates and outlining the theoretical framework that has guided my research. It also describes the research site and the case study, highlights the research problem, and presents the main questions that the study addresses. This chapter also highlights the significance of this study.

The second chapter describes the methodology and the rationale behind the selection of the methods I used to undertake this study. I discuss all the methods I used to collect and analyze data and their limitations. I also describe the data collection process.

Chapter three explores the political economy of rice production in Mngeta and the collapse of contract farming and of the Kilombero Plantation Limited. In this chapter, I show that agricultural transformation in Mngeta relied on the role of the private sector under the contract scheme, which ensured the farmers access to agricultural inputs and credit. I also trace the historical development of KPL and the emergence of contract farming in Mngeta. I argue that participation in contract farming shaped farmers' lives by changing their practices and affecting their productivity. I argue that the collapse of contract farming resulted from conflictual relations between KPL and the smallholder farmers manifested by misunderstandings between KPL and the farmers, farmers' resistance to paying the bank loan, farmers' deception on rice measurements, and a lack of support from other partners such as NAFAKA and Private Agricultural Sector Support (PASS). In short, market relations and social relations of production generated political contention leading to the collapse of contract farming. I show that the collapse of KPL was a result of multiple factors, including the failure to pay the bank loan, poor management of the company, price competition between maize and rice, and unfavorable business conditions. I also show that the debt relations created by the lending system resulted in dependent relations that greatly impacted smallholder farmers' livelihoods and the sustainability of contract farming.

Chapter four examines contract farming, gender relations of power, and rice production in Mngeta. In this chapter, I discuss how the arrival of KPL, the introduction of contract farming, and KPL's partnership with a USAID-funded project-NAFAKA altered household gender relations in Mngeta. I also explore how the arrival of new commercial opportunities afforded by KPL and contract farming attracted men to grow rice, a crop previously considered to be exclusively a "women's crop", and how they gained control over the rice harvest and the income generated from rice selling. I also show that while NAFAKA training increased women's negotiation power at the household level, it also depended on their access to various economic, social, emotional, and cultural assets and resources.

The fifth chapter examines how contract farming affected smallholder farmers' livelihoods and subjectivities following their participation in contract farming. The chapter shows how the benefits of contract farming differed with respect to markers of social differentiation, such as gender, social class, social capital, and education. I also discuss how contract farming created "new" types of smallholder farmers and how contract farming affected farmers' livelihood activities. Additionally, the chapter discusses how contract farming requirements to meet market standards pushed farmers into debt, impacting gender and household relations through property dispossession and intra-household conflicts, thus further jeopardizing their conditions. Towards the end of the chapter, I highlight some local institutional contentious and protest politics informing conflicts between KPL and the local people which negatively affected smallholder farmers' livelihoods and wellbeing.

Chapter six is the conclusion, which highlights my answers to the main questions of the dissertation and summarizes my key findings and their implications. This chapter reviews the main contributions that this study makes to the analysis of contract farming, agriculture, and gender studies. This concluding chapter advances specific suggestions for studying and understanding agricultural transformation and smallholder farmers' agriculture in Tanzania and also identifies areas that need further research as well as some policy implications of my research.

Chapter 2: Research Methodology

Introduction

This study is about the political economy of rice production, contract farming, and the implications of contract farming for smallholder farmers' household gender relations and livelihoods in Mngeta. A study of this nature requires a case study approach. A case study entails a thorough study of a single unit to understand a larger class of (similar) units. Case studies always employ more than one case (Gerring, 2004). In other words, the question "What is this a case of?" can have multiple answers. Implicitly, a case embodies a claim. This claim represents general categories of the social world. A case study demonstrates a causal argument about how general social forces take shape and produce results in specific settings (Walton, 1992). This research requires a case study because of the need to understand the cultural meanings that inform people's actions, practices, and the structures shaping their actions (Bartlett & Vavrus, 2016).

This study is a case of multiple cases (Gerring, 2004; Walton, 1992; Yin, 2009). First, it is the case of a distinct historical and cultural context that shapes farming, gender relations, and smallholder farmers' livelihoods, requiring attention to specificities. Second, it is a case of how market production and political processes produce particular outcomes, such as social and political conflicts, a shift from use to exchange value, the alteration of gendered household dynamics, and the collapse of KPL. Third, it is a case of how commercialization reshapes gender dynamics in the household.

This chapter presents the research design and data collection methods. I begin with the rationale for Mngeta as my research site followed by a discussion of how I gained access to the field. After that, I present my case study research design followed by a description of the sampling process, data collection methods, and data analysis used in this study. I conclude with a discussion of the limitations of my study, the ethical issues encountered in my research, and my positionality in the research process.

Selection of the study site

This study was done in Mngeta ward which is located in the fertile valley of Kilombero in Morogoro region. It focuses on the 5,818 hectare-Mngeta farm which was owned by Kilombero Plantations Ltd (KPL) at the time of this study. Mngeta ward consists of three villages, namely, Mkangawalo, Mngeta, and Lukolongo, which were initially included in KPL's contract farming scheme when contract farming began. During the research, I focused on the three villages neglecting the new administrative villages which the government introduced (as shown on the map) for administrative purposes in the late 2000s when contract farming had already started. The three villages gave part of their land to form Mngeta farm. These villages were established under the *"ujamaa"* policy of 1967 and the 1974 villagization policy. Mngeta ward is dominated by rice production with many smallholder farmers owning small farms.

I selected Mngeta for this study for several reasons. First, KPL is an exemplary project of the public-private partnership model espoused by the government as the agricultural development model that aims at modernizing agriculture and linking smallholder farmers to global value chain and markets through outgrower scheme/contract farming. Second, Mngeta has a large number of smallholder farmers involved in contract farming (for rice production) with KPL within the SAGCOT area. Additionally, Mngeta ward is the area where rice is produced in bulk (due to presence of KPL) compared to other places, thus; the impacts of contract farming are felt by smallholder farmers more than other places which also produce rice but not under the PPP model. These dynamics shape the patterns of use of rice from a purely consumption crop to an exchange crop, by bringing to the fore important questions about the implications of contract farming on the political economy of rice production in Mngeta, how it shapes (and reshapes) gender relations at the household level, and how it affects smallholder farmers' lives in general. The dynamics of rice farming in Mngeta made it an important case to study because it shows how rice, which was initially produced exclusively for consumption, became a major cash crop in the area. It is also a good case to study because it represents various power relations and dynamics resulting from the presence of multiple actors, including the state, agribusiness companies, Non-Governmental Organizations (NGOs), and smallholder farmers, who are a necessary component in the public-private partnership model in agricultural transformation in Tanzania in particular and Africa in general.

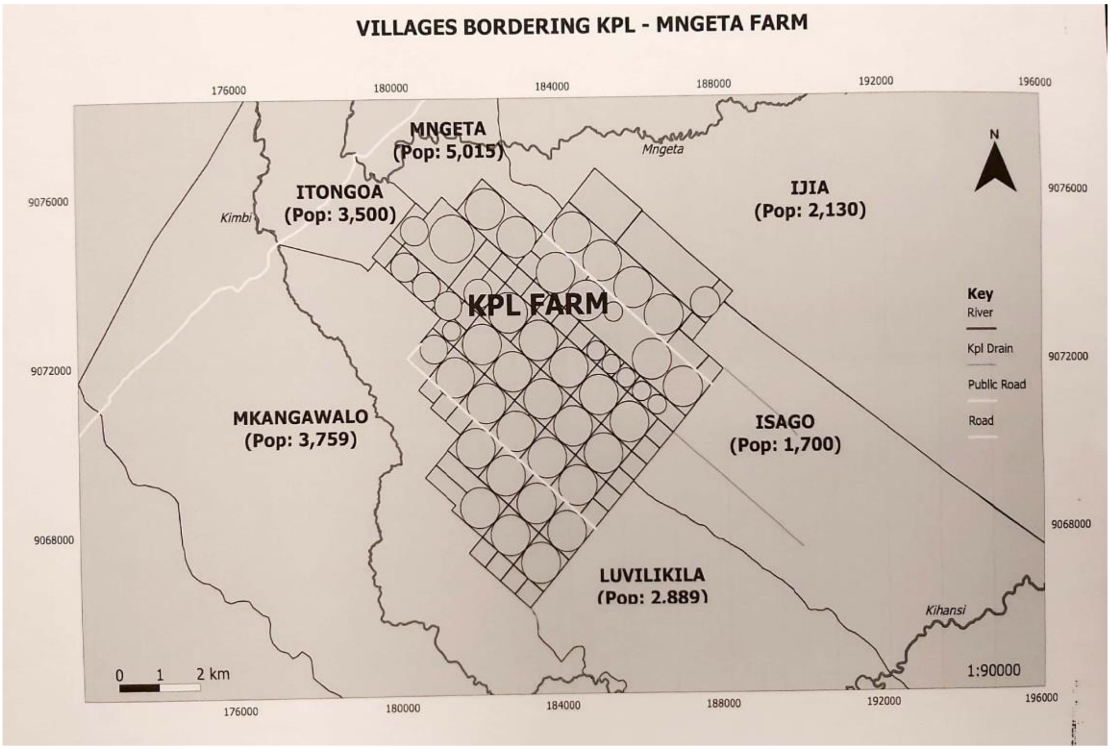
Figure 2: 1

Tanzanian Map Showing the Location of Kilombero in Morogoro

Note. Tanzanian map showing the location of Kilombero in Morogoro. Copyright © 1998-2021**:** nationsonline.org

Figure 2: 2

The Map of Mngeta Showing the Study Area



Note. The map of Mngeta showing the study area. Copyright © KPL

In this study, I included both contract farmers and non-contract farmers. I included the non-contract farmers for comparative reasons. The contract farmers own an average of 4.27 acres with the highest being 30 acres, whereas the non-contract farmers own an average of 3.85 acres with the highest being 10 acres. The contract farmers included in this study are those who reside in the three villages of Mkangawalo, Mngeta and Luvilikila (hereinafter referred to as “Mngeta ward” or “Mngeta”) some of whose residents work with KPL as out-growers through a contract farming scheme.

Access to the Research Site

This study was preceded by an administrative process for gaining access to the research site. The initial gateway was the Tanzanian Commission for Science and Technology

(COSTECH) where I secured my study permit. After obtaining the permit, I applied for another permit from the Regional Administrative Secretary (RAS) of the two regions: Dar es Salaam and Morogoro. After three months of back and forth, I was finally introduced to the RAS in Dar es Salaam and Morogoro. The RAS in Morogoro where my research was based introduced me to the district directors where I was going for data collection. Then the district director introduced me to the ward executive officer (WEO) who was my gateway to my participants in the field. The WEO introduced me to my participants and the leaders of the Sustainable Rice Intensification (SRI) who then introduced me to the company's human resource manager. These introductions helped to make connections with the farmers and the local leaders in Mngeta.

Study Design

As noted in Chapter 1, this study was conducted in Mngeta ward from November 2018 to July 2019 to explore the implications of contract farming on smallholder farmers' gender relations, livelihoods and subjectivities. Specifically, the study aimed to examine how contract farming, market and production relations, and political decisions shaped household gender relations, livelihoods and the subjectivities of the people of Mngeta. It also aimed at understanding the political economy of rice production in Mngeta and the causes of the collapse of both contract farming and the Kilombero Plantation Limited (KPL).

To address these questions, this study adopts a case study design and uses a multi-method approach of qualitative and quantitative data collection, which combines interviews, ethnographic observations, social surveys and archival documents. A case study design helps to investigate social phenomena by exploring ongoing events and understanding people's meanings grounded in natural settings (Ragin & Becker, 1992; Stake, 1995; Yin, 2009). As I said earlier, this case is an example of how market relations, production relations, and political processes among multiple actors shaped the development of contract farming and of how agricultural commercialization, i.e., the shift from use to exchange value, reconfigured gender and household dynamics.

Sampling Process

In this study two types of sampling techniques were used. First, a purposive sampling technique was used to capture the dynamics of different social groups regarding contract farming (Sigleton, 1999; Weiss, 1995). I purposively selected participants based on their participation in contract farming and their role in society and the company. I made initial contacts with the local authorities (gate keepers) to identify people who participate in contract farming and those who do not participate in contract farming in order to have a comparative group. I spent the whole data collection period familiarizing myself with the people, the culture and social organization of people in Mngeta, mapping out the setting, and developing social networks to help me understand the study site and its people. During the familiarization process, I identified some participants whom I thought were well informed about contract farming and interviewed them. After these initial interviews, I asked them to connect me to other farmers they knew. I did this for both contract farmers and non-contract farmers. I also spent a month doing archival research at the University of Dar es Salaam. I spent a total of 10 months in the field site collecting data for this study.

I preferred to use purposive sampling to capture the dynamics of different social groups regarding contract farming. Purposive sampling helped me understand how the production of structures, processes, and practices of power (and agency) create certain outcomes, by selecting only those respondents who had experiences with rice farming and working with the smallholder farmers in Mngeta. Qualitative sample size was determined through theoretical sampling (Glaser & Strauss, 2017), where I used integrative memos or axial coding that I developed during a preliminary analysis of my data to determine the areas that needed further investigation and the type of data to collect next and where to find it (Emerson et al., 2011). These memos helped me to link the pieces of data together and establish their relationship. This was followed by the development of focused codes that helped me identify the themes that seemed related, and I merged them together. The actual sample size was reached based on the farmer's social networks. The use of integrative memos allowed me to recruit more respondents to create a meaningful pattern of my data. I recruited participants until I reached a point of saturation with the data, i. e,. no new insights were forthcoming from the collection of additional data (Strauss & Corbin, 1998). The ages of those in my qualitative sample ranged between 30-68 years, and most of the respondents were married, and had primary education.

The sample for the social surveys was determined by the sampling frame that I obtained from the local government authority in Mngeta, which had a list of households for both non-contract farmers and the names of contract farmers. In terms of marital status, about nine out of ten contract farmers were married while seven out of ten non-contract farmers were married. Over 90% of the respondents were Christians with primary education. About eight out of ten respondents had primary education. Whereas the majority (40%) of contract farmers were in the age group of 46-55, for non-contract farmers the majority were in the age group 36-45 years. Using this list, I started with the list of names of contract farmers and eliminated all those who were initially involved in the key informant interviews in order to avoid double sampling. After that I stratified the list by gender and selected a representative sample using a simple random sampling technique. I then selected a total of 70 contract farmers (45 males and 25 females) for the social surveys.

To get the non-contract farmers, I used the list of households from the local government authority, matched it with the list of contract farmers (because the contract farmers are registered by names not households) and isolated the farmers who were involved in contract farming and the interviews and then made sure I did not sample these. I then stratified the population by gender and drew a representative sample through a simple random sampling technique. I then selected a total of 40 non-contract farming households (22 male headed households and 18 female headed households) for the social surveys. A large portion of those in the quantitative surveys had primary level education, followed by secondary education and there were very few respondents with post-secondary education for both categories i.e., contract and non-contract farmers. I used the household as my unit of analysis to avoid oversampling because some households had more than one member who was registered for contract farming. Secondly, the use of households helped me to avoid duplication of information. The non-contract farmers whom I included in this study were those who lived within the same ward as the contract farmers, so that I would have a meaningful comparison group.

Table 2: 1

Descriptive Statistics for Quantitative Sample

	Contract Farmers (N=70)	Non-Contract Farmers (N=40)
Gender		
Male	64.3% (45)	55% (22)
Female	35.7% (25)	45% (18)
Total	100% (70)	100% (40)
Marital status		
Married	88.6% (62)	67.5% (27)
Single	2.9% (2)	12.5% (5)
Divorced	4.3% (3)	12.5% (5)
Widow	4.3% (3)	2.5% (1)
Cohabiting	0% (0)	5% (2)
Total	100% (70)	100% (40)
Education level		
Primary education	84.3% (59)	85% (34)
Secondary education	11.4% (8)	12.5% (5)
Post-secondary education	4.3% (3)	2.5% (1)
Total	100% (70)	100% (40)
Religion		
Christians	91.4% (64)	82.5% (33)
Muslims	8.6% (6)	17.5% (7)
Total	100% (70)	100% (40)
Age-groups		
Under 25	7.1% (5)	5% (2)
26-35	11.4% (8)	15% (6)
36-45	30% (21)	35% (14)
46-55	40% (28)	32.5% (13)
56 and older	11.4% (8)	12.5% (5)
Total	100%	100%

Data Collection Methods

In order to capture the dynamics of smallholder farmers in Mngeta, I used multiple methods of data collection as explained below. This study included both male and female participants. To get in depth information, I hired a female research assistant who conducted the interviews with female participants. In many rural areas in Tanzania, there are strong cultural boundaries between men and women such that women do not face men and speak to them as a gesture of respect and submission. Even when they would volunteer to speak to a researcher, the husband would always be close to monitor the conversation. So, to ensure respondents' confidentiality and capture the opinions and experiences of women, I decided to hire a female research assistant who conducted interviews with women farmers. Using a female research assistant reduced the tension of the husband and gave women more confidence to speak out. In total, I did 37 qualitative interviews with the smallholder farmers and two interviews with administrative staff in KPL, one representative from NAFAKA and two local government officials in Mngeta. For the surveys, I conducted 70 surveys with the contract farmers and 40 with the non-contract farmers.

Key Informant Interviews

A key informant interview is one of the methods that I used for data collection (Gilchrist, 1992; Tremblay, 1957). After the process of familiarization, I purposively selected participants whom I thought were well informed and knowledgeable about contract farming and the livelihood trajectories of people in Mngeta. This was easy to do following contacts I developed with some farmers during pre-dissertation research during the fall of 2016 and summer of 2017. Key informant interviews helped me to capture participants' opinions, lived experiences as well as feelings about their situation and their participation in contract farming in general. I used key informant interviews to help answer three broad research questions. First, what is the political economy of rice production and why did contract farming and the KPL both collapse? How did rice production and its value in Mngeta change over time i.e., from exclusively for consumption to exchange? What impact did this transition, from a consumption to a market crop, during the neoliberal era, have on smallholder farmers and what was the nature of the contract farming that it produced? The interviews were particularly helpful for exploring the nature of contracts in terms of who participates, what the contract offers, how smallholder farmers react/respond to the contracts, what happens when smallholder farmers breach the terms of the contract, and the various ways in which smallholder farmers resist contract farming, such as cheating and refusal to sell their rice to the company.

Second, I used key informant interviews to understand the effects of contract farming on gender relations in Mngeta. In this part of the country, rice has long had a feminine identity because it was women who were solely responsible for its production and for feeding the household. The introduction of Kilombero Plantation Limited (KPL) in Mngeta redefined the value of rice from a consumption, or use, value to an exchange value. This led smallholder farmers to expand their production of rice. Rice has now become a leading cash crop in Mngeta, tempting men to participate in its production. Thus, I carried out a set of interviews to understand the impacts that contract farming has had on gender relations at the household level. The purpose was to examine changes related to household agricultural production, distribution, and consumption, following the introduction of KPL and the commodification of rice in Mngeta.

Third, I used key informant interviews to understand how contract farming shapes smallholder farmers' subjectivities/identities and livelihoods in Mngeta. The dominant agricultural modernization model considers contract farming as a means through which smallholder farmers can be integrated into global markets and commercialized. Moreover, the government of Tanzania considers contract farming to be a good example of a public-private partnership model that can benefit smallholder farmers within the Southern Agricultural Growth Corridor of Tanzania (SAGCOT) by transforming not only their agricultural practices but also their lives through increased incomes, productivity, farm inputs, and the markets. In doing so, contract farming is supposed to transform smallholder farmers into new agricultural entrepreneurs. The use of interviews enabled me to understand and learn how such narratives/claims shaped smallholder farmers' identities in Mngeta.

I conducted a total of 49 interviews: 43 interviews with smallholder contract farmers and six interviews with administrative staff from KPL, NAFAKA - a USAID funded project under the Feed the Future Program, and the local government authority in Mngeta (three from KPL i.e., KPL human resource manager, smallholder program manager, and the KPL medical officer in charge, who is also a board member, one financial and business advisor from NAFAKA and two local leaders from the local government authority respectively). The interviews consisted of both men and women to capture the gender dynamics in rice production and contract farming. I conducted a total of 13 interviews with female participants and 29 interviews with male participants.

Through the interviews I was able to understand intra-household relations and how smallholder farmers organize their agricultural production, make decisions about what to grow, how much to grow, and the gendered division of labor. Additionally, I was able to understand seasonal variations in the use of men's and women's labor by examining different seasons, i.e., farming and non-farming seasons. The interviews with the local government leaders helped me to understand general information regarding the political economy of the area and the social, cultural and economic changes and shifts that have happened in the area. Interviews with key informants from KPL helped me to understand the role of the company in rice production in Mngeta and in contract farming. For example, one of the interviews with a smallholder program manager from KPL lasted for three hours, generating significant information about the contract farming scheme. Moreover, an interview with NAFAKA representative enabled me to better understand the role of the private sector in contract farming in Mngeta as they mobilize for the creation of and participation of producer organizations or farmers' organizations in rice farming. NAFAKA is not funded by the government of Tanzania. These interviews were guided by an open-ended interview guide which provided research participants with freedom to express their opinions and experiences. I used a probing technique to direct the conversation so that it centered around the research questions that I wanted to learn about.

Interviews were also helpful in capturing the experiences of both men and women in rice marketing by exploring who does the selling, where, how, who makes decisions about the selling/how much to sell, who controls the income, how is the income spent, how much is left for food, and how that which is left over is distributed in the household.

I recorded most of the interviews except three interviews where participants did not want to be recorded because they felt that what they were telling me was very sensitive. It was clear that they did not have enough trust to let me record, so I took notes on our conversation. Most of my interviews lasted between one hour and an hour and forty minutes, except for the interviews requiring note taking, which took about two hours. I transcribed all the interviews verbatim before I started developing my codes. All the interviews were done in the *Kiswahili* language.

Informal Interviews

A researcher is also a social being. Apart from his or her professional role, s/he also hangs out with people with whom s/he develops contacts and familiarizes. This helps him or her to better understand the research site and the people s/he is working with. As a researcher I also used informal interviews for this study. I did these interviews during informal interactions or what (Bernard, 2017) calls “hanging out”, such as those during the happy hour (especially during coffee hour and chess game playing, which are very common in the study area) often done during the evenings. While in the field I participated in various activities, including planting and weeding of rice in smallholder farmers’ farms. It is also during these activities when we had informal conversations. Such conversations were in the form of storytelling about smallholder farmers’ experiences with large scale investments, such as the KPL’s investment and contract farming. I then recorded comments related to the relationship between KPL and the farmers, contributions of KPL in development projects, such as schools, water, dispensary, and the roads, and the contribution of the company to the economy of Mngeta. Some of these comments did not appear in the interviews and the surveys but I was able to capture them through informal interviews. This was possible as some villagers got an opportunity to interact with me in a more informal way and get to know me more outside my professional role while "hanging out" (de Munck & Sobo, 1998). Interacting informally with the villagers (most of whom were farmers) enabled me to solidify trust and change the villagers' minds from seeing me as an outsider and a spy with a hidden agenda about the conflict that happened between KPL and the villagers to viewing me as a trusted colleague with a potential to represent their voices. For example, during the chess game, one of the adults said: *Let me be honest to you, we have had a lot of people coming here but we never wanted to talk to them because they see us as nothing. This is the first time we sit down and tell stories with a researcher in this village, but we have had a lot of them. We were even worried to talk to you because we thought you are just like them.*

I did not tape-record my informal interviews because I did not want to make my participants nervous. I immediately recorded in my notebook all the issues that were relevant to my study before I forgot.

Participant Observation

This is a method of data collection in which a researcher takes part in the daily activities, rituals, interactions, and events of a group of people (Mngeta villagers for this case) as one of the means of learning the explicit and tacit aspects of their life routines and their culture (Musante (DeWalt) & DeWalt, 2010). This method focuses on the meanings of human existence as seen from standpoint of insiders (Berg & Lune, 2017; Spradley, 2016). I used this technique to capture some insights about the location of smallholder farmers' farms in Mngeta, the type of livelihood activities, the way smallholder farmers grow their rice in Mngeta, and the way the local communities in Mngeta interact with their environment and with each other. This method helped me to answer my research questions about the political economy of rice production, the collapse of contract farming and of KPL, as well as my research question about the impacts of contract farming on household gender relations. It enabled me to understand the gender division of labor by observing who does what during farming season and off farming season, and the kinds of crops grown. This method also helped me to answer my research question about livelihood strategies and self-provisioning practices and smallholder farmers' subjectivities in Mngeta. I paid attention to body movements during the key informant interviews and informal interviews in order to capture people's feelings, such as their disappointments or anger or appreciation of contract farming. With this technique, I was able to understand that some smallholder farmers were disappointed and angry with the company because of the arrest of some smallholder farmers which happened in 2012 following the theft that occurred at the company. These feelings were revealed during the interviews when I was discussing the benefits of contract farming to smallholder farmers in Mngeta.

During the field work, I took ethnographic notes on the setting and the Mngeta farm. I also attended a NAFAKA training session where I recorded observations about the gender division of labor. Through observation, I was able to map smallholder farmers' farms and see the infrastructure available on the farms, which included the irrigation pivots and irrigation canals, and control or security towers. Through observation I found out that there was a big spatial difference between the company's farm and the farms where smallholders were growing their rice and one that was associated with irrigation and proximity to pastoralists. Smallholder farms were not supplied with irrigation canals, pivots, or control towers used to protect the farms against intruders and cattle from the pastoralists. I found out that the farm blocks that were given to smallholder farmers by the company were those that bordered the pastoral communities. This helped me to better understand the company's strategy in allocating land to smallholder farmers.

Survey Method

My data collection process began with qualitative interviews. Based on the information and insights obtained from the interviews, I designed a survey tool to help me understand the changing pattern of men's participation in rice farming, a crop previously considered to be for "women", the perceived benefits of contract farming, and livelihood activities in Mngeta. The surveys also allowed me to assess how contract farmers and non-contract farmers spend the income they obtain from rice farming and to capture the various ways through which people in Mngeta, particularly smallholder farmers, sustain their life during off-farm season. The aim here is to capture the differences between contract farmers and non-contract farmers in order to understand whether contract farming has managed to improve smallholder farmers' life as the dominant discourse claims. The survey questions were comprised of closed-ended questions and they were administered by the researcher. A total of 110 surveys were administered to smallholder farmers. The survey sample consisted of 70 contract farmers and 40 non-contract farmers. I randomly selected the participants for the survey based on the sampling frame discussed above.

Archival Research Method

For secondary data, I did archival research to document timelines of events and change. Archival documents included newspapers, public documents, organizational materials, and other research reports to analyze the discourses around contract farming. This approach helped me to explore how different actors construct their claims about contract farming and the implications of contract farming for gender relations in Mngeta. I obtained archival materials from the University of Dar es Salaam library, NAFAKA, and KPL. I also obtained secondary sources about KPL and SAGCOT from the internet. The archival materials helped me to understand more about the history of KPL, the contract farming scheme, and the discourses about contract farming in Mngeta. During the review of these materials, I paid attention to various discourses about smallholder agricultural transformation and contract farming. It was from this method that I was able to trace the changes that have happened in Mngeta with regard to rice production.

Data Analysis

This study utilized both qualitative and quantitative methods of data analysis. For the qualitative analysis, I used a grounded theory approach (analytical induction approach) of data analysis where the themes were constructed from ethno-narratives (lived experiences-narratives)–constellations of relationships (connected parts) embedded in time and place (Somers, 1992)–of actors in the field as bounded by various institutions, structures, and processes. This approach coded the patterns of actions of the actors, such as smallholder farmers and KPL, and the intersubjective structures of everyday life in which agents operate (Tavory & Timmermans, 2009). I used grounded theory because of its ability to continuously produce bounded narratives of the social world which further shape and enable action (*ibid*) as well as its iterative nature, which allows the researcher to move back and forth between data collection and analysis. After data collection, I coded all the data in order to generate themes and identify the areas that needed further investigation through theoretical sampling (Strauss & Corbin, 1998) as I explained earlier. During the analysis, I wrote memos and highlighted some themes in order to establish the relationship between concepts and categories that arose from data. After this process, I used two methods to code the data, a computer-based program N-Vivo and manual coding. The dominant coding method was manual coding. The focus here was on analyzing the various discourses obtained from KPL, smallholder farmers, and the government about contract farming and its effects on smallholder farmers.

I analyzed my quantitative data using SPSS (version 23). Before analysis, I created a code sheet which I used to enter all the survey data. After data entry, I cleaned the data and made sure that I entered it correctly. I used quantitative data analysis to produce information about demographics, decision making at the household level, income expenditure, and livelihood strategies. I ran descriptive statistics and cross tabulations to establish relationships between various variables in my data that were important in understanding the implications of contract farming on household gender relations and smallholder farmers' livelihoods. The survey data were crucial in answering my research question about the implications of contract farming for smallholder farmers' livelihoods.

Limitations of the Study

In her book "Killing Neighbors: Webs of Violence in Rwanda", (Fujii, 2010, p. 21) writes: "No study can hope to explain all the complexities of a single phenomenon.

The real world is too big and messy to fit into any single analysis" So is this study. This is a case study about contract farming. It is done within a particular context and time. It has its own boundaries and limitations as to what should be included and excluded. While the findings and the analysis of this study are robust and significant theoretically and in terms of policy implications, they may not be widely generalized because of the nature of the case itself. This study offers an understanding of contract farming in a more contextualized setting than many other contract farming studies as it takes into account the history and the social embeddedness, or political economy, that underlies what happens with the initiatives like contract farming. One of the limitations of my study was due to the weather. While in the field, excessive rains made it practically impossible to visit some farms of smallholder farmers which were completely flooded. The roads also were impassable.

Another limitation was the bureaucratic obstacle facing researchers in Tanzania particularly with securing the necessary permits, and the resulting difficulty of having reliable plans and schedules for doing research. I spent long time waiting for the national institutional review board COSTECH and other institutions responsible for issuing the research permit to grant me the permit. This delayed my field work time and hence I missed some of the farming preparations which happen between October and early November. Because of this delay, I was not able to observe the gender dynamics during farm preparation. However, I was still able to capture some of these dynamics during the interviews with smallholder farmers.

Even though my study attempted to explore the implications of contract farming on smallholder farmers subjectivities, my data did not allow me to draw definitive conclusions about the success of failure of efforts to create new small farmer subjectivities: However, it did provide an understanding of what the company and external actors were trying to achieve.

Ethical Considerations and Positionality

All researchers are required to follow ethical standards so as to not harm their research participants. To avoid such harm, I observed research ethics as per the IRB protocol. First and foremost, I asked for the full informed consent of the research participants. In the process of securing informed consent, I informed the research participants of the confidentiality of the information they would provide as well as their right to anonymity. I also informed and assured them that the information they provided would strictly be used for the purpose of my academic research and that their participation was totally voluntary. To maintain the confidentiality and anonymity of the research participants, I use pseudonyms throughout this dissertation. I also told research participants that if I thought there was a necessity to use someone's real name, I would explicitly seek their consent.

I understand that the position of the researcher influences the emerging analysis. I also understand that grounded theory, like any sociological practice, is both highly influenced by the interests and blind spots of the researcher and shaped by theory. (Bourke, 2014; Hausermann & Adomako, 2021) warn that a researcher's positionality can affect the research process from the design to the analysis to the presentation of findings. Much as I tried to always be reflexive of my position throughout the entire research process in order to best capture the ethno-narratives of the community under study, my presence in the field symbolized multiple identities for myself and for the research participants as well. My positionality as a young heterosexual Tanzanian male, born and raised in a rural area in Tanzania, and as a university instructor in a Tanzanian university (University of Dar es Salaam) speaking the same language as the research participants made it easy for me to connect with the experiences of the people living in Mngeta because rural life across Tanzania is similar. On the other hand, being a university student at a US university ascribed to me a different identity for the smallholder farmers, some of whom saw me as a spy from a foreign country, or a company (KPL), and as a government official who was there to assess the contract farming program. I thus told them very clearly from the beginning of the interview that my research was not evaluation research, and I was not there to evaluate their knowledge but to learn how they practice agriculture and understand their relationship with KPL. I insisted that I neither was looking for the right answers nor the wrong ones. I also used the networks I created to help explain the purpose of my study and constantly reminded participants that participation in the study was voluntary. Spending more time with the potential participants, especially while hanging out or during happy hour while playing chess, watching soccer, and drinking evening coffee, helped me gain their trust. My understanding of Tanzanian cultural norms, values, and behavioral expectations helped me to relate well with my research participants. My identity helped me to establish connections and interact with different people in the area. Being a Tanzanian gave me some credibility as an “insider”, although I also understand that being an “insider” may make it difficult to see certain things because some parts of the social world and practices are so familiar that they may go unnoticed and be taken for granted. I was keen to make sure that participants did not assume that I knew the answers to some of the questions because of my shared identity as a Tanzanian. Instead, I probed them about all the questions to make sure that participants were as explicit as they could be.

Conclusion

Generally, my study aimed at exploring the roles of market production relations and political decisions under the contract farming system in shaping smallholder farmers' household gender relations, livelihoods, and subjectivities. In addressing this question, I used a case study design coupled with multiple methods of data collection that included key informant interviews, informal interviews, surveys, and observations. As I argue in this chapter, this is a case of multiple cases that explores how commercialization reshapes gender dynamics in the household, how market production and political processes produce particular outcomes, such as social and political conflicts, a shift from use to exchange value, the alteration of gendered household dynamics, and the collapse of contract farming and KPL, under a distinct historical and cultural context. In the subsequent chapters, I use the methods discussed in this chapter to explore how the political economy of rice production in Mngeta, the rise and fall of the contract farming scheme and of KPL, and how KPL's contract farming scheme and its associated politics, including the NAFAKA training, impacted smallholder farmers' household gender relations, livelihoods, and subjectivities.

Chapter 3: The Political Economy of Rice Production in Mngeta and the Collapse of Contract Farming and Kilombero Plantation Limited (KPL)

As noted in Chapter One, the global discourse on agriculture considers agriculture in many African countries as poor, characterized by low technology, and by a lack of credit, and low productivity, which leads to rural poverty and food shortages [or insecurity]. To improve agriculture in these countries (Tanzania included) and ensure food availability to feed the hungry population, agricultural modernization and transformation thus become imperative. From this perspective, the smallholder farmers who dominate agricultural production in many African countries need to be modernized through training, credit, and access to better inputs (Gengenbach et al., 2018). In addition, this approach to agricultural transformation relies on the role of the private sector in ensuring access to agricultural inputs and credit. Transformation becomes possible through the public-private partnership model. My research assesses the outcomes of such an approach to agricultural transformation in the case of rice farming in southern Tanzania.

This chapter addresses the political economy of rice production in Mngeta. It historically traces the development of KPL and the emergence of contract farming in Mngeta. In the process, I show how participation in contract farming and the adoption of new farming techniques shaped farmers' lives by changing their traditional rice production practices and by raising their productivity.

I also show that, contrary to other studies, in India, Madagascar, Kenya, Mozambique, and elsewhere, which highlight the success of contract farming, a focus on market forces, power imbalances between the contracting parties, and the nature of farmers' participation in the scheme can account for the failure of contract farming schemes. These factors generated conflictual relations between the company and the farmers that led to the collapse of contract farming in Mngeta. A corollary argument here is that the broader relations of production between the company and its contract farmers created the conditions for dissatisfaction and mistrust between the two parties leading to the collapse of the scheme. Thus, my analysis of the collapse of contract farming highlights factors that go beyond *relations of production*, e.g. levels of productivity, or yields, resulting from how contract farming production relations were organized by agribusiness firms, ownership of warehouses, or the leasing of blocks of company land to smallholders) and highlights as well *relations of distribution, or market relations*, including inflated rice weight (through additional rice debris and sand by the farmers), monopsony, and especially price competition (between maize and rice for this case). I argue that these distributional, or market, aspects of social relations, as well as relations of production, generated political contentions that led to the collapse of contract farming and the subsequent collapse of KPL.

In addition, I show that while contract farming promised to improve smallholder farmers' lives, the farmers adopted techniques that allowed them to affect by their own means certain market relations (lending relations) with the local agro-dealers in order to transform their agriculture and their own lives. I argue that technologies of the self, involving the desire to become a "modern farmer", produced a lending system that tied smallholder farmers to debt relations without which they could not meet the expectations of "modern farming". The debt relations, and resulting relations of dependency, greatly impacted smallholder farmers' livelihoods and the sustainability of contract farming.

I also note that even though smallholder contract farmers did benefit in certain ways through the new rice farming system and access to and use of the company's blocks for rice farming, my findings suggest that production relations, in the form of leasing of farms to smallholder farmers, was a mechanism of control and surveillance that helped to protect the company's farm from destruction by cattle from around the farm and conflicts that would potentially arise between the pastoralists and the company. Thus, contract farmers acted as a buffer zone to protect KPL's investment against pastoralists' invasion. This suggests that the company used its own farm as a form of governmentality that functioned to organize and control the practices of both the farmers and the pastoralists.

In this chapter, I begin my examination of rice production in Mngeta ward and move on to Kilombero Plantation Limited (KPL), the agro-enterprise that was established under the SAGCOT initiative. KPL was established to grow rice and sell it both domestically and internationally to countries such as Burundi, Rwanda, and Uganda. At the Tanzanian government's urging, and as specified in the SAGCOT agreement, the company was required to incorporate smallholder farmers as outgrowers in its business plan. In 2009, the company started the system of rice intensification (SRI) project under the contract farming scheme to help smallholder farmers improve their productivity and secure reliable markets. According to my interviews, surveys, and observations, about 168 smallholder farmers in Mngeta decided to participate in KPL's contracting system, in the hope of improving their overall rice production and their socio-economic conditions. I then move on to exploring contract farming and examining the impact of the various conflictual relations and the credit system on smallholder farmers' rice production, contract farming scheme, and the company (KPL).

Rice production in Mngeta: Brief historical overview

In the 1950s and 60s, the economy of Mngeta depended on fishing, and most of the fishermen were from the Wandamba ethnic group. A large part of Mngeta was dominated by forests, swamps and rivers, and wild animals. Mngeta borders Ruaha national park. The wild animals from Ruaha would come close to people's houses in search of grasses and places to keep themselves safe from floods. Floods were very common in this area due to constant rains. In fact, one of the villages in Mngeta, *"Mkangawalo"*, derived its name from the local name, which implied the relationship that existed between human beings and animals. Mkangawalo derived its name from a hill where both wild animals and human beings ran to when floods started in order to save their lives. Upon reaching such uplands, both animals and human beings started staring at each other, and it is from this act that the villagers derived the name *"Mkangawalo"* (*"kushangaana" in kiswahili*). Because Mngeta was a valley, a large part of the land was covered with water, making fishing the main economic activity.

These fishermen would fish not for consumption but for selling to get money for various basic needs. In addition to fishing, few Wandamba, Wahehe and Wapogoro grew rice for consumption. Rice production was done at a very small scale to only cater to household needs. However, as climatic conditions changed, the water started to retreat to the main Kilombero river. The fish catch became scarce, and more people who were fishing started to grow rice.

Rice was the major crop that was grown because of the flooded nature of the land. Access to farmland was through individual possession, where the farmers would approach a forest and identify an area and establish boundaries. The population was small, and a large part of the land was still a forest. No government authority was involved in land distribution. When the local people started clearing more land for farming, floods started to decrease, and the wild animals were pushed further back to the national park.

In the 1970s, the population of Mngeta increased following the Nyerere's "ujamaa[4] and villagization policy" which moved people from different places in mainland Tanzania as part of the government's agricultural transformation initiatives, leading to the clearing of a larger land area for agricultural activities. In 1973, the government of Tanzania pronounced that all Tanzanians should enroll in *ujamaa* villages within the next three years through *"operation vijiji"* (Cliffe, 1972; Raikes, 1973; Saul, 1972). Right after independence, the population of Tanzania (then Tanganyika) was widely dispersed on small plots of land, creating a challenge in service provision. Peasants were moved to newly constructed settlements to promote efficient agricultural production and simplify the delivery of basic services. The ujamaa and villagization policy required people to establish *"ujamaa"* (community) villages where they would live and work together, particularly on agriculture. The ujamaa policy aimed at introducing modern agricultural techniques and social services to these new communities. These agricultural communities were subsidized by the government and were given fertilizers and seeds and hand hoes for farming. Even before 1973, the government of Tanzania took a number of initiatives to improve agriculture. These included the Three-Year Plan of May 1961 which aimed at

[4] "Ujamaa" is a Swahili word which stands for collectiveness/community life. It was a development strategy designed by the late Mwalimu Julius Kambarage Nyerere, the first president of Tanzania. As a development strategy ujamaa aimed at living together, working together and self-reliance. The ujamaa vision was realized through collective agricultural production and equal sharing of the produce (also see Tanzania Second Five-Year Plan 1969-74)

expanding and improving agriculture, education and communication[5]. After clearing the land, the farmers cultivated small plots, mostly around their own houses, using hand hoes. Family labor was used for cultivation, and families grew rice. The most commonly used rice sowing method was *"tangulia naja[6],"* literally translated as *"take a lead I am coming"* or broadcast method. This style of sowing did not involve planting in straight rows/grid, and it led to wastage of seeds and low yields.

In 1986 there was a policy shift where the government of Tanzania changed its policies of *ujamaa* and self-reliance and embraced neo-liberal policies after adopting a series of structural adjustment programs (SAPs). Among other things, the SAPs policies called for private investments and trade liberalization and the privatization, or public-private partnerships (PPPs), of state-owned properties (Aminzade, 2013). The SAPs determined what the state could and could not do. There were several conditionalities put in place by the structural adjustment programs, including economic liberalization, currency devaluation, withdrawal of the state from the economy, the introduction of the private sector, and the involvement of NGOs (ibid). The state was supposed to provide enabling conditions (Block & Somers, 2014), for the promotion of what (Block, 1977) calls “business confidence”, in order for the private sector to operate smoothly (Aminzade et al., 2018). These structural changes required the government to withdraw

[5] In its Three-Year Development Plan (1961-1963), the government of Tanzania (then Tanganyika) allocated about one-quarter (24 percent) of its budget annually to agriculture alone compared to other sectors such as power, work, and communication, which received about 30 percent of the budget and education, which received 13.7 percent (Government of Tanganyika 1962).

[6] *"Tangulia naja"* is a rice paddy sowing method where a farmer carries rice seeds on his/her back in a sack and uses his/her hands to scatter the rice seeds by moving his/her hands from left to right and back again as he/she walks, commonly known as "broadcasting."

from subsidizing farmers and allow privatization. These policy reforms set the ground for the later introduction of the Kilombero Plantation Limited (KPL) farm.

The History of Mngeta Farms

Mngeta farm has been in existence since the 1980s when it was surveyed and its boundaries established (SRI manager interview, December 2018). It covers a land area of 5,818 hectares. In 1986 the government of Tanzania, in partnership with the North Korean government (KOTACO), decided to establish Mngeta farm (which later came to be known as KPL[7]). In this partnership, Tanzania and Korea agreed that the Tanzanian government would provide salary, wages, fuel, and food to the farm employees while the North Korean government would provide the machinery and the expertise. Koreans cleared the farm and constructed some of the infrastructure, including the irrigation system, roads, houses for the employees, and the fence surrounding the offices on the farm. The Korean president promised the then-president of the United Republic of Tanzania, Mwalimu. Julius Kambarage Nyerere, that he would ensure that Tanzania would be food secure before Nyerere retired from office. To achieve that goal, he promised to bring experts who would work with the Tanzanian government to produce more rice to ensure food security for the Tanzanian people. In December 1987, the Korean experts came and started working with the Tanzanian government. However, they came with Korean tools which did not work well in Tanzania, because of the nature of

[7] KPL stands for Kilombero Plantations Limited, a Norwegian agri-business company located in Mngeta ward in Kilombero valley Tanzania. It owns about 5818 hectares of rice farm in Mngeta ward. The Tanzanian government considers this company as an excellent example of a public-private partnership project under the Southern Agricultural Growth Corridor of Tanzania (SAGCOT) initiative that seeks to modernize agriculture in Tanzania. It was established in 2007 as a public-private partnership company that works with smallholder farmers who produce rice and link them with global value chains and the markets through contract farming/out-grower schemes.

the land. The land was hard to till. They came with bulldozers that could not fell trees, and tractors, which could not easily till the land.

When Nyerere came to inspect the farm, he acknowledged that the machines could not work and advised KOTACO to look for other machines. The Korean government was not ready to do that, and the Tanzanian government decided to buy new machines. Thus, the Tanzanian government's budget was directed towards purchasing new equipment instead of paying for salary, wages, and fuel and the company (KOTACO) went bankrupt in 1996. Before KOTACO went bankrupt and collapsed, it had cleared and developed over 5000 hectares of land and planted a large part of the farm. KOTACO did not plant the whole farm because rice did not yet have a market other than feeding the Tanzanian population.

By 1992, all Koreans had already left the country. When the Koreans left, the farm was taken over by the Rural Basin Development Agency (RUBADA), the government agency overseeing the Kilombero valley. In 2000, RUBADA leased the farm to the Kilombero Holding Company (KIHOCO). KIHOCO was only able to develop about one-twentieth of the land (i.e., about 10 blocks out of about 200 blocks that the farm has). KIHOCO was farming the blocks close to the villages, leaving the blocks that were far from the villages. The blocks that were not farmed turned into big forests. The KIHOCO also failed, because of lack of capital and machinery. Following the failure of KIHOCO, the farm was handed back to RUBADA, which began looking for other investors.

The arrival of KPL

In 2006, the farm was leased to a new investor, Kilombero Plantations Limited (KPL), which signed a purchase contract in 2007, and RUBADA handed the company the 5,818-hectare farm. However, before KPL took over the farm, the farm remained idle for about a decade, inciting the local people to move into the farm and start their life and farming activities. After KIHOCO collapsed in 1997, a large part of the farm turned into a forest. People moved in and started their settlement there and built houses. The people who lived in the farmland justified their occupancy by claiming that they had been using the land for agricultural activities even before the coming of KOTACO (Bergius et al., 2018a). During this time, animals such as elephants, buffalos, and gazelle had encroached upon the farm because they could easily move from the national park bordering Mngeta ward. When KPL was identifying the boundaries of the farm for clearing, it was found that some people who had built their houses were also within the farm, which was now legally owned by KPL. KPL had to design a resettlement plan. A survey was undertaken. Those who lived within the farm were identified and compensated with cash and new houses in *Kichangani* outside the farm area (see the pictures of the new houses that the company built for farmers as compensation).

Figure 3: 1

Houses Compensated to Smallholder Farmers by KPL after the Assessment in Mngeta

Note. Picture taken by the researcher during field work in October 2018

Even though the houses appeared to be an improvement on their previous traditional grass-thatched houses, the farmers complained, because the houses did not cater to their needs. Most of the families that were evicted from the farm had large families averaging between 6 and 10 members who could not fit in the new two-bedroom houses. One of the beneficiaries of these new houses said,

> … it is true that these new houses are better and stronger than our traditional houses. We used to build our houses with poles, sticks, grasses, and mud, but these houses are built with solid blocks that the termites cannot destroy. But the only problem is that the houses are very tiny. I cannot fit my eleven members' family in there. Why didn't they ask me about the size of my family before they built the house? How could they assume that all our families are the same size? Have you ever seen a farming family with fewer members? (Interview with a male-rice farmer in Mngeta June 2019).

After the resettlement process, KPL began its operation in 2008. The company produced rice using irrigation technology (see the picture below). The establishment of

KPL required the removal of those who invaded the farmland, leading to loss of land, although some compensation was made. This dispossession led to what (Chachage, 2010) calls a 'crisis of eviction.' With the introduction of KPL, the local land users were considered as aliens and invaders of the land. Just like any other large-scale land investments, it made them vulnerable to land dispossession (Bergius et al., 2018a).

Figure 3: 2

KPL's Irrigation Infrastructure in Mngeta

Note. Picture taken by the researcher during field work in October 2018

To establish a good relationship between KPL and the surrounding communities, KPL decided that it would support development activities in three villages near where the farm was located. In line with the dominant narrative of helping the local communities around the investment area, KPL agreed to offer an annual grant of USD 22,000 (approximately 50 million Tanzanian shillings) to the three villages. These villages included Mkangawalo, which comprised 64 percent of the farmland; Mngeta, which comprised 24 percent; and Lukolongo, which comprised 12 percent. The money was spread proportionally depending on the size of the land each village offered for the farm. The government convinced the people from the three villages that if they gave their land to the company, the company would create employment opportunities that would help improve lives and the villagers gave up their land. When the village was under the leadership of politicians from the ruling party *Chama Cha Mapinduzi* (CCM), the three villages used to receive this grant from the company in form of cash for infrastructure improvements. However, this approach was characterized by corruption and embezzlement which made the villagers very angry.

In 2015, there were general elections. Out of the villagers' anger and frustrations with the then corrupt village leadership, they decided to vote CCM out and elected people from the opposition party to the position of the village leadership council. The change of political regime instituted *Chama Cha Democrasia na Maendeleo* (CHADEMA) into power and gave them control of the local village council. These changes coincided with some tariff changes and unfavorable climatic conditions that compromised the company's business environment and the ability to continue giving grants to the villages.

In early 2016, the company changed its method of giving grants to the three villages from cash to service provision. The company started using its own machineries, such as caterpillars and drilling machines, to repair the roads and construct water wells in the villages. It decided to change its approach to supporting the three villages instead of giving cash to the villages. It also helped to repair schools in the villages by supplying cement, bricks, and sand. However, the new CHADEMA village leadership did not support the company's approach, claiming that the company did not prioritize the villages' needs. So, the village leadership wanted to be issued with cash so that they could budget the money themselves, but KPL refused. The village leaders politicized the inability of the company to issue grants to the villages, claiming that the company refused to issue grants because the village council was under the opposition party. For example, during the interview, *Mkangawalo* village chairman emotionally condemned the company saying; *"...the people from the company hate us [leaders from CHADEMA] because we exposed their corruption with the previous leadership that is why they [the company] refused to continue giving us the grant we are entitled to" (Interview the village chairman in March 2019).*

The legacies of earlier party politics shaped the relations between the company, local leadership, and the villagers. The change in the company's approach to issuing the grant resulted in hostile relations between the company, the village leadership of the three villages, and the smallholder farmers/villagers. These relations sowed the seeds for conflictual relations between the company and smallholder farmers (or villagers), which I explore further in the coming sections. Additionally, the villagers believed that the company treated them unfairly. For these villagers, the company was just a foreign establishment that should have been accountable to them because the company was using their land, even though they did get some compensation. Analogous to (Scott, 1985) the only weapon the villagers remained with, at their disposal, was the uncoordinated or planned self-help forms of resistance that included pilfering, arson, and sabotage of the company's properties as means to confront the company's authority.

The History of Contract Farming in Mngeta

In 2009, the then Prime minister of the United Republic of Tanzania Hon. Mizengo Peter Pinda, was invited to visit the farm and, in his talk with the management, discovered that KPL was producing almost four metric tons of rice per hectare while the smallholder farmers were only producing between 1.6 to 1.9 metric tons per hectare. As part of their conversation, Pinda asked the KPL management to help the smallholder farmers around the KPL farm increase their yields. Two weeks later, after the prime minister left, KPL decided to start a contract farming scheme and consulted a rice expert from India to teach smallholder farmers about the system of rice intensification (SRI). In 2009/2010, the company started with a group of 15 farmers (SRI group) who were recruited from the villages surrounding the farm; Mngeta, Mkangawalo, and Lukolongo. Each village was asked to identify five good farmers who would be trained and be able to teach others. The company started a demo plot on its farm. The company then hired an agronomist who worked with the SRI expert from India. The agronomist helped translate the language for smallholder farmers, most of whom did not understand English and gave instructions to farmers. Unlike other forms of contracts that contract individual farmers, KPL contracted smallholder farmers' SRI groups. This was done to maximize production from smallholder farmers as their plots were so fragmented. These smallholder farmers grew rice collectively and collected their rice and stored it in the warehouse located within the KPL compound (see the picture below).

Figure 3: 3

Smallholder Farmers' Rice Warehouse at KPL

Note. Picture taken by the researcher during field work in February 2019

Agricultural transformation entails the use of modern agricultural technology and water management systems that are usually very expensive. Even though the SRI entails water management where farmers would increase their yields with fewer water requirements by creating a proper irrigation system, smallholder rice farmers in Mngeta had to purely depend on rain-fed agriculture. This is because the smallholder farmers could not afford to build the infrastructure that is required for irrigation.

In the efforts to mechanize and improve smallholder farmers' farming techniques in Mngeta, KPL decided to train farmers how to use inexpensive technologies that utilized the resources available within their own surroundings. KPL, in collaboration with the USAID-funded project NAFAKA, trained smallholder farmers on how to increase their productivity in the absence of an irrigation system. The farmers learned how to use power tillers, how to use rotary plows/rototillers to prepare the land for rice sowing, how to use the grid system of rice sowing, how to use the hand rotary weeders for weeding, and how to effectively use fertilizers.[8] However, machines such as power tillers and rototillers later proved a failure because of the nature of the soil. The farmers also learned how to identify and select quality seeds from their previous season's harvest, which they hadn't done before.[9] All of this represented a new system of rice production in Mngeta that changed the local farmers' traditional system of rice sowing which was dominated by broadcasting methods.

During the first harvest season after the training, the yield increased to 3.5 metric tons per hectare. After a while, the agronomist left, but the company decided to expand and reach more farmers. The company now wanted to reach 250 smallholder farmers. The first 15 farmers were supposed to bring 15 farmers each, making a total of 225 farmers who should be trained. The company looked for the remaining 250 farmers. Thus in 2010/2011, the company expanded its reach from three villages to six villages, adding Ikule, Njagi, and Mchombe villages. The company then hired an extension officer whose job was to work with smallholder farmers.

The smallholder farmers adopted this new system of production because it was very cheap. To reduce costs to smallholder farmers, KPL decided to train the smallholder farmers to use the resources that were cheap and readily available within their own

---

[8] This is a conventionally wide-row and intra-row seed spacing that produces better yields as opposed to the broadcast method. It helps to produce a deeper root system and a bushier plant. The farmers used hand rakes to draw the 25 by 25 grid lines, the intersections at which the farmers would plant the rice seedlings.

[9] Specifically, in order to avoid the cost of buying seeds, the farmers were taught a simple technique of sorting quality seeds by using a bucket of water, water, rice, salt, and either an egg or Irish potato. As the farmer added salt, the poor-quality seeds (those that were premature or damaged) would float to the top so the farmer could remove them.

surroundings, claiming that it is the best way for them to give back to the community. This was also stressed by the smallholder farmers' manager who said

> As a company, we know that transforming smallholder farmers' agriculture entails a lot of costs for the inputs. But what we have been doing to help them is trying to teach them how they can use the resources that are found within their own environment and which they can afford. (Interview with SRI manager, Mngeta, January 2019).

Although KPL thought it was helping the smallholder farmers lower production costs, this was not a smallholder farmers' cost concern. For them, high production costs resulted from the use of fertilizers and pesticides, which were both very expensive. Most of the farmers I interviewed complained of the high costs of fertilizers and pesticides which forced them into debt. For example, one of the female smallholder farmers noted:

> You know one might think that one of the main problems with smallholder farmers is seeds just like the company did, but that is not true. The company thought our main problem is a lack of quality seeds and started training us on how to prepare our own seeds, but they purposely decided to neglect the real issue here. The real problems are the costs of fertilizers and pesticides… For example, if you want to harvest a lot you will also need to use a lot of fertilizer. We are buying fertilizers at the market price and most of us are just poor farmers who cannot afford them. A one-liter bottle of pesticide costs around $7 and you need three of them per acre. No smallholder farmer can afford that unless he/she is rich. So, what most of us do is borrow pesticides from the local agro-dealers who charge us almost five times more. (Interview with a female farmer, Mngeta, November 2018).

In 2010 a USAID-funded project, NAFAKA, started collaborating with KPL in supporting smallholder farmers. While KPL provided seedlings and a demo plot, NAFAKA provided extension officers, training, and matching grants to KPL. YARA provided fertilizers for the demo plot project. Whereas KPL's goal was to reach 500 smallholder farmers in Mngeta (those living around KPL farm) through contract farming, NAFAKA's goal was to reach 1350 farmers in Mngeta and Mlimba. Unlike KPL, NAFAKA's intention was to extend beyond Mngeta. NAFAKA did not only work with contract farmers but also with noncontract farmers. However, in Mngeta NAFAKA wanted to work with groups of farmers that were already established. And the only group that was available in the 2011/2012 farming season was the KPL SRI group which was under contract farming. So, the smallholder farmers that participated in NAFAKA training were only those who were under the contract scheme. Some non-contract farmers were not willing to participate in the NAFAKA project thinking that they had to be members of the SRI group and because they felt they could not afford the requirements because the scheme is capital intensive.

Even though the establishment of contract farming in Mngeta seem to be started as part of the company's corporate social responsibility, (CSR) that aims to do what many private businesses consider to be social accountability through ethically oriented practices, a closer assessment of the establishment of contract farming shows that it was also politically, socially, and economically motivated. According to KPL's human resource manager, the company introduced contract farming to transfer agricultural technology to smallholder farmers and assure them of the inputs and credits. In the words of the then KPL's human resource manager:

> We are a well-known company here in Tanzania and in fact the only rice growing company in East Africa. We need to set a good example even for other companies that aspire to come to invest in the country by giving back to the community. I mean, our presence should also benefit the people around us. This way, we can live harmoniously. (Interview with human KPL resource manager Nov. 2018).

KPL perceived the introduction of contract farming as a form of "technology transfer" that would improve smallholder farmers' productivity. In addition to that, the introduction of contract farming intended to create friendly relationships between the local farmers and the company and secure political legitimacy and international recognition in the company's efforts to improve smallholder farmers' agriculture and food security.

Rice Production Under the Contract System in Mngeta

Apart from improving the quality of smallholder farmers' rice production, KPL aimed to increase their productivity as well. In order to achieve this objective, KPL leased some farm blocks to smallholder farmers who were participating in the contract farming scheme. The company gave the peripheral blocks that were not installed with the irrigation infrastructure such as the pivots and the towers to smallholder farmers. These blocks border the pastoral communities that live close to the KPL farm. KPL was not using these blocks to grow rice, making them turn into thick bushes, hence, attracting pastoralists. The blocks were prone to both human and animal (cows) interventions.

Although the smallholder farmers were given bushy land that did not have an irrigation system in place, they still had to pay for them. There were two modes of payment; pay in cash or pay in rice. The farmers who had access to KPL farms were in two categories: the first category included those who own their own farms and are members of the SRI groups and participate in contract farming. These farmers had to pay approximately $30 per acre or one bag of rice per acre. The second category included those who had bought new farms following the resettlement plan, but the farms they bought were either affected by the floods or became part of the national reserve later. These farmers paid approximately $6 per acre or one bag of rice per acre. The payment was to be done after the harvest. All the farmers opted to pay in cash because it was cheaper than paying for one bag of rice (which was three- times more for category one and fifteen times more for category two).

In 2017 the smallholder farmers' harvest was not very good due to the lack of enough rain. The company decided to charge half the price for the farmers in category one and the same price for those in category two. In the 2019 season, the company waived the fees because most farmers struggled to clean the farms, and the company thought because the farmers had contributed to making the farm clean, there was no need for charging them after the farmers complained about the cost they incurred in cleaning the farms. This, in a way, was a way of grabbing the smallholder farmers' labor in cleaning the company's farm, which should have been highly paid for by the company. The company used smallholder farmers as cheap labor to clean the farm. The blocks that the company leased the farmers changed from season to season, helping the company clear the farm.

According to KPL, the money paid by the farmers was not meant for business, but to maintain infrastructure around the blocks where the smallholder farmers grow their rice. This money has a separate account and is used for the maintenance of the roads and water drainage within the farm. The KPL SRI manager spoke to me about why the company leased the farms to the farmers and why it charges this money:

> The company decided to lease the farms that are at the periphery because the farms are close to their residence which helps limit the movements of villagers within the company premises. …. in fact, we are not even making any profit with the leasing. Our intention is not to make profit; we want to make sure they can produce even though there is no irrigation system in those blocks. We use that money to improve infrastructure. The thing is if we do not clean the roads and the water system, all those areas will be flooded, and the farmers will not be able to grow rice there. …. if you do not maintain the roads and the water system, smallholder farmers complain, but the company cannot invest its money in the blocks that the company does not use. (Interview with KPL SRI manager, December 2018).

The company claims to be moved by the ideals of corporate social responsibility aimed at improving smallholder farmers' productivity by helping them address some challenges including the lack of farms. However, the company's leasing of farms to farmers proves the opposite. The company's motivation was self-centered, aiming at social control and surveillance by restricting and confining smallholder farmers' movements within a specific location of the company's premises that would be easy to monitor and control. Through observation, I realized that the blocks that were leased to the smallholder farmers are those which border pastoral communities, and they neither have the pivots for irrigation nor do they have security towers. Thus, I argue that contrary to the dominant narrative of cost-sharing typical of the public-private partnership model (PPP) — where the farmers need to be responsible for sharing the costs to run the farm — the leasing of peripheral blocks to smallholder farmers is a surveillance mechanism that functions to protect KPL farm from intervention by the outsiders and avoid conflicts. There have been several incidents of conflicts between the company and the pastoral communities around the farm because these communities feed their cattle on the company's farm, particularly in the periphery areas. Occasionally, the cattle have also encroached into the blocks that had rice, resulting in a serious conflict between the company and the pastoralists.

Thus, smallholder farmers act as the buffer zone between the company's rice fields and the pastoralists. There have been conflicts between the farmers and the pastoralists in Kilombero valley because the valley supports both activities. Leasing the peripheral blocks to the smallholder farmers helps KPL divert the possible conflicts to farmers, keeping the company safe from engaging in direct conflicts with the pastoralists.

In short, it ensures that if there has to be any conflicts, then such conflicts will be between the pastoralists and the smallholder farmers. In doing so, the farmers help to protect the company's farm, something which the company cannot effectively do because of the large size of the farm and limited resources.

Contract Farming and the Credit System in Mngeta

The form that the company's CSR took was to try to alleviate the problems of usury from local money lenders. Smallholder farmers in Mngeta depended on informal credit systems from the local money lenders who exploited them upon repayment. During the interview about the financial constraint, smallholder farmers go through, the KPL SRI manager stated:

> These farmers are very poor, and to be able to grow rice that meets our standards they need to get money. So, they seek loans from the local money lenders or agro-dealers, or petty businessmen where they end up paying up to 10 times more. (Interview with KPL SRI manager in Mngeta, Nov. 2018).

Similar sentiments were also expressed during interviews with smallholder farmers who complained that the local petty businessmen were taking advantage of their poverty and exploiting them through credits. The following utterances were common during the interviews with smallholder farmers:

> You know these local petty businessmen are very clever. The moment they know that you are in need, that's where they oppress you. For instance, most of the time, when it gets around January to May, most of us become broke, taking into account also that there is a lot of stuff going on in January, such as school supplies and farm work, which require us to have money. Now, because we are broke, our only alternative is to borrow money for weeding or pesticides from these businessmen. The maximum amount you can get from a businessman is $13 and if it is pesticides, you get one bottle of pesticide that is worth $5 or $7. After the harvest, you pay back a bag of rice that is worth $67 for every bottle of pesticide or every $13 you borrow. And this is our life, and that's how we live. If you don't do that and you have no money, you will not harvest anything. (Interview with a rice smallholder farmer in Mngeta October 2018).

To help smallholder farmers access credit and avoid the exploitation of local agricultural suppliers, KPL linked the farmers with a financial institution called Yetu Microfinance (YOSEFO). YOSEFO was the first Microfinance to issue loans to smallholder farmers in Mngeta, with KPL standing as the guarantor. Through a new arrangement, the company agreed to guarantee the loans of the 168 smallholder farmers who were contract farmers. Half the money was given to farmers in cash and the other half in the form of inputs, which included seeds, fertilizers, rakes, and weeders. The first loan was very successful despite several challenges but was repaid in full. The following season had critical challenges in working with YOSEFO. YOSEFO claimed that because it is microfinance, its loans need to be repaid on a bi-weekly basis. In other words, the farmers were supposed to start paying off the debt even before they produced anything. Yet because farming is seasonal, this proved to be an onerous ever impossible request. KPL asked YOSEFO to change their system, but YOSEFO refused saying: *"We do money business, so we cannot leave the farmer with money for six or eight months to come to pay it at the end of the season. That is impossible" (Interview with SRI KPL manager Nov 2018).*

Like any other money lending financial institution, YOSEFO generates profit through the interest charged from the lenders. This profit is generated at the expense of the smallholder farmers who depend on credit to produce rice. When YOSEFO refused to change its money lending system to smallholder farmers, KPL started a conversation with the National Microfinance Bank (NMB[10]), which agreed to give loans to the farmers.

---

[10] NMB is a commercial bank in Tanzania whose shares are largely owned by ARISE BV of the Netherlands and Norway and the government of Tanzania. NMB shares are owned by institutions and private individuals.

When the farmers secured loans from the National Microfinance Bank, they defaulted, leading to a financial burden for KPL. Because KPL was the guarantor, and the farmers were required to pay their loans on a monthly basis (which they were not able to do), KPL decided to pay the loan monthly on behalf of the farmers under the agreement that the farmers would pay back the loan when they harvested and sold their rice. As part of the contract, where the company had to provide markets for smallholder contract farmers, the company was responsible for helping farmers get buyers who wanted rice in bulk. The company would be able to recover its money because farmers collectively stored their rice in the warehouse that was located within the company's premises.

In the 2016/2017 season, the harvest suffered from bad weather, incapacitating many rice farmers. Some farmers were able to pay a large amount of their debt, but others refused to pay back the loans, claiming that the company (KPL) had already paid the loan for them. The lack of smallholder farmers' knowledge and understanding of the role of KPL in the scheme led the credit system to fail. Some smallholder farmers thought the loan from the National Microfinance Bank was a grant from KPL, which they did not have to pay back. This was made clear during an interview with one of the SRI leaders, who said:

> You know there was a big problem here with our smallholder farmers when KPL guaranteed them; they thought KPL was borrowing money for them and that it was KPL that would be responsible for paying it back. Thus, when we (their leaders) reminded them to pay back the loan, they always said, why do you bother us, after all that is not your money- it is the company's money, which the company borrowed on our behalf. So, the company should pay that money because we do not have money. (Interview with SRI leader, March 2009 Mngeta).

Those smallholder farmers who were not able to pay back the loan came into conflict with the SRI leaders and local leaders who frequently followed them around trying to clear their debt, with some deciding to leave the village and move to a different village. These farmers decided to leave the village because they were intimidated that, if they did not pay the loan, they would be arrested and taken to court. Some smallholder farmers also blamed their fellow farmers for not being trustworthy, resulting in severe consequences, including the failure to get future loans. The following sentiments were prevalent throughout the interviews with smallholder farmers who secured loans from NMB bank:

> We secured loans as a group after accepting that we, as members of an SRI group, will be custodians of each other. Although each one had his/her own farm, we secured a loan as a group such that if one defaults, then the rest should be responsible for paying that debt. However, it looks like some of us either did not understand that or intentionally took advantage of group accountability to default on our debt. Some refused to pay back the loan and left the village, leaving a huge burden on us to pay for their debt. But the worst thing is, the company has refused to guarantee us for any other loans. So, we cannot get loans from the bank. (Interview with male smallholder farmer, January 2019, Mngeta).

To ensure that the loan would be paid, KPL decided to give the loans to the group of farmers and not to individual farmers so that even if one farmer defaulted, the rest would still carry the burden to pay it back. Hence, when some farmers defaulted and others decided to leave the village, the rest of the members are still paying the debt, something they find very unfair. Following this violation, the company decided to stop acting as the guarantor for smallholder farmers in securing loans from financial institutions.

Attempts to deal with the problems of production costs forced the farmers to secure some credits that tied them to a credit system that further undermines their productive capacity. The lending system tied smallholder farmers to debt relations without which farmers cannot meet the expectations of “modern farming”.

Through the credit system, contract farming places poor smallholder farmers within the chains of exploitation controlled by the local agricultural suppliers and businessmen and women around their area. The need for markets and the desire to meet the market demands in terms of quality rice forces smallholder farmers to get into a relationship of dependency on the suppliers who help them get fertilizers and pesticides. To get loans, smallholder farmers build trust with the businessmen by involving the local leaders, such as the *balozi* (the ten-cell leaders) who verify the identity of the farmer and act as the loan guarantor. As one of the respondents put it, *"If you are not on good terms with the balozi or local leader, you can hardly convince someone to give you a loan."* The *Balozi* is a cosigner for smallholder farmers who do not have the collateral which is usually land or furniture i.e., the sofa, or electronic devices such as TVs, mobile phones, and radios.

Conflicts Between KPL and Smallholder Farmers in Mngeta

Although the smallholder farmers benefited from KPL, their relationship with KPL was characterized by contradictions, resistance, and autonomy. The relationship between KPL and smallholder contract farmers was characterized by conflicts that resulted from different perceptions about their respective rights and responsibilities. Even though there were some benefits to farmers, the relationship between the company and smallholder farmers was filled with considerable conflict and tension and a significant amount of farmer resistance. This section highlights three conflicts that characterized the relationship between KPL and the farmers in Mngeta, namely: 1) tensions over prices; 2) tensions over the warehouse, and 3) tensions over the bank loan that the company (KPL) cosigned for the farmers.

Rice Marketing and Tensions over Prices

Contract farming in Mngeta combines a "market-specific contract," which describes the terms of the sales transaction concerning price, quantity, timing, and product attributes, and a "resource-providing contract", where a buyer (KPL) provides technical assistance and guarantees credit for smallholder farmers (Martinez, 2002). However, (Mighell & Jones, 1963) warn that this type of contract is appropriate when the buyer has better access to credit and specialized inputs that are needed for production than Mngeta farmers do. KPL relies on fixed-price contracts based on split payment. Both payments are predetermined and fixed before planting. The first payment is paid upon harvest when the prices are usually low because of the mass production of rice when supplies are high, and the second payment is given a few months later [between September and January] when demand for rice is high. According to the smallholder farmers, the company pays them much less in the second payment even though the market price appears to be high because the prices were fixed in the contract. Throughout the interviews with smallholder farmers, complaints about rice prices were common, and I repeatedly heard the following sentiments:

> The problem is, we cannot determine prices. The company does that because it is the one that buys our rice paddy, and that price is determined even before we harvest. Now, if you agree with their price, you tell them, then you get input. But, because we do not have options, we just agree. What can we do? (Interview with a 45—year male farmer, Mngeta, November 2018).

Another respondent said:

> The problem with the company is that you have to discuss the price and agree on it even before you harvest. Because we are small farmers, we cannot determine prices because they say the prices depend on the global rice market and the services they provide to us. So, because they buy in kilograms and this is a more reliable market, we agree to the prices that are predetermined and fixed. (Interview with a 42—female farmer in Mngeta, November 2018).

Adding to this, another respondent angrily said:

> This company is taking advantage of us; they claim to be helping us but that is not true. The most expensive and difficult part of rice farming is the farming itself, but they do not help us with anything. We buy seeds, fertilizers, pesticides, and bare all other costs on our own but just because they buy rice from us, they decide to set prices. By the way, there are many buyers out there nowadays, I wonder why we still need to sell to them. That is why last time we refused to sell to them. But because the company is powerful, we had to suffer the consequences and we ended up getting very little money because of the debt that we had and some storage costs that the company decided to deduct. (Interview with a 38—female farmer in Mngeta, November 2018).

Contract farming in Mngeta focused more on the markets than inputs. The coming in of KPL opened up Mngeta ward to rice buyers from other places such as Ifakara, Morogoro, Dodoma, Arusha, Dar es Salaam and Zanzibar. Even when these buyers offered a better market price than the company, farmers could not sell the rice to them because the contract was binding on them and the only way they could sell their rice to buyers other than those secured by KPL was through KPL's approval. In case the farmers wanted to sell their rice directly to outside buyers, they had to pay some costs such as storage, transportation, security, and rice bags fees. The company aimed to help the farmers create a strong market base where the buyers could buy rice in bulk. The company's intentions were not transparent enough to the farmers such that the farmers believed that it was the company that was buying their rice. Even though the company connected the farmers to the markets, some farmers were not satisfied with the way the company handled the rice marketing process. Some farmers complained about the way they were treated by the company when they wanted to sell their rice to other buyers other than KPL. For example, one of the farmers bitterly complained saying:

> …this company is supposed to help us, but instead of helping us, it is using us to get more profit. Just imagine, how could the company want us to pay for the services that we did not agree upon? If we pay them what they want, we are literally going to remain with nothing. I think the company did not mean to help

> us but to lure the government that it is helping us so that it can do its business (Interview with a male farmer in Mngeta, July 2019).

The farmers viewed the company's arrangements to sell rice to other buyers as a means through which the company exploits their labor and productivity. However, the company had a completely different view about its role in ensuring rice markets to smallholder farmers. In one of the interviews, the KPL's HR manager made it clear about the company's approach to smallholder farmers' rice market:

> … one thing the farmers don't know is that we are just doing them a favor because we are helping them get markets. After all we are self-sufficient as a company, we do not depend on their rice. But because we know that the smallholder farmers are so fragmented it becomes difficult to get markets. So, the idea we gave them of collective storage was meant to help them get reliable and serious buyers who want tons of rice. The buyers cannot move from one farmer to another collecting rice in pieces. Such buyers do a one-stop kind of service where they get to a warehouse and get all the tons of rice they need (Interview with the KPL HR manager in Mngeta, November 2018)

The HR manager's statement suggests that the KPL business did not depend on smallholder farmers' rice production. It was part of the company's commitment to helping the farmers surrounding the KPL farm as part of its CSR mission. The lack of the farmers' understanding of the company's CSR policy and the company's position as regards to the markets led to the farmers' misunderstanding of who exactly was their client creating conflicts between the farmers and the company.

In addition to rice markets, the company only facilitated the availability of inputs such as fertilizers and pesticides for which the farmers were supposed to pay. KPL helped to connect the farmers with input suppliers such as YARA, who sold fertilizers to smallholder farmers at an affordable price. It also helped the farmers store their fertilizers and pesticides, which the farmers had to pay for. For the rice paddy of the smallholder farmers to qualify for purchase by KPL, KPL set some conditions. First, the rice paddy had to be harvested in time and well dried. Second, the rice paddy had to be pure i.e., should not contain a mixed variety[11] of improved and local variety, although the company was ready to buy either. Third, the rice paddy should be clean and free from husks. To make sure that the farmers offer a well-dried rice paddy to KPL, they received a grant for a rice paddy moisture detector from NAFAKA. The moisture detector helped the farmers to meet the moisture level required by KPL. Unlike other local buyers who used the size of the bag as measurement while buying rice, KPL used weight (in kg), which benefited the farmers. When some dishonest smallholder farmers realized that they tried to cheat by adding rice husks to the rice paddy bag to add weight. Others added sand in the middle of the rice paddy bag. But KPL found out that some farmers were trying to cheat and refused to buy the rice paddy which was dirty. This was evident during the interview with the SRI manager who said:

> When farmers work with a big company like this, they try very hard to get profit out of it. We realized that the local buyers were robbing the smallholder farmers' rice in measurements where they use the size of the bag…. buyers have their own bags which are more than a hundred kilograms, some have bags which are 150 kilograms. They use these bags and tell the farmers that they weigh a hundred kilograms. We decided to educate the farmers that the proper measurement unit is weight (in kg) and we started using kilograms to buy their rice. … when some farmers knew that we were using weight to determine the cost of rice paddy, they started mixing their rice with husks and sand. But the funny thing is, a 100-kilogram rice bag is pretty much obvious because the bags are 100-kilogram size. So, it becomes very easy to spot the bags that are mixed with dirt because they weigh more than 100 kilograms. (Interview with SRI manager in Mngeta, December 2018).

Similarly, some smallholder farmers expressed their concerns about the measurements of rice and how they were not happy with dishonest farmers who tried to

[11] Improved variety include Saro 5 (Txd 360), Lawama/komboka and Atu and the local variety include Kienyeji kisegese, sigara, jambo twende, rangi mbili, musilangi, tule na bwana, shingo ya mwali, kalimata, ngome, mbawa mbili, Zambia, and super india.

cheat. The following sentiments were common in my interviews with smallholder farmers:

> … businessmen are very clever; they always have their own measurements which help them get more profit. When I joined contract farming, KPL told us to stop selling our rice to local buyers [middlemen] by using the size of the bags as measurement because these buyers were exploiting us. They were coming with their bags which were more than a hundred kilograms, and we did not even notice that because what we only cared about was the bag itself. We then started selling our rice in Kilograms. But some farmers let us down as they started selling dirt rice to increase their kilograms. (Interview with a 54-year male farmer in Mngeta, November 2018).

Smallholder farmers were not satisfied with the rice prices they received from the company. As a response to their price disappointment, the farmers decided to cheat in order to offset what they saw as unfairly low prices, even though the company tried to treat them fairly. When the company found out that some farmers were engaged in dishonest practices, it lost trust in the farmers and decided to use its machines to clean and dry the rice before seeking buyers (especially the rice that was harvested by combine harvesters). When this happened, the weight (tones) of the rice declined, leading to conflicts between the farmers and the company. In order to clean and dry the rice to the company's required standard, the farmers had to pay approximately $6 per ton. The farmers complained that the company intentionally reduced the kilograms of their rice so that it could pay them less while accruing more profit as one of the farmers commented; *"...one of the things that upset us is that the company reduced the weight of our rice in order to pay us less because they pay us in kilograms"*. The farmers decided to withdraw from selling their rice through the company.

Conflict over the Warehouse

There has been a high level of failure of contract farming projects in developing countries. This has been particularly common in Kenya, which has a history of contract farming from the colonial period. Studies reveal that there is a high rate of turnover of contract farming schemes in Kenya as these schemes collapse, and new ones emerge (Jaffee, 1994; Minot, 2011). Similarly, contract farming in Mngeta did not exist for long before it collapsed. When these contract schemes start, they exhibit a promising future to the farmers but only live for a relatively short time. Conflicting relations over the warehouse contributed significantly to the collapse of contract farming in Mngeta. The ownership of this warehouse was highly disputed by both KPL and the smallholder farmers. Both KPL and the farmers claimed to have ownership and control of the warehouse. The company labeled the warehouse after the SRI group, something that made the farmers believe that it belonged to them. While KPL claimed that the SRI project was theirs and that is why they built it in their compound to separate their rice and smallholder farmers' rice, the smallholder farmers claimed that the warehouse belonged to them and that is why it was given their name as explained by the SRI manager*:*

> When we started the contract farming program, we did not have a dedicated warehouse for the smallholder farmers. But later, we thought that would create problems and decided to build a warehouse that would only store smallholder farmers' rice and that is why we labeled it SRI. We spent our internal resources to build that warehouse even when NAFAKA came in and wanted to partner with us, it wanted us to have a warehouse for the smallholder farmers. (Interview with SRI manager, Mngeta, December 2018).

The company labeled the warehouse SRI not because it belonged to them but because it wanted the farmers to know where their rice was being stored. Additionally, according to KPL, construction of the warehouse was because it was a condition from the

USAID through the NAFAKA project for matching grant and also was done to simplify transportation and storage of farmers' rice from their farms. By contrast, smallholder farmers believed that the warehouse was built for them with a grant from NAFAKA—a USAID-funded project who wanted it to be labeled SRI. During the interviews one of the participants said:

> The company was not open to us about the warehouse. For example, if you have been to the company there is a warehouse labeled SRI, that is our (smallholder farmers) warehouse, which was donated by NAFAKA, but KPL denies that and says the warehouse was built by the company. …. unfortunately, we never questioned its ownership until we were required to pay for the rice storage. (Interview with a 48-year-old male in Mngeta, February 2019).

The extract above suggests that the processes of constructing the warehouse were not transparent. The farmers were not involved in the whole process but were only informed during the NAFAKA training and later by their SRI leaders that NAFAKA had funded the warehouse for them to store their rice. All the farmers believed that the warehouse was built for them by NAFAKA and not KPL. During the interview with the NAFAKA financial advisor who dealt with smallholder farmers, I found out that the warehouse was built with the funding that KPL requested from NAFAKA. While responding to the question about the role of NAFAKA in smallholder agriculture in Mngeta, the NAFAKA financial advisor said that they provide both education and material support. She cited an example of a smallholder farmers' warehouse that KPL built with the NAFAKA grant to serve the smallholder farmers:

> When we wanted to help smallholder farmers, we knew that it would be difficult to deal with individual farmers. We had to look for any organizations or institutions that work with groups of smallholder farmers in Mngeta. When we came to Mngeta we realized that KPL was already working with smallholder farmers. So, we approached KPL and told them we wanted to help smallholder farmers and asked them where they think we could help. KPL submitted a proposal that included the construction of a warehouse which we funded. But

> because KPL is the one that was supervising smallholder farmers' activities under the contract and was responsible for transporting the rice paddy from smallholder farmers' farms …., it decided to build the warehouse within its compound. (Interview with NAFAKA financial advisor, Mngeta, March 2019).

Even though both KPL and NAFAKA had good intentions of helping smallholder farmers, there was a lack of farmers' participation in decision-making. Knowing that the warehouse was built for them, the farmers developed a sense of entitlement and ownership that resulted in tension over the warehouse ownership between KPL and the farmers. The farmers wanted to store their rice at no cost, believing that the costs had been covered by NAFAKA.

In the 2017 season, smallholder farmers in Mngeta refused to sell their rice through KPL because they were not satisfied with the price they received. The second payment was lower than the market price around November and December. The farmers wanted KPL to pay them the market price, but the company refused because it had already established the prices earlier. Because of this disagreement, smallholder farmers decided to sell their rice to outside buyers, which was allowable under the contract. When the farmers decided to pull out, KPL demanded that the smallholder farmers pay storage fees, security fees and the sacks that were used to store their rice. The farmers refused to pay these fees, claiming that the warehouse belonged to them, leading to a serious conflict between the company and the farmers. To avoid further conflicts and protect its reputation and legitimacy, the company decided to waive the security fee and storage fee, but not the rice bag fees[12]. This was made clear by the SRI manager from KPL who pleaded:

[12] According to KPL records approximately $3728 was waived from smallholder farmers, who only had to pay for the bags used to store rice.

> It is true that there were some problems here with this warehouse. The farmers believed that the warehouse was theirs because the farmers stored their rice at no cost, but in reality, it was not. So, when the farmers refused to sell their rice through the company, we said ok. But we gave them conditions that they have to pay for security, storage and the bags if they wanted to sell outside. After some prolonged tension, we both sat down and agreed that because the farmers had no money and the harvest was not very good, they would only pay for the bags and the company waived the other costs…. Indeed, we did this because we did not want to have issues with the farmers, and we also considered it as part of CSR. (Interview with SRI manager in Mngeta, December 2018).

The farmers felt the company just used them to accumulate more profit, something that justified their withdrawal from storing rice in the SRI warehouse. Although the smallholder farmers decided to pull out from KPL and sell to a third party, things didn't go well. When they started selling their rice, some of the leaders within the SRI group colluded with the third-party buyers to cheat other farmers. For example, if the leaders bargained for a higher price with the buyers (say 35 cents per kilogram), they would sell the rice to other farmers at a lower price (say 25 cents per kilogram) and take the difference, resulting in distrust and conflicts between the leaders and the farmers. When the farmers realized that they were being played by their own leaders, they decided to start selling their rice individually to the same buyers. Consequently, some farmers ended up selling their rice at a lower price than the one they got from KPL.

Conflict Over the Bank Loan

In 2014 the company helped contract farmers to secure a loan from the National Microfinance Bank (NMB). The company agreed to cosign for the farmers, and they were able to get the loans. These loans were used for the 2014/2015 farming season. The loan was disbursed through KPL, leading to contradictory perceptions about the loan as the farmers believed that the money came from KPL. To qualify for the loan, KPL mandated that smallholder farmers provide some mortgages that included houses, farms, furniture, or electronics. Each farmer received approximately $180 based on the exchange rate at the time the loan was issued. This was a one-year loan that was to be repaid after the harvest. It was not clear to the farmers that the money was a loan from NMB and that the company just cosigned for them because the farmers were not involved in the whole loan process. The company, as part of its CSR, linked the farmers to financial institutions to help them get loans. But after the harvest, some farmers did not have a good harvest because of bad weather and a rice disease called *"Kimyanga*[13]*"*. When it was time to repay the loan most of the farmers refused to pay the loan. The company, with the help of the SRI leaders, started seizing the farmers' properties to compensate for the loan. Some farmers decided to accept responsibility and started paying the loan. Very few of them decided to sell their properties and flee the village, disrupting their means of livelihood. Some farmers lost their properties such as farms, furniture, and electronics when they refused to pay, resulting in severe hatred and conflict between the company, SRI leaders, and the farmers as revealed by one of the SRI leaders:

> In any group, not all the people will have similar understanding. Unfortunately, a lot of the farmers thought that loan was the company's money. So, when they were required to pay it back, they were not ready to do so. When the company told the farmers that it had helped them get the loan, the farmers thought it was a grant by KPL. But the results were very bad especially for us leaders. There was so much hatred against us by the farmers as if we are the ones who asked them to take the loan. We were intimidated and had to move to another village for safety. (Interview with the SRI leader in Mngeta, Dec 2018).

Unlike Shrimali's (2016) study of contract farming in India, which contends that capitalist accumulation can occur without dispossession, my study shows that, although the company acted out of goodwill and social accountability to support the farmers secure loans, it resulted in unintended consequences. Some smallholder farmers were

[13] *Kimnyanga* is a local name for the rice disease that turns the rice bush yellowish due to prolonged drought.

dispossessed of the means of production and subsistence that were either their own or collectively owned by the household, such as land (Harvey, 2003). Shrimali argues "…. CF is about capitalist accumulation without dispossessing the farmer, i.e., without disturbing the farmer-land relation" (p. 82). While this is true about land, it is not true with respect to the means of subsistence and production other than land in Mngeta. This accumulation of capital is assisted by the credit system and access to finance in the form of loans (Marx, 1976).

Towards the end of 2015, the farmers found a buyer from Zanzibar, and they introduced him to KPL so that he could buy the farmers' rice. A conflict emerged about payment mode. Whereas the farmers wanted the buyer to pay them directly and go get the rice from the warehouse, KPL wanted the buyer to deposit the money into KPL's bank account, or KPL would not release the rice. The company decided so because it wanted to deduct the money the farmers owed the bank and the company for the bags. The company had paid the farmers' loan when they were required to do so, and they were not able. The company used the farmers' rice in the warehouse as a mortgage. The farmers refused and the buyer was not able to buy the rice. The farmers got very upset and decided to remove their rice from the warehouse and sold it to other buyers at a much lower price than the company's.

The conflict between the company and the farmers over the ownership and control of the warehouse, worked against the promises of the contract farming scheme to the farmers in Mngeta creating the conditions for its collapse. By the end of 2019, contract farming in Mngeta collapsed. My study revealed that the collapse of contract farming in Mngeta was overdetermined by the conflictual relations between KPL and the farmers that created feelings of distrust between the two parties. Moreover, this collapse coincided with the phasing out of other partners such as NAFAKA (under the NAFAKA ONE program), which offered training to farmers and matching grants to KPL and farmers, the phasing out of the Africa Enterprise Challenge Fund that funded smallholder farmers' training and office administrative cost, and the pulling out of YARA from supplying fertilizers to farmers through KPL that made fertilizers more expensive for the farmers.

The collapse of KPL

One year after the collapse of contract farming, KPL also collapsed. The collapse of KPL was driven by several factors, the main ones being economic factors. When the company started its operation in 2007, it secured a loan from the National Microfinance Bank that was supposed to be repaid after ten years of operation. After the ten years elapsed, the company was not able to repay the loan and requested that the bank to give them more time to repay the loan, but the bank refused. The failure to pay the loan resulted from several factors, including unfavorable weather conditions characterized by excessive rains, the overproduction of maize, which forced rice prices down as more consumers switched to maize consumption which was cheaper, and new tariffs on rice importation. In 2015, the Tanzanian government allowed 80,000 tons of rice from Pakistan to be imported exempt from the common external tariff of the East-African Community. The Tanzanian government made this decision without any consultation with the producers or consultation with the East-African Community member states. Then Uganda, Rwanda, and Burundi, which were key export markets for Tanzania's rice, imposed the common external tariff on all Tanzania rice. During the interview conducted by a representative from the East African newspaper with the CEO of KPL in 2015, the CEO concluded that the common tariff destroyed both the domestic and export markets (KPL CEO interview with the East African newspaper June 8, 2015). The tariff led to increased rice prices from Tanzania and decreased importation of rice from Tanzania to East African countries. After the importation of rice from Pakistan, KPL was forced to reduce its prices domestically to be able to compete with imported rice. By doing this, KPL started operating at a loss because the rice prices did not guarantee the recovery of production costs. Having realized the projected loss that the KPL would incur, KPL management decided to rise rice prices, thus encouraging people to switch to maize, which was cheaper. To deal with this challenge, the company decided to switch to maize production (see the picture below), to recover its production cost claiming that maize production was less costly. During the interview, the SRI manager alluded to difficult business conditions saying:

> For the past three years, the company has been struggling to make profit because of the competition from maize production. When there is too much maize production, the prices of maize drop forcing rice prices to drop as well. We [the company], tried to turn to maize production to recover the costs but still, it didn't work out because first the maize price is lower than the rice price, but also the company did not have enough money to produce more maize (Interview with the SRI manager in Mngeta, November 2018)

Maize production did not work either because of competition from other maize producers who flooded the maize market. The SRI manager commented:

> When you have two food crops and both of them are staple foods, there is a very big risk of getting a loss. You can only be safe if the prices for both crops somehow match. But the truth is you cannot match maize price to rice price. Rice production is very costly and [more]labor intensive than maize, so, in any case, its price must be high. Last year [2018] we had a big problem. There was a lot of maize which made it cheaper for consumers. So, most of the consumers switched to consuming maize reducing the rice market (Interview with SRI manager, February 2019).

This crisis of overproduction of maize led to price failure, further weakening the company's production capacity. Because the company had many other costs to bear in running the company, it slowly started reducing its production and eventually stopped production of both rice and maize due to lack of funding. According to an interview with the SRI manager, KPL lost 11 million dollars within two years, leading to an inability to produce. The efforts to seek other interested investors did not bear any fruits. The market crisis coincided with harsh tax conditions under the new political regime that wanted the company to continue paying the same taxes as it did before (based on the tax bracket the company was in) which did not reflect the profit the company generated.

Figure 3: 4

KPL's Maize Production

Note. Picture taken by the researcher during field work in June 2019

In addition to the crisis of overproduction, the local conflicts with smallholder farmers following farmers' claims that the company destroyed their farms with aerial spray contributed to the incapacitation of the company. The conflict resulted in the destruction of the company's infrastructure, such as the water storage tanks, the irrigation systems, the road systems, and physical harm to some company employees after the company declined responsibility. The company could not manage to repair the broken infrastructure as it was very expensive and given their bankruptcy, they decided to stop production and eventually close the company after their appeal to the bank to give them more time to recover had failed.

Apart from the external challenges that the company faced, there were also some internal factors that contributed to the failure of the smooth operation of the company. Internal mismanagement of the company characterized by mismanagement of funds, a weak quality control unit, and dishonesty by some of the employees who stole the company's money, also contributed to the inability of the company to make profit and pay back the loan. Consequently, in the face of all these challenges, the company went bankrupt and was liquidated in 2020.

Conclusion

This chapter has addressed the political economy of rice production in Mngeta. It has shown that smallholder farmers' rice production in Mngeta has undergone tremendous changes following the introduction of KPL and contract farming. The presence of KPL introduced a new production system and production and marketing relations that created conflicts between KPL and smallholder farmers as well as exploitative debt relations. Varied perceptions about the rights and responsibilities of the company created farmers' negative perceptions of the role of the company, contributing to the collapse of the contract farming scheme. Despite the benefits of contract farming to farmers, such as access to farms from KPL farms, I have shown that access to KPL farms by smallholder farmers was a means through which KPL ensured the safety of their rice production through surveillance and social control of the farmers and the pastoralists living around the company's farm. Through leasing the farms to smallholder farmers, the company was able to protect its farm from destructive animals such as cattle and from conflicts that would potentially arise between the pastoralists and the company. Smallholder farmers acted as a buffer zone to protect KPL's investment. Additionally, I have also shown that the failure to repay the NMB bank loan, unpredictable market policies, rice price volatility, and unfavorable weather, led to the collapse of KPL. The next chapter explores the implications of contract farming on gender relations of power and rice production in Mngeta. It focuses on the changes created by the availability of the new commercial opportunities and by the USAID-funded NAFAKA project, which altered the household gender relations of production, household decision making, the division of labor, and rice marketing in Mngeta.

Chapter 4: Contract Farming, Gender Relations of Power and Rice Production in Mngeta

Traditionally, Tanzanian culture and rural life rely on the household's social networks and relations. The male adults usually exercise the breadwinner role while the female adults perform the household or family activities that include family care, domestic chores, and food preparation. To ensure food availability and feed the household, Mngeta women have depended on and dominated rice farming for a very long time. However, the arrival of KPL, the introduction of contract farming, and KPL's partnership with a USAID-funded rice intensification project called NAFAKA, altered household gender relations in the area. This chapter explores the question of how.

What I will show in this chapter is that with the arrival of the new commercial opportunities afforded by KPL and contract farming, more men became interested in growing rice, a crop previously considered to be exclusively a "women's crop." Men's increased involvement in rice production provided a way for them to gain control over the rice harvest and over the money they generated from selling rice to outside buyers. This represented an encroachment on what had formerly been a woman's domain.

Soon after KPL began operating, however, it also established a partnership with the USAID-funded NAFAKA project, under the Feed the Future program (recall Chapter 3). Because of a broad USAID mandate, NAFAKA had a "women's empowerment" focus, which involved training both men and women in sustainable rice intensification (SRI) techniques and in gender equality. For instance, NAFAKA's training encouraged men and women to cooperate in decision-making over how rice farming should be done (including the division of labor), how the rice harvest should be managed, and how to spend the income obtained from rice farming. While this partly thwarted men's desire to exert total control over rice production and the harvest, they still managed to dominate rice farming-related decision-making. Even widows remained subordinate to men because they had to negotiate with their deceased husband's relatives to grow rice on the farms that their husbands left.

At the same time, some women *do* have more power to negotiate with their husbands, depending on their access to various economic, social, and cultural assets and resources. For instance, women who own land or cows of their own are able to challenge their husbands' decisions about how much rice to produce and how to produce it. The material, cultural and emotional support they receive from male adult children also serves to increase their negotiating power vis-à-vis their husbands.

Understanding Power, Gender and Decision Making: A Conceptual Overview

In this section, I discuss power, gender, and decision-making at the household level drawing from different theories of power. I draw substantially on (Lukes, 2005), (Arendt, 1969)), and (Foucault, 1980, 1982) conceptions of power because their approaches offer useful insight for the interpretation of both power and dominance as reflected in the household gender inequality. I also draw from feminist political ecology (FPE) (Butler, 2004; Elmhirst, 2011; Radcliffe, 2006; Resurreccion & Elmhirst, 2012) to show how gender intersects with other social identities affecting smallholder farmers' everyday lives.

Lukes' theory of power (2005) identifies three conceptions of *power over* someone. The first conception denotes power as a conscious action that influences the content of decisions. It takes into account the possible conflicts over decision-making due to differences in needs, resources, and proposals. His second conception consists of the power to set and control the political agenda by either making or not making decisions (nondecisions). Only the issues that benefit the values or interests of decision-makers become part of the agenda. Male farmers in Mngeta bring to the table issues such as control of rice marketing and storage that enhance their economic power and avoid discussions such as the workload that aim at women's empowerment. Decision-making in Mngeta is a process that exposes women to the risk of violence; hence women choose to remain silent (nondecision). This limits their ability to influence decisions that affect them and their entire household's well-being. To avoid conflicts and harm, women in Mngeta choose to become complacent. When women in Mngeta decide not to engage in the "male-dominated" post-harvest rice management (which includes packaging, carrying rice bags, and storing them), it affects their ability to participate in decisions about post-harvest management of rice fully. A conversation about harvest management becomes absent. Another dimension of Lukes' power is power consisting of the ability to influence another by shaping what or how s/he thinks (Lukes, 2005). This practice reifies and legitimizes the socially accepted relations of inequality in agricultural production, as a result, these relations of inequality go unnoticed and unquestioned.

Arendt's conceptualization of power is somewhat different from that of Lukes'. For her, power is the capacity to act (Arendt, 1969). She shows that power is a product of empowerment. A person attains power through a learning process, and as such, a person gains power because a group empowers him or her through a mutual process. Power manifests itself through speech and persuasion, a process that is embedded with conflicts and cooperation between men and women. In this way, power becomes a capacity to act together for a common goal (Arendt, 1969). This conception of power is clearly exemplified by KPL and NGOs such as NAFAKA in Mngeta. NAFAKA and KPL have adopted this approach as a means for collective and individual empowerment by strengthening women's networks such as the Village Community Banks (VICOBA) and local farmers' self-help groups *(Vikundi vya kuweka na kukopa).*

As for Foucault's theory of power, structures influence individual actions. Broader hegemonic discourses enable and at the same time constrain an actor's agency. Social mechanisms produce different types of knowledge and reality (Foucault, 1980) that normalize specific values, norms, relations, and behavior through certain practices. (e.g., men in many households in Mngeta always make decisions about farm work). According to Foucault, power is exercised on other people's actions through incitation, persuasion, and, lastly, constriction and prohibition. The social norms in Mngeta normalize decision-making and labor arrangements in households. The confinement of women in the domestic field obscures discussions about domestic and farm work balance at the household level leading to work inequality. (Lombardo & Meier, 2009) suggest that, as people normalize certain nonactions (e.g., by deciding to become complacent), they symbolize power mechanisms that are hidden by implicit legitimation advanced by normalization processes. The hidden or invisible power mechanisms (such as the community norms and habitus) maintain or reproduce implicit norms of dominance over excluded/subordinate groups and discourses, perpetuating the power of the dominant group. Power limits the visions and voices that express different options for change and transformation, obscuring the opportunities to challenge existing normative narratives and discourses within the household. For example, in the studies of social policy, (Bacchi, 1999) argues that framing the problem of women's inequality as a lack of sameness with men (e.g., women will be equal when they will have the same work conditions as men), makes it difficult to challenge the appropriateness of the implied male criteria (male work conditions). Since the problem is presented as a "woman's problem, it does not touch on the existence of differences among women, thus leaving many issues and norms unquestioned (Bacchi, 1999, p. 66).

Drawing from feminist political ecology (FPE) (Kansanga et al., 2019) and the feminist post-structuralist approach (FPS) (Arndt & Tarp, 2000; Carr, 2008), I show how gender, in relation to other aspects of social differentiation such as class, age, marital status, and education, is significant in shaping and controlling resources and household agricultural decision-making in Mngeta. Unlike the feminist empiricist approach to gender on agriculture (Doss, 2001; Ezumah & Di Domenico, 1995; Masamha, 2018), which approaches gender as an undifferentiated category of “men” and “women”, I use the FPE and FPS approaches to show that social subjects and identities are constituted in and through relations with nature and everyday agricultural practices through diverse and interlocking differentiation processes such as gender, class, and livelihoods (Rap & Jaskolski, 2019). Agricultural gendering practices are not simply built on sex differences; instead, bodies are gendered in and through the regulatory practices of disciplining institutions such as the family. In other words, gendered bodies have no natural foundation (biologically) but are constituted in and through gendering practices that are reiterated or performed in daily life. Thus, everyday agricultural performance and household relations of production in Mngeta produce and reflect gendered subject positions.

The following section explores how power plays out in agricultural decision-making and household gender relations of power in Mngeta under the contract farming scheme. Normalized decision-making at the household level affects gender relations and agricultural production in Mngeta, perpetuating gender inequality despite the potential promises of contract farming to empower women and improve smallholders' wellbeing.

Contract farming and household gender relations of power in Mngeta

Household gender relations of power between men and women are complex and significantly affect any community's agricultural production (Agarwal, 1997). These relations are embedded with both ideological and material relations that shape behavior. Gender relations of power in agricultural societies uncover resource allocation and decisions about the division of labor between men and women (Agarwal, 1997). They thus represent ideas, values, beliefs, and representations that construct and assign different abilities, personality traits, attitudes, desires, interests, behavior patterns, and endowments.

The dominant economic unitary household model sees households as a single unit for production and consumption, where household resources, including incomes, are pooled together and allocated by an altruistic household head who represents the household’s preferences (Agarwal, 1998). According to Agarwal, the household is an arena within which members decide about consumption, production, and investments. Unlike the dominant economic unitary model, I adopt a household bargaining model framework, to show that Mngeta households are complex and heterogeneous, and they comprise multiple actors with varying and sometimes conflicting ideas over resource allocation and division of labor, attitudes, interests, tastes, preferences, endowments, and abilities to meet the household's demands (Doss, 2001; Udry, 1996). The bargaining process is characterized by gender inequalities in the distribution of household resources and tasks. I also show that both cooperation and conflicts characterize intra-household interaction, decision making, production, and consumption. Moreover, gender power relations structure household resource allocation (Katz, 1997). From a bargaining model perspective, members of the household possess their own preferences and tastes that affect negotiation at the household level. Household members decide to cooperate if their collaboration benefits them rather than noncooperation (Agarwal, 1998). The powerful members control decisions about the division of labor regarding who does what, when, and where, as well as who gets what goods and services, and how each member should be treated. This cooperation is uneven across members. At times, as one person gains and another person loses, creating conflicts between those cooperating. This is the case in Mngeta between men and women.

Decision-making power in rural Tanzania and Mngeta

The organization of household gender relations in rural Tanzanian communities is organized around seniority with male dominance regardless of whether the person giving the orders is a close relative or a household helper who could be a close relative or someone from a distant family. Agricultural decisions in rural communities are made based on the existing gender relations. These gender relations are often constructed and contested in a myriad of ways. These rural communities decide about their agriculture depending on many factors, including intra-household gender dynamics, including age, social and cultural norms, and a set of resources or assets that help determine a person's (in this case, a woman's) bargaining power vis-a-vis the men in her extended family (or household). Before the contract farming system, most farms were communally owned, with a male as the head or custodian of the land. Men were the ones who decided what to do with the household land or farm.

Historically, and before the coming of KPL, contract farming, and NAFAKA, decisions about domestic chores in the household were made by adult women or household helpers who may be a close family relative or distant relative, or family friend (normally a mother, grandmother, sister or aunt), but decisions about non-domestic chores within and outside the household were usually made by men who could either be a father, grandfather, or uncle or any other close male relative. Before rice production became the main economic activity, men engaged in fishing as their main economic activity. When men went fishing, women were left at home to take care of the household and raise the family. Men were the main providers for the household. In the past adherence to labor arrangements was based on the ideas of respect, altruism, integrity, and good values as embraced by the household members. Members of the household consented to labor arrangements while believing that one day they would be in a similar position of allocating work/tasks to others who should also abide. While this desire was internalized among the household members, it perpetuated inequalities within the household as it acted as an ideology that implicitly masked who it most benefited. This system severely reduced the possibilities for contestations over household power relations before the arrival of KPL. The households embraced the principles of public good rather than the self-interests of men and women as demonstrated during the interviews with phrases such as:

> You know, in the past, in our community, you would do what your elders asked you to do because it benefited the whole society. When my sister, brother, uncle,

> mother, father grandfather or grandmother asked me to either do some household chores or go to the farm, I just did it; I didn't even have to question. (Interview with a male youth aged 38 in Mngeta March 2019)

Before the coming of KPL in Mngeta, ideas about how smallholder farmers grew rice were transmitted from one generation to the other through primary socialization at the family level where the young family members went to the farms with the adults and worked together. Men and women learned how to grow rice and organize their labor from what the other older members of their society did. Responding to the question of how the farmers learned to grow rice, respondents appealed to family socialization saying:

> In our villages, we learned how to farm from our elders in the families. We did not go to any formal school to learn because we are poor. As you grew up, you got exposed to farming because you would always go to the farm with your parents or guardians. You could not stay home alone because everyone went to the farm, so you just had to follow them and, in the process, you learn how to do the job. (Interview with a male farmer aged 50 in Mngeta January 2019).

This quote reveals that gender relations were constituted by and helped to constitute agricultural practices and ideologies in interaction with other social hierarchy structures such as age, class, and education. The nature of life and dependency within the household created social compliance to elders in the household, severely reducing any form of resistance and conflicts and driving them underground into covert forms. The older men played a crucial role in providing for the family and dominated production decisions outside the household, including agricultural production decisions as one of my female interviewees said:

> You know when we were growing up it is our fathers who always decided what to do on the farm. I remember in my family, my mother never allocated labor on the farm. We all received orders from our father. Nowadays, with the NAFAKA training, things have changed. It is common to see women allocating labor to their children and other family members or sometimes discussing with their husbands about farm work. (Interview with a female respondent aged 49 in Mngeta, December 2018).

However, the introduction of KPL through its contract farming scheme which mobilized Sustainable Rice Intensification groups that were required to have both genders, changed these gender relations at the household level as more men got involved in rice production. KPL opened new market opportunities for rice which attracted more men to engage in rice production. More men decided to quit fishing work, especially during farming season, and grow rice because rice became more profitable. In addition, fishing became more difficult because of the changing climatic conditions and increased local government restrictions on rivers, which reduced fish catch. During our interviews, some male farmers acknowledged that rice commodification attracted them into rice production because it assured them of some income even though had to depend on rain-fed agriculture. The following sentiments were common among male farmers during the interviews and informal interviews:

> …. We (men) never cared about rice in the past. This was a women's thing. If someone found you busy growing rice, would be a serious embarrassment. Rice had no value. Who would you sell it to if everyone else was producing rice? That is why we decided to focus on fishing and other small activities. But, thanks to KPL and NAFAKA, they have helped us (men) understand the value of rice. Actually, it is much more profitable than fishing if you do it seriously. Sometimes rains let us down, but during the good rain season, we get lots of money. Let me tell you, a lot of men you see in this village are rice farmers and make some decent money, some work for the company. Just for your information, every household has a male rice farmer (Interview with a male farmer in Mngeta, March 2019).

In addition, another male interviewee said:

> Honestly, the times have changed. We thank KPL for bringing in this project because fishing has become a headache now, with no catch at all. The situation has changed, you may spend a whole night but get nothing or get very few fish. It is not worth the time. But with rice farming under SRI, you are sure that at least you will have money at the end of the season. A lot of us especially in this ward decided to quit fishing. We only do that during the off-farm season. (Interview with a male participant aged 47 in Mngeta, December 2018).

Before the coming of KPL and NAFAKA rice farming did not constitute part of men’s status as it contributed nothing to their income. To maintain their status, men had to stick to those activities that earned them income. Men wanted to protect their identity and status financially as head of the household, even if doing so would require spending a lot of time fishing. Contract farming restructured the organization of labor at household level as more men took part in rice production.

Following the changes created by KPL through the CF scheme and later NAFAKA training about gender empowerment and modern rice farming techniques among others, both men and women started making decisions about agricultural labor arrangements, although some interviewees associate such changes with the effects of globalization. For example, during the interviews, statements such as “nowadays things have really changed because of globalization, such that everyone in the household wants to take control, even the young men and women, something which never existed during our time” (Interviews in Mngeta, February 2019), were common. Another female participant said, “These girls have their own world nowadays, you cannot just ask them to do something, and they do it right away, they must argue back” (female interviewee aged 50 in Mngeta, December 2018).

Even though NAFAKA training created the conditions for collective agricultural decision-making, presence of agricultural information regarding availability of inputs and markets that was made possible through use of mobile phones, played a part in instituting a sense of independency that slowly weakened the interdependent nature of the household structure.

Although NAFAKA offered gender empowerment training to both men and women in the SRI groups, older women still control and dominate decisions about household domestic chores, and men control agricultural decisions outside the household during the farming season. In households where men engage in other non-farm work such as construction or fishing during the off-farm season, women have been responsible for allocating household labor to activities such as poultry projects, or who should go to the local market to sell rice (only for women though).

As the discussion this far has indicated, the introduction of contract farming in Mngeta has transformed the gender relations of power and production, exposing such relations to contestations. These gender relations are often constructed and contested in a myriad of ways. The presence of contract farming in Mngeta has changed the previous production relations as women play a key role in making decisions. The introduction of contract farming was accompanied by land ownership policy reforms that encouraged private property and land titling as a means to allow women to assert their claims to land (Chu, 2011). These reforms promoted women's land ownership in Mngeta. Women were able to access land and own land regardless of their age, ethnicity, education, or religion. The private property sentiments created by the new land ownership patterns encouraged people to develop a self-centered individualistic interest, which started to disrupt the communal norms of the *"common good."* The NAFAKA training inspired smallholder farmers to be self-sufficient through diversification instead of being dependent on a single breadwinner or economic activity.

Consequently, these changes allowed community members, including women, especially young women, and youth, to contest labor arrangements that they defined as exploitative. In some households, such contestations led to intra-household gender conflicts between men and women and within gender (involving older women and young girls, or older men and young men) who decided to leave the household and start their own families and production. Elderly men and women repeatedly complained during the interviews about their male and female children who became *"rebellious"* and did not listen to them anymore. Even though this habit was embraced by young men and women, these elderly parents indicated that rebellious behavior was more common among young women than men. In discussing the essence of these changes, these parents suggested that the new changes and opportunities created by contract farming and the training that members (including young men and women) of the SRI groups received from NAFAKA, had inspired them to be more independent. For example, one older man said:

> This company has destroyed our children. They now no longer listen to us as they used to. If you ask them to do some farm work, they remind you about the training and tell you about equality and all that nonsense stuff. They have become hardheaded now. (Interview with an old male respondent aged 58 in Mngeta, December 2018).

Another female respondent said,

> Our children have become completely spoiled with the NAFAKA and KPL training; imagine I tell my daughter to go to the farm and she tells me, we all have to do the farm work, if not, I am not going. We have been arguing and quarreling as if we are all married to one man. They think because they have their plots, then they are grown up, and their parents should not tell them anything, although at least they listen to their father more than me. (Interview with a female respondent aged 48 in Mngeta, January 2019).

Any attempts to challenge or question the normalized household arrangements were seen by men, especially male elders, as rebellious and a threat to their male power as the household head. Thus, much as contract farming has created more opportunities for smallholder rice farmers in Mngeta by creating enabling conditions for accessing the markets, credits, farm inputs, and training, it has also created intra-household gender conflicts and contradictions that lead to the breaking up of social ties within the household that go unnoticed when looked from the outside. Thus, through contract farming and gender training, the production relations and gender relations of power are reconstructed and contested within and outside the household. The next section explores how agricultural decision-making is organized in Mngeta.

Contract Farming and gendered agricultural decision making in Mngeta

Being the head of the household, men enjoy the privilege of dictating most decisions about rice production. Even though women in Mngeta have received training from organizations such as NAFAKA about gender equality that help them to challenge the gender norms, it does not mean that there is greater equality in the household. Women still have not been able to participate in decision-making at the household level equally. Although the interviews with men revealed that they believe that they collectively make decisions with their wives about agricultural arrangements and rice income expenditures, the interviews with women revealed a different story. Women indicated that even though they sometimes make joint decisions, such decisions only get their partners' approval if they do not threaten their partner authority and status. They also show that they keep the money but do not have the power to authorize how to use it, only their partners do. If they need to use the money, they must get permission from their husbands or partners. Even though men give the income obtained from rice to their wives (who act as accountants), they are the ones who still dictate the use of that money.

However, the findings also show that decision-making differs depending on marital status, education level, and status one occupies in society. For example, my interview data suggests that those who were either single or widowed were fully responsible for making their own decisions about rice farming, income expenditure, and how and how much to sell. For married couples, men must authorize any expenditure except for female-generated income from other sources such as the village community bank (VICOBA) money or money obtained from the garden (which most men are not aware of). For women who had secondary education and had leadership positions either in the local government or in self-help groups, they had more power in making decisions about household expenditure than those who did not because these positions gave them more status. With this power, such women can influence their partners and save more money for rice farming in the next farming season. This has sometimes resulted in some conflicts between the partners, as one of the local female leaders said:

> Sometimes it is very difficult to convince men that your decisions are the right decisions no matter how knowledgeable you might be. Men would always want to be on top of whatever decisions they make. At some points, you quarrel, but at the end of the day, you just calm down and let things go. (Interview with a local female leader in Mngeta aged 48 May 2019).

The social norms that shape the household expectations determine the household decision-making process in Mngeta. The social norms embodying accepted notions about a women's role, the gendered division of labor, resource allocation at the family or household level, and the social perceptions about women's capabilities in production and distribution of resources within the household play a key role in negotiation during decision making. In intra-couple negotiations, women have tended to avoid open contestation with their husbands and choose to compromise their position due to fear of divorce, or the fear that their husband would marry a second wife[14] or subject them to physical violence. As one woman explained:

> You know our tradition does not allow women to be very vocal and critical to their husbands. So, when there is an argument about how we should spend the income from rice, or how much we should farm, I usually decide to agree with what my husband wants because contrary to that what follows becomes very painful. I may either get divorced or be beaten, or my husband will decide to bring in another wife. And because I am not ready to let all that happen, I just agree with him. If anything has to happen, it is my family, especially the children, who will suffer more. (Interview with a married woman aged 45 in Mngeta January 2019).

Under such circumstances, most women gauge the potential costs of their engagement in decision-making and decide to forego their claims. I thus argue that the tendency to avoid conflicts with their husbands continuously weakens women's negotiating position, perpetuating what Bourdieu calls “symbolic violence”, i.e., a system of domination established through patterns of power, privilege and politics that support a form of domination exercised upon a social agent with his or her complicity. My research shows that the couple's cultural expectations impose specific meaning systems that legitimize and solidify inequality structures through symbolic violence. Although most married women in Mngeta decide to forego their negotiation powers in decision making, they choose to do so based on what they consider to be socially "good", that is, protecting their families.

Various factors determine women's decision-making power in Mngeta. (Sen, 1987) suggests that two factors are significant in determining a person's (or a family's) ability to command subsistence goods (including food) and services: endowments (what a

[14] Polygamy and divorce are common among the Muslims in this area. So, when women, particularly Christian women are intimidated by men about divorce or adding an extra wife, most of them decide to cooperate to avoid embarrassment because the Christian doctrine discourages divorce and extra wife.

person owns, such as assets, labor power, etc.) and the exchange entitlement mapping (the exchange possibilities that exist through production and trade, which determine the consumption set available to a person with given endowments). The most important endowments in Mngeta are land and the ability to labor; and the exchange entitlements are determined by the possibilities of using these endowments for production and trade (including seeking employment, in the case of labor), and by the structure of factors and commodity prices.

Other factors such as the traditional rights in communal resources, traditional support systems, and support from the state and nongovernmental organizations (NGOs) that contribute to intra-household bargaining power also affect decision-making. In Mngeta, for example, the role of NAFAKA and KPL have contributed to shaping intra-household decision-making power through various pieces of training that embolden women and material support. Empowerment training has enabled women to create social support groups and the Village Community Banks (VICOBA) groups that empower women financially. In their training, these organizations insist on joint decision-making about agricultural production and income expenditure. However, I argue that such cooperation requires negotiation between a man and a woman in the first place. This process places some members in a weaker bargaining position relative to others based on normative expectations within the community.

For some women in Mngeta, it was evident during the interviews that talking about their place in decision-making at the household level was normalized and unquestioned to the extent that it was not even formulated in their minds, making the discussion of male power over women an unspoken taboo. Women's decision-making position depends on the resources and other markers of social identities such as class, age, and marital status they have that determine their bargaining power. Men's presence as the invisible and unstated norm suggests the unquestioned (even apparent) perpetuation of their power over subordinate female subjects. In this sense, the maintenance of the male group's power is protected against possible changes through a continuous hegemonic process of normalization.

The example below suggests that several factors determine intra-household decision making and the ability to bargain, including ones' economic assets and external support system, institutions such as marriage, and perceptions about contributions and needs. Maua's (pseudonym) story suggests that household decision-making power is determined by the kind of resources and assets one has including access to and ownership of land. My study revealed that most women in Mngeta, especially those who received NAFAKA training have some power to make decisions because they have a relatively higher bargaining position resulting from their off-season activities such as vegetable growing and small poultry projects.

Maua's story is an example of how the intersection of various factors such as gender, class, income, and education enabled her to make rice farming decisions in Mngeta. Maua is a Mndamba (ethnic group) woman born in 1958 in Mngeta village, Tanzania. She holds a high school certificate from one of the secondary schools in the Kilombero district. She is a mother of 6 children, two boys, and four girls. The two boys completed secondary school 13 and 15 years ago and live with their mother in the same household. Two of the four girls are in secondary school and the other two have just finished elementary school. Maua is married to a retired village chairman, a form four graduate, who is also a leader of the SRI group. Both Maua and her husband (Joseph) are members of the Mngeta SRI group practicing contract farming. They joined the SRI group in 2012. When they joined the SRI group, Joseph was working at KPL as a watchman but also worked as a fisherman during the off-farm season, and Maua was a stay-at-home mother taking care of the family while also growing rice and vegetables for the family. After attending NAFAKA training about modern rice farming techniques, gender empowerment, and market opportunities for rice, Joseph got much more interested in growing rice and started growing rice as well. Although the farm which Maua was using was owned by Joseph, he considered it his wife's plot. But when Joseph started engaging in rice farming, he took back control of the farm. Maua did not like it because Joseph's control of the land meant that she would not be able to exercise control over the farm as she used to.

With this plot, Maua used to grow not only rice but also some vegetables through irrigation which she sold at the local daily market. She used the income from the vegetables to take care of the family's food and her own needs. This income supported Joseph in providing food for the family especially when it was hard for him to provide for the family due to delayed wages or other emergencies such as sickness. During the first year of Maua's participation in the CF project, Maua and Joseph grew rice in the plot where she alone used to grow rice, which was about two hectares. They both decided to apply modern rice farming techniques taught by NAFAKA and KPL which entailed the use of seedlings, use of industrial fertilizers, and grid sowing technology. During the harvest season, they got 60 bags of rice, which was twice as much compared to what Maua got before joining the CF scheme.

Following a successful harvest, Joseph convinced Maua to grow rice on the whole farm, including the plot on which Maua used to grow vegetables, saying, *"We better plant rice on the whole farm because we will get more money than the money you are getting from selling those vegetables every day".* Maua disagreed with her husband, leading to a misunderstanding between the two. Because Maua did not want to create a scene that would make other community members aware of the conflict, she decided to comply with Joseph's opinion. This meant that Maua would not get the side money that she used to get from vegetable production.

Maua says she was so disturbed by Joseph's decision to grow rice in the whole farm that she decided to seek an alternative. Recalling NAFAKA training which emphasized that women should not be weak and sit down and wait for their husbands to provide for them, she decided to join a women's village community bank (VICOBA) where members saved money by purchasing shares and distributed the dividend to members at the end of the year. Maua was able to join the VICOBA group with the help of her two sons who helped her raise the required money[15]. Maua is also a member of a neighborhood women's agricultural group, in which women, particularly those who are in CF, support each other with rice sowing, weeding, and husking. After she joined the group, she convinced her husband to help her pay the bi-weekly fees of 1000 Tshs which were used to buy shares. When the dividend was distributed to members in 2013, she was able to buy her own plot which she used to grow vegetables through irrigation. She was also able to start a poultry project that increased her relative bargaining power. Her husband's bargaining position was strengthened by a small restaurant he owned in

[15] VICOBA groups are based on social networks and kinship groups.

Mngeta. He started this restaurant by using the wage he received from KPL working as a watchman.

When I asked Maua how hard it was to discuss farm arrangements with her husband, she said:

> Honestly, it is not easy to change a man's mind, you know how men are, we have always quarreled when deliberating about farming, but as a woman, you have to keep forcing intelligently otherwise you might get into big problems. Ooh, I should also say this, my children especially the boys have been very helpful in making their father listen to me. They have always supported me [rather] than their father when it comes to any conversation. You know the boys are for the mothers. (laughs) (Interview with Maua in Mngeta).

This implies that intergenerational relations shape decision-making power within the household. These relations ensure both instrumental forms of support, such as financial resources, and emotional support to adult parents. Although substantial material assistance tends to be occasional and responsive to specific needs, these relationships can strengthen women's bargaining power in the household. Male children are more culturally privileged to intervene in a conflicting relationship between the couple due to socialization, access to capital, and autonomy.

Of course, intergenerational family relations also reflect adaptations to current, economic and cultural conditions. Children's roles in shaping decision-making power within the household are primarily driven by the social structure and the position they occupy in the family as well as economically. Intergenerational support constitutes an essential aspect of how families contribute to and reproduce social inequality operating in and through families. My interviews with some male respondents clearly indicated that intergenerational support from adult children play an important role in shaping decision-making power in Mngeta, as the following quote shows:

> So often the male adult children tend to side with their mothers and support them with anything even when there is a minor argument such as who should go to the farm first. My observation in recent years is that more youths have engaged in rice farming than in the late 1990s and early 2000s because they also get good money, I think. Rice farming in this era has become so demanding and if you do not have good social support to give you some ideas about what to do and how to do it, you may end up making bad decisions. I'm glad that our children help us with that because they are more enlightened than us. Just take an example of myself, I ended up in primary school, but my son is a secondary school graduate. So, his thinking is broader than mine. He makes more educated decisions about how we should plan our farming. Sometimes we have to listen to him because he supports us with some capital for rice farming. The only problem is that my wife tends to benefit more from my son's support than me. (Interview with a male farmer aged 56 in Mngeta, May 2019).

Women spend more time bringing up the children, and as such, they develop strong bonds with them. Social reproduction revolves around parental influence during childhood and adolescence that prepares men to become responsible caretakers of the family, mediators, and problem solvers. Thus, whenever a crisis arises within the household, young male adults intervene. Male adult children exercise their masculinity by siding with their mothers based on the strength of the bond. The cumulative advantages in material, human, social, and cultural capital acquired in families by male adult children contribute to differential responses to adult parents, influencing social class reproduction (Bourdieu, 2014; Granovetter, 2018; Lareau, 2011). This coincides with (Rosaldo et al., 1974), who argues that while men "have rituals which reinforce the distance between themselves and their families… that become a barrier to becoming embedded in an intimate, demanding world. They are embedded in, and subject to, the demands of immediate interaction (pp 26-28)". This suggests that women's lives are far more involved with the family than men's are and that women invest in and rely more on vertical bonds than do men, sending and receiving more intergenerational influence (Kawarazuka et al., 2021).

Maua’s story suggests that the stronger a woman’s bargaining position, the stronger the decision-making power she will have and the vice versa. Although this was common to many smallholder farmers under the contract farming scheme, it was especially so for those who had economic, social and cultural resources and asserts (a la Bourdieu). These also included the local officials who moved to Mngeta as local government officials who decided to join the CF scheme to grow rice. These were very few, and the traditional kinship support system strengthened their bargaining position through the support they received from their children who lived in town. The local officials and those who worked as wage workers at KPL had reliable monthly wages and support, which supported them with rice farming activities. The children support their relatives financially as was revealed by a local village executive who said:

> So often, I receive some help from my child who is in Dar es Salaam (town), and this has been very helpful. She is the one who sends money for farming, weeding, and harvesting. Sometimes she would just send money for my upkeep, but I would use it for farm work during the farming season. (Interview with a village female executive in Mngeta, December 2018).

Maua’s story also suggests that working in groups empowers women because it gives them greater access to resources through the mutual support they give each other. In Mngeta, such a support system has been important for women, and is not typically based on market transactions (Agarwal, 2000). The relationship created between Maua and other support groups like the farming and VICOBA group is such that economic considerations are not a priority.

Customary Law and the Widows’ Agricultural Bargaining Power in Mngeta

Tanzanian marriages play a crucial role in uniting the couples and the two families of the couples. *Marriage* is a medium through which the groom's household joins the household of the bride and establishes long-lasting relations. When a woman is married to a man, she becomes a member of the husband's family and household. Even when the husband dies, the woman remains to be a member of the husband's family. Upon divorce a woman separates from her former husband, but whatever they had developed together as a couple, including a farm or a house, is divided under section 114 of the Law of Marriage Act 1971. This section allows the court to order the division of matrimonial assets during separation or divorce. The section stipulates the following:

(1) "The court shall have power when granting or subsequent to the grant of a decree of separation or divorce, to order the division between the parties of any assets acquired by them during the marriage by their joint efforts or to order the sale of any such asset and the division between the parties of the proceeds of sale.

(2) In exercising the power conferred by subsection (1), the court shall have regard-

(a) to the custom of the community to which the parties belong;

(b) to the extent of the contributions made by each party in money, property or work towards the acquiring of the assets;

(c) to any debts owing by either party which were contracted for their joint benefit; and

(d) to the needs of the infant children, if any of the marriage, and subject to those considerations, shall incline towards equality of division" (Section 114 (1) and (2) of the Law of Marriage Act Cap 29 (*The Law of Marriage Act*, 1971).

The properties acquired before marriage remain with either the husband or husband's family. The Marriage Act 1971 is very clear about the division of matrimonial assets during divorce or separation. This gives the divorced more autonomy to make decisions as they wish without necessarily having to negotiate with anyone. Much as my focus is on power negotiation, I turn my attention to widows who have to go through negotiations with other family members after a husband's death. The customary law clearly states that, “The widow has no share of the inheritance if the deceased left relatives of his clan; her share is to be cared for by her children, just as she cared for them.”[16] If the widow’s children are minors, a guardian is appointed to look after them, their mother, and their property (Ezer, 2006) depriving the widows of their economic power and decision-making power[17].

The Tanzanian customary inheritance law restricts widows’ inheritance and allows limited inheritance shares to daughters. The Law treats women as minor dependent on the care of others and as property to be inherited by men. Under Islamic Law, women can inherit only up to a half of what men do, creating dependency (Ezer, 2006). Because the Tanzanian Laws connect inheritance to children, some relatives tend to take the children away from the widow in order to access and control their property. In polygamy, after a husband’s death, the widows' access to economic resources becomes even more limited.

Even though the Customary Law provides limited inheritance rights to widows, they lose them upon remarriage. In rare cases, a widow can inherit property if she is childless and there are no other husband's relatives. [18,19] A childless widow receives one-

[16] Local Customary Law (Declaration) (No. 4) Order, Government Notice (GN) 436/1963, Second Schedule, Laws on Inheritance [Sheria za Urithi], rule 27 in Judicature and Application of Laws Act, TANZANIAN LAWS SUBSIDIARY LEGISLATION [CAP 358 R.E. 2002]

[17] Local Customary Law (Declaration) (No. 4) Order, Government Notice (GN) 436/1963, First Schedule, laws on Guardianship [Sheria za Ulinzi] R. 11 in Judicature and Application of Laws Act, Tanzania laws Subsidiary Legislation [CAP 358, R.E. 2002]

[18] Local Customary Law (Declaration) (No. 4) Order, Government Notice (GN) 279/1963, First Schedule, laws of Persons [Sheria zinazohusu Hali ya Watu] R. 77 in Judicature and Application of Laws Act, Tanzania laws Subsidiary Legislation [CAP 358, R.E. 2002]

[19] GN 436, 2nd sched., supra note 2, R.50.

twentieth of one-half of any movable property, land, and crops for every year of her marriage. [20] However, this benefit ceases when “she remarries or dies”, and the “property shall promptly be given to the deceased relatives.[21]” The widow’s entitlement to land is conditional as it requires her to use it “for cultivation, using proper methods during her lifetime,” and she cannot sell or bequeath it.

In 2000, Tanzania amended its constitution to prohibit discrimination on the basis of gender (Tanzanian Constitution article 13(5)). International law requires Tanzania’s inheritance laws to be modified and comply with the International Covenant on Civil and Political Rights. The international law clearly stipulated that unequal allocation of inheritance shares to widows and daughters “contravene the Convention on the Elimination of all Forms of Discrimination against Women (CEDAW Committee) and should be abolished.”[22] In November 2005, Tanzania ratified the Protocol to the African Charter on the Rights of Women in Africa which clearly stipulates the widows’ rights to inheritance as it states:

> *A widow shall have the right to an equitable share in the inheritance of the husband's property. A widow shall have the right to continue to live in the matrimonial house… Women and men shall have the right to inherit, in equitable shares, their parents’ properties.*[23]

Despite the efforts by the international law on inheritance, the Tanzania Legal and Human Rights Center (LHRC) and the Tanzania Gender Networking Program (TGNP) to change the Tanzanian customary inheritance laws to allow widows to inherit the property

---

[20] GN 279, 1st sched., supra note 50, R. 77.
[21] GN 279, 1st sched., supra note 50, R. 77.
[22] CEDAW Committee, General Recommendation 21, Equity in Marriage and Family Relations, 13th Session, 1992, UN Document A/49/38, at 1 (1994), reprinted in Compilation of General Comments and General Recommendations Adopted by Human Rights Treaty Bodies, at 257, paragraph 3, UN Document HRI/GEN/1/Rev.6 (May 12, 2003)
[23] Protocol to the African Charter on Human and People’s Rights on the Rights of Women in Africa, art. 21(1), (2) (Nov. 25, 2005)

of their deceased husbands, there has not been significant changes to the laws. The cultural traditions and actual behaviors have not changed, further marginalizing widows from decision-making and economic empowerment, suggesting the need to change cultural practices at the local level, not just national laws.

So, whenever some decisions are to be made about access to and use of properties, such as a farm, or house, widows engage in negotiations between themselves and the relatives of the deceased husband.

However, in some cases, my research revealed contestations in decision making related to widowed women who were challenged by the deceased husband's relatives. These relatives command control of the widow and dictate all the decisions about agricultural production, claiming that the "farm" belongs to their "son" (the deceased husband). So, the farm is technically theirs, and because in places such as Mngeta a woman is close to nature (meaning land), the wife also automatically becomes theirs. So, they can decide whatever they think because a widow is also their "property." The sisters-in-law commonly do this. In this sense, a wife is considered as a property owned by men's family just like any other private property, as one of the participants complained during our interview saying:

> You know you only become valued with your in-laws when your husband is alive, but when he passes away, you will get all sorts of embarrassment, intimidation, and violence. I have a farm, but I cannot use it because my in-laws have taken control of it, claiming that it belongs to them because it was owned by their son (my late husband). I cannot make any decisions about how to use it. This hurts me so much; they have taken everything, including the farm I used to grow vegetables for the family. I am left with nothing. (Interview with a widow aged 48 in Mngeta, December 2018).

Another divorced woman I talked to during the interview said,

> It is really very weird, imagine I'm divorced right now, we have a farm that we bought during our marriage. I decided that because we own the farm jointly, I should continue using the farm. But my ex-husband told me I should talk to his

mother and sisters before I do anything with the farm. When I ask him so that we can talk about it, he tells his sisters and mother who start insulting me, telling me as long as I divorced their brother, I have nothing there and negotiation ends up in chaos and misunderstanding. (Interview with a widow aged 47 in Mngeta, March 2019)

These cultural and traditional arrangements inhibit women's ability to bargain, affecting their decision-making power at the household. Although NAFAKA gender empowerment training has been crucial in transforming perceptions about women's involvement in agricultural production and decision making in Mngeta cultural practices towards widows and the divorced have not yet changed.

Increased rice commodification that was facilitated by PKL, transformed the traditional values and norms for the protection of the widows. When I asked if there were cultural barriers for women and widows in particular to access to land prior to the coming of KPL when rice was produced for household consumption, the participant said no. She went on to say that:

> During the time of our parents, when a woman lost a husband [she]would be taken by the husband's family and get maximum care. In other words, she becomes part of the family members. However, this woman would not make any decisions in the family but would enjoy the fruits of what the husband had left behind and escape humiliation and violence. But nowadays, people have become greedier and only care about their own families. (Interview with a widow in Mngeta, March 2019)

These feelings were also revealed by one of the village leaders who acknowledged to receiving cases related to widow embarrassment and violence by saying:

> As a village leader, I have received several complaints about widow violence in this village, and surprisingly, it is the women who abuse fellow women! But the only thing I see here is the fight for property and wealth. Growing up in this village, I have never seen such incidences; this tells me that something has changed. (Interview with the local village leader aged 52 in Mngeta February 2019).

The sentiments raised in these two interview extracts suggest that community values of care and the common good that existed before the capitalist system displaced the “moral economy” are slowly eroding following the commercialization of rice in Mngeta. The ideals of societal good (such as taking care of the widows) have now been replaced with self-centered interests of wealth accumulation and private property. The presence of the contract farming scheme has even worsened the situation for widows and the divorced in Mngeta, because it has added more value to the land used for rice production because of the latter’s benefits. Consequently, there have been several conflicts between men and women within the household over how farmland should be used. In some households, women's farmland to grow vegetables and maize for household consumption has now been changed to rice-growing sites by men claiming that what women produce on that land is less profitable than rice production.

Contract Farming and the Gender Division of Labor in Mngeta

The division of labor in Mngeta is affected by factors such as gender, level of income, marital status, family structure, and family size. Gender plays a key role in determining who does what, where, and when. Gender roles and expectations structure the manner in which labor allocation is done and should be done. As will be further explained in this section, the division of labor in rice farming has not been static; it has changed to reflect the demands of the production system and purpose.

Contract farming has restructured the way labor is organized in Mngeta. The gendering of crops such as rice (which has historically been considered a feminine crop in Mngeta) has been a key determinant factor for labor allocation. Before the arrival of contract farming, farm work was mostly done by women and children. Rice was produced for consumption and barter trade. In all these circumstances, rice had a use-value. It was used for consumption and not to make a profit. Because rice farming was a women's affair, women were responsible for most of the decisions about how much to grow, how much labor to allocate to the crop, and how to use and spend the earnings from harvest. Before rice did not have a high value; it was used for barter exchange or selling in the local women's market for the community member's household consumption. The buyers did not buy it to make more profit but just for consumption.

As I have already argued, following the introduction of CF which commercialized rice, men started claiming control over land, including women's plots. Men started allocating labor, determining who should do what in all the plots including the female plots (except for the plots which women like Maua bought as their own new plots after engaging in social support network groups). The division of labor depended on the nature of work and the amount of time required to perform the task. There are farm activities that both men and women consider feminine and others that they consider masculine. At some points, the "feminine" tasks are shared between the two genders. Men tend to avoid tasks that are time-consuming such as planting (seedling), weeding, and harvesting (feminine tasks). In rice production, men perform the functions that are considered by women to be masculine, such as land preparation, which includes clearing of land, land tilling, and harvesting, which involves lifting rice bags. These are masculine tasks because they require strong muscles *(see the picture below)*. Women, on the other hand, do what they consider to be feminine work, which includes planting, weeding, rice husking and sometimes helping with harvesting but not carrying the bags to storage points before they are finally transported to the warehouse.

This division of labor is strategic in the sense that men get to know the size of the farm during preparation and the amount of harvest during harvest season, which gives them the opportunity to underreport the number of rice bags harvested. Through my observation, I realized that men are now performing tasks such as planting, weeding, and harvesting, which had been feminine tasks in Mngeta. Women acknowledge that there are activities that need big muscles, noting that, as a woman, you cannot do that. As one put it*, "Men are men, they are created to do tough work which as a woman you can't even try." (key informant female participant aged 38 in Mngeta January 2019).*

Figure 4: 1

Male Farmers Carrying Rice Bags for Storage

Note. Picture taken by the researcher during field work in July 2019

The Gendered Division of Labor in Rice Farming and Women's Health Risks

Rice farming in Mngeta is characterized by a gendered division of labor. Labor arrangements in rice farming are unevenly allocated, benefiting men more than women. While men do all the tasks that are less time consuming, such as land clearing, land plowing (using traction technology), pesticide application, collection of rice piles (before it is removed from the branches), and transportation work, women do most of the time-consuming tasks such as planting (seedlings), weeding, cutting rice paddy during harvesting, and separating paddy from branches (this is done by piling up the rice paddy and using hands to sock the paddy out by repeated shaking of the paddy).

The activities that women do expose them to various forms of health vulnerability including back problems because planting the seedlings and weeding requires a lot of squatting and bending, allergic reactions, and chest problems created by the dust from shaking the paddy during the separation of the paddy and the paddy trees/branches and during cleaning of the rice paddy which produces toxic dust and husks that often lead to rashes and other cough allergies to women involved as one of the female participants said; *"We are doing this cleaning work just because we are poor, I wish there was a machine to do it. Some other days I develop rashes all over my body because of the rice husks but I have no option."* (*Interview with a female participant aged 40 in Mngeta November 2018).* Similarly, another female respondent who was cleaning the paddy when I arrived for the interview said,

> … the work most of us (women) do is very dangerous and time-consuming. If you will not break your back, then you must develop severe flu, cough, or rashes that take too long to heal. You have seen the work I was doing here when you arrived. Is this work an old woman like me should do? (Interview with an old female respondent aged 50 years in Mngeta, May 2019)

My observation revealed that when women perform these health risking tasks, they usually do not wear any protective gear, putting their health at a huge risk. I have also observed that the tasks that women perform demand more time to complete compared to male tasks. This overburdens women because they also perform their domestic chores and childcare without the help of men as the picture below testifies.

Figure 4: 2

Rice Husking in Mngeta

Note. Picture taken by the researcher during field work in July 2019

Contract Farming, Masculinity, and Conflicts in Mngeta

Although NAFAKA training has increased women's bargaining power in decisions about agricultural arrangements and division of labor, it has, unfortunately, not helped to change men's perception towards the role of women in doing domestic chores and childcare in Mngeta. That remains to be the role of women. Interestingly, those men who shared some rice farming tasks such as seedling and weeding with women were labeled by other men and some women as "weak" because according to them, "real" men need to do muscular work such as land plowing or pesticide application which requires walking around the farm with a twenty-liter pesticide tank on their backs or carrying rice paddy bags. Statements such as *"Mwanaume jina"*, literally meaning "A man by name" to describe men who do "feminine" tasks, were common during the interviews and informal conversations with youths and the elderly during happy hour in Mngeta. The gendered division of labor within the household reinforces gender inequality that has been in existence even before the introduction of KPL, CF, and NAFAKA intervention.

However, the changing value of rice created by the introduction of contract farming has shifted rice from being a crop exclusively grown by women to one that is now grown by women and men. Although it is now both a male and female crop, and both genders benefit economically, the benefits obtained by men and women are uneven. My field observations suggest that men tend to benefit more than women because apart from having the rice market networks, they also have other sources of income such as construction work or other part-time casual labor that they can invest in rice farming. This advantage gives men more control over the income expenditures in the household.

The presence of contract farming has given women --particularly those who participate in contract farming -- the financial power to purchase their own plots of land where they have control over and produce rice. This has increased their bargaining power regarding agricultural decisions and the division of labor in particular because they too can contribute money to rice farming like their husbands. There have been some variations in the division of labor and time spent on the farm depending on who owns the farm. For women-owned farms, women's family members tend to spend more time on those farms than men's family members. Men find it shameful to spend more time on women-owned farms because they think that is too controlling. This was evident during the interviews with men in Mngeta where the following sentiments were common:

> We all know that men are looked upon as the breadwinner and so you have to prove that you can look after your family, and this begins with having a means of production (a farm) where you can produce food for your family. Now if a woman or say your wife is the one who owns the farm, your manhood gets degraded, especially when you go spend time on your wife's plot and people know you do not own it. So, it is very hard to spend more time there because other men will laugh at you saying you are being controlled by a woman (*kulelewa na mwanamke*) and I'm not ready for that. (Interview, male respondent, Mngeta December 2018)

Sentiments like these show that although women have tried to become economically independent, doing so has threatened men's power. Hence, men decide to practice a form of non-compliance with decisions that are initiated by women to express their resistance to the newly emerging women's power. Most of these women were able to buy more land because of the income they obtained from their rice farming in the contract system, the women's social support networks and VICOBA groups. The SRI techniques enable women to harvest more rice per hectare for those in the contract scheme because those who are not in the scheme are not ready to spend more money for growing rice.

Although women own these farms and participate in rice production just like men, they still don't have control of the harvest as men tend to dominate the process (except for those who are single). Ownership of rice differs depending on how decisions are made in the household. Some respondents I talked to claimed that they own the harvest jointly while some said it is men who do. Male's responses differed from female's responses as more men said they own the harvest jointly while more women said it is men who own the harvest. However, ownership of the harvest was different from control.

Even though some females said the harvest was owned jointly, they still said that the harvest was controlled by men because they are the head of the household. So, any permission to spend the income from harvest had to be approved by the men. Men tend to dominate the harvest activities (packaging and transportation which are considered as masculine) not only to express their masculinity but because controlling the harvest allows them to manipulate the situation to their advantage by under-reporting the number of rice bags they keep for themselves. In the harvesting process, women only take part in cutting the rice paddy, pilling it, shaking it from the paddy trees, and husking it, while men deal with packaging and transporting rice paddy to the storage warehouse. Packaging and transporting rice give men the opportunity to underreport the number of rice bags stored in the warehouse. Men who have partners tend to hide the number of rice bags harvested from their partners so that they may remain with extra bags which they sell secretly and keep the money for themselves.

Smallholder rice farmers divided their farmland into three places. One is the group farm which was offered to SRI members by KPL. In this farm, every SRI member was asked to request the farm depending on how much they wanted from KPL and the request was submitted to KPL as a group request. KPL then gives the SRI group farmland which is in the same block and the SRI members distribute the farm amongst themselves. The second type of land is the land, which is registered for contract farming, where all the contract farming skills are applied, and the third type is the land that is not registered with contract farming on which farmers use their local knowledge to grow rice. When contract farming started, farmers were required to store their rice in KPL's warehouse and because KPL wanted to control quality, they only allowed the rice grown from contract farming registered farms to be stored there. So, the rice that was grown on unregistered farms was stored in private warehouses. It is from the rice stored in private warehouses where men did the cheating because it was not easy for their partners to find out. During the interviews, I realized that for some men this was the tendency and they preferred it because it made them be what they call “real men”, as one of the male participants explained:

> When you are a man, you must be very intelligent; otherwise, you will be controlled by your woman. You must have something to protect you when you harvest rice. If you declare everything you will [be considered] stupid and would not even be able to sit with your fellow men at a bar. (Interview with a male participant aged 57 in Mngeta, March 2019).

Much as this behavior benefited men, it also created some conflict within the household, especially when women found out about cheating. Even though men did it secretly by involving the warehouse owners, whom men asked to lie to their partners, some women were able to find out. There are two ways through which women found out about cheating. One was through their husband, who frequently came back home drunk especially after harvest season, and the second was through their friends, who told on them. Whenever women decided to ask their husbands about where they got the money for drinking, it resulted in a severe conflict where women ended up being beaten. One woman emotionally shared her experience, reflecting her severe trauma as she spoke:

> My husband kept coming back home drunk every day. I was surprised because I know he has no other source of income. One day I got some hints that he has been selling rice from one of the warehouses and decided to ask him where he got the money for drinking. I won't forget that day. There erupted a huge conflict between me and my husband. He got very mad and started beating me asking who am I to ask him such questions. Since then, I never asked him again and that became his habit. (Interview with a female participant aged 44 in Mngeta, May 2019).

This woman reported her case to the local leaders, but no measures were taken against her husband because the husband is a friend of that local leader. While contract farming empowers women smallholder rice farmers in certain ways, it worsens their situation in other ways through exposure to male violence when husbands feel threatened. Consequently, women have decided to go silent about their abuse because doing so risks their lives. However, I also observed that some women opted to join the social support groups such as women's rice farming group and VICOBA as well as occasionally soaking their husbands' clothes when they are about to go to a local bar, echoing what (Scott, 1985) would refer to as the weapons of the weak.

It is clear that men struggle to preserve their masculinity because they have moved into producing what formerly was seen as a women's crop. Women's empowerment associated with participation in the rice contract scheme poses threats to masculinity, and men attempt to maintain their masculinity in various ways including physical threats. Some men expressed their concern about the threat to their masculinity, as this interviewee did:

> … a man is a man no matter what, you have to do everything to make sure you earn enough money to keep supporting your family. Women are coming up at a very high speed and this is not good for us (men) because if we sleep (meaning not careful), we will be turned into wives by these women. So, we cannot let that happen (interview with a male respondent aged 47 in Mngeta, March 2019).

Similarly, another male respondent said,

> I have been doing other businesses (casual labor) which my wife does not even know about to just have some extra money to help me plant rice in a bigger area. If I plant a huge area, I earn more money than my wife because her plot is smaller than mine. That way, I get to meet my household needs easily (interview with a male respondent in Mngeta, March 2019)

Men's desire for control and status has also tied some men to debt relations, because they have taken loans from different people including pesticide sellers, rice middlemen, milling machine owners, and businessmen in Mngeta. These kinds of relations were clearly stipulated by a male respondent who said:

> being a man means having more brains. The only thing that will give you respect to your wife and family is having money and being able to provide for them as the breadwinner. You know rice farming demands a lot of money which I do not have. So, the best way to get this money is to be able to live well with people. If you have good relations with people around you, you will not lack. For example, whenever I need money for rice farming, I just go to my friends, I will either go to the owner of a shop, or pesticide seller, or a middleman and get some money. Once I harvest my rice, I pay back their money. (Interview with a male respondent aged 50 in Mngeta March 2019).

When men borrow money or pesticides from these sources, they agree to pay back in terms of rice after harvesting. But what I observed is that they end up paying back more money than they borrowed. For example, a man might borrow 30,000 Tshs ($13) for planting rice or weeding but would end up paying back a bag of rice worth 120,000 Tshs ($52) or four times as much as the value of the loan. Some men have also established their own loan networks that enable them to access money for rice farming, unlike women who only depend on mutual social networks that are not economically motivated i.e., not focused on profit maximization.

Although men benefit from this system of borrowing money, their decisions to borrow money generally do not often involve their partners. Consequently, it has resulted in conflicts and misunderstandings between men and women in the household. This was evident during the interview with one of the female respondents who said,

> Honestly, we are growing rice, but the profit is very minimal because most of the rice goes back to paying the debt which my husband owes. He has been taking money from different people without even telling me but during harvest, he just tells me we need to pay so many bags of rice to someone. Sometimes I feel like it’s his trick to fool me and get more money for himself after selling that rice (Interview with a female respondent in Mngeta, April 2019).

The story of a woman named Megi (pseudonym), who is part of the contract farming scheme at KPL illustrates the phenomenon of household bargaining and the division of labor at the household level in Mngeta. Megi and her husband are contract farmers. They had a total of seven acres under the contract farming scheme. Although they have about fourteen and a half acres, they have not registered all the acres for contract farming because it is too expensive to produce under contract farming for them. For example, they claim that to be able to grow rice in one acre, one needs to have a minimum of 600,000 Tshs which is approximately $280. So, what they have done is to divide their farm into two separate plots, one on which they grow rice under contract farming and another outside contract farming. The plot under contract farming observes all the required skills and techniques while the one which is not under contract farming is heavily reliant on the traditional methods of farming which include *"broadcast"* sowing. Megi and her husband decided to combine the methods to increase their yield.

The couple does the farm work jointly, with the help of their 4 older children who are between 30 and 22 years old while the other four are still going to school. During land preparation, most of the work is done by the husband and the three boy children, and the sowing is done by all the family members including those who are students (who mostly do the sowing during the weekends). While the sowing in the contract farming plot uses seedlings, the sowing in the other plot uses a broadcast method which Megi describes as *"tangulia naja"* literally meaning *"take a lead I'm coming".* This is a sowing method where a farmer throws the rice seeds as he/she walks while moving his/her hand holding seeds from left to right and back to left again continuously. The weeding is done by all members of the family although the husband always gets excuses because this work involves a lot of bending and sometimes squatting or kneeling.

So, it is mostly Megi and her children who do the job. Because Megi and her husband are not experts in pesticide application, they usually hire another person for pesticide application. The harvest is done by all the family members and a few hired laborers. Megi says, they usually decide to hire a few people to help with the harvesting because if you delay during harvesting, the rice gets destroyed especially if the weather is moist or if it is too sunny. After harvesting, the men carry the rice piles and stock them in one place to slowly dry. When the rice is dry, the men in the family shake it from the trunks while women i.e., Megi and the girl children and a few other hired women clean the rice ready for packaging in the sacks. When women clean the rice, they do not fill it in the sacks but pile it together in one place waiting for the husband and the boy children to come to fill it in the bags.

According to Megi, her husband (Kibira), just like other men, tends to dominate the packaging process because it favors them more. She recalled some occasions when she got into conflicts with Kibira because he lied to her about the number of sacks they harvested. Kibira decided to underreport the number of sacks harvested but Megi later found out the truth. Kibira could not lie about the harvest obtained from the plot that was under the contract farming, because there were extension officers who inspected each process and estimated the amount of rice to expect from the plot. But the cheating was done in the other plot which was not under contract. After filling the rice into the sacks, Kibira took the rice bags to the warehouse, and instead of reporting the real number of bags stored to his wife, he reported fewer bags, leaving some for himself. When Megi asked why the yields were so little, Kibira said, *"it is because we used our local methods of sowing that is why"*. But then, the truth was revealed a few days later when Kibira started selling rice and coming home drunk.

Megi realized something was not right and decided to follow up. She was then informed by her friends and her husband's friends that they saw her husband selling rice. When Megi confronted her Kibira about this, he beat her up. She decided to report the matter to the local authority, but no measures were taken against her husband. Instead, the village leader told Megi that she had to go back home and resolve her differences with her husband because they are married, and the local authority could not interfere with their affairs. Since that time, Megi never asked her husband about the yields or reported him to the local authority because doing that would be a waste of time. (Interview with Megi in Mngeta).

Megi's story clearly reveals how agricultural transformation through contract farming may have hidden consequences within the households. The gender dynamics operating at the household level because of the struggle for income control may expose women to more violence, both overtly and covertly. Women's decision to remain silent exacerbates male power over females and normalizes symbolic violence, reifying inequalities within the household.

The Rise of Commercialization and Gendered Markets in Mngeta

Rice farming in Mngeta has become the main business in Mngeta. The presence of KPL in Mngeta from the late 2000s has attracted many rice buyers from many different places, from within the country and outside the country. Rice marketing is regulated by standards that ensure that the rice which is being produced abides by. Such standards include the wetness level, quality of rice in terms of length, and packaging. KPL sells packaged rice, which is high quality, classified as grade one to countries such as Uganda, Rwanda, and within the country. It also sells broken rice to the local communities at a cheaper price of up to 350 Tshs per kilogram (approximately 15 cents). The local community members buy the rice and sell it in the local market for profit.

According to the dominant agricultural discourse, contract farming is crucial for linking smallholder farmers to global value chains by linking them to the markets. Through KPL, smallholder farmers were able to secure a reliable market, at least until the company shut down. Even though contract farming provided the market for both men and women smallholder farmers in Mngeta, available market opportunities did not benefit them equally. There are different rice market opportunities for men and women. The rice market in Mngeta is divided into two main markets: the *internal* market which comprises buyers from within the ward or village and the *external* market which comprises buyers from areas outside the wards and that includes clients from Morogoro town, Dar es Salaam, Zanzibar, Arusha, Tanga and even neighboring countries such as Uganda, Burundi, and Rwanda. The rice market depends on the social networks one has. Although women did not have access to the markets from outside Mngeta (unlike their husbands, who do have access to these external markets), they do have access to their own local market. They sell their rice at an open market every evening starting at 4 pm. The evening market is also used as a space for women to socialize, gossip, and interact with each other outside their domestic space. As one of my female interviewees noted:

> ... This is the only place where we can meet and chat and talk about women's affairs without the presence of men. Everyone is busy in their home, so, you cannot have someone come over to your place for a chit chat, you know women have a lot to talk about (laughs)… This market helps us to learn about what our

> friends go through in their families and see how we can support them". (Interview with a female farmer in Mngeta May 2019).

Women consider this market as a safe space for them to share their joys, excitement, frustrations, and disappointments, and it also serves as a source of social support from others. Women share their stories without feelings of intimidation and fear because of their husbands' absence. They also use the market space as a source of information to learn about their husbands' behavior and actions in the village.

The rice that is sold in the local market is divided into different grades. There is broken, medium broken, and super/high quality rice (rice which is not broken). The broken rice is the cheapest for most local customers. Women go to the milling machines or KPL during specific days to buy broken rice which they later sell for some profit. When women sell the rice, they keep the money for themselves, and it is this money that they use to support their families when men do not leave any money for food at home. (See the picture below).

Figure 4: 3

Women's Rice Market (with the researcher) in Mngeta

Note. Picture taken by the researcher during field work in July 2019

Men do not usually have control of the money obtained from this type of rice selling. The medium broken and super rice is not preferred by women marketers because it is expensive and does not have many customers. The buyers of the rice in this market are the residents in Mngeta who buy in retail just enough for a day or two. Responding to a question about why they prefer selling their rice at the open market and not to buyers who come from outside, one woman said:

> This is the easiest and quickest way to get money. We cannot sell to people from outside because we have no access and even if we had, we cannot compete with men. We better sell in this market although sometimes it takes a long time to sell off the rice you have. We prefer broken rice because it is cheap, and many people can afford it. (Interview with a female trader aged 38 in Mngeta February 2019).

This indicates that the rice market depends on the social networks that one has. The women who sell rice at the open market do not have connections with people from outside Mngeta who come to buy. This gives men full control of the external rice market. The people from outside the ward use middlemen who are not the residents of the ward to shop around and inspect who has quality paddy which they can husk to get good quality rice. Such a survey is done during harvest and after harvest season. The middlemen take advantage of the harvest season to buy rice at a much cheaper price which they, in turn, sell at a higher price to their clients and earn more profit than the farmers.

To support the local community, the company sells the broken rice to them during specific days at a very cheap price of 50 Tshs per kilogram. The broken rice from the company is sold to both men and women although women are the main customers because they sell most of this rice at their local market. The men who buy broken rice from the company resell it to women for an open evening market.

During my research, I found that all the middlemen I was introduced to were males, although their customers included a few females. Men dominate the rice paddy search because the process demands walking long distances to inspect the paddy, an exercise that takes a lot of energy and time. This job is considered masculine as it sometimes requires climbing higher up in the storage hardware and moving rice paddy sacks for inspection.

Rice production in Mngeta is done by targeting different markets. For example, while KPL mostly focuses on the *external* (outside the country) market, the local farmers even though some are working under the contract scheme with KPL focus on the *local* (village and within the country) market. When contract farming was introduced, the smallholder farmers sold their rice to KPL although their production did not constitute a large portion of KPL's market. The rice market in Mngeta is gendered where men tend to dominate the broader market (both internally and externally), while women are confined within the local market characterized by small capital and poor quality which they can only afford to sell at the open market. These market dynamics favor and benefit more men than women.

Conclusion

This chapter has shown that rice farming arrangements in Mngeta have undergone significant changes after the introduction of KPL and the associated contract farming scheme and the NAFAKA project. These changes have affected the household gender relation of power, decision making, and the division of labor in Mngeta. Whereas some women have managed to engage in agricultural decision-making, their traditional role as household keepers and family caretakers has remained the same. Even though this study shows that there is a form of "collective" decision-making between male and female farmers in the household, it is important to distinguish between ownership of farm products and control.

KPL and NAFAKA created rice markets that disproportionately benefit men and women. The presence of the new market opportunities attracted men to be more active in rice production and marketing in Mngeta than before.

Although there have been some changes to inheritance laws in Tanzania, to allow widows and daughters to inherit their husband's properties, the cultural tradition and the actual behavior of people in Mngeta have not changed, as widows have to bargain with the relatives of the deceased husband who legally recognized by the law as heirs creating a disjuncture between legal rules and more powerful cultural norms. The existing customary inheritance laws weaken widow's bargaining power as such laws do not allow widows to inherit properties.

Much as KPL and NAFAKA training aimed to empower women in rice farming, this initiative has had hidden consequences such as intrahousehold conflicts, increased male violence and health risks that made women more vulnerable, affecting their wellbeing and livelihoods. Such risks resulted from men's desire to maintain their status and masculinity.

The next chapter explores the smallholder farmers' livelihoods in the context of contract farming in Mngeta. It also highlights the gender dynamics of smallholders' livelihoods in Mngeta.

Chapter 5: Contract Farming and Smallholder Farmers' Livelihoods and Subjectivities in Mngeta

Introduction

This chapter explores smallholder farmers' livelihoods and subjectivities in the context of contract farming. It addresses how contract farming affects people's livelihoods and subjectivities in Mngeta and the associated consequences of participation in contract farming. The introduction of contract farming in Mngeta altered people's previous livelihood activities through increased mechanization and commercialization. In this chapter, I show that the impact of contract farming on smallholder farmers was uneven, with some smallholder contract farmers benefiting more than others depending on their access to various resources and assets, such as land, agricultural tools for land cultivation, and credit. Although some farmers benefited, the majority did not. Moreover, the benefits of contract farming to smallholder farmers in Mngeta varied with respect to gender, social class, and education. This chapter also shows that the average income of contract farmers was slightly lower than the income of non-contract farmers due to a lack of market freedom, which the non-contract farmers have.

The contact farming requirements set by KPL to meet rice production standards (i.e., grid rice sowing, use of seedlings, application of fertilizers and pesticides) and market standards that included rice moisture content, purity, and the shape and size (unbroken rice), created a conducive environment for many smallholder farmers to fall into debt, which worsened their condition. Indebtedness impacted gender and household relations through property dispossession and intra-household conflicts. Some smallholder farmers who decided to take a mortgage in order to grow rice so that would meet the market standards, used their farmland, furniture, or electronic devices, such as mobile phones, television sets, and radios, as collateral to get a loan.[24] Those who defaulted on their debts lost whatever they used as collateral. Some even lost their rice harvest to their creditors for compensation. The main victims of these credit relations were men. Unlike men, women depended more on their social networks, which were not for profit, making property dispossession less severe. However, because men often decided to take out loans without involving their wives, this created intra-household conflict between couples and between women and the creditors, especially when the latter came to collect the defaulters' properties for failing to pay back the loan as agreed.

Additionally, the local institutional contentious and protest politics created the conditions for and fueled the emergence of conflicts between KPL and the local people which had severe consequences on the smallholder farmers' livelihoods and wellbeing. The changes in political regime at the national and local level and associated tariff changes affected the operations of KPL and the relationship between KPL and the farmers, creating conditions for conflicts that affected the farmers' wellbeing. The failure of KPL to fulfill its commitment to Mngeta ward villages through dividends and compensation propelled the emergence of protests that were politically motivated, leading to severe destruction of KPL's properties and arrests of local farmers. These incidences affected the livelihood activities of the people of Mngeta.

Moreover, the contract farming scheme, KPL, and NAFAKA training significantly altered smallholder farmers' identities and subjectivity. To cope with

[24] These loans typically took the form of cash or inputs such as seeds, fertilizers, or pesticides.

problems of low productivity, lack of markets, and food insecurity, smallholder farmers were trained to adapt by instilling in them entrepreneurial skills that aimed to transform them into “entrepreneurial or modern/neoliberal farmers” with creative mindsets and entrepreneurial freedoms. The training designed to instill entrepreneurial skills led some farmers to adopt neoliberal subjectivities, encouraging these small farmers to understand the problems they faced- of low productivity, a lack of markets, the absence of credit, and food insecurity- as a product of personal shortcomings, such as a lack of entrepreneurial initiative or persisting traditional mindsets, rather than as rooted in relations of power and inequality.

Understanding Livelihoods in Mngeta

“Livelihood” refers to peoples' capabilities, resources, assets, and activities required to make a living and the means for resilience from shocks and stresses (Chambers & Conway, 1992; Krantz, 2001). Usually, people in a given area interact with the existing norms, rules, and institutions that govern their activities. Peoples’ livelihood strategies, such as farming, livestock keeping, and petty business, depend on the assets, such as the land and the types of capital they own, which help them realize their expected livelihood outcomes (LaFlamme, 2007). In this case, contract farming and NAFAKA promote or avail households with livelihood opportunities by promoting agricultural technology and market strategy, which link the smallholder farmers to global value chains as the largest market of KPL was exported internationally. These assets and forms of capital/resources enable households to withstand the challenges they encounter, such as bad weather conditions, that affect productivity and well-being. The major assets for smallholder farmers in Mngeta are land and social support networks that are not profit-oriented. Improvement of livelihoods depends on the farmers' ability to integrate the technology, assets, and other resources, and the households' decisions regarding the adoption of technology, that they perceive to bring positive social and economic outcomes.

Agriculture plays a key role in smallholder farmers' livelihoods (Diao et al., 2018). However, in many rural areas, including Mngeta, agriculture is a seasonal activity that depends on seasonal rains. Thus, smallholder farmers do not usually depend on farming alone for their livelihoods. During the off-farm season, they engage in other income generation activities to support themselves. Off-farm activities are crucial not only for income generation but also for coping with various forms of vulnerabilities and insecurity, including food insecurity. The most recent 2012 Tanzania Census survey, for example, indicates that the share of non-agricultural employment in rural areas is 13.5 percent. As I observed in this study, off-farm activities directly contribute to household income and indirectly shape agricultural activities during the farming season in that they enable farmers to buy seeds, fertilizers, pesticides, and rice storage bags. As one of the respondents noted during our interview,

> As you know rural life is very tough, there is not much money here like in towns. Our main activity here is farming, and it is not done throughout the year. And because our agriculture is rainfed, we find our hands tied during the dry season. But these extra activities we do help us a lot with meeting our daily needs and agricultural needs. (Interview with a male farmer aged 49 in Mngeta, November 2018).

Similarly, another respondent said,

> I thank God that I have this side business here (a restaurant and a retail shop). It has helped me a lot with my rice farming. It has helped me buy more seeds, fertilizers, and pesticides, and I do not have to borrow from the vendors who take a lot of money at the end of the day (Interview with a male farmer aged 44 in Mngeta, February 2019).

As my review of the literature in chapter one revealed, scholars have documented both the positive consequences of contract farming (such as increased income, increased yields, access to markets, credits, technology, reduced poverty, and improved livelihoods), as well as the negative consequences (such as increased indebtedness, risks of losing land, increased inequality, restructuring of the family farm, and household relations, conflicts, increased rural inequality, and exploitative relations). Similarly, contract farming in Tanzania has had both positive and negative consequences for smallholder farmers. Contract farming did have some positive consequences for some farmers in Mngeta, including improved agricultural practices, improved yields, better quality, and improved crop revenue; there had been spillover effects of information and technology for non-contract farmers living near the project area; and there have also been long-term positive outcomes for some farmers, such as increased household income, improved livelihood strategies, increased market power and improved food security. All of these outcomes positively affect smallholder farmers' livelihoods.

However, there were also some very negative outcomes for many farmers resulting from contract farming in the area, as I will show in the coming sections of my research. Some of the context-specific negative consequences of contract farming in Mngeta include forced evictions, lengthy commutes of the farmers from their newly relocated homes to new farms, wildlife threats when going to and coming from their new farms and conflicts with pastoralists, and the potential effects of aerial spraying of pesticides and fertilizers. These generated conflicts between KPL and local farmers, which led to violence, protests, and widespread arrests that affected agricultural production and farmers' livelihoods.

Economic Activities in Mngeta before and after KPL's Arrival

The topography of Mngeta, which is surrounded by rivers, historically allowed men to rely heavily on fishing as their main economic activity, while women engaged in rice farming before the introduction of KPL. However, men also grew cocoa and banana on a small scale for selling. As I showed in Chapter Four, the fishing work was dominated by the Wandamba men. Women grew rice for household consumption and worked on the farms of other people who grew bananas, in exchange for food (banana) or a living wage. In the 1980s and early 1990s, the ethnic groups doing agricultural work in Mngeta were the Wandamba, Wanyakyusa, and Wahehe. These people had built grass houses and grew rice and banana in Mngeta, including on the Mngeta farm. All the smallholder farmers I spoke to during my fieldwork consider rice farming as their main economic activity in Mngeta.

During the villagization (*Ujamaa*) of the 1970s, people from different parts of Tanzania moved to Mngeta ward, including the Mngeta farm, which was established in 1985. When the farm was established, local villagers had already started living and working in some parts of the farm following the villagization policy. Thus, when the farm was leased to KPL in 2007, some villagers had already established their residence and developed livelihood activities on the farm – activities that KPL disrupted through its forced evictions. According to the evicted villagers I interviewed, they were not involved in the part of the eviction process that determined the value of their land and houses. This resulted in conflicts between KPL and the local villagers, especially those living on the Mngeta farm. This was repeatedly recited by evicted villagers who said:

> We are the owners of this village, but when these people from KPL came, they did not want to engage us in their decisions. We know they have money and are

> powerful, but we have land. They just chased us as if we are foreigners in this land. We were treated like strangers. They just called a public meeting and told us that we have to move, and they will build better houses for us and give us some money to buy farms somewhere else. Unfortunately, the houses they built for us did not even consider the family size. They just decided to build two-room houses for every family while our earlier houses had more than two rooms depending on the family size (Interview with an evicted male farmer in Mngeta, December 2018).

After a thorough assessment, KPL decided to evict the people living on the farm, build new houses for them outside the KPL project area and gave them money to buy new farms elsewhere. (See Figures 5.1 and 5.2 below of the houses before and after KPL's compensation). Although KPL compensated those who resided on the farm, most were unsatisfied with the compensation because they had to go far away from these new houses to buy new farms. Others bought farms in areas that were flood plains, risking their livelihood activities, particularly farming. The farmers saw this as a forced and unfair eviction process.

Figure 5: 1

Farmers' Housing Structure before KPL's Investment and Compensation

Note. Picture taken by KPL staff during compensation assessment © KPL

Figure 5: 2

Farmers' Housing Structure after KPL Eviction and Compensation

Note. Picture taken by the researcher during field work in May 2019

An interview with one of the male respondents revealed that, much as they were able to secure more durable houses from KPL's compensation (see figure 5.2 above), the houses felt very small because the rooms were smaller than their previous grass-thatched houses. They were also frustrated with the way KPL disrupted their livelihood activities. This respondent claimed,

> Our rural life depends on rural activities like farming, and that is how we survive. We have farmed in this area for many years, but we were evicted. The government said the farm belonged to KPL, but that was not true because we have lived here for years and never saw anyone come to tell us that we live in his/her area. So, what the company did was to build new houses for us which to be honest are better than our previous houses because our houses were made of grass which would often leak, especially during the rainy season. The new houses are made of bricks, and aluminum sheets and so are our toilets. Unfortunately, this has not been very helpful to us because we are being forced to move to a bad environment where we can hardly harvest anything because of excessive rains and conflicts with pastoralists who graze their cattle on our farms in our absence. Worse still, we spend more time going to the farm because the farms are far away now from where we live. Each day we must walk for more than twenty kilometers to and from our new farms (Interview with a male farmer aged 50 in Mngeta, December 2018).

Thus, the coming of KPL had a dual effect on the well-being of those who lived in the farm area. On the one hand, KPL's arrival improved people's health conditions by building them better houses with brick walls, aluminum sheets, good toilets, and cemented floors that reduced the health problems emanating from dust. On the other hand, KPL disrupted people's livelihood activities by creating precarious conditions that limited their farming activities. These precarious conditions resulted from the inability of the farmers to depend on their new farms to provide as good a harvest as the old ones. Additionally, some farmers had to go further to the areas that bordered Selous game reserve to secure farmlands, exposing them to wild animals, such as elephants, lions, cheetah, and buffalos, which posed threats to their lives and often destroyed their farms.

Farmers' Motivations for Participating in Contract Farming

Proponents of contract farming, including KPL, see contract farming as a significant means through which smallholder farmers can raise their productivity and access more reliable markets that will subsequently improve their livelihoods. However, looking at it from the farmers' point of view, there are different motivations for participating in contract farming. My findings show that over half (65.7%) of the farmers I surveyed were motivated by the NAFAKA training to join contract farming. The NAFAKA program had some incentives, such as food and allowances, and farmers' expectations that NAFAKA would help them secure some start-up grants and rice husking machines for rice production. According to my survey, the importance of these incentives were followed by the availability of farm inputs (41.4%) and the availability of reliable markets (40%). Even though the contract farming narrative revolves around increased productivity and reliable markets, my survey findings show that the leading motivation for participating in contract farming was not increased productivity. For both male and female contract farmers, the leading motivation was receiving training from NAFAKA (55.6%) [same for female farmers (84.0%)], followed by the presence of reliable markets (40.0%), and presence of KPL (35.6%). However, for female farmers, the presence of reliable markets was ranked third (40.0%) suggesting that female farmers do not see markets as a big issue, probably because they are confined to their local daily market where they sell rice on a daily basis. The presence of KPL and farmers' proximity to KPL score as the least important (35.7% and 10% respectively). The presence of KPL scored higher for male farmers (37.8% compared to female farmers 32%) possibly because more men had more interactions with the KPL company, not only as contract farmers but also as hired wage laborers than female farmers.

Table 5: 1

Farmer Motivations for Participating in Contract Farming

Farmers' reasons for participating in contract farming (responses not mutually exclusive)	**Percent of male contract farmers (n=45)**	**Percent of female contract farmers (n=25)**	**TOTAL (n=70)**
Training from NAFAKA	55.6%	84.0%	65.7
Availability of farm inputs	35.6%	52%	41.4%
Presence of a reliable market	40.0%	40.0%	40.0%
Presence of KPL	37.8%	32.0%	35.7%
Proximity to KPL	11.1	8.0	10.0

The potential promises that the farmers thought contract farming would bring to them facilitated their motivation to participate. The smallholder farmers in Mngeta desire inputs but cannot afford them because they are expensive. They thus make strategic decisions by joining the scheme to easily access the inputs and improve their farming and lives. This was evident during an interview with one smallholder farmer, who expressed a common sentiment saying:

> Most of us were so excited to join in contract farming because we thought we would get free inputs. We did not know that we will have to buy the inputs on our own. When we received the inputs for the demo plots, we thought things will be like that always. So, many people who joined after the first year believed the company was giving free input. (Interview with a male farmer aged 45 in Mngeta February 2019).

Contribution of Rice Farming to Smallholder Farmer Livelihoods in Mngeta

The political economy of Mngeta has undergone significant changes since the 1970s when the villages comprising the Mngeta ward were established. Prior to the recent changes of the 1980s when the Mngeta farm was introduced, followed by its successor KPL, the livelihoods activities changed from fishing activities to more reliance on rice farming due to the role played by KPL, which included rice training to smallholder farmers and the provision of rice markets. It should also be noted that KPL did not only offer markets to smallholder rice farmers but also opened up Mngeta to new markets from outside buyers who took advantage of rice abundance in Mngeta. The findings of this study suggest that rice farming constitutes an important component in the livelihoods of the farmers in Mngeta. Table 5.2 indicates that for both contract and non-contract farmers, about nine out of ten smallholder farmers I surveyed depend on rice farming for 50% or more of their cash income (i.e.,88.2%), while only one farmer does so for less than 50%.

Table 5: 2

*Contribution of Rice Farming to Smallholder Farmer Livelihoods in Mngeta**

	Total (percent) (n=110)	**Contract farmers (n=70)**	**Non-contract farmers (n=40)**
Under 50%	11.8%	12.9%	10.0%
50-80%	66.4	61.4	75.0
Over 80%	21.8	25.7	15.0
	100%	100%	100%

Note. *Livelihoods here are defined in economic terms.

Looking at the contract farmers, Table 5.3 shows that comparing women and men contract farmers, about 9 out of 10 (92%) female contract farmers depend on rice farming for over 50 percent, while 8 out of 10 men (84.4%) do so. This difference is probably because, compared to women, men engage in more off-farm activities, such as fishing, construction work, and petty business, that are outside the household setting and earn relatively more income. Women's off-farm activities, such as poultry and animal domestication, usually help in household consumption other than by generating income. So, regardless of other off-farm activities discussed in the next section, smallholder farmers in Mngeta are highly dependent on rice farming for their cash income and livelihoods.

Table 5: 3

*Contribution of Rice Farming to Smallholder Contract Farmers' Livelihoods in Mngeta by Gender**

	Total (percent) (n=70)	**Male (n=45)**	**Female (n=25)**
Under 50%	12.9%	15.6%	8.0%
50-80%	61.4%	60.0%	64.0%
Over 80%	25.7%	24.4%	28.0%
	100%	100%	100%

Note. *Livelihoods here are defined in economic terms.

Off-season livelihood activities for Smallholder Farmers in Mngeta

Rice farming is a seasonal activity that depends on seasonal rains. Because it is seasonal, smallholder farmers have diversified their income generation activities to include both agriculture-related and non-farm activities. Off-season livelihood activities, which in this area include raising pigs and cows, poultry projects, construction activities, fishing, running local restaurants, and small retail shops, help farmers to exercise resilience during the off-farm season and cope with life. Figure 5.3 below shows the livelihood activities in which smallholder farmers engage during the off-farm season in Mngeta. These activities are significant because they help farmers amass capital to buy the farms, fertilizers, pesticides, and packaging bags required in rice production and to service loans from their creditors. As I mentioned earlier, the success of smallholder farmers largely depends on the amount of capital and the assets to which they have access; hence, these off-farm season activities function to support smallholder agriculture and people's overall livelihoods.

Figure 5: 3

Off-Season Livelihood Activities for Smallholder Farmers in Mngeta (N=110)

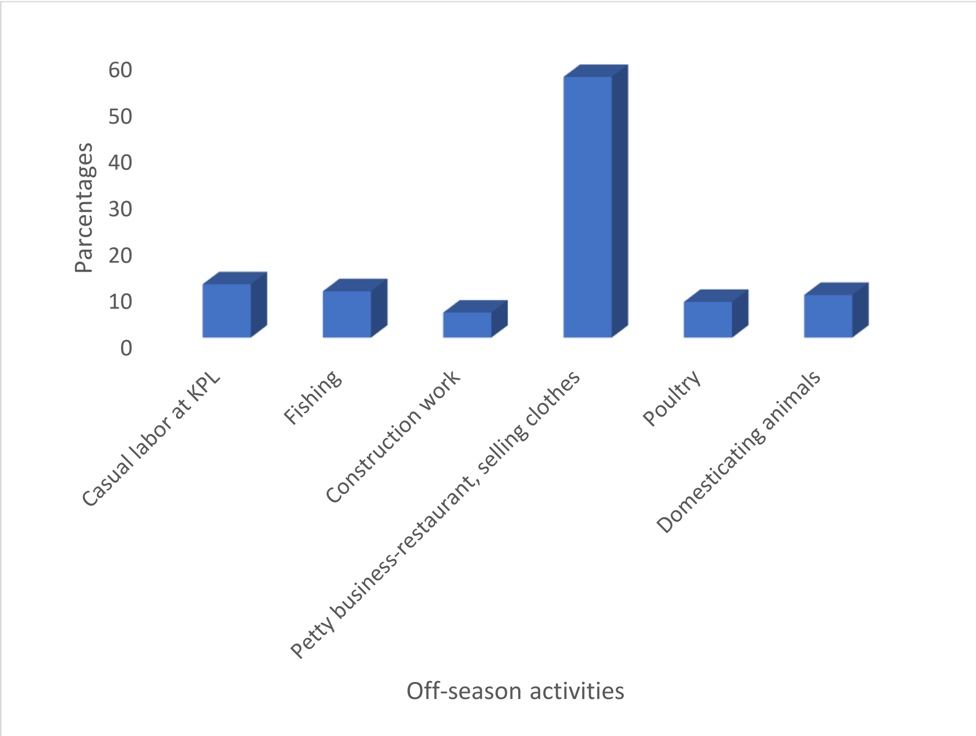


Figure 5.3 shows that over fifty percent (56.2%) of the smallholder farmers I surveyed in Mngeta engage in petty business, which typically includes running a restaurant or selling clothes, followed by casual labor at KPL (11.5%). The mushrooming of these businesses results from KPL's hiring of a bunch of workers. Although fishing accounts for 10.0%, this activity is exclusively male dominated. Mngeta is surrounded by rivers offering a conducive environment for fishing. However, the changing climatic conditions have made fishing hard, as the fish catch decreases with the decrease in the amount of water, especially during the dry season. This makes the water depth shallow, discouraging fish breeding. Although the smallholder farmers have historically raised chickens and pigs in Mngeta, they only did that for domestic consumption. The NAFAKA training commercialized these activities, however, and farmers have started to

raise chicken and pigs commercially. The NAFAKA training also mobilized the farmers to raise cows for milk production, generating some income for households. Approximately 9% of survey participants reported domesticating animals, with a slightly small number (7.7%) raising chickens during the off-farm season. As one farmer explained:

> [F]arming is not a permanent activity. You only do it for a specific period, after which you have to wait for the harvest, but you cannot do it during the dry season. So, many smallholder farmers try to get something to do during this time. Most of us do small business, and a few of us work at the company. Unlike those working for KPL, the rest of us do not have a reliable income. So, we try to do a few things here and there. You will raise some chicken or some cows or pigs to get something. The NAFAKA training helped us a lot because it made us do these projects more economically. We raised these animals habitually before the training, but the NAFAKA training added value to what we were doing. (Interview with a 48-year-old male farmer in Mngeta, November 2018).

It is also important to note that the diversity of off-season activities is not evenly spread across gender as men tend to benefit more from activities that are outside the household, which contributes to capital formation, than women. For example, my survey data show that while more men engage in fishing (100%), casual labor at KPL (14.9%), and construction work (7.5%), more women engage in petty business (78%), poultry (17.1%) and domesticating animals (12.2%). Table 5.4 below shows the gender variation in off-farm activities in Mngeta.

Table 5: 4

Off-farm Activities by Gender

Off-farm activities	Gender		
	Male	Female	Total
Casual labor at KPL	10 14.9%	5 12.2%	15 13.9%
Fishing	13 19.4%	0 0.0%	13 12.0%
Construction work	5 7.5%	2 4.9%	7 6.5%
Petty business (restaurants, selling clothes)	41 61.2%	32 78.0%	73 67.6%
Poultry	3 4.5%	7 17.1%	10 9.3%
Domesticating animals	7 10.4%	5 12.2%	12 11.1%

The off-farm activities that most women perform, as revealed in my surveys, suggest that men prefer to uphold the cultural division of labor that confines women to a household environment that aims to ensure household survival rather than foster capital formation. Such confinement places women in a subordinate position that makes it hard to benefit more from contract farming, thus reinforcing inequality.

Political Contention, Conflicts, and Smallholder Farmers' Livelihoods in Mngeta

The literature on contract farming fails to talk about the relationship between conflict and livelihoods. In fact, many new agribusiness/development projects in Africa require the taking of a significant amount of land—land that other people were using and lived on. This contradicts the promise by those promoting contract farming that it would not dispossess smallholder farmers of their lands. The result is a social and political conflict, which in turn, can negatively impact livelihoods, as they did in Mngeta.

Most studies of contract farming are done by economists, who do not look at or consider the political relations that shape the political economy, and other forms of social behavior (such as social and political conflicts) that underlie what happens with these initiatives. In this section, I show that the socio-political relations and local politics influence the way contract farming arrangements work out. Such arrangements are normally affected by contentious politics and protest politics in a given context. Institutionalized politics involving political parties, such as the ruling party, *Chama Cha Mapinduzi (CCM),* and the leading opposition party, *Chama Cha Demokrasia na Maendeleo (CHADEMA),* have catalyzed conflicts between the local people and KPL in Mngeta. These political conflicts have had important consequences for farmers' livelihoods in Mngeta.

The findings of this study show that the nature of the relationship between KPL and smallholder farmers for the five years leading up to the company's collapse was not good, which affected smallholder farmers' livelihoods in Mngeta. In 2011/12 and 2015/16, KPL applied an aerial spray on its farm. When the company did that, the local people complained that their rice was affected and demanded compensation. The government intervened through the Ministry of Agriculture and banned the use of aerial spray. The smallholder farmers were upset because they believed that their rice had been spoiled by the excessive fertilizer and pesticides that KPL sprayed. The villagers demanded an independent investigation that would determine the cause and extent of the problem for compensation. Following the farmers' complaints, KPL decided to survey the spraying incident itself. The KPL team, in collaboration with the local leaders, revealed that first, some of the farms that the farmers claimed were affected were five kilometers away from KPL. In contrast, some of the farms that were closer to KPL were unaffected. Secondly, there was an "island effect" where some patches were affected by the spray while others weren't. According to KPL, because the aerial spray drops in the form of moisture, there was no way that this pattern could have been caused by their spraying. They thus contended that they were not responsible for the damage.

Because the villagers remained unsatisfied, KPL decided to request professional support from an independent research organization and asked the Tropical Research Institute (TPRI) to conduct its own study. The organization concluded that there was no direct impact of the spray on the smallholder farmers' farms. However, in order to maintain a positive relationship with the local community, KPL agreed to compensate those who claimed that their farms were affected in the total amount of $22,000 (50 million Tanzanian shillings).

In January 2016, KPL carried out another aerial spray because the farms were full of water, preventing tractors and other spraying machines from spraying pesticides and fertilizers. After the aerial spray was done, the farmers complained again that the company had destroyed their rice because of the chemical spray. KPL commissioned another team of experts from TPRI to assess the situation. Based on a large number of pesticide and herbicide containers found in the affected farms, the TPRI team exposed the farmers' practices, which involved spraying their own crops with too high a concentration of pesticides and herbicides. Thus, the TPRI team conclusively rejected the farmers' claims that KPL was responsible for the problem.

The TPRI team presented its second report to the farmers, who refused to accept it. The district commissioner, who was also present, advised the farmers to appeal with the district attorney and district agricultural officer's help, but they never did that. The farmers in Mkangawalo, one of the Mngeta ward villages, continued complaining that

KPL destroyed their rice. This time, KPL refused to compensate the farmers, leading to a huge misunderstanding between KPL and the farmers.

Following the KPL's refusal to compensate the farmers, the farmers whose farms were affected decided to riot and invade the company, forcefully demanding compensation. They dug the road and blocked company trucks from entering the company premises and beat the company guards who were preventing them from rioting and entering the company premise. The company called the local police, who came to disperse the rioters. They used live bullets to scare the rioters, but rioters decided to hide on the company farm. In anger, the following day the farmers set KPL's water storage tanks on fire and stole fertilizer. A police report was filed and when the police arrived at the scene, those who were responsible for setting the fire and beating the company guards ran away. But because the guards were local residents, they knew some of the rioters and pointed them out to the police. The police arrested several young men and women, including those who did not participate in the riot at all, and took them into custody in Ifakara, over 80 kilometers away. The next morning, the news of the arrests spread, and the villagers started another strike demanding the release of their fellow villagers.

KPL called the police again, and this time they arrested anyone who came across their way in Mkangawalo village. They came in civilian clothes so that the villagers would not identify them. Several people who were not involved in the riot were arrested as well. I spoke to one of the young girls aged 24 who expressed her frustration by saying,

> I was coming from my farm with my baby on my back. When I got close to my house, someone stopped me and started questioning me about where I was during the day of the riot. I told him I do not know what he was asking about because I was away from the village visiting my uncle on that day. He pulled me and said,

> “you are now under arrest.” He then took me to the local government village office, and then to the police station that evening. The next morning, the prosecutor charged me and the other 23 people for stealing two bags of fertilizers from the company by carrying them on my head and running away with them. Do I really have the energy to carry 100 kilograms of fertilizer on my head and run, really? (Interview with a female in Mngeta, January 2019).

Such complaints about illegal arrests were also raised by several other respondents who did not even participate in the riot. As one of those who was unlawfully arrested told me:

> The police came to my house, where I live with my wife, three children, and my young brother, late in the night. They knocked on the door, and I opened it, not knowing what was happening, although it is very unusual to have people knock on your door during such times unless there is an emergency such as an illness or death event. They arrested me and moved with me to other houses. Whoever opened the door was arrested. It is strange because I did not participate in the riot, but my younger brother did. They arrested me and left him. The next morning, I was charged with invading the company, beating up the guard, setting up the company’s property on fire, and stealing fertilizers (Interview with a male respondent aged 48 in Mngeta, January 2019).

Because the arrests continued during the next morning, many people decided to escape to nearby villages. Others stayed in the forest. This affected their livelihood activities for about a month because as people feared being arrested, they neither worked on their farms nor in the village. This was the farming season, and because most of them were not able to prepare their farms in time because of running away from being arrested, they missed the season. This led to a very poor harvest and the loss of domestic animals, such as pigs, goats, cows, and chicken, severely affecting people’s livelihoods and food availability. An interviewee who ran away from the police explained:

> You know when you are poor, you have no rights. The company destroyed our rice, but instead of compensating us, it uses the police to humiliate us. We have been hunted by the police here for about forty days. We were not able to do any productive work because of running away from the police and hiding. Our animals and chicken died and we were not able to prepare our farms for rice farming in time. Remember, this was happening during the farming season. Our

> livelihoods were severely impacted during this time. We spent more time hiding than working (Interview with a male farmer aged 38 in Mngeta January 2019).

The conflicts that surround projects such as KPL's contract farming scheme are often ignored in studies of livelihoods, but they can have unanticipated, negative impacts on livelihoods in ways that scholars have been slow to recognize.

Additional conflicts between KPL and the local people in Mngeta were catalyzed by contentious politics between the ruling party Chama cha Mapinduzi (CCM) and the opposition party Chama Cha Democrasia na Maendeleo (CHADEMA). When KPL was introduced and started giving economic dividends to Mngeta, some people, especially those from the opposition party, believed that the village leaders were getting extra money from the company. Before the 2015 general elections, CCM led the village council, and all decisions were made by CCM leadership. During this time, KPL was very responsive to the villagers' requests, such as road construction, school maintenance, and water wells construction in part because the company wanted to gain political legitimacy with the ruling party. But the local council, under CCM party control during this time, was condemned by the opposition party figures and the local villagers for corruption because of the financial assistance that was coming from KPL as part of the company's corporate social responsibility (CSR) program. These allegations led to the defeat of the CCM party by the leading opposition party of the time, CHADEMA, during the 2015 general elections. The local council was now under the leadership of CHADEMA.

As I mentioned in Chapter Three, the new regime that came into power in 2015 implemented some tariff changes that affected KPL's operation. The company started facing financial problems due to a fall in profits. As a result, the company could not give the money that it used to give to the Mngeta ward (i.e., the three villages) but decided instead to offer some direct services that were within their capacity by using their machines to repair roads, schools, and water wells. The CHADEMA leadership did not want that but wanted to be given cash to plan for themselves. When the company said it had no money to pay the villages, hostility between the village leadership and the company arose. The village leaders from CHADEMA convinced the villagers that the 2016 report about the aerial spray was false and they should reject it and demand justice. For example, when I was speaking to the village chairman during the interview about the effects of the aerial spray, he lamented that:

> I know everything about that spray, even though the company (KPL) does not want to tell the people the truth. When the people from TPRI came, they said it was true that the spray killed farmers' rice and recommended compensation. But the company decided to hide that report and came up with a different report which they presented to the villagers. (Interview with the village chairman in Mngeta, December 2018).

The village chairman of Mkangawalo, one of the villages in the Mngeta ward, also maintained his stance that KPL was responsible for destroying smallholder farmers' rice farms and ruining their livelihood activities. He initiated a passive resistance toward KPL by convincing the villager to not attend the meetings that were convened by KPL to discuss how they could both resolve the hostility that had emerged. This further affected the relationship between KPL and the smallholder farmers as well as the smallholder farmers' welfare, as KPL stopped supporting some projects, such as water, road, and education projects. The village chairman decided to side with the farmers to win their political support and remain in office.

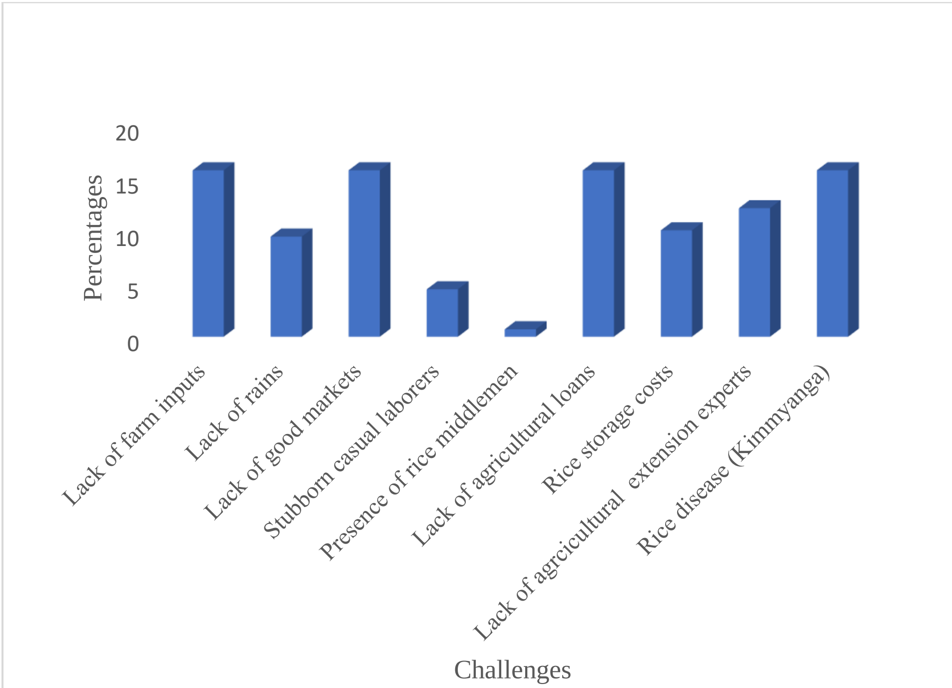
Smallholder Contract Farmers' Challenges in Mngeta

Smallholder contract farmers in Mngeta face several challenges that make it hard for them to realize the benefits of contract farming. As Figure 5.4 shows, the most common challenges identified by the smallholder contract farmers in my study are lack of farm inputs (agrochemicals, fertilizers, and pieces of equipment), lack of a good rice market, insufficient access to loans, and rice diseases.[25] (*"Kimmnyanga.[26]"*) followed by lack of rains. Contrary to the promises of contract farming, the most important of which is to create a reliable market for smallholder farmers, the farmers I surveyed still mentioned the lack of good markets as one of their prices are pre-determined before harvest and the lack of price flexibility by the company create conditions that hinder smallholder farmers from taking advantage of the market prices due to strict conditions created by KPL should the farmers decide to sell their rice to other markets (from outside Mngeta). These findings suggest that unlike the dominant discourse around contract farming, which emphasizes linking smallholder farmers to the global value chain and improving their lives, smallholder farmers in Mngeta have not managed to fully benefit from the rice markets under the contract system.

[25] Note that these categories are not mutually exclusive challenges. The fact that the rice, and farmers could choose multiple answers.
[26] *"Kimmyanga"* is a local name for a rice disease resulting from a prolonged drought, in which the rice seedlings turn yellowish and die before they mature.

Figure 5: 4

Challenges Faced by Smallholder Contract Farmers in Mngeta (N=70)



Rice farming in Mngeta depends on seasonal rains, which are very unpredictable. Lack of predictability results in smallholder farmers' reluctance to sow rice due to fear of incurring a loss. The change in rain patterns has often delayed farmers' sowing of rice, and by the time they decide, they find that the rainy season has shortened, leading to drought. On some occasions, drought has led to the emergence of mice, which eat the rice seeds. In the 2015 season, for example, many smallholder rice farmers in Mngeta faced a mice calamity because there were not enough rains. Lack of rain created a conducive environment for the mice to find their habitat in the ground, and they then started eating the seeds. Several respondents complained about this during our interviews saying:

> The major challenges we have been facing here are rice diseases (*"Kimmyanga"*) and unpredictable rains. We have had terrible rain patterns in the past 10 or 15 years; either we get too much rain or very little rain. All of these affect our farming. If you have too many rains, you cannot sow rice seeds because of

> waterlogging. By the time you wait for the water to retreat, the rain season becomes short, leading to a prolonged dry season. If you have fewer rains, we delay sowing and face the problem of drought. Also, prolonged drought attracts mice, that invade the farm and destroy the seeds. (Interview with a female farmer aged 48 in Mngeta, January 2019).

Another male respondent explained,

> What let us down is the fact that we depend too much on seasonal rains to grow our rice. The rains nowadays are not predictable. So, our farming has become like gambling; you do it, but it's a fifty-fifty chance. Actually, this has hurt many people here in the village, especially those who took loans. Some have even lost their properties because they couldn't pay back their loans due to bad harvests. (Interview with a male farmer aged 42 in Mngeta January 2019).

The challenges facing smallholder rice farmers in Mngeta have made it hard for the poorest farmers – those without capital and assets to support their farming activities – to realize the benefits of contract farming. High production costs limit what the smallholder farmers can do in terms of the size of the farm to cultivate. Contract farming is technology-intensive and most smallholder farmers in Mngeta cannot afford to pay such high costs. The lack of institutions that offer farmers credit represents another challenge, as indicated by one of the farmers who commented:

> The problem is that we smallholder farmers are not trusted by financial institutions that are supposed to give us loans. We are not trusted because our farming is at a very small scale and depends on seasonal rains, so it is so hard for the financial institution to have faith that you can harvest at the end of the season because the weather might change at any time. So, there is no security for the lending institutions…. Even when you use your properties as a mortgage, it does not help them much because when you default and they want to sell your property, they cannot find a buyer to help them recover the cost of the loan. So, they end up taking a loss (Interview with smallholder farmer aged 42 in Mngeta, December 2018).

Despite these challenges, some smallholder farmers *have* managed to benefit from contract farming. In the following section, I discuss the benefits of contract farming that some smallholder farmers were able to enjoy. I will also show that men and women perceive the benefits differently.

Perceived Benefits of Contract Farming to Smallholder Farmers in Mngeta

> "Before I joined SRI, I was not able to build a house but now, having been an SRI member for about 4 years, I have managed to not only build a house and take my kids to school but also treat my family members when they get sick, and most of it all put food on the table for my family" (Smallholder rice farmer in Mngeta).

The quote above symbolizes the importance of contract farming to smallholder farmers in Mngeta in dealing with various types of insecurity and vulnerability. Even though farmers in Mngeta have been growing rice for a long time, their participation in contract farming has enabled them to access services they could not access before. However, the ability to benefit from contract farming varied significantly, depending on the farmer's ability to adhere to modern rice farming requirements and his or her initial asset base and access to resources. Smallholder farmers who were relatively better off, i.e., those who had larger farms and could access credit and agrochemicals, benefited more than those who did not. Those who had small farms, by contrast, had to take out loans from creditors and then ended up spending most of their harvest and income to repay them.

The dominant narrative by the World Bank, SAGCOT, and KPL about the role of contract farming is that it helps smallholder farmers get connected to markets and global value chains, and thereby improves their livelihoods. However, the farmers' point of view is different. The findings of this study suggest that markets are important to smallholders but not as important as other things, such as increased yields and income, access to extension officers, agricultural training, access to farms for rice farming, and collective rice storage.

Interestingly, the perceived benefits for the men and women I talked to were different. For men, the three most important perceived benefits of contract farming were increased income (100%), increased yield, and access to extension officers (both 97.8%). For women farmers, by contrast, agricultural training ranked first (100%), followed by increased yields (96.0%), and gaining access to farms for rice farming (92.0%). Female farmers ranked gaining access to farmland quite highly while men didn't seem to care about that so much. More specifically, 92% of women farmers saw this as an important benefit while only 84.4% of men did, probably because men had better access to land. For men, in contrast, increased income was more important; *every single man in the sample mentioned this as a perceived benefit, compared to only 88% of the women*. Even though markets were somewhat important for both male and female farmers, it was not seen as a big benefit to smallholder farmers, ranking 7th in both cases.

Although the contract farming literature claims that contract farming helps smallholder farmers make more money, the findings of this study show that the biggest thing attracting farmers is not money; rather, there are other benefits they feel they are getting out of it. The table below shows the various perceived benefits of contract farming identified by the contract farmers in Mngeta.

Table 5: 5

Perceived Benefits of Contract Farming for Smallholder Farmers by Gender

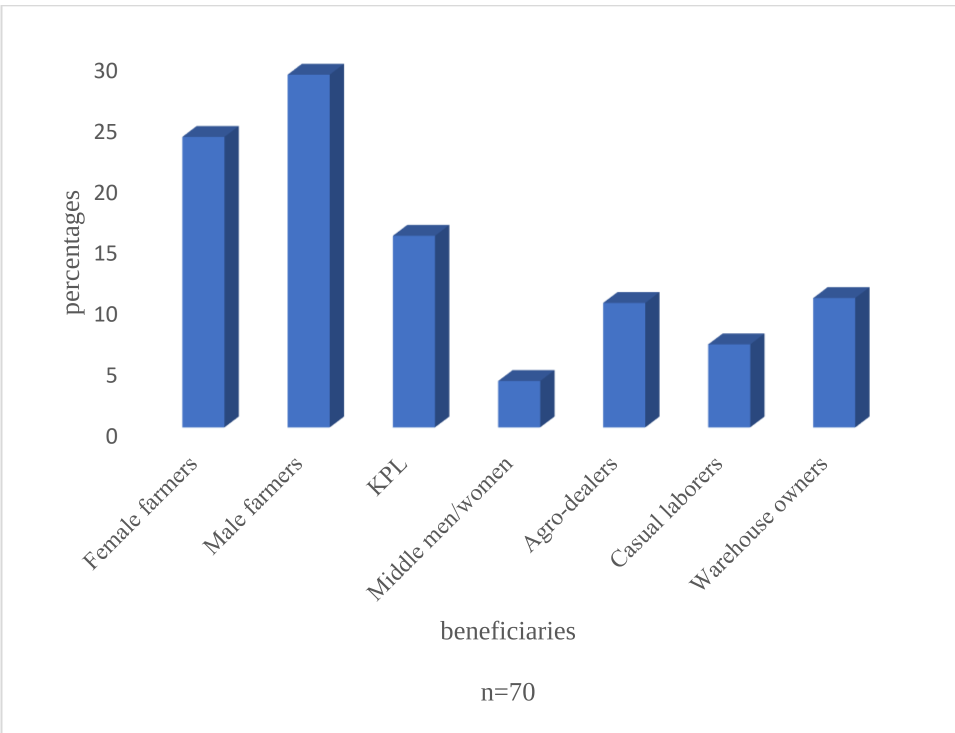
	TOTAL (n=70)	Male (n=45)	Female (n=25)
Increased yield	97.1%	97.8%	96.0%
Increased income	95.7	100.0	88.0
Agricultural training & financial literacy	92.9	88.9	100.0
Access to extension officers	92.9	97.8	84.0
Gaining access to farm for rice farming	87.1	84.4	92.0
Collective farming and storage	81.4	82.2	80.0
Reliable markets	78.6	82.2	72.0
Getting loans from financial institutions	75.7	75.6	76.0
Getting farm inputs	60.0	55.6	68.0

Contract Farming Beneficiaries

In assessing the benefits of contract farming, I asked smallholder contract farmers to rank their responses about who they thought benefits more from contract farming. The responses to this question were not mutually exclusive, generating a total of 253 responses. The majority of farmers surveyed thought male farmers benefited more from contract farming than other actors. From these responses, it is clear that almost everyone thought men benefited the most. This is probably because men have more access to resources and assets such as land, income, and established relations with creditors who supply them with fertilizers and pesticides, which enables them to take greater advantage of contract farming opportunities in Mngeta. Female farmers were viewed as the second most significant beneficiary group, with KPL occupying third place. The fact that male farmers are thought to benefit more than other actors confirms the hypothesis that men have become more involved in rice farming, a crop previously dominated by women. Figure 5.5 below shows the various beneficiaries of contract farming as perceived by the contract farmers in Mngeta.

Figure 5: 5

Perceived Beneficiaries of Contract Farming in Mngeta



In order to gain a deeper understanding of participants' experiences with contract farming, it is useful to draw from my interviews. My interview data suggest that even though contract farming offered important benefits to those farmers who had financial, social, and cultural capital and relatively higher levels of education, it offered less, and in fact often created a burden, to others.

Those who opined that contract farming is not beneficial to them related their concerns towards the burden that contract farming creates, particularly for impoverished farmers. One of the smallholder farmers said:

> I cannot say contract farming has helped me at all. First of all, you need to have enough money to be able to produce under contract farming. Imagine one-acre costs about 600,000 Tshs (an equivalent of $260). Where can I get that money? I borrowed some money from one guy who used to lend us money, but I could not pay it back because I did not have good yields that season because of the lack of rain. I ended up giving him part of my land for compensation. So, I have nothing to brag about contract farming, although I received valuable training. The problem is, I cannot put [the training] into practice because I do not have capital (Interview with a male farmer aged 38 in Mngeta, December 2018).

Another respondent blamed KPL and NAFAKA for failing to empower them with the financial resources that would help them participate fully in contract farming. This farmer contended:

> I sometimes get pissed off completely. These facilitators (trainers) think we smallholder farmers are stupid and do not know what holds us back, they would come with their documents and gather us somewhere and lecture us a lot about rice farming and how we should do it but none of them will ever give us capital. Our main problem is not knowledge but capital. We do not have money to invest in our farms, and that is what we need. So, I would not say they are helping us since after the training I still can't do anything (Interview with a male farmer aged 50 in Mngeta, December 2018).

By contrast, other smallholder farmers acknowledged that contract farming has been very beneficial because not only have they been able to receive training about rice farming and gender equality, but the scheme also helped them create a social network. This has become a crucial part of their livelihoods through the various egalitarian social support they offer to each other.

Rosei (pseudonym) is one of the few females who could take advantage of the contract farming scheme by using her cows to till her farm and the farms of other smallholder farmers. She moved to Mngeta from Shinyanga in 2011 when the conditions of life got more difficult in Shinyanga. Drought and lack of pastures in Shinyanga forced her to migrate to Mngeta for rice farming. When she and her husband were in Shinyanga, they used to grow cotton and graze cattle. But because of a lack of rain, which led to insufficient cotton production accompanied by falling prices of cotton and a lack of pastures, they decided to move to Mngeta.

> We decided to move to this valley because my aunt who lived here told us that there is more opportunity here in Mngeta than in Shinyanga because the rainy season is longer here, and we could farm twice a year. We did not want to let go of this opportunity and decided to sell the 24 cattle I inherited from my late father and move here.

Rosei says Shinyanga is predominantly dominated by Wasukuma, who care more about cattle than education, especially for female children. However, because she was married to an enlightened pastor who knew the importance of education, she took her children to school, despite the pushbacks she encountered from her relatives, such as her aunts. These relatives would prefer a girl’s early marriage over attending school, claiming that since girls eventually get married and join another clan, there is no need for them to be educated. She says she hated the kind of life most people in Shinyanga lived, which was characterized by poverty, and she wanted to make a difference with her children.

When she reached Mngeta, she was so impressed with the weather conditions, which supported both rice farming and pastoralism, that she convinced her husband to move to Mngeta. When she arrived in Mngeta she bought four acres of land and started growing rice. During the first year, she says, she cultivated only two acres out of four and got a total of 16 bags of rice. During this period, Rosei was just a new rice farmer who did not know how to properly apply fertilizers and pesticides and exclusively depended on the broadcast method of rice sowing. She also had not joined into contract farming and used hand hoes for cultivation. After acquainting herself with the environment, she decided to buy cows for cultivation, just like she did in Shinyanga when growing cotton. In 2012, Rosei decided to join contract farming through the Mkangawalo SRI group and started receiving training from KPL. After attending the SRI training, she realized that she could get up to 30 bags of rice if she had followed all the instructions. The following year she decided to cultivate all four acres and got about 116 bags of rice. She then decided to buy more land and increase her cows from four to six. Since then, she has been using cows to cultivate her own farms and other people's farms to earn more income.

Similar to Rosei is another female farmer named Kabula (pseudonym) who is also a primary school teacher in one of the schools in Mngeta. When Kabula reached Mngeta in 2000, she started an after-class program that helped her earn extra income which she used to buy a farm. After buying the farm, she joined the SRI contract farming group with KPL and started growing rice. When she got married in 2012, she influenced her husband who was hired at KPL as a supervisor of the casual labors, to join the contract farming group. After both became members of the SRI contract farming group, they started attending NAFAKA training and began using NAFAKA's modern farming technologies. Using the income from her teaching and her husband's employment, Kabula and her husband were able to hire laborers and cows for cultivation. During the interview, Kabula acknowledged the role played by her primary job in helping her benefit from contract farming: *"I thank God that I have a permanent job. This job helps me a lot in raising money for rice farming. I see how other farmers are struggling with capital. Sometimes I wish they had a job like mine."*

When talking to Joseph (pseudonym), a male farmer who was the former village leader, it was clear that education plays a significant role in who can reap the benefits of contract farming. Joseph is a form four graduate who was born and raised in Mngeta. He jointly owns a 15-acre farm with his wife Sofia (pseudonym). Using his education, he was able to write a proposal to NAFAKA and secured a grant, which he used to improve his farming. With the NAFAKA grant, he was able to grow rice on ten of his acres. The condition for the grant was that NAFAKA would only provide a matching grant of 80% but the applicant had to show proof of 20% of the fund. Joseph says being a member of the contract farming group who also attends NAFAKA training helped him a lot in winning the grant, as the following interview extract reveals:

> I was lucky… When I put up my proposal, I had no idea if I would get the money. My wife told me. 'You should try it, you never know, I remember that the trainer from NAFAKA said, 'If you have a business idea, just write it down and send it to us. If it is feasible, we will find a way to fund it.' And that is what I did. I thought I should use my education and not just keep complaining about my lack of capital.

These stories suggest that contract farming benefits depend on one's training, social class, and the kind of resources and assets one has, all of which enable farmers to access credit and agricultural inputs required to meet the standards of contract farming production. Farmers' levels of knowledge and education also enable them to engage in productive discussions, bargaining, and decision-making regarding agricultural production and market exposure. My research findings suggest that the claim that contract farming is good for smallholder farmers ignores important variations in farmers' experiences that shaped their ability to benefit from this system of production.

Figure 5: 6

NAFAKA Training Session in Mngeta

Note. Picture taken by the researcher during field work in November 2018

Smallholder Contract Farmers' Rice Income in Mngeta

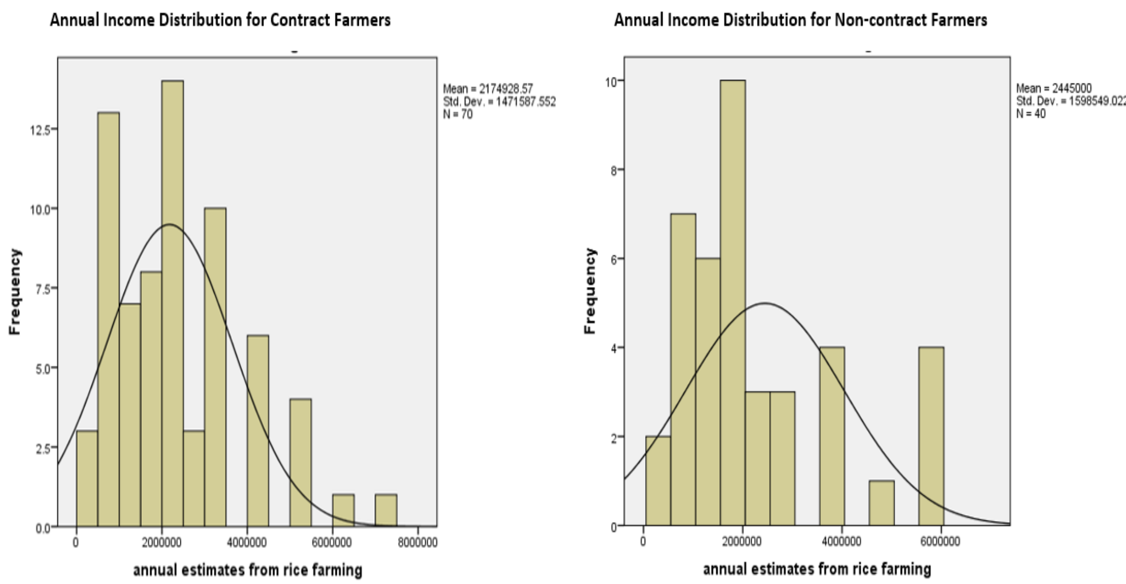
Contract farming studies in places such as Nigeria and Madagascar indicate that contract farming increases the income of smallholder farmers. In this study in Tanzania, I explore the annual rice income for both contract farmers and non-contract farmers to understand the potential impacts of contract farming on smallholder farmers' income and its consequences on their livelihoods. Smallholder farmers reported that rice farming contributes significantly to their annual income. It is important to note that the annual income generated from rice farming depends on the size of the farm under cultivation and the use of Sustainable Rice Intensification (SRI) rice-growing techniques, including the use of improved seeds, use of seedlings, use of grid technology in rice sowing, use of harrowing, and effective use of fertilizers and pesticides. At the same time, the application of modern rice farming technology in Mngeta has increased the financial burden to smallholder farmers, which most cannot afford. As a coping mechanism, some smallholder farmers decide to blend modern rice farming technology with their traditional rice-growing techniques, including the broadcast rice sowing method, which is cheaper.

Both contract and non-contract smallholder farmers acknowledged during the research that their income has increased because modern technology has increased their yields. According to my interview findings, one acre using these modern technologies produces between 30 and 35 bags of rice while the traditional method produces 10 to 15 bags. Even though my findings suggest that farmers relatively increased their net income, such findings also indicate that SRI puts farmers at a disadvantage financially, particularly when it is done at a small scale like one or two acres because contract farming is capital intensive.

The rice-related income of contract farmers is less than non-contract farmers, though the difference is not statistically significant with a P-value of 0.5. The average annual income reported by smallholder farmers under the contract farming scheme (2.2 million Tshs, or USD $945) slightly differs from that of the non-contract farmers (2.4 Million Tshs, or USD $1,063) (see Fig. 6.7). The high standard deviations for contract and non-contract farmers, respectively 1.47 Tshs or USD 660 and 1.6 Million Tshs or USD 718, suggest that the annual income of the farmers in both groups vary widely across the farmers, possibly due to the level of capital invested in rice farming. Together, these findings confirm the complaints raised by the smallholder farmers in the contract scheme about the low prices they received from KPL and the lack of market freedom; even though they benefited from increased yields, access to training, access to farms to grow rice and the markets compared to non-contract farmers, they still didn't make more money than their counterparts who were not part of the scheme. The fact that the non-contract farmers have a slightly higher average income than contract farmers suggest that having multiple-market alternatives offers the non-contract farmers a better price advantage than contract farmers who operate with fixed prices.

Figure 5: 7

Annual Income Distribution of Contract and Non-Contract Smallholder Farmers in Mngeta (Based on Annual Income from Rice Farming Only)



The average annual income associated with rice farming differs by gender as well. As Table 5.6 shows, male farmers had a higher annual average income than female farmers in Mngeta (2.4 million Tsh or USD 1,075 for non-contract farmers vs. 2. Million Tshs or USD 895 for contract farmers). Male farmers consistently earned more regardless of whether they are working as contract farmers or not (2.3 million Tshs and 2.6 million Tshs respectively) (*see table 5.6*). The male contract farmers tend to under-report the number of rice bags harvested and sold to KPL from their partners, leaving some for their own personal income. The annual income reported by male contract farmers, however, included the combined income i.e., the income they reveal to their partners and that which they do not reveal. This was especially so with the male contract farmers. On the other hand, the male non-contract farmers had more access to outside markets which offered higher prices than the domestic local market, which was dominated by female farmers. Hence, generalizing the benefits of contract farming across smallholder farmers ignores these important dynamics.

Table 5: 6

Average Annual Income (in millions of $TSH) of Contract and Non-Contract Farmers, by Gender

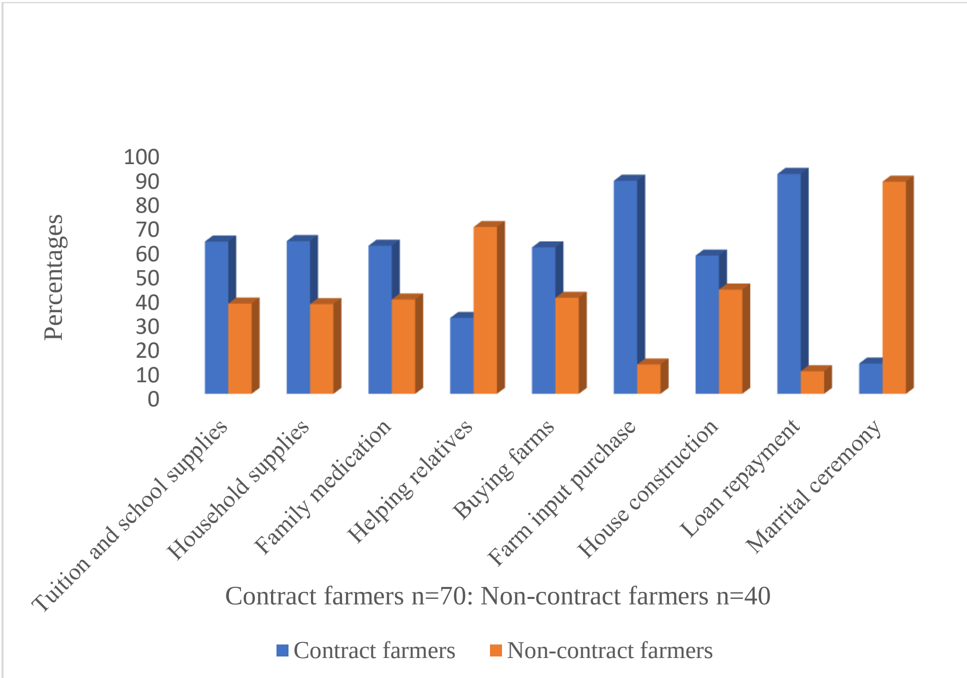
	Male farmers (n=67)	**Female farmers (n=43)**	**All farmers (n=110)**
Contract farmers (n=70)	2.3 (n=45)	1.9 (n=25)	2.1
Non-contract farmers (n=40)	2.6 (n=22)	2.2 (n=18)	2.4
All farmers (n=110)	2.4	2.0	2.2

Rice Income Expenditure and Smallholder Farmers' Livelihoods in Mngeta

Proponents of contract farming believe that with increased income, the farmers will be able to meet their needs and improve their daily lives. Figures 5.8 below show reported rice income expenditures for contract farmers and non-contract farmers. Whereas rice income contributes to improving smallholder farmers' lives for both contract farmers and non-contract farmers, my survey findings show a significant difference between contract farmers' and noncontract farmers' rice income expenditure. While on average noncontract farmers spend their rice income to improve their lives, with the top three expenditures being on marital ceremonies, helping relatives, and building houses, most of the contract farmers' rice income-expenditure goes to loan repayment, buying farm inputs, and buying new farms. Of particular importance here is the income that is spent to repay the loan, buy farm inputs, and buy new farms. My survey findings show that over three-quarters of the expenditure of rice income of the contract farmers goes to repaying the loans and buying farm inputs (90.7% and 87.9% respectively) and slightly over half (60.4%) of the income-expenditure goes to buying new farms. Contract farming is technological intensive, requiring smallholder farmers to apply expensive fertilizers and pesticides. This implies that, unlike non-contact farmers, contract farmers spend more money repaying the loans, buying farm inputs, and buying new farms to meet the requirements of contract farming and expand their production. Even though some of the contract farmers' expenditures go to improving their lives, my survey findings suggest that the demands created by contract farming, which I discussed earlier, increase the financial burden for smallholder farmers, in terms of agricultural inputs and agrichemicals needed to meet the production standards required in contract farming.

Figure 5: 8

Smallholder Farmers' Rice Income-Expenditure in Mngeta



Other Social and Economic Impacts of the KPL Contract Scheme in Mngeta

Although this chapter is focused on the implications of contract farming on smallholder farmers' livelihoods, the anecdotal evidence I obtained from my fieldwork suggests that there were other, secondary impacts of contract farming. These ranged from a possible improvement in food security (as it reduced the length of time of food shortages experienced by participants) to new businesses starting up, to in-migration and its associated impacts, which included a rise in prostitution, as men spent their money on going to the guest house for a rendezvous with young women.

Improvements in Food Security

Before the introduction of KPL and a contract farming scheme, farmers had low yields, most of which were used for consumption and could only take them through a few months before they started suffering problems of food shortages. However, as I have already suggested, most contract farmers in Mngeta expanded their production after joining the SRI groups, allowing them to harvest relatively more rice. Some farmers were able to save a portion of their rice for household consumption while selling most or part of it. Those who sold all their rice often had enough money to buy other types of food for a longer period of time before the next rice farming season began. During the interviews, testimonies about the role of contract farming in improving food availability were common among participants. The following excerpt from one of my respondents represents the opinions of many of the farmers I spoke with in Mngeta:

> In fact, I'm glad that I'm part of the scheme… and I think I have benefited a lot from the project because my yields have increased and helped me with food availability. Before I joined the scheme, I would start struggling with food shortages just three months after the harvest. But nowadays, I have enough food to take me through the next season. Things worsened when we had a bad season like the 2016 season when the aerial spray damaged our rice. (Interview with a male farmer aged 53 in Mngeta, December 2018).

This is consistent with (Bellemare & Novak, 2017) study in Madagascar, which concluded that contract farming participants reported a reduction in the duration of the hungry season by eight percent compared to non-contract farmers.

Increased in-migration

The introduction of KPL and associated contract farming scheme in Mngeta increased people's mobility from outside regions due to the new market opportunities that opened up following rice commercialization. KPL attracted many people from different areas, including Mngeta, to move towards the company location and establish their residence. The influx of people from other areas increased the circulation of money and income in Mngeta, and people started opening new businesses. John (pseudonym), who himself participated in the contract farming scheme, is a good example. He started his agricultural input shop in 2011 when an increased number of smallholder farmers, particularly those who are doing contract farming, expressed a strong demand for agricultural inputs, which were hard to find in Mngeta. He started selling the inputs to other smallholder farmers as a way to earn some extra money.

John started his business following the disappointments he experienced from the company. In the beginning, he thought KPL would provide all the required inputs as it did during the establishment of the contract farming scheme with the demo plots, as part of the contract, but contrary to his expectations, the company did not do that. Instead, it only assured farmers of a market and some technical advice, but they had to pay for the seeds, fertilizers, and pesticides. John decided to take this not as a challenge but as an opportunity to improve his livelihood:

> I must confess that these two things -- KPL and the contract farming scheme -- have completely changed most people's lives here. You know anything that is new to people has its own challenges, and not all people will accept it or find it beneficial. But those of us who worked with the company and participated in the scheme have seen our lives improving. I was one of those who worked at the company as a watchman but later joined the contract farming scheme. I was able to get land to grow rice from KPL for two years through contract farming and benefited from the rice-growing training through the demo plots offered by KPL. But I think most of us… got it all wrong. We believed that as long as we were doing contract farming with KPL, the company would provide us with all the rice production inputs. And because most of us were poor farmers, we took this as a "grant". But the truth is the company only offered us a market to sell our rice and the support to help us access loans from financial institutions. So, when we started experiencing the challenges of getting agricultural inputs, I decided to open a shop and sell the inputs that the smallholder farmers wanted. This business has

> been lifesaving for me (Interview with a male respondent aged 53 in Mngeta February 2019).

My research revealed that other smallholder farmers diversified their livelihoods by starting other businesses that never existed before in Mngeta because of the income obtained from contract farming. Although this business was initiated by newcomers to Mngeta from Ifakara town, some smallholder farmers also decided to start retail clothing businesses. The increased population attracted by KPL created a conducive environment for businesses, such as retail clothing businesses and restaurants, to thrive.

Increased Prostitution

Despite the opportunities created by KPL and contract farming in Mngeta, some community members also expressed concern about the increase in indecent behavior in Mngeta, particularly among those who moved to the area to seek economic opportunities. The post-KPL period was characterized by a rise in prostitution, as women from other villages moved to Mngeta to engage in sex with men hired by KPL – particularly those who were not prior residents of Mngeta who had either moved to Mngeta without their partners or who were single. One of the pastors who is also a contract farmer said:

> I have lived here for over 50 years now. I have witnessed all the changes that have happened in the last decade. Let me tell you something. Before the coming of KPL, this ward was small, and almost all the people knew each other. Even the rate of crime was close to none because we all knew each other. But starting in late 2000, I have seen many people, both men and women, moving in from different areas seeking employment at KPL. Some manage to find a job, but others don't. Today, there are so many girls here in the village that we do not even know their parents, who do prostitution. If you observe during the evening at the guest house you are staying at, you will see what is happening. (Interview with a male pastor in Mngeta aged 56, December 2018).

While sitting outside of the guest house I was living in during fieldwork, I did observe a man in a KPL uniform come to the guest house with a woman and book a room. In their conversation, the KPL worker asked the receptionist for a “short term” booking to spend time with his woman. Out of curiosity, I asked the receptionist if such behavior was common in the area, and he confirmed that it was. “These men do not have only one woman,” the receptionist told me.“They keep changing women every time they come here. I have seen one man who sticks to three women when he comes. If you don’t see him with one, then he will bring another one or the other one”.

Some women resort to prostitution as a means for their own livelihoods, raising concern about community ethics and values (morality) in the community and among religious leaders in Mngeta. Although rice commercialization has increased smallholder’s income in Mngeta, some adult locals see this as a source of moral decay, as is evident in this complaint made by one of the adult residents of Mngeta:

> This company has brought us big problems here. There are women whose work is just prostitution; they are spoiling our girls here. Imagine what are they teaching our young girls? You cannot even confront them because they claim to have partners who work at the company. What surprises me is that they do not work anywhere, but they always look beautiful and smart. Where do they get the money for upkeep if not through prostitution? (Interview with a female community leader aged 47 in Mngeta, February 2019).

Another respondent complained of the newly emerging barbershop business as being the site of sex work as he said:

> If you walk around this village, you will see some beautiful-looking barber shops, but what is usually going on there is unimaginable. There are very beautiful ladies in there but all those are at work. They do not know how to shave but they have a special job for those who come to shave. Actually, other people just go there for them not even to shave. If you want a prostitute, that is the easiest place to find them. There are many in this village nowadays (in-depth interview with a male-farmers aged 55 in Mngeta February 2019).

Because prostitution is unacceptable in Mngeta community, some girls or women have decided to secure employment in the barbershops where they wash the customers after shaving. But the barbershops have become sites for meeting and connecting with potential sexual clients who come to “shave”. This helps to avoid the community’s stigma towards prostitution and encourages community members to think that the women who work in the barbershops earn decent money; but that money is really earned through prostitution or sex work. Apart from the community-level impacts of contract farming, contract farming had significant effects on smallholder farmers’ identities as well. In the next section, I explore the effects of contract farming on smallholder farmers’ identity and subjectivities in Mngeta.

Smallholder Farmers’ Subjectivities and Contract Farming in Mngeta

The NAFAKA project, administered by ACDI/VOCA under the USAID Feed the Future program, integrated agricultural, gender, environmental, and nutritional development efforts to improve smallholder farmers’ rice productivity in Mngeta. The goal was to reduce poverty and food insecurity by increasing incomes for smallholder farmers, including men, women, and youth (https://www.acdivoca.org/projects/tanzania-staples-value-chain-nafaka/). In order to achieve this goal, NAFAKA used various methods. The methods included conducting farmers’ training, local demonstrations of improved technology packages (seed, inputs) in rice (by creating the rice demo plots), improved sustainable access to farming information and inputs through village-based agents linked to commercial agro-dealers (KPL for this case). The methods also included strengthening farmer associations, such as SRI, and the formation of saving and internal lending community groups, saving and credit cooperatives, and contracted farming models to bring sustainable production finance to smallholders (https://www.acdivoca.org/practice-areas/).

The ACDI/VOCA focused on empowering people to make positive changes in their lives by hiring expertise in various areas, including sustainable agriculture and equity and inclusion. As regards to sustainable agriculture, ACDI/VOCA states: “We help farmers and agribusinesses sustainably improve productivity, access markets, and feed a growing population. This involves catalyzing sustainable production, agribusiness supply chains, and effective natural resource management” (https://www.acdivoca.org/practice-areas/). As for equity and inclusion, ACDI/VOCA states: “we promote gender equity, engage youth, and include marginalized communities. Our programs address harmful or limiting norms using social and behavior change communication campaigns, training to ensure participation, and dialogues that lead to transformed perspectives. We analyze norms that inhibit growth and work with local partners to make markets more inclusive. We help women, youth, and marginalized communities to access safe spaces to become central actors in their own development” (https://www.acdivoca.org/practice-areas/). Through collaborative initiatives, the KPL and NAFAKA projects have been working to produce changes in farmers’ subjectivities and promote the creation of a class of “farmer entrepreneurs” or “modern farmers” through value chains and the various training offered with the help of NAFAKA.

The practice of contract farming resulted in a new form of farmer subjectivity and subjects who internalized new power relations in the production process that create both possibilities and constraints. KPL and the NAFAKA training discourses were trying to create a new type of farmer referred to here as “the neoliberal farmer”- achieved through the development of entrepreneurial freedoms and skills within an institutional framework characterized by private property rights, individual liberty, creative markets, and free trade (Birch et al., 2010; Chandler & Reid, 2016; David Harvey, 2005). While some farmers embraced this discourse, others did not, as the NAFAKA business advisor reported during an interview:

> Farmers are so strange. So often they complain about not having the capacity to improve their agriculture but even when you devote your efforts to help them, they still don't see and value that. They will always have excuses that take away their responsibilities. When we started offering training to smallholder farmers, we started with women. We frequently experienced low attendance, the excuse being a lack of permission from partners. We then decided to change the system and mandated that whoever wanted to be part of the project should come with her partner. Although this strategy helped to reduce absenteeism, there are some farmers who still would not show up for training (Interview with the NAFAKA business advisor December 2018).

Similarly, the sentiments about farmers' irresponsibility were also raised by the contract farming community manager working as a liaison between KPL and smallholder farmers, who stated:

> Working with smallholder farmers is really hard. Most of them do not have a higher IQ. So, whenever you suggest something that will demand them to spend some money, they don't get it, even if that proposal directly benefits them. Unfortunately, most of the farmers think that it is the responsibility of the company to support them financially 100%. A few of them understand, but some do not. And to me, I see this as a habit of denying responsibility and needs to change if all the smallholder farmers want to succeed under the contract system (Interview with KPL contract farming community manager, Mngeta February 2019).

The neoliberal ideologies of market ethic, accountability, competition, and commodification envision the creation of an entrepreneurial culture, new "technologies of governance," and an "enterprising self". This enterprising neoliberal farmer is characterized by self-reliance, self-governance, and self-discipline, which prepare the smallholder farmer to be responsible for his/her own wellbeing and empower the farmer to manage risks and vulnerabilities. Thus, the dominant discourse about contract farming deploys a market individualist discourse to restrain dissent, induce smallholder farmers to self-discipline at work, and drive them to motivate themselves to improve their own performance and productivity through intensification of work (Amoore, 2004), as well as accountability and modern farming practices. Smallholder farmers have been forced to exert themselves strenuously and incessantly in an active enterprising manner, which includes acquiring skills through training and securing loans to survive in the scheme. This results in some intra-household conflicts, due to a lack of participation and increased women's bargaining power. It also produces a "blaming the victim" mentality, which highlights personal responsibility and attributes all problems and failures to a lack of individual initiative and poor individual decisions. In doing so, it ignores the role of larger structural and cultural forces and the power of those who control markets and systems of credit and debt to shape the options facing individual contract farmers.

Understanding Subjectivity

Rice farming constitutes a large part of smallholder farmers' rural livelihood in Mngeta. Smallholder farmers' agricultural practices have been shifting in response to the global demands for increased productivity and food security. Their participation in contract farming and NAFAKA training has contributed to the change in their knowledge, identity, and forms of social organization, creating new "subjects" - a "neoliberal subject" (Leitner et al., 2007). (Chandler & Reid, 2016) describe a neoliberal subject as "a subject that must permanently struggle to accommodate itself to the world. Not a subject that can conceive of changing the world, its structure and conditions of possibility; but a subject which accepts the unknowability of the world in which it lives as a condition for partaking of that world, and which accepts the necessity of the injunction to change itself and adapt in order to cope responsively with the threats and dangers now presupposed as endemic" (p.4). According to Foucault, the subject is constructed and varies historically, and so is their subjectivity[27] (Foucault, 1980, 1982; Kelly, 2013). According to Foucault, the subject constitutes itself through the "subjectivation" process using the techniques available to it historically and doubtless under the influence of myriad factors outside its control. For Foucault, these techniques and practices are not invented by the individual himself but are models that he finds in his culture and are proposed, suggested, imposed upon him by his culture, society, and social group.

(Leitner et al., 2007) argue that "under neoliberalism, individual freedom is redefined as the capacity for self-realization and freedom from bureaucracy rather than freedom from want, with human behavior reconceptualized along economic lines. Individuals are empowered to actively make self-interested choices and are made responsible for acting in this way to advance both their well-being and that of society. Employees are redefined as entrepreneurs with an obligation to work, to better themselves and society, rather than as having a right to work. They are viewed as responsible for their own education and retraining to build human capital, and for their own well-being and risk management by behaving prudently, instead of relying on the state. Personal and social responsibility are equated with self-esteem." (p.4).

Neoliberal discourses and policy narratives purveyed by NAFAKA and KPL seek to produce a new subjectivity ("neoliberal farmer"). My data suggest that they are at least

[27] I adopt Foucault's conception of subjectivity, which refers to historically variable practices of self-constitution constituted by social practices, rationalities, and discourses which are positive as well as negative, productive as well as repressive (Bernard 1999).

partially successful, in that many contract farmers came to see themselves as successful self-motivated individual entrepreneurs and blamed themselves, rather than the larger systems of power in which they are embedded, for their failures and setbacks. This was evident during my interviews as one of the contract farmers proudly commented:

> I'm so proud to be part of NAFAKA program that taught me a lot about farming. Just for your information, I am one of the most successful farmers in the contract program. But I will tell you something, you can take a donkey to the river but cannot force it to drink its water. If at all you are not committed, hard-working, dedicated and have entrepreneurial mind like mine, you cannot not see any benefits of NAFAKA. You will only be wasting your time attending that training. I know many farmers who have attended NAFAKA training, but their life and minds have not changed at all (Interview with a male farmer in Mngeta May 2019).

However, while some farmers approved of NAFAKA training and embraced the neoliberal discourse, others resisted and rejected the lessons they were taught in NAFAKA training. Some farmers complained that the NAFAKA training was just a waste of time because they did not have the financial capacity to put whatever technologies they were taught into practice. For example, during the interviews, one of the farmers said *"if you are poor like me, the NAFAKA training is as good as nothing. You need money to buy quality seeds, fertilizers, pesticides and at least hire some workers".* The neoliberal farmer is an entrepreneurial farmer who seeks to produce rice for selling, who is autonomous, and who invests all his efforts to achieve the potential benefits of contract farming in a competitive manner with other farmers. This farmer is expected to behave responsibly, entrepreneurially, and prudently. The smallholder farmers become responsible for their own successes and failures, with the social obligation to make expected contributions to the collective welfare alongside their hard-working fellow farmers through various disciplinary powers such as signing in for attendance and roll calls during the training. To ensure the accountability of an entrepreneurial farmer, KPL requires smallholder farmers to work collaboratively with other farmers through the SRI groups.

Contract farming and the creation of farmers' subjectivity

Contract farming imposes a new form of knowledge and practices on smallholder farmers by teaching them how to use modern farming techniques such as harrowing, grid planting, use of seedlings, agrochemicals, and post-harvest management. For example, the NAFAKA training manual focused on increasing smallholder productivity and income from rice, the increased adoption of new technologies, and the creation of farmer associations, developing saving and internal lending community groups. During the interview with the NAFAKA business advisor, it was evident that the training which smallholder farmers received sought to prepare them to become entrepreneurial and individually self-reliant as she said:

> Our training aims to empower smallholder farmers, particularly women because they have been left behind and highly oppressed in many communities, to be able to engage in commercial farming and be self-sufficient. We teach them various rice farming techniques and post-harvest management, how to bargain in the market, gender equality, financial literacy, entrepreneurial skills such as keeping animals such as cows, pigs, goats, and raising chicken. We also teach them how to look for rice markets and the requirements such as rice quality, impunity, rice humidity, size, shape required in the market (Interview with the NAFAKA business advisor in Mngeta, December 2018).

Supporting NAFAKA's claim one farmer had this to say:

> After many years of profitless rice farming, just farming from hand to mouth, I can proudly call myself a farmer now. I was always ashamed when introducing myself as a farmer while I have nothing to be proud of. But now, I see the benefit of farming. Thanks to NAFAKA training and KPL support, I am one of the few successful modern farmers who often get invited to testify in different seminars about how rice farming could change ones' life. What I practice now *is "kilimo biashara"* (business agriculture). My participation in contract farming has widened my entrepreneurial skills to see how I should look into rice farming as a business (Interview with a male farmer in Mngeta, March 2019).

This shows that it was the intent of NAFAKA and KPL to instill new work ethics of entrepreneurship, but it doesn't suggest that they were totally successful in creating a new farmer subjectivity. This was evident during the interview with the NAFAKA business advisor who added:

> We have tried to do everything we could to help these farmers, but for some reason, some do not even take the trouble to attend the training although the training is free. We have now decided to select the active members and those are the ones we are focused on. Interestingly, when these farmers come to work at the demo plot, they seem to understand the training, but once you visit their plots some of them are not doing what we teach them (Interview with NAFAKA business advisor in Mngeta, December 2018).

NAFAKA training aimed to instill in the farmers, the sentiments of self-realization, accountability, entrepreneurship, and competition in smallholder farmers which further drive their participation in contract farming. Under the contract farming scheme, quality assurance becomes an important component that the farmers need to abide by should they opt to participate. Production standards such as the shape of the rice, size, and moisture level constitute a new form of a "modern" farmer. Thus, contract farmers get subjected to these production and power relations embedded in contract farming between the contractor and the contracted farmer, although these power relations are never addressed in the NAFAKA training. The various production standards act to surveil the behavior of smallholder farmers' practices, making contract farming a form of institutional, social, and economic control of smallholder farmers in Mngeta.

My argument, which, is similar to the claims of (Blackman et al., 2008) and (Pile, 2008), is that the production of smallholder farmers' subjectivity occurs within particular social and economic contexts that are influenced and changed by institutions and people, including the farmers themselves, who are seemingly marginalized by relations of authority and domination. Many smallholder farmers internalize the logic of neoliberal survival/resilience as their security against vulnerability and adapt their practices in their farming techniques, extraction patterns, and modes of production (Chandler & Reid, 2016).

Before contract farming came to Mngeta in the form of KPL, smallholder farmers had historically learned to grow rice from their own cultures, facilitated by the society's adult members. Since childhood, farmers imitated what their elders had done by going to the farm and participating in various tasks such as land tilling, sowing, weeding, guarding the rice against birds, and harvesting. The roles of adult family members constituted them as "teachers" responsible for transmitting knowledge, techniques, and practices required for rice farming. Moses (pseudonym) is a smallholder contract farmer who summarized his rice farming experience by saying,

> If you ask me how I learned how to grow rice, I may not be able to give you an obvious answer because when I was growing up, learning was part of growing up. I remember following my older siblings and parents to the farm and finding myself doing what they did. With time I also mastered how to grow rice. But nowadays, we are taught how to grow rice like students in the classroom. (Interview with a male farmer aged 57 in Mngeta, April 2019).

The introduction of contract farming and the associated NAFAKA training altered how smallholder farmers viewed themselves through the discourse created by the dominant agricultural and agribusiness narrative, which sees smallholder farmers as potential "entrepreneurs" capable of dealing with solving the problems of global food insecurity. The creation of new farmer subjectivity is associated with new techniques and practices in the production of rice. For example, it was common to hear expressions such as:

> We (smallholder farmers) are very lucky to have NAFAKA people. They have taught us to understand ourselves and to be innovative. Most of us grew rice but we never benefited from it because we did not have the right knowledge about how to dry it. Whenever we dried our rice, we could either overdo it or do it halfway and as a result, we would have most of it broken during husking. And with broken rice, you cannot get a good market. We did not know if we could make good entrepreneurs or good animal keepers, but today most of us know how to properly dry the paddy and we have seen people from other places buying our rice as well. In addition to growing rice, we do all these things (raising animals, chicken) (interview with a female farmer aged 42 in Mngeta, March 2019).

Another respondent said,

> Attending NAFAKA training has been life-changing for me and my family. There are things I took for granted and I did not realize how important they were until I received NAFAKA training. You know, I had been raising chicken at my home, but I was never serious about it. I did not supplement my chicken with anything; they were just self-grazing. But after I received NAFAKA training, I realized that I was getting it all wrong. Chicken needs to be cared for. For example, there is a ratio of cocks to chicken that I never knew before. When I started implementing what I had learned from NAFAKA, I found myself having a reliable project, which has been crucial in ensuring food availability for my family (Interview with a male farmer aged 38 in Mngeta, March 2019).

Through the various forms of training provided by NAFAKA, many smallholder farmers in Mngeta learned how to constitute themselves as “responsible farmers,” “entrepreneurs” or “agribusiness men and women”, and “problem solvers.” Farmers develop diversified selves and become agents of change in their own livelihood activities (Mwaura, 2017). NAFAKA training attempted to transform smallholder farmers into “successful” farmers who could integrate with the global rice market and contribute to the global food problem solution. This discourse was central to NAFAKA, as my interview with one NAFAKA representative suggested:

> You know, one thing most people do not know is the fact that farmers have a great potential to improve their farming. The advantage they already have is that they know their environment better than anyone. All they need is empowerment. They need knowledge that will empower them to be able to interact with their environment and the markets in things like bargaining for prices, having quality rice, and mapping out their capabilities in doing other non-farm activities which will help them generate income which will, in turn, help them in rice farming. So, what we do as NAFAKA is to basically empower smallholder farmers along these

> lines. I am glad that we have model farmers who are doing exceptionally well (interview with NAFAKA representative in Mngeta, March 2019).

The training that smallholder farmers received included rice farming skills, leadership training, financial literacy, entrepreneurship, gender empowerment, animal domestication (dairy cows, pigs, and goats), poultry, and marketing strategies. All this training sought to shape them into a different kind of farmer – one who is diverse, rational, autonomous, responsible, self-confident, and with entrepreneurial skills - constituting a “neoliberal farmer”. The training that the farmers received from both KPL, and NAFAKA echoes (Chandler & Reid, 2016; David Harvey, 2005) conception of neoliberalism alluded to earlier. Thus, KPL and NAFAKA set in motion a process that enabled some smallholder farmers to adopt new rice farming techniques and internalize them, and because they become habitually repeated over time, their subjectivity continues, while others did not. This was evident during the interviews as smallholder farmers reiterated the self-motivated spirit that embraced an entrepreneurship mindset as they said:

> If you want to succeed, you first of all need to have an entrepreneurial spirit. If you are not self-motivated you cannot do anything, and this is what NAFAKA teaches us to be. [NAFAKA] insists on self-motivation, accountability, and the ability to try out new things. Their training has really changed who we are, although others dropped out from this journey. We can now use modern technology in sowing rice and package our rice in a better way. I can actually say we are better farmers now, though we do not have capital. We have the right knowledge but no capital to put all our knowledge into practice. We only do it on small pieces of land and we have seen the benefits. We had resources around us but could not use them effectively (Interview with a male farmer aged 40 in Mngeta, March 2019).

Similarly, another respondent recalled her NAFAKA training and said:

> I remember I used to go and husk my rice and throw away the husks, but through the training, I realized that I could make more money using the rice husks instead of throwing them away. I learned that I could use the husks to make pigs’ food and earn some extra money. Since then, I started raising pigs and using the rice husks as their food. Actually, I go around collecting the husks from the machines

> because no one knows their value (Interview with a female farmer in Mngeta, February 2019).

On the other hand, through contract farming SRI groups, KPL exercises a technology of power to ensure that smallholder rice farmers conform to the new rules and norms of rice growing. Group members ensure conformity by creating sanctions or punishment for those who do not conform by either excluding them from the scheme or denying them access to the contractor's services. For example, some SRI members who could not pay the fee for the land KPL gave them were eliminated from the list of the people who would get land from KPL during the next season. And those who refused to pay back the loan which KPL cosigned for smallholder farmers had their membership revoked. The following sentiments were common during the interviews with smallholder contract farmers when they were explaining how they manage to hold the group together and ensure conformity:

> You know dealing with people is very difficult, you will create enemies and friends simultaneously. In any group, there must be those stubborn people. They will never attend the meetings, never attend their duties but will still want to be members, hahaha... But what we have done is remove them from the program. (Interview with SRI leader aged 45 in Mngeta, April 2019).

Another SRI leader added,

> We had a very stubborn member. He would challenge everything we do and sometimes give many excuses when it was his turn to attend the demo plot. We warned him, but he did not want to change. Then we decided to revoke his membership. He later apologized, and we reinstated his membership, and this time he became better (Interview with SRI leader aged 40 in Mngeta, May 2019).

Similarly, another respondent said:

> Sometimes working with a group is very nice. Apart from pulling together collective efforts, it also helps us, smallholder farmers, to make sure we are all responsible and accountable. For example, when I go to the farm, I have to check on my fellow to see whether he/she is present and if absent I follow up to see what happened because if one of us messes up, the image of us all gets tarnished (Interview with a male farmer aged 35 in Mngeta, April 2019).

In addition to interviews, my rice field visits and observations revealed that when farmers went for rice sowing and rice weeding at different seasons, a roll call was first taken by the group leader to identify those who were absent and would be subject to punitive measures, which included working some extra time at the SRI farm, a cash penalty, or bird guarding when the rice matures. Interestingly, in 2012, when one of the members of the SRI group failed to repay the loan secured from the National Microfinance Bank (NMB), the rest of the group members decided to take collective responsibility and pay off the debt in order to create trust among the lending institutions.

Although conformity to group norms created grounds for conflicts and hatred among smallholder farmers in Mngeta, the various practices, and social control mechanisms worked to prepare smallholder farmers who are responsible, accountable, and self-policing. By doing this, the contractor can control smallholder farmers and their labor and time. Smallholder farmers inherit and internalize a power system that both creates their possibilities and constrains their existence through what Foucault calls "disciplinary power". However, as I mention elsewhere in this dissertation, while smallholder farmers embraced modern rice farming technology under the contract farming scheme, they also maintained their traditional ways of growing rice in separate plots. However, they spent more time in the scheme because contract farming is labor-intensive and more productive. The various forms of disciplinary power instituted by NAFAKA and KPL through training and collective storage among others, were not entirely successful as evidenced by some farmers who opted out of contract farming after engaging in collective action and protests against the company, as I discussed in detail in chapter three.

Conclusion

This chapter explored the impacts of contract farming on smallholder farmers' livelihoods and subjectivities in Mngeta. Through the contract farming scheme, KPL exposed Mngeta to a variety of livelihood activities and broader market exposure, improving the well-being of some farmers in relative terms. Even though contract farmers did not benefit more financially from rice farming compared to non-contract farmers, KPL and NAFAKA together offered a number of benefits to people that went beyond earning more income. The company and the development project brought different benefits to different people (such as men and women). For example, whereas KPL opened up new market opportunities and a conducive environment for access to credits and loans for rice farmers, NAFAKA empowered rice farmers with new farming techniques and diversified their livelihood strategies. NAFAKA also initiated the creation of social support groups such as the village community banks (VICOBA) and women's self-help groups commonly known as *"vikundi vya kuweka na kukopa"*, translated as "groups for saving and lending money" and small entrepreneurship projects.

As I have shown here, the benefits depended on gender, the level of education, ones' social class, the number of resources one can attract for farming, and willingness to take risks, particularly with loans. Unlike other scholars like (Otsuka et al., 2016), (Bellemare & Novak, 2017), (Awotide et al., 2015), (Minot, 2011), (Minot & Ronchi, 2015), (Bellemare, 2012), and (Setboonsarng et al., 2008), who show an increase in household income in rice contract farming in Nigeria and Madagascar, my study indicates that the income benefits were slightly higher for non-contract farmers than contract farmers in Mngeta, due to their greater ability to access alternative markets.

Accordingly, this chapter shows that men benefit more than women due to their access to secure loans. However, this has sometimes resulted in intra-household conflicts because of the lack of transparency and their partners' lack of participation. Despite the benefits of contract farming, the chapter has also highlighted the various challenges smallholder farmers face that affect their livelihoods. These challenges comprise both climatic and institutional/structural challenges.

I have also shown that livelihoods diversification has helped smallholder farmers adapt to life vulnerabilities and insecurity, especially during the off-farm season, and further improve their farming. In addition, I have shown that even though off-farm activities help in smallholder farmers' adaptation/resilience, some tasks expose women to health risks even when such tasks are less muscular, such as rice husking. The type of off-farm activities the farmers perform help to determine the resources and power they have in reaping the benefits of contract farming, as they contribute to the capital invested in growing rice. The less muscular work, such as rice husking done by female farmers, pays less, while more muscular work such as rice bag lifting done by male farmers pays more money.

I have shown that the introduction of contract farming created a new form of subjectivity among many farmers, characterized by rationality, freedom, accountability, entrepreneurial skills, and prudence. All these acted to discipline smallholder farmers' agricultural practices. The scheme's rice production standards act as a means of social and economic control that ensures the conformity of some smallholder farmers to a new form of neoliberal subjectivity, while others did not conform and engaged in collective protest to challenge institutional actors and the neoliberal assumptions that blame individuals for whatever goes wrong. I have also argued in this chapter that the smallholder farmers' subjectivity is determined by specific social and economic conditions that are shaped by institutional actors such as KPL and NAFAKA as well as the farmers themselves. The power of these organizations to shape these conditions suggests that the individualistic assumptions of the neo-liberal discourse are problematic and that larger structural forces also need to be taken into account. The next chapter provides a conclusion and highlights the key observations of this study. It also explores the policy implications of my work and offers recommendations for further research.

Chapter 6: Conclusion

Agricultural transformation in Africa is shaped by both global as well as regional institutions that view smallholder farmers as potential drivers of agricultural change. African agriculture development cannot be divorced from dominant global agricultural transformation discourses. Contract farming is a reflection and a response to global demands for improved agricultural production and food sustainability across the globe. These global narratives, such as those of the World Bank and the IMF, place at their center smallholder farmers, who are fragmented and widespread. Such a discourse has informed many agribusiness narratives, including the Kilombero Plantation Limited (KPL), which used contract farming to achieve this goal of agricultural transformation. The narratives of these global actors assume that by commercializing smallholder farmer agriculture, African countries such as Tanzania will be able to address their socio-economic challenges of food insecurity, low productivity, unemployment, poor economic growth, and environmental sustainability (Brooks et al., 2013).

What is common to all these narratives is that they consider smallholder farmers as a homogenous and undifferentiated group of "entrepreneurs" regardless of their context and agricultural practices. This study aimed to examine the implications of contract farming for household gender relations, livelihood strategies, and subjectivities among smallholder rice farmers in Mngeta. Specifically, it explored the political economy of rice production in Mngeta, why contract farming and KPL failed, how gender relations were affected by smallholder farmers' incorporation into contract farming schemes and the gendered effects of their incorporation, the localized political conflicts created by contract farming, and the ways farmers' identities and subjectivities were affected by their incorporation into contract farming.

Methodologically, I used a Feminist political ecology and Feminist post-structuralist approach, as well as a Marxian political economy perspective, to understand rice production processes and relations. I used both qualitative and quantitative methods to address the research objectives stated above. I used key informant interviews to explore the history of rice production, household gender relations of production within the household, and changes in production that have taken place in the study area. I interviewed smallholder farmers, KPL representatives, NAFAKA representatives, and local government leaders. I also used observations to understand both local and modern agricultural practices in Mngeta. As a participant-observer, I reflected on my own positionality and everyday encounters as ways of gathering nuanced information about smallholder farmers' agricultural practices. The informal interviews covered those instances that could not be captured by the formal interviews but were locally significant. To document the impact of contract farming on smallholder farmers' livelihoods, I used surveys to collect data among both contract farmers and noncontract farmers.

Empirical evidence from this study revealed that contract farming had several impacts on smallholder agriculture in Mngeta, including a shift in household gender relations, the introduction of new livelihood strategies and social safety nets, the creation of "entrepreneurial" farmers, and of a gendered rice market, and the establishment of new technologies of production and new relations of production that created more risks than benefits for some farmers.

The Costs and Benefits of Contract Farming

The data obtained from both qualitative and quantitative methods revealed that contract farming had both positive and negative consequences for smallholder farmers and that the benefits of contract farming differed by gender, by differential access to assets among farmers, and by the nature of the contract farming scheme. This uneven impact was a product of the economic, social, political, and cultural contexts within which rice farmers operate. Moreover, the nature of contract farming for rice production, which is capital, labor, and time-intensive, has created uneven benefits for smallholder farmers, with male farmers benefiting more than females. Some smallholder farmers benefited more than others depending on their access to various resources and assets, such as land, agricultural tools for land cultivation, and credit. Although some farmers benefited, the majority did not, and many became indebted. Moreover, the benefits of contract farming for smallholder farmers in Mngeta varied with respect to gender, social class, and education. Also, I compared the farmers who were and were not involved in contract farming to help assess the consequences of CF. My survey data suggested that the average income of contract farmers was slightly lower than the income of non-contract farmers due to a lack of market freedom, which the non-contract farmers had.

Using both qualitative and quantitative data, my study revealed that even though the rice-related income of contract farmers was less than non-contract farmers, due to a lack of market freedom and the low prices the contract farmers received from the company, they still benefited from increased yields, access to training, access to farms to grow rice, and access to markets, compared to non-contract farmers. The fact that the non-contract farmers had a slightly higher average income than contract farmers, suggests that having multiple-market alternatives offers non-contract farmers a better price advantage than contract farmers who operated with fixed prices. While on average noncontract farmers spent their rice income to improve their lives, with the top three expenditures being on marital ceremony, helping relatives, and building houses, most of the contract farmers' rice income-expenditures went to loan repayment, buying farm inputs, and buying new farms.

The average annual income associated with rice farming differs by gender as well. Male farmers consistently earned more than female farmers regardless of whether they were working as contract farmers or not. On the other hand, male non-contract farmers had more access to outside markets which offered higher prices than the domestic local market, which was dominated by female farmers. Hence, generalizing the benefits of contract farming across smallholder farmers ignores these important gender differences and dynamics.

As revealed by dozens of interviews, the introduction of KPL and associated contract farming schemes in Mngeta increased people's mobility from outside regions due to the new market opportunities that opened up following rice commercialization. The influx of people from other areas increased the circulation of money and income in Mngeta, and people started opening new businesses that boosted the economy of the village. However, the period after the establishment of KPL was characterized by a rise in prostitution, as women from other villages moved to Mngeta to engage in sex with men hired by KPL – particularly those who were not prior residents of Mngeta and had either moved to Mngeta without their partners or were single.

My qualitative data revealed that the lack of smallholder farmers' participation in price determination in the negotiation of the rice standards, and in the NMB loan processes resulted in misunderstandings of KPL's role in contract farming. Conflictual relations between the farmers and the company played an important role in the collapse of contract farming in Mngeta. Even though contract farming aimed to benefit smallholder farmers (and it indeed did so for some farmers by increasing their yields and income) the ability to benefit from the scheme depended on the farmer's level of capital and assets. Because most farmers were "poor", they had to seek credit to be able to benefit from contract farming. The credit system established new relations of production that tied smallholder farmers to both dependent relations and debt relations while at the same time depriving the farmers of their power to control their own production. The debt that the farmers entered into became a technology of control, as it tied them into commodity relations over which the farmers had no control. This encouraged property accumulation by the creditors on the one hand and the farmers' property loss on the other. Conflictual relations between the company and the farmers, indebtedness, and dependency, greatly impacted smallholders' livelihoods and the sustainability of contract farming in Mngeta.

Whereas the dominant global narrative sees contract farming as a solution to the lack of markets and to information asymmetry and adopts an institutional approach that emphasizes technological innovation and input availability that will eventually improve the rural economy, these benefits cannot be generalized across farmers. Smallholder farmers in Mngeta were differentiated based on their level of capital, farm size, household size, connections to creditors, and agricultural knowledge and skills, all of which determined the number of benefits they got from contract farming. Unlike scholars such as (White et al., 2013) and (Patel, 2012) who contend that contract farming results in the loss of traditional cultivation methods, my study has shown that contract smallholder farmers in Mngeta have retained their traditional cultivation methods, commonly known as the broadcast method.

Contract farming enabled the farmers to retain ownership and control over their land and created more opportunities for smallholder rice farmers in Mngeta by creating enabling conditions for accessing markets, credits, farm inputs, and training, which improved their livelihoods. Nevertheless, the credit relations of the system led to a growing indebtedness, a loss of land and properties for some farmers, and increased inequality.

It is critical to note that the presence of contract farming in Mngeta created exploitative relations between the company and the farmers where the company shifted production risks to farmers through the leasing of the company farms to the contract farmers and the use of unpaid household labor to clear the plots that the company leased. My qualitative and survey data suggest that by relying on household or family labor, contract farming replaced the direct exploitation of farmers via wage labor with the indirect exploitation of household labor.

The contact farming requirements set by KPL to meet rice production standards (i.e., grid rice sowing, use of seedlings, application of fertilizers and pesticides) and market standards that included rice moisture content, purity, and the shape and size (unbroken rice), created a conducive environment for many smallholder farmers to fall into debt, which worsened their condition. Indebtedness impacted gender and household relations through property dispossession and intra-household conflicts. The main victims of these credit relations were men. Unlike men, women depended more on their social networks, which were not for profit, making property dispossession less severe. Despite the costs created by contract farming, my qualitative data revealed that women in Tanzania were able as their male counterparts to access secure rights to land and farm inputs.

Gender and Household Relations

The KPL's introduction of a contract farming scheme which created SRI groups that were required to have both genders changed gender relations at the household level, as more men got involved in rice production, which was initially a female domain. Through KPL, new rice market opportunities emerged, attracting more men to engage in rice production and to abandon fishing activities that were greatly affected by climate change. Increased mechanization and commercialization of rice under contract farming changed people's previous livelihood activities as they abandoned less lucrative activities such as fishing. Men's encroachment into a "feminine" domain of rice production, had significant consequences both within and outside the household. This study showed that increased men's involvement in contract farming led to an increase in household tensions and conflicts.

The introduction of contract farming in Mngeta transformed the previous gender relations of power and production, exposing such relations to contestations. These gender relations were often constructed and contested in a myriad of ways. In light of these contestations, it is crucial to acknowledge the role of contract farming schemes in enabling women to make some agricultural decisions. Through the NAFAKA training, some participating women played a key role in making decisions based on the resources and assets they owned. The presence of contract farming in Mngeta has changed previous production relations by allowing women to participate in agricultural decision-making. While this partly thwarted men's desire to exert total control over rice production and the harvest, men still managed to dominate rice farming-related decision-making among the couples. Even widows remained subordinate to men because they had to negotiate with their deceased husband's relatives to grow rice on the farms that their husbands left. The young members of the household challenged the influence of adult members of the household on the agricultural arrangement because the young members were free from family dependency as they too became members of the SRI groups that practiced contract farming.

Similar to (Berry, 1989) and (Carney, 1993), I have shown that apart from the production methods and the relations of production, the social relations that mediate access to and use of land within rural households have also been transformed by contract farming. Contract farming fostered greater food security through increased income that relatively reduced the period of hunger before another farming season. It also fostered the adoption of new rice farming techniques that led to increased yields. On the other hand, the transformation of social relations often led to intra-household conflicts between couples and between the company and the local villagers. At the household level, intra-household conflict was over credit, rice income, and expenditures while at the company level there were conflicts between the company and the farmers over rice marketing, prices, the NMB loan, and the rice warehouse. The commodification of rice transformed the use of land that was initially female land, altering social relations as more men gained control of the land and of rice production in Mngeta. Men’s increased involvement in rice production provided a way for them to gain control over the rice harvest and over the money they generated from selling rice to outside buyers.

Intra-household gender conflicts and violence led to the breaking up of social ties within the household that go unnoticed when looked at from the outside. Thus, through contract farming and gender training, production relations and gender relations of power were reconstructed and contested within and outside the household.

However, the desire to avoid conflicts with their husbands continuously weakened women's negotiating position, perpetuating what Bourdieu calls symbolic violence, i.e., a system of domination established through patterns of power, privilege, and politics that support a form of domination that is exercised upon a social agent with his or her complicity. In addition, my qualitative data suggest that local customs and culture, particularly those which confine women to the household domain while giving men greater freedom to dominate the economic sphere outside the household, function to perpetuate gender violence, subordination, and inequality in Mngeta. These cultural values have attracted more men to engage in contract farming to help them control the income generated from rice production.

On the other hand, I have shown that contract farming weakened the bonds that once kept families together as the unit of production through the introduction of new relations of production and distribution that challenged traditional decision-making processes. This led to a new form of farmer-agency, herein referred to as entrepreneurial farmers who were free from certain aspects of societal control. The findings of this study suggest that gender relations are constituted by and help constitute agricultural practices and ideologies in interaction with other social hierarchy structures, such as age, class, and education. The nature of life and dependency within the household created social compliance to elders in the household, severely reducing any form of overt resistance and conflict, driving them underground into covert forms. However, with the emergence of contract farming, household gender relations became individualized and commodified.

The Failure of Contract Farming and KPL

My study revealed that apart from conflictual relations between the contracting parties, local institutional contentious and protest politics created the conditions for, and fueled the emergence of, conflicts between KPL and the local people, which had severe consequences for smallholder farmers' livelihoods and wellbeing. Changes in political regime at the national and local level, and associated tariff changes, affected the operations of KPL and the relationship between KPL and farmers, creating the conditions for conflicts that affected the farmers' wellbeing. The failure of KPL to fulfill its commitment to Mngeta ward villages through dividends and compensation propelled the emergence of protests that were politically motivated, leading to the destruction of KPL's properties and the arrests of local farmers. These incidences affected the livelihood activities of the people of Mngeta.

Unlike other accounts of contract farming initiatives which often focus on production relations that allow smallholder farmers to stay on their land and keep ownership of land, thereby reducing the likelihood of conflict, this study highlighted the role of relations of distribution or market relations, as central to generating both the conflicts documented above, as well as the decline of CF and KPL. This study thus provides a more comprehensive explanation that takes into consideration the importance of both control and ownership of property and labor power, or production relations, as well as market relations and control over product distribution and credit in understanding the impact of contract farming and the conflictual relations between the company and smallholder farmers in Tanzania. My analysis moves beyond a narrow focus on the impact of contract farming on levels of productivity (or yields) and farmers' incomes, to include the broader relations of production and marketing relations that shaped contract farming and smallholder farmers' household gender relations, livelihoods, and subjectivities in Tanzania.

Farmers' Identities and Subjectivities

The contract farming scheme, KPL, and NAFAKA training significantly altered smallholder farmers' identities and subjectivities. To cope with problems of low productivity, lack of markets, and food insecurity, smallholder farmers were trained to adapt by instilling in them entrepreneurial skills that aimed to transform them into "entrepreneurial or modern/neoliberal farmers" with creative mindsets and entrepreneurial freedoms. The training that was designed to instill entrepreneurial skills led some farmers to adopt neoliberal subjectivities, which meant that these small farmers came to understand the problems they faced- of low productivity, a lack of markets, the absence of credit, and food insecurity- as a product of their personal shortcomings, such as a lack of entrepreneurial initiative or persisting traditional mindsets, rather than as rooted in relations of power and inequality. This meant that they came to believe that their ability to survive in the scheme depended on their willingness to exert themselves strenuously and relentlessly in an enterprising manner through the acquisition of new agricultural skills and the creation of new networks that would help them secure credit and loans. The production of this enterprising farmer occurs within particular social and economic contexts that are influenced and changed by the actors involved in the production of such power and knowledge, that is, by KPL and NAFAKA on the one hand, and by the farmers who are seemingly marginalized by relations of authority and domination on the other. This process, according to (Bottrell, 2007), involves making choices about one's identity and, for some, resisting identities that were imposed by others, as was the case with the farmers who did not subscribe to NAFAKA training and decided to withdraw from the scheme. My analysis of efforts to change the subjectivities of farmers suggests that contract farming was a form of institutional power and knowledge used by KPL for the social and economic control of the farmers.

Recommendations for Future Research

The findings of this study offer significant implications for future research for a deeper understanding of the impact of contract farming and agricultural improvement in Tanzania. First, the study has laid the foundation for more research on the long-term effects and sustainability of contract farming on smallholder farmers' practices which are labor and capital intensive. This would help policy planners to design agricultural programs that will increase the sustainability of smallholder farmers' practices. Longitudinal studies of the effects of participating in contract farming are crucial for a broader understanding of the role of contract farming in improving the rural economy. Second, my study revealed that contract farming commoditized rice, attracting more people to produce rice, including men whose domain was previously not rice farming. Because rice farming is technologically intensive and entails the excessive use of industrial fertilizers and pesticides to generate more harvest, there is a need for broader research that will explore the environmental effects of contract farming on the land. Third, my research revealed that smallholder farmers are highly differentiated based on their resources and assets. There is a need for research that explores the different ways through which smallholder farmers exercise resilience in dealing with the risks and vulnerabilities created by social, political, and economic exigencies and climate change.

Policy Recommendations

Improving smallholder farmers' agriculture should be of paramount importance in agricultural policy. Public policy should consider gender dynamics in addressing the many challenges that are gender-specific rather than providing generalized approaches. Through the Ministry of Agriculture, the government of Tanzania should prioritize smallholder farmers' participation in negotiating any agricultural arrangements that directly affect their lives, such as the nature and content of the contracts used in contract farming. For successful participation in such negotiations and agricultural arrangements, the government, in collaboration with the private sector, should offer training to smallholder farmers, for example in their public meetings, about responsible farming techniques and practices that will help them increase yields and protect the environment while promoting sustainable agriculture. There should also be clear clarification of the roles and responsibilities of various actors involved in arrangements such as contract farming so as to avoid possible conflictual relations that might compromise the program. In addition, the Ministry of Agriculture should introduce a one-stop agricultural center for each ward where farmers will get free information about weather, crop markets, and any new developments in agriculture that will help them plan accordingly for their farming. While this might be expensive, a partnership with the private sector can help raise funds to run such centers.

Bibliography

African Development Bank, Organization for Economic Co-operation and Development, & United Nations Development Programme. (2014). *African economic outlook 2014: Global value chains and Africa's industrialization*. OECD Publishing, 2014. ©2014. https://search.library.wisc.edu/catalog/9911219411002121

Agarwal, B. (1997). "Bargaining" and Gender Relations: Within and Beyond the Household. *Feminist Economics*, *3*(1), 1–51. https://doi.org/10.1080/135457097338799

Agarwal, B. (1998). Disinherited Peasants, Disadvantaged Workers: A Gender Perspective on Land and Livelihood. *Economic and Political Weekly*, *33*(13), A2–A14.

Agarwal, B. (2000). Conceptualizing environmental collective action: Why gender matters. *Cambridge Journal of Economics*, *24*(3), 283–310. https://doi.org/10.1093/cje/24.3.283

Aminzade, R. (2013). The Dialectic of Nation Building in Postcolonial Tanzania. *The Sociological Quarterly*, *54*(3), 335–366. https://doi.org/10.1111/tsq.12031

Aminzade, R., Schurman, R., & Lyimo, F. (2018). Circulating Discourses. The Case of Agricultural Development in Tanzania. *Sociology of Development*, *4*(1), 70–93. https://doi.org/10.1525/sod.2018.4.1.70

Amoore, L. (2004). Risk, reward and discipline at work. *Economy and Society*, *33*(2), 174–196. https://doi.org/10.1080/03085140410001677111

Arendt, H. (1969). Reflections on Violence. *Journal of International Affairs*, *23*(1), 1–35.

Arndt, C., & Tarp, F. (2000). Agricultural Technology, Risk, and Gender: A CGE Analysis of Mozambique. *World Development*, *28*(7), 1307–1326. https://doi.org/10.1016/S0305-750X(00)00017-6

Awotide, B. A., Fashogbon, A., & Awoyemi, T. T. (2015). Impact of Agro-Industrial Development Strategies on Smallholder Rice Farmers' Productivity, Income and Poverty: The Case of Contract Farming in Nigeria.". *International Conference of the Centre for the Studies of African Economies (CSAE), Oxford*.

Bacchi, C. L. (1999). *Women, Policy and Politics: The Construction of Policy Problems*. SAGE.

Bailey, S., & Bryant, R. (1997). *Third World Political Ecology: An Introduction*. Routledge. https://doi.org/10.4324/9780203974360

Bartlett, L., & Vavrus, F. (2016). *Rethinking Case Study Research: A Comparative Approach*. Routledge.

Bassett, T. J. (1988). The Political Ecology of Peasant-Herder Conflicts in the Northern Ivory Coast. *Annals of the Association of American Geographers*, *78*(3), 453–472. https://doi.org/10.1111/j.1467-8306.1988.tb00218.x

Baumann, P. (2000). *Equity and efficiency in contract farming schemes: The experience of agricultural tree crops*. Overseas Development Institute.

Bellemare, M. F. (2012). As You Sow, So Shall You Reap: The Welfare Impacts of Contract Farming. *World Development*, *40*(7), 1418–1434. https://doi.org/10.1016/j.worlddev.2011.12.008

Bellemare, M. F., & Novak, L. (2017). Contract Farming and Food Security. *American Journal of Agricultural Economics*, *99*(2), 357–378. https://doi.org/10.1093/ajae/aaw053

Berg, B. L., & Lune, H. (2017). *Qualitative research methods for the social sciences* (Ninth edition). Pearson.

Bergius, M. (2014). Expanding the corporate food regime: The southern agricultural growth corridor of Tanzania. Current and potential implications for rural households. *182*. https://nmbu.brage.unit.no/nmbu-xmlui/handle/11250/227112

Bergius, M., Benjaminsen, T. A., & Widgren, M. (2018a). Green economy, Scandinavian investments and agricultural modernization in Tanzania. *The Journal of Peasant Studies*, *45*(4), 825–852. https://doi.org/10.1080/03066150.2016.1260554

Bergius, M., Benjaminsen, T. A., & Widgren, M. (2018b). Green economy, Scandinavian investments and agricultural modernization in Tanzania. *The Journal of Peasant Studies*, *45*(4), 825–852. https://doi.org/10.1080/03066150.2016.1260554
Bergius, M., & Buseth, J. T. (2019). Towards a green modernization development discourse? The new, green revolution in Africa. *57-83*. https://doi.org/10.2458/jpe.v26i1
Bernard, H. R. (2017). *Research Methods in Anthropology: Qualitative and Quantitative Approaches*. Rowman & Littlefield.
Bernstein, H. (1996). South Africa's agrarian question: Extreme and exceptional? *The Journal of Peasant Studies*, *23*(2–3), 1–52. https://doi.org/10.1080/03066159608438607
Berry, S. (1989). Social institutions and access to resources. *Africa*, *59*(1), 41–55. https://doi.org/10.2307/1160762
Bijman, J. (2008). *Contract Farming in Developing Countries: An overview* (p.). Wageningen University, Department of Business Administration. https://library.wur.nl/WebQuery/wurpubs/376366
Birch, K., Mykhnenko, V., Birch, K., & Mykhnenko, V. (2010). Introduction: A World Turned Right-Way Up. In *Rise and Fall of Neoliberalism: The Collapse of an Economic Order?*
Blackman, L., Cromby, J., Hook, D., Papadopoulos, D., & Walkerdine, V. (2008). Creating Subjectivities. *Subjectivity*, *22*(1), 1–27. https://doi.org/10.1057/sub.2008.8
Block, F. L. (1977). *The Origins of International Economic Disorder: A Study of United States International Monetary Policy from World War II to the Present*. University of California Press.
Block, F., & Somers, M. R. (2014). The Power of Market Fundamentalism: Karl Polanyi's Critique. In *The Power of Market Fundamentalism*. Harvard University Press. https://doi.org/10.4159/harvard.9780674416345
Bolwig, S., Gibbon, P., & Jones, S. (2009). The Economics of Smallholder Organic Contract Farming in Tropical Africa. *World Development*, *37*(6), 1094–1104. https://doi.org/10.1016/j.worlddev.2008.09.012
Bottrell, D. (2007). Resistance, Resilience and Social Identities: Reframing 'Problem Youth' and the Problem of Schooling. *Journal of Youth Studies*, *10*(5), 597–616. https://doi.org/10.1080/13676260701602662
Bourdieu, P. (2014). Distinction: A Social Critique of the Judgment of Taste. In *Social Stratification* (4th ed.). Routledge.
Bourke, B. (2014). *Positionality: Reflecting on the Research Process*. https://www.proquest.com/openview/099f9ae451972037ac96c449ca1669a1/1?pq-origsite=gscholar&cbl=55152
Brooks, K., Zorya, S., Gautam, A., & Goyal, A. (2013). *Agriculture as a Sector of Opportunity for Young People in Africa* (SSRN Scholarly Paper No. 2274005). Social Science Research Network. https://papers.ssrn.com/abstract=2274005
Brownhill, L., Njuguna, E., Bothi, K. L., Pelletier, B., Muhammad, L., & Hickey, G. M. (2016). *Food Security, Gender and Resilience: Improving Smallholder and Subsistence Farming*. Routledge.
Buseth, J. T. (2017). The green economy in Tanzania: From global discourses to institutionalization. *Geoforum*, *86*, 42–52. https://doi.org/10.1016/j.geoforum.2017.08.015
Butler, J. (1997). *The Psychic Life of Power: Theories in Subjection*. Stanford University Press.
Butler, J. (2004). *Undoing Gender*. Routledge. https://doi.org/10.4324/9780203499627
Carney, J. (1993). Converting the Wetlands, Engendering the Environment: The Intersection of Gender with Agrarian Change in The Gambia. *Economic Geography*, *69*(4), 329–348. https://doi.org/10.2307/143593

Carr, E. R. (2008). Men’s Crops and Women’s Crops: The Importance of Gender to the Understanding of Agricultural and Development Outcomes in Ghana’s Central Region. *World Development*, *36*(5), 900–915. https://doi.org/10.1016/j.worlddev.2007.05.009
Chachage, C. (2010). *LAND ACQUISITION AND ACCUMULATION IN TANZANIA*. 51.
Chambers, R., & Conway, G. (1992). *Sustainable rural livelihoods: Practical concepts for the 21st century*. https://opendocs.ids.ac.uk/opendocs/handle/20.500.12413/775
Chandler, D., & Reid, J. (2016). *The Neoliberal Subject: Resilience, Adaptation and Vulnerability*. Rowman & Littlefield.
Christensen, S. (1992). *The Role of Agribusiness in Thai Agriculture: Toward a Policy Analysis*. 8.
Chu, J. (2011). Gender and ‘Land Grabbing’ in Sub-Saharan Africa: Women’s land rights and customary land tenure. *Development*, *54*(1), 35–39. https://doi.org/10.1057/dev.2010.95
Cliffe, L. & S. J. S. **. (1972). The district development front in Tanzania. *African Review*, *2*(1), 65–104. https://doi.org/10.10520/AJA00020117_120
Cooksey, B. (2013). *The Comprehensive Africa Agriculture Development Programme (CAADP) and agricultural policies in Tanzania: Going with or against the grain?* 46.
Dancer, H., & Sulle, E. (2015). *Gender implications of agricultural commercialisation: The case of sugarcane production in Kilombero District, Tanzania.* https://www.cabdirect.org/cabdirect/abstract/20153438694
David Harvey. (2005). *The New Imperialism*. OUP Oxford. http://login.ezproxy.lib.umn.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,uid&db=nlebk&AN=441106&site=ehost-live
de Munck, V. C., & Sobo, E. J. (1998). *PARTICIPANT OBSERVATION:* 28.
De Schutter, O. (2011). How not to think of land-grabbing: Three critiques of large-scale investments in farmland. *The Journal of Peasant Studies*, *38*(2), 249–279. https://doi.org/10.1080/03066150.2011.559008
Deininger, K., & Byerlee, D. (2011). *Rising Global Interest in Farmland: Can It Yield Sustainable and Equitable Benefits?* World Bank Publications.
Diao, X., McMillan, M., & Wangwe, S. (2018). Agricultural Labor Productivity and Industrialization: Lessons for Africa. *Journal of African Economies*, *27*(1), 28–65. https://doi.org/10.1093/jae/ejx034
Doss, C. R. (2001). Designing Agricultural Technology for African Women Farmers: Lessons from 25 Years of Experience. *World Development*, *29*(12), 2075–2092. https://doi.org/10.1016/S0305-750X(01)00088-2
Eaton, C., & Shepherd, A. (2001). *Contract Farming: Partnerships for Growth*. Bulletin 145. Food and Agriculture Organization of the United Nations (FAO) Rome.
Elmhirst, R. (2011). Introducing new feminist political ecologies. *Geoforum*, *42*(2), 129–132. https://doi.org/10.1016/j.geoforum.2011.01.006
Elmhirst, R., & Ressurrecion, B. P. (2008). Gender, environment and natural resource management: New dimensions, new debates. In *Gender and Natural Resource Management: Livelihoods, Mobility and Interventions* (pp. 3–22).
Emerson, R. M., Fretz, R. I., & Shaw, L. L. (2011). *Writing Ethnographic Fieldnotes, Second Edition*. University of Chicago Press.
Ezer, T. (2006). Inheritance Law in Tanzania: The Impoverishment of Widows and Daughters. *Georgetown Journal of Gender and the Law*, *7*, 599.
Ezumah, N. N., & Di Domenico, C. M. (1995). Enhancing the role of women in crop production: A case study of Igbo women in Nigeria. *World Development*, *23*(10), 1731–1744. https://doi.org/10.1016/0305-750X(95)00075-N
FAO. (2012). *The state of food and agriculture 2012: Investing in agriculture for a better future*. FAO.

Felgenhauer, K., & Wolter, D. (2008). *Outgrower Schemes – Why Big Multinationals Link up with African Smallholders*. 3.
Foucault, M. (1980). *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977*. Pantheon Books.
Foucault, M. (1982). *The Subject and Power*. https://www.journals.uchicago.edu/doi/abs/10.1086/448181
Fujii, L. A. (2010). Killing Neighbors: Webs of Violence in Rwanda. In *Killing Neighbors*. Cornell University Press. https://doi.org/10.7591/9780801458613
Gatto, M., Wollni, M., Asnawi, R., & Qaim, M. (2017). Oil Palm Boom, Contract Farming, and Rural Economic Development: Village-Level Evidence from Indonesia. *World Development*, *95*, 127–140. https://doi.org/10.1016/j.worlddev.2017.02.013
Gengenbach, H., Schurman, R. A., Bassett, T. J., Munro, W. A., & Moseley, W. G. (2018). Limits of the New Green Revolution for Africa: Reconceptualising gendered agricultural value chains. *The Geographical Journal*, *184*(2), 208–214. https://doi.org/10.1111/geoj.12233
Gerring, J. (2004). What Is a Case Study and What Is It Good for? *American Political Science Review*, *98*(2), 341–354. https://doi.org/10.1017/S0003055404001182
Gilchrist, V. J. (1992). Key informant interviews. In *Doing qualitative research* (pp. 70–89).
Glaser, B. G., & Strauss, A. L. (2017). *Theoretical sampling.* 105–114.
Glover, D. (1994). Contract farming and commercialization of agriculture in developing countries. *Agricultural Commercialization, Economic Development and Nutrition. Johns Hopkins*, 166–175.
Glover, D., & Kusterer, K. (2016). *Small Farmers, Big Business: Contract Farming and Rural Development*. Springer.
Goldsmith, A. (1985). The private sector and rural development: Can agribusiness help the small farmer? *World Development*, *13*(10), 1125–1138. https://doi.org/10.1016/0305-750X(85)90031-2
Granovetter, M. (2018). *The Sociology of Economic Life*. Routledge.
Grosh, B. (1994). Contract Farming in Africa: An Application of the New Institutional Economics. *Journal of African Economies*, *3*(2), 231–261. https://doi.org/10.1093/oxfordjournals.jae.a036805
Grow Africa. (2013). *Investing in the future of African agriculture*.
Grow Africa. (2014). *Agricultural Partnerships Take Root Across Africa: 2nd Annual Report on Privatesector investment in Support of Country-Led Transformations in African Agriculture*.
Harvey, D. (2003). Accumulation by dispossession. In *The new imperialism*. Oxford University Press.
Hausermann, H., & Adomako, J. (2021). Positionality, 'the field,' and implications for knowledge production and research ethics in land change science. *Journal of Land Use Science*, *0*(0), 1–15. https://doi.org/10.1080/1747423X.2021.2015000
Herath, D., & Weersink, A. (2009). From Plantations to Smallholder Production: The Role of Policy in the Reorganization of the Sri Lankan Tea Sector. *World Development*, *37*(11), 1759–1772. https://doi.org/10.1016/j.worlddev.2008.08.028
Hornborg, A. (2001). *The Power of the Machine: Global Inequalities of Economy, Technology, and Environment*. Rowman Altamira.
Jackson, C. (1998). Gender, irrigation, and environment: Arguing for agency. *Agriculture and Human Values*, *15*(4), 313–324. https://doi.org/10.1023/A:1007528817346
Jaffee, S. (1994). *Contract farming in the shadow of competitive markets: The experience of Kenyan horticulture. Living under contract: Contract farming and agrarian transformation in Sub-Saharan Africa*. 97–139.

Jenkins, B., & Beanland, D. A. (2012). *Mobilizing the Southern Agricultural Growth Corridor of Tanzania: A CASE*.

Jones, S., & Gibbon, P. (2011). Developing Agricultural Markets in Sub-Saharan Africa: Organic Cocoa in Rural Uganda. *The Journal of Development Studies*, *47*(10), 1595–1618. https://doi.org/10.1080/00220388.2011.579107

Kansanga, M. M., Antabe, R., Sano, Y., Mason-Renton, S., & Luginaah, I. (2019). A feminist political ecology of agricultural mechanization and evolving gendered on-farm labor dynamics in northern Ghana. *Gender, Technology and Development*, *23*(3), 207–233. https://doi.org/10.1080/09718524.2019.1687799

Katz, E. (1997). The Intra-Household Economics of Voice and Exit. *Feminist Economics*, *3*(3), 25–46. https://doi.org/10.1080/135457097338645

Kawarazuka, N., Anh, N. T. V., & Thai, V. X. (2021). *Agriculture in intergenerational relations: Ethnic Thai youth in northern Vietnam* [Working Paper]. International Potato Center. https://doi.org/10.4160/02568748CIPWP20212

Kelly, M. G. E. (2013). Foucault, Subjectivity, and Technologies of the Self. *A Companion to Foucault*, 510–525. https://doi.org/10.1002/9781118324905.ch26

Key, N., & Runsten, D. (1999). Contract Farming, Smallholders, and Rural Development in Latin America: The Organization of Agroprocessing Firms and the Scale of Outgrower Production. *World Development*, *27*(2), 381–401. https://doi.org/10.1016/S0305-750X(98)00144-2

Kirsten, J., & Sartorius, K. (2002). Linking agribusiness and small-scale farmers in developing countries: Is there a new role for contract farming? *Development Southern Africa*, *19*(4), 503–529. https://doi.org/10.1080/0376835022000019428

Korovkin, T. (1992). Peasants, grapes and corporations: The growth of contract farming in a Chilean community. *The Journal of Peasant Studies*, *19*(2), 228–254. https://doi.org/10.1080/03066159208438479

Krantz, L. (2001). *The sustainable livelihood approach to poverty reduction: An Introduction*.

LaFlamme, M. (2007). *Developing a Shared Model for Sustainable Aboriginal Livelihoods in Natural-Cultural Resource Management*. 10–13.

Lareau, A. (2011). Unequal Childhoods: Class, Race, and Family Life. In *Unequal Childhoods*. University of California Press. https://doi.org/10.1525/9780520949904

Leitner, H., Peck, J., & Sheppard, E. S. (2007). *Contesting Neoliberalism: Urban Frontiers*. Guilford Press.

Little, P. D., & Watts, M. (1994). *Living Under Contract: Contract Farming and Agrarian Transformation in Sub-Saharan Africa*. Univ of Wisconsin Press.

Lombardo, E., & Meier, P. (2009). Power and Gender: Policy Frames on Gender Inequality in Politics in the Netherlands and Spain. *Journal of Women, Politics & Policy*, *30*(4), 357–380. https://doi.org/10.1080/15544770903266632

Lukes, S. (2005). *Power and the Battle for Hearts and Minds*. https://journals.sagepub.com/doi/abs/10.1177/03058298050330031201?journalCode=mila

Maghimbi, S., Lokina, R. B., & Senga, M. A. (2011). *The Agrarian Question in Tanzania? : A State of the Art Paper*. Nordiska Afrikainstitutet; University of Dar Es Salaam. http://urn.kb.se/resolve?urn=urn:nbn:se:nai:diva-1378

Martinez, S. W. (Ed.). (2002). *VERTICAL COORDINATION OF MARKETING SYSTEMS: LESSONS FROM THE POULTRY, EGG, AND PORK INDUSTRIES*. https://doi.org/10.22004/ag.econ.34051

Marx, K. (1976). *Capital: A Critique of Political Economy*. Penguin Classics.

Masamha, B. (2018). *Gender and Cassava (Manihot esculenta crantz) value chains: An intra-household gendered analysis of smallholder farmers in Tanzania* [Thesis, University of Pretoria]. https://repository.up.ac.za/handle/2263/65580

McKeon, N. (2015). La Via Campesina: The ‘Peasants’ Way’ to Changing the System, not the Climate. *Journal of World-Systems Research*, *21*(2), 241–249. https://doi.org/10.5195/jwsr.2015.19
McMichael, P. (2013). Value-chain Agriculture and Debt Relations: Contradictory outcomes. *Third World Quarterly*, *34*(4), 671–690. https://doi.org/10.1080/01436597.2013.786290
Mighell, R. L., & Jones, L. A. (1963). *Vertical Coordination in Agriculture*. Farm Economics Division, Economic Research Service, U.S. Department of Agriculture.
Mill, J. S. (1884). *Principles of Political Economy*. D. Appleton.
Ministry of Agriculture, Food Security and Cooperatives. (2013). *Tanzania National Agriculture Policy*. https://www.climate-laws.org/geographies/tanzania/policies/national-agriculture-policy-2013
Minot, N. (2011). *Contract Farming in sub-Saharan Africa: Opportunities and Challenges*.
Minot, N., & Ronchi. (2015). *Contract farming: Risks and benefits of partnership between farmers and firms*. World Bank. https://scholar.google.com/scholar_lookup?title=Contract+farming%3A+Risks+and+benefits+of+partnership+between+farmers+and+firms&author=Minot%2C+Nicholas%3B+Ronchi%2C+Loraine&publication_year=2015
Minten, B., Randrianarison, L., & Swinnen, J. F. M. (2009). Global Retail Chains and Poor Farmers: Evidence from Madagascar. *World Development*, *37*(11), 1728–1741. https://doi.org/10.1016/j.worlddev.2008.08.024
Mittal, A., Mousseau, F., Tajdin, A., Farrell-Bryan, D., & Young, B. (2015). *Irresponsible Investment: Agrica’s Broken Development Model in Tanzania*. https://www.oaklandinstitute.org/irresponsible-investment
Mulatu, G., Haji, J., Legesse, B., & Ketema, M. (2017). Impact of Participation in Vegetables’ Contract Farming on Household’s Income in the Central Rift Valley of Ethiopia. *American Journal of Rural Development*, *5*(4), 90–96. https://doi.org/10.12691/ajrd-5-4-1
Musante (DeWalt), K., & DeWalt, B. R. (2010). *Participant Observation: A Guide for Fieldworkers*. Rowman Altamira.
Mwaura, G. M. (2017). Just Farming? Neoliberal Subjectivities and Agricultural Livelihoods among Educated Youth in Kenya. *Development and Change*, *48*(6), 1310–1335. https://doi.org/10.1111/dech.12342
Nay, O. (2014). International Organisations and the Production of Hegemonic Knowledge: How the World Bank and the oecd helped invent the Fragile State Concept. *Third World Quarterly*, *35*(2), 210–231. https://doi.org/10.1080/01436597.2014.878128
Norfund. (2010). *Norwegian Investment Fund for Developing Countries: Report on operations*.
Nyerere, J. (1979). Third world negotiating strategy. *Third World Quarterly*, *1*(2), 20–23. https://doi.org/10.1080/01436597908419420
Ochieng, C. M. O. (2009). The political economy of contract farming in tea in Kenya: The Kenya Tea Development Agency (KTDA), 1964–2002. In *The comparative political economy of development* (pp. 162–183). Routledge.
Otsuka, K., Nakano, Y., & Takahashi, K. (2016). Contract Farming in Developed and Developing Countries. *Annual Review of Resource Economics*, *8*(1), 353–376. https://doi.org/10.1146/annurev-resource-100815-095459
Oya, C. (2012). Contract Farming in Sub-Saharan Africa: A Survey of Approaches, Debates and Issues. *Journal of Agrarian Change*, *12*(1), 1–33. https://doi.org/10.1111/j.1471-0366.2011.00337.x
Patel, R. (2012). *Stuffed and Starved: The Hidden Battle for the World Food System - Revised and Updated*. Melville House.
Paulson, S., Gezon, L. L., & Watts, M. (2005). Locating the Political in Political Ecology: An Introduction. *Human Organization*, *62*(3), 205–217. https://doi.org/10.17730/humo.62.3.e5xcjnd6y8v09n6b

Peet, R., Robbins, P., & Watts, M. (2010). *Global Political Ecology*. Routledge.
Pile, S. (2008). Where is the Subject? Geographical Imaginations and Spatializing Subjectivity. *Subjectivity*, *23*(1), 206–218. https://doi.org/10.1057/sub.2008.9
Porter, G., & Phillips-Howard, K. (1997a). Contract Farming in South Africa: A Case Study from KwaZulu-Natal. *Geography*, *82*(1), 38–44.
Porter, G., & Phillips-Howard, K. (1997b). Comparing contracts: An evaluation of contract farming schemes in Africa. *World Development*, *25*(2), 227–238. https://doi.org/10.1016/S0305-750X(96)00101-5
Radcliffe, S. A. (2006). *Development and Geography: Gendered Subjects in Development Processes and Interventions—Sarah A. Radcliffe, 2006*. https://journals.sagepub.com/doi/abs/10.1191/0309132506ph624pr
Ragin, C. C., & Becker, H. S. (1992). *What Is a Case?: Exploring the Foundations of Social Inquiry*. Cambridge University Press.
Raikes, L. P. (1973). *Economic Evaluation Criteria for Ujamaa Villages*.
Rap, E., & Jaskolski, M. (2019). The lives of women in a land reclamation project: Gender, class, culture and place in Egyptian land and water management. *International Journal of the Commons*, *13*(1), 84–104. https://doi.org/10.18352/ijc.919
Ray, N., Clarke, G., & Waley, P. (2021). The impact of contract farming on the welfare and livelihoods of farmers: A village case study from West Bengal. *Journal of Rural Studies*, *86*, 127–135. https://doi.org/10.1016/j.jrurstud.2021.06.003
Raynolds, L. (2007). Negotiating Contract Farming in the Dominican Republic. *Human Organization*, *59*(4), 441–451. https://doi.org/10.17730/humo.59.4.464j7g347ru3jp15
Resurreccion, B. P., & Elmhirst, R. (2012). *Gender and Natural Resource Management: Livelihoods, Mobility and Interventions*. Routledge.
Ricardo, D., & Kolthammer, F. W. (2004). *The Principles of Political Economy and Taxation*. Courier Corporation.
Robbins, P. (2019). *Political Ecology: A Critical Introduction*. John Wiley & Sons.
Rocheleau, D. E. (2008). Political ecology in the key of policy: From chains of explanation to webs of relation. *Geoforum*, *39*(2), 716–727. https://doi.org/10.1016/j.geoforum.2007.02.005
Rosaldo, M. Z., Lamphere, L., & Bamberger, J. (1974). *Woman, Culture, and Society*. Stanford University Press.
Rose, L. L. (2002). Women's Strategies for Customary Land Access in Swaziland and Malawi: A Comparative Study. *Africa Today*, *49*(2), 123–149.
SAGCOT. (2011). *Southern Agricultural Growth Corridor of Tanzania: Investment blueprint*.
Saul, J. S. (1972). The nature of Tanzania's political system: Issues Raised by the 1965 and 1970 elections-II. *Journal of Commonwealth Political Studies*, *10*(3), 198–221. https://doi.org/10.1080/14662047208447167
Schipmann, C., & Qaim, M. (2011). Supply chain differentiation, contract agriculture, and farmers' marketing preferences: The case of sweet pepper in Thailand. *Food Policy*, *36*(5), 667–677. https://doi.org/10.1016/j.foodpol.2011.07.004
Scoones, I., Leach, M., & Newell, P. (2015). *The Politics of Green Transformations*.
Scott, J. C. (1985). *Weapons of the Weak: Everyday Forms of Peasant Resistance*. Yale University Press.
Sen, A. (1987). *Gender and Cooperative Conflicts*.
Setboonsarng, S., Leung, P., & Stefan, A. (2008). *Rice Contract Farming in Lao PDR: Moving from Subsistence to Commercial Agriculture*. https://www.think-asia.org/handle/11540/3678
Sheppard, E. (2008). *A Companion to Economic Geography*. John Wiley & Sons.

Shrimali, R. (2016). *Accumulation by Dispossession or Accumulation without Dispossession: The Case of Contract Farming in India*. https://journals.sagepub.com/doi/abs/10.1177/194277861600900306

Sigleton, R. (1999). *Instructor's Manual to Accompany: Singleton, Straits, Straits, and McAllister's Approaches to Social Research*.

Silva, C. A. B. da, Asian Productivity Organization, T., & Colombo, S. C. F. for I. C. eng J. 2005. (2005). *The growing role of contract farming in agri-foodsystems development:drivers,theory and practice*. Rome (Italy). ftp://ftp.fao.org/docrep/fao/010/ah924e/ah924e00.pdf

Singh, S. (2002). Contracting Out Solutions: Political Economy of Contract Farming in the Indian Punjab. *World Development*, *30*(9), 1621–1638. https://doi.org/10.1016/S0305-750X(02)00059-1

Smith, A. (2010). *The Wealth of Nations: An Inquiry into the Nature and Causes of the Wealth of Nations*. Harriman House Limited.

Somers, M. R. (1992). Narrativity, Narrative Identity, and Social Action: Rethinking English Working-Class Formation. *Social Science History*, *16*(4), 591–630. https://doi.org/10.1017/S0145553200016679

Spradley, J. P. (2016). *Participant Observation*. Waveland Press.

Stahl, M. (2015). *Looking Back, Looking Ahead - Land, Agriculture and Society in East Africa: A Festschrift for Kjell Havnevik*. NAI.

Stake, R. E. (1995). *The Art of Case Study Research*. SAGE.

Strauss, A. L., & Corbin, J. M. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed). Sage Publications.

Swinnen, J. F. M. (2007). *Global Supply Chains, Standards and the Poor: How the Globalization of Food Systems and Standards Affects Rural Development and Poverty*. CABI.

Tavory, I., & Timmermans, S. (2009). *Two cases of ethnography: Grounded theory and the extended case method*. https://journals.sagepub.com/doi/abs/10.1177/1466138109339042

Tremblay, M.-A. (1957). The Key Informant Technique: A Nonethnographic Application. *American Anthropologist*, *59*(4), 688–701.

Udry, C. (1996). *Gender, Agricultural Production, and the Theory of the Household*. https://www.journals.uchicago.edu/doi/abs/10.1086/262050

UNCTAD. (2001). *World Investment Report 2001 Promoting Linkages*.

UNCTAD. (2009). *World Investment Report 2009: Transnational Corporations, Agricultural Production and Development.* UNCTAD.

UNCTAD. (2011). *World Investment Report 2011: Non-Equity Modes of International Production and Development*. UN. https://doi.org/10.18356/6c9c5276-en

The Law of Marriage Act, (1971) (testimony of URT).

Village Land Act, (1999) (testimony of URT).

Land Amendment Act, (2004a) (testimony of URT).

Van Der Ploeg, J. D. (2010). The Food Crisis, Industrialized Farming and the Imperial Regime. *Journal of Agrarian Change*, *10*(1), 98–106. https://doi.org/10.1111/j.1471-0366.2009.00251.x

Veldwisch, G. J. (2015). Contract farming and the reorganisation of agricultural production within the Chókwè Irrigation System, Mozambique. *The Journal of Peasant Studies*, *42*(5), 1003–1028. https://doi.org/10.1080/03066150.2014.991722

Vermeulen, S., & Cotula, L. (2010a). *Making the Most of Agricultural Investment: A Survey of Business Models that Provide Opportunities for Smallholders*. IIED.

Vermeulen, S., & Cotula, L. (2010b). Over the heads of local people: Consultation, consent, and recompense in large-scale land deals for biofuels projects in Africa. *The Journal of Peasant Studies*, *37*(4), 899–916. https://doi.org/10.1080/03066150.2010.512463

Vicol, M. (2017). Is contract farming an inclusive alternative to land grabbing? The case of potato contract farming in Maharashtra, India. *Geoforum*, *85*, 157–166. https://doi.org/10.1016/j.geoforum.2017.07.012
Walker, P. A. (2006). Political ecology: Where is the policy? *Progress in Human Geography*, *30*(3), 382–395. https://doi.org/10.1191/0309132506ph613pr
Walton, J. (1992). Making the Theoretical Case. In *What Is a Case?: Exploring the Foundations of Social Inquiry* (pp. 121–137).
Warning, M., & Key, N. (2002). The Social Performance and Distributional Consequences of Contract Farming: An Equilibrium Analysis of the Arachide de Bouche Program in Senegal. *World Development*, *30*(2), 255–263. https://doi.org/10.1016/S0305-750X(01)00104-8
Watts, M. (2000). Political Ecology. In *Political ecology. A companion to economic geography* (p. 257,274).
Weiss, R. S. (1995). *Learning From Strangers: The Art and Method of Qualitative Interview Studies*. Simon and Schuster.
White, B., Jr, S. M. B., Hall, R., & Wolford, I. S. and W. (2013). The new enclosures: Critical perspectives on corporate land deals. In *The New Enclosures: Critical Perspectives on Corporate Land Deals*. Routledge.
Williams, S., & Karen, R. (1985). Agribusiness and the Small-Scale Farmer: A Dynamic Partnership for Development. In *Agribusiness and the Small-Scale Farmer A Dynamic Partnership for Development*. Routledge.
Wilson, J. (1986). *The Political Economy of Contract Farming*. https://journals.sagepub.com/doi/abs/10.1177/048661348601800403
Wily, L. A. (2003). *Community-based land tenure management*. 65.
Wolf, E. (1972). Ownership and Political Ecology. *Anthropological Quarterly*, *45*(3), 201–205. https://doi.org/10.2307/3316532
World Bank. (1981). *World Development Report*.
World Bank. (2007). *World Development Report 2008: Agriculture for Development*. The World Bank. https://doi.org/10.1596/978-0-8213-6807-7
Yin, R. K. (2009). *Case Study Research: Design and Methods*. SAGE.
Zimmerer, K. S., & Bassett, T. J. (2003). *Political Ecology: An Integrative Approach to Geography and Environment-development Studies*. Guilford Press.

Appendixes

Appendix 1: Oral Consent Form for Smallholder Farmers

Contract Farming in Tanzania: Implications for Smallholder Farmers' Gender Relations, Livelihoods, and Subjectivities

My name is Francis Lyimo, and I am a graduate student in the Department of Sociology at the University of Minnesota in the United States. I am here to conduct a study for my dissertation research project which focuses on Contract Farming and its Implications for Smallholder Farmers' Household Gender Relations and Livelihoods in Tanzania. I am studying rice farming in Mngeta, Kilombero. I would like your permission to ask you some questions about rice farming in Mngeta. I am interested in your experience with contract farming, such as who in the household does the planting, harvesting, and marketing, what you view as the benefits and challenges of being an outgrower for KPL company, and what other activities you do for a living. You have been selected to participate in this study because of your participation in and experience with contract farming. Our conversation may take approximately 45 minutes.

The information I will gather from you will be confidential and I will not use your name in my study, only the information you share with me. I will protect your identity by using a code name. I will store all information in such a manner that no one else has access to it or could ever link you to the information you provide. I will keep all my printed-out notes safe in my hotel room (in Dar es Salaam and Morogoro) and all the audio files will be stored on my laptop which has a strong and complex password.

I would like to take notes during our conversations, but I will not use your name or identify you in any way in my notes. Your participation in this research study is totally voluntary. If you *do* agree to be interviewed, you may: choose not to tell me certain information, refuse to answer a question, or withdraw from the study at any time. While your participation may not directly benefit you, it should help us all to understand how contract farming affects farmers like you. It will also hopefully help policymakers design better agricultural policies and strategies through which smallholder farmers can benefit more from their participation in contract farming. The decision to participate in the study is totally up to you and there will be no negative consequences if you decide not to talk with me.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), you are encouraged to contact the Research Subjects' Advocate Line, D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455; (612) 625-1650. irb@umn.edu. OR Director General, Tanzania Commission for Science and Technology (COSTECH), P.O.Box 4302, Ali Hassan Mwinyi Road, Kijitonyama (Sayansi) COSTECH Building, Dar es Salaam, Tanzania. Email: dg@costech.or.tz.

Thank you for your time.

NOTE: Although consent will be oral, I will hand my interviewees a card with the following information on it so that they can easily reach me, my advisor, and/or the IRB.

In Tanzania you can reach me at:
Francis Lyimo
University of Dar es Salaam, Department of Sociology and Anthropology
P.O Box 35043
Dar es Salaam
Cell Phone: 0621694751.
E-mail: lyimo002@umn.edu

After August 2019, you can reach me at:
Francis Lyimo
Department of Sociology
University of Minnesota-Twin Cities
267 - 19th Ave. South
909 Soc Sciences Bldg.
University of Minnesota-Twin Cities
Minneapolis, MN 55455
Email: lyimo002@umn.edu

You can also contact my adviser at:

Rachel Schurman
Professor, Department of Sociology
267 - 19th Ave. South
909 Soc Sciences Bldg.
University of Minnesota-Twin Cities
Minneapolis, MN 55455
Ph: 612-624-1039/Fax: 612-624-7020
schurman@umn.edu

If you have any questions about your rights as a research subject, you can are encouraged to contact the Institutional Review Board at the University of Minnesota at:

Institutional Review Board
University of Minnesota-Twin Cities
D 528 420 Delaware St. SE
Minneapolis, MN 55455-0392
Phone: (612) 625-1650
Email: irb@umn.edu

Statement of Consent: I have read the above information. I have asked questions and have received answers. I voluntarily consent to participate in the study.

Participant's Signature _________________ Date ______________

Investigator's Signature ________________ Date ______________

Ridhaa ya Mdomo kwa Wakulima Wadogowadogo

Kilimo cha Mkataba Tanzania: Hatima yake kwa Mahusiano ya Kijinsia ya Wakulima Wadogowadogo, Maisha yao, and Utambuzi wao

Mimi ninaitwa Francis Lyimo, na ni mwanafunzi wa masomo ya elimu ya juu kutoka chuo kikuu cha Minnesota kilichopo Marekani. Niko hapa kwa ajili ya kufanya utafiti kuhusu kilimo cha mkataba na madhara yake kwa wakulima wadogowadogo, mahusiano ya kijinsia na Maisha ya wakulima wadogowadogo Tanzania. Utafiti huu unahusisha kilimo cha mpunga katika kata ya Mngeta, Kilombero. Huu utafiti ni kwa ajili ya masomo yangu.

Ningependa kupata ruhusa yako kukuuliza maswali machache kuhusu kilimo cha mpunga Mngeta. Ninatamani kufahamu kuhusu uzoefu wako katika kilimo cha mkataba, hususani juu ya ni nani katika kaya anahusika na upandaji, uvunaji na uuzaji wa mpunga, ni nini mtazamo wako kuhusu faida na changamoto za kuwa mkulima wa mkataba kwa ajili ya kampuni ya KPL, na ni shughuli gani nyingine unazifanya kwa ajili ya kuendesha Maisha yako. Umechaguliwa kushiriki katika utafiti huu kwa sababu ya ushiriki wako na uzoefu wako katika kilimo cha mkataba. Maongezi yetu yatachukua takribani dakika 45.

Taarifa zote nitakazokusanya kutoka kwako zitakuwa siri na sintatumia jina lako katika utafiti wangu. Nitatumia tu taarifa utakazonipa. Nitalinda utambuzi wako kwa kutumia alama maalumu. Nitatunza taarifa zote kwa namna ambayo hakuna mtu mwingine yeyote atakayeweza kuwa na uwezo wa kupata taarifa zako au hata kukuhusisha wewe na taarifa utakazonipatia. Nitaweka taarifa zote zilizochapishwa kwenye chumba changu cha hoteli (nitakapokuwa Dar es Salaam na Morogoro) na taarifa zote zitakazorekodiwa nitazitunza kwenye komputa mpakato yangu yenye nywila.

Ningependa kuandika wakati wa mazungumzo yetu, lakini sintatumia jina lako wala kudhihirisha utambulisho wako kwa namna yoyote ile. Ushiriki wako katika utafiti huu ni wa hiari kabisa. Endapo utakubali kuhojiwa, unaweza kuamua kutonieleza baadhi ya taarifa, kukataa kujibu swali, au kujitoa katika utafiti huu wakati wowote. Wakati utafiti huu unaweza usikufaidishe wewe moja kwa moja, utatusaidia kuelewa namna ambavyo kilimo cha mkataba kinaathiri wakulima kama wewe. Pia ninatumaini kuwa utawasaidia watunga sheria kutunga sheria bora zaidi na kuweka mikakati bora zaidi ya kuboresha kilimo itakayowanufaisha wakulima wadogowadogo wanaoshiriki katika kilimo cha mkataba. Uamuzi wakushiri katika utafiti huu uko juu yako na hakutakuwa na athari zozote endapo utaamua kutoongea na mimi.

Ikiwa unamaswali yoyote kuhusu utafiti huu na ungependa kuongea na mtu mwingine mbali na mimi, unahimizwa kuwasiliana na huduma kwa washiriki wa utafiti kupitia anuani hii: D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455; (612) 625-1650. irb@umn.edu.

Asante sana kwa muda wako.

Kwa mawasiliano zaidi unaweza kuwasiliana na mimi, au msimamizi wangu au ofisi inayohusika na haki za washiriki wa utafiti kwa anuani zifuatazo:

Kwa hapa Tanzania napatikana kupitia:

Francis Lyimo
Chuo kikuu cha Dar es Salaam, Idara ya Sosholojia na Anthropolojia
P.O Box 35043
Dar es Salaam
Cell Phone: 0621694751.
E-mail: lyimo002@umn.edu

Baada ya August 2019, nitapatikana kupitia:
Francis Lyimo
Idara ya Sosholojia
University of Minnesota-Twin Cities
267 - 19th Ave. South
909 Soc Sciences Bldg.
University of Minnesota-Twin Cities
Minneapolis, MN 55455
Email: lyimo002@umn.edu

Vile vile unaweza kuwasiliana na msimamizi wangu kupitia:

Rachel Schurman
Professor, Idara ya Sosholojia
267 - 19th Ave. South
909 Soc Sciences Bldg.

University of Minnesota-Twin Cities
Minneapolis, MN 55455
Ph: 612-624-1039/Fax: 612-624-7020
schurman@umn.edu

Ikiwa una maswali yoyote kuhusu haki zako kama mshiriki katika utafiti huu, unahimizwa kuwasiliana na bodi ya kuhakiki tafiti ya chou kikuu cha Minnesota kupitia anuani hii:

Institutional Review Board
University of Minnesota-Twin Cities
D 528 420 Delaware St. SE
Minneapolis, MN 55455-0392
Phone: (612) 625-1650
Email: irb@umn.edu

Ridhaa:

Nimesoma na kuelewa Habari iliyoelezwa hapo juu. Nimeuliza maswali na kupata majibu sahihi. Ninakubali kushiriki katika utafiti huu.

Sahihi ya Mshiriki ______________________ Tarehe _______________

Sahihi ya Mtafiti ________________________ Tarehe _______________

Appendix 2: Oral Consent for Company Representatives, Local Government Agricultural Experts, and NGO Representatives
Contract Farming in Tanzania: Implications for Smallholder Farmers' Gender Relations, Livelihoods, and Subjectivities

My name is Francis Lyimo, and I am a graduate student in the Department of Sociology at the University of Minnesota in the United States. I am here to conduct a study for my dissertation research project which focuses on Contract Farming and its Implications for Smallholder Farmers' Household Gender Relations and Livelihoods in Tanzania. I am studying rice farming in Mngeta, Kilombero.

I would like your permission to ask you some questions about the history of contract farming in Tanzania and your experiences in the rice sector, with the industry more broadly (or with the company), and with smallholder farmers. You have been selected to participate in this study because of your knowledge of the sector and the local economy. Our conversation should take about 45 minutes. If need be, I may request a follow-up conversation to get more in-depth about some of the things we will discuss today.

All the data I will gather from you will remain strictly confidential with respect to your personal identity unless you specify otherwise. Strong efforts will be made to limit the use and disclosure of your personal information to people who may have a need to review this information, including the Institutional Review Board at the University of Minnesota and the Tanzania Commission for Science and Technology (COSTECH), except as may be required by law. If I publish a report or an article, or present the results at a professional conference, I will protect your identity by using a pseudonym (code name). I will store all information is such a manner that no one else has access to it and could link you to the information you provide. All of my notes and audio files will be stored in my laptop, which has a strong and complex password. In order to further ensure confidentiality, I will regularly upload my interview data and transcripts onto a secure, password protected network drive accessible by only me via the University of Minnesota, which has very secure storage system. I will retain this data throughout the whole period of my program and thereafter to help me design other studies. My dissertation advisor and I will only be the people who have access to it.

I would like to take notes during our conversations, but I will not use your name or identify you in any way in these notes. Your participation in this research study is totally voluntary. If you *do* agree to be interviewed, please feel free to keep private any information you do not want to share, refuse to answer a question, or end our interview at any time. While your participation may not directly benefit you, it should help us to understand how contract farming affects smallholder farmers and their livelihoods in this area. It will also hopefully help policymakers design better agricultural policies and strategies. The decision to participate in the study is totally up to you and there will be no negative consequences if you decide not to talk with me.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), you are encouraged to contact the Research Subjects' Advocate Line, D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455; (612) 625-1650. irb@umn.edu. OR Director General, Tanzania Commission for Science and Technology (COSTECH), P.O. Box 4302, Ali Hassan Mwinyi Road, Kijitonyama (Sayansi) COSTECH Building, Dar es Salaam, Tanzania. Email: dg@costech.or.tz.

Thank you for your time.

NOTE: Although consent will be oral, I will hand my interviewees a card with the following information on it so that they can easily reach me, my advisor, and/or the IRB.

In Tanzania you can reach me at:
Francis Lyimo
University of Dar es Salaam, Department of Sociology and Anthropology
P.O Box 35043
Dar es Salaam
Cell Phone: 0662059623.
E-mail: lyimo002@umn.edu

After August 2019, you can reach me at:
Francis Lyimo
Department of Sociology
University of Minnesota-Twin Cities
267 - 19th Ave. South
909 Soc Sciences Bldg.
University of Minnesota-Twin Cities
Minneapolis, MN 55455
Email: lyimo002@umn.edu

You can also contact my adviser at:

Rachel Schurman
Professor, Department of Sociology

267 - 19th Ave. South
909 Soc Sciences Bldg.
University of Minnesota-Twin Cities
Minneapolis, MN 55455
Ph: 612-624-1039/Fax: 612-624-7020
schurman@umn.edu

If you have any questions about your rights as a research subject, the Institutional Review Board at the University of Minnesota at:

Institutional Review Board
University of Minnesota-Twin Cities
MMC 820
420 Delaware St. SE
Minneapolis, MN 55455-0392
Phone: (612) 626-5654
Email: irb@umn.edu

Statement of Consent: I have read the above information. I have asked questions and have received answers. I voluntarily consent to participate in the study.

Participant's Signature ____________________ Date ________________

Investigator's Signature ___________________ Date ________________

Appendix 3: Interview guide for smallholder farmers
Contract Farming in Tanzania: Implications for Smallholder Farmers' Gender Relations, Livelihoods, and Subjectivities

Introduction/background

1. Name and age
2. Occupation
3. Where were you born?
4. Did you move into this village from somewhere else? When did you move in and why?
5. For how long have you lived in this village?
6. How can you describe this village? (Probe its origin, ethnic composition, relationship with other people/newcomers, and economy).

Livelihood's strategy

1. What are the main economic activities in this village?
2. What do you do for a living?
3. For how long have you been doing what you do for a living? What else did you do before that? Why did you change?
4. How do you allocate your time across different activities?
5. When did you start rice farming? Why?

6. How have you been doing it? Has that changed over time? How and why?
7. Who do you work with at the farm and why? Can you take me through what each person does on the farm? (Probe about men, women, and children, are they family members? Hired? How are they paid? Who pays them? etc)
8. I understand that rice farming goes through various stages, would you please take me through each stage of farming and tell me who does what and why?

Land tenure, access, ownership, and use in Mngeta

1. Tell me how you got the farm you are working on. Who owns it? (Probe more)
2. Do you own land now? Did you own land in the past? Why? (Probe more about the size, and how it was used)
3. How is land transferred from one person to the other in this village? How is this done at the family/household level? How does it differ across family members? (Probe differences in age, birth order, marital status, gender, social class, and ethnicity)
4. Who has access to land in your community? Are you able to access land in your community today? What kind of access, just exploiting/using or ownership? (Probe the process of land access-i.e. How do you get access to land?) Do women have access to productive land? Which land? Why?
5. How does their access differ with social class, marital status, and ethnicity?
6. What systems of authority give you the right to access, use and exploit land?
7. Who decides on how the farm should be used? (Probe how much to cultivate, what to grow, how to grow it, when to grow it). Who owns the produce and why?
8. How is labor allocation done? Who decides on labor allocation? Why?
9. How is labor allocated across different crops over different seasons?
10. Are there any conflicts over this allocation? How are such conflicts resolved?
11. How does that differ with gender, class, and or ethnicity?
12. What happens with labor during the non-farming season?
13. How much does rice farming contribute to your living?
14. How are the farm products/harvests used and who decides on how to use the farm products?
15. How much income do you get from rice farming?
16. Who controls it?
17. How is it spent?
18. Who decides on how the income should be spent?
19. Has that changed over time? Why?

Smallholder farmers' experience with Contract farming

1. Do you have any agreement with an individual or a company about production? Which one? Please tell me more about the process and requirements.
2. For how long have you been practicing contract farming with KPL?
3. Who is more likely to participate in contract farming?
4. How large is the farm that you grow rice for Kilombero Plantation Limited company?
5. How do you feel about your relationship with the company?
6. Why did you decide to get into contract farming?
7. What are the terms and conditions? What do you think about these terms and conditions?

8. Who gets involved in the decision-making process to partner with this individual or company? Why? (Probe about negotiation, participants,)
9. How do you understand contract farming?
10. When did you start practicing contract farming?
11. What motivates you to participate?
12. Please tell me about the changes that you have experienced with contract farming
13. How do you respond to the terms of the contracts?
14. What happens when the contract is violated? How does this differ with gender, social class, and ethnicity?
15. How do you benefit from a contract farming system? (Probe more about what the contract offers).
16. What are the benefits and disadvantages of contract farming to different social groups (men, women) in your community/family and farming activities? (Probe production, distribution, and consumption patterns)
17. Is contract farming good for who under what conditions? Why? How has that changed within the household?
18. How do you think about yourself?

Thank you for your participation.

Appendix 4: Interview guide for NGO representative, KPL representative, and Local government official.

Contract Farming in Tanzania: Implications for Smallholder Farmers' Gender Relations, Livelihoods, and Subjectivities

1. Tell me about the political economy of the area. What are the main economic activities in the area? Have there been any changes since you came here? What changes and why?
2. Tell me more about KPL
3. Tell me more about contract farming
4. How do you define contract farming? What are the conditions or requirements for participation/membership?
5. What are the benefits of contract farming in Mngeta?
6. Is there anything you are proud of that results from contract farming since the establishment of KPL
7. How has commercialization affected people's self-provisioning practices?
8. How are the effects of rice commodification in the context of contract farming experienced by both men and women in Mngeta ward?
9. Now that rice has more value, have men become more interested and engaged in its production?

10. How have cropping patterns changed as a result of KPL's presence in the area? How has this shaped or altered the division of labor? What are the implications for men and women's labor (recognizing that this may be v difficult to answer b/c of variation over the seasons)
11. How are decisions, rights, and responsibilities about (a) what crops to grow, (b) how much to grow, and (c) who "should do what" with respect to those crops, organized at the household level? (I am interested here in gendered decision-making processes.)
12. What is happening to other crops that farmers typically grew as a result of participation in the (presumed) growth in commercial rice markets?
13. What claims do the various actors such as the state, agribusiness company (KPL), and smallholder farmers make about contract farming? How do these actors respond to such claims? How do smallholder farmers respond to contract farming in Mngeta?
14. What kind of farmers does contract farming create and how do these farmers influence the nature of contract farming?
15. How have they changed compared to non-contractors (those who are not in contract farming)?
16. What are the impacts of smallholder farmers' response to contract farming on contract farming and household gender, social relations, and household structure?
17. How have contract farming arrangements evolved over time in response to various forms of responses (if any)?
18. In the context of various power asymmetries, rooted in class, gender, ethnicity, and generation, to what extent can contract farming improve smallholders' lives?

Thank you for your participation.

Appendix 5: Follow-up Interview Guide questions for KPL and Contract Farming project

Contract Farming in Tanzania: Implications for Smallholder Farmers' Gender Relations, Livelihoods, and Subjectivities

About KPL and the impact of its closure on the community

What has happened with the KPL farm?

Did KPL find any new investors? Has anyone come in to take over the business?

Are there any employees who still work there? How many people lost their jobs?

When exactly did it close down? When did it stop buying rice from farmers?

How did life change for the people in Mngeta when the company closed?

How about the local economy -- what happened after KPL closed?

Rice market

Are smallholder farmers still growing rice? Who are they selling their rice to now? Is there much of a market for rice?

What has happened to prices -- are farmers getting paid more or less than they did when KPL was operating? Why?

How did the farmers feel about KPL's closure? Who do they blame?

Why did it shut down?

Longevity of SRI

Are many farmers still using SRI techniques? Which techniques are they continuing to use and which ones have they abandoned?

Do you have any idea what fraction of farmers who were trained in SRI methods are still using them?

What explains their abandonment of these methods, if they *have* abandoned them?

Is NAFAKA still working in the area? What is it doing?

Contribution to the state/government at different levels

What was the impact of the decline of KPL on the local government and district government in terms of tax revenues? [roads, school repairs, dispensaries, water, etc.]

Thank you for your participation.

Appendix 6: Smallholder Farmers' Questionnaire-Mngeta Ward

Contract Farming in Tanzania: Implications for Smallholder Farmers' Gender Relations, Livelihoods, and Subjectivities

I will give them a separate consent form before I start interviewing them

My name is Francis. I am a student at the University of Minnesota, USA. I am currently doing research about rice farming and its implications for smallholder rice farmers. This research is part of the requirement for the completion of my program at the mentioned university. I am speaking to smallholder farmers about their participation in contract farming through SRI, and how that helps them run their daily life. This conversation is confidential and whatever we will discuss here will not be disclosed to any other person who is not part of this research. To ensure confidentiality, this conversation will not require me to record your name anywhere. You are being selected based on your experience and knowledge of farming. This conversation will approximately take between 15 and 20 minutes and I request your participation. You are free to withdraw or to pass any question should you find a reason to do so. You will not be penalized for any decision you take.

1. Region ________________

2. District _______________
3. Ward __________________
4. Place of residence __________________________
5. Place of birth _____________ *(if born in place of residence skip to question 7)*
6. **Reasons for migration**
   a) *Rice farming*
   b) *Following relatives*
   c) *Marriage*
   d) *Employment at KPL*
   e) *Business*
7. **Age _______________**
8. **Gender**
   a) *Male*
   b) *Female*
9. **Marital status**
   a) *Married*
   b) *Single*
   c) *Widower/widow*
   d) *Divorced/Divorcee*
   e) *Cohabiting*
10. **Education level completed**
    a) *Primary education*
    b) *Secondary education (from four or form six)*
    c) *Vocational training*
    d) *Diploma*
    e) *Degree*
11. **Religion**
    a) *Christian*
    b) *Muslim*
12. ***Traditionalist***
    Number of people living in the household ________________
    a) *Women* ______________
    b) *Men* ______________
    c) *Children (18 years and below)* __________________
13. **Who is the head of the household?**
    a) *A man*
    b) *A woman*
14. **Ethnicity**

a) *Mndamba*
b) *Msukuma*
c) *Mhehe*
d) *Mpogoro*
e) *Mluguru*
f) *Masai*
g) *Other Mention*_______________

15. **Main economic activity**

a) *Rice farming*
b) *Fishing*
c) *Poultry*
d) *Raising of pigs*
e) *Raising of cows*
f) *Petty business*
g) *Food vendor*
h) *Casual labor*
i) *Others, mention* __________

16. When did you start rice farming? _________________________

***17.* What do you do during off farm season?**

a) *Casual labor at KPL*
b) *Fishing*
c) *Construction work*
d) *Petty business*
e) *Others, mention* ____________________

Ownership and use of Land/Farm

18. Who owns the farm you are using?

a) *Myself*
b) *I rented it*
c) *My family*
d) *Others, mention* ____________________

19. How big is your farm? ____________________

20. How did you get it?*I inherited it*

a) *I bought it*
b) *I was given by a relative/friend*
c) *I just got it myself*
d) *I was given by the village government*

21. Do women own land in your village?

a) *Yes* (b) *No*

22. Do women get fertile land in your community?

a) *Yes*
b) *No*

23. How do women get land in your tribe?

a) *They inherit*
b) *They get it after marriage (through their husbands)*
c) *They buy it*
d) *They just get it themselves*
e) *They are given by the village government*
f) *They do not get it at all*

Distribution of housework and farm work and decision making

24. In your own experience, who makes most decisions on how to use the farm you are using?

a) Myself
b) My husband
c) My wife

d) Children
e) Extension officer
f) KPL
g) NAFAKA

25. In your own experience, who makes most decisions on what to grow on the farm you are farming?
a) Myself
b) My husband
c) My wife
d) Children
e) Extension officer
f) KPL
g) NAFAKA

26. In your own experience, who decides on how to plant?
a) Myself
b) My husband
c) My wife
d) Children
e) Extension officer
f) KPL
g) NAFAKA

27. In your own experience, who makes most decisions about household chores distribution?
a) Myself
b) My husband
c) My wife
d) Children
e) Extension officer
f) KPL
g) NAFAKA

28. In your own experience, who spends more time taking care of the family e.g., looking after the children, cooking, and cleaning?
a) A man
b) A woman
c) Children
d) Housemaid
e) Close relative

29. In your own experience, who makes most decisions about farm work?
a) Myself
b) My husband
c) My wife
d) Children
e) Extension officer
f) KPL
g) NAFAKA

30. Who spends more time doing farm work?

a) A man
b) A woman
c) Children
d) Housemaid
e) Close relative
f) Casual labor

31.

Crops	Myself	My partner	Both of us	Children	Extension officer	KPL	NAFAKA
Rice							
Maize							
Banana							
Cocoa							
Teak trees							

32. In your experience, who owns the harvest of the crops?
a) Myself
b) My husband
c) My wife
d) Children
e) Extension officer
f) KPL
g) NAFAKA

33. Where do you store your harvest after you harvest?
a) At home
b) SRI warehouse
c) At the husking machine
d) In a private warehouse

34. In your experience, who has the power to decide how the harvest should be used?
a) Myself
b) My husband
c) My wife
d) Children
e) Extension officer
f) KPL
g) NAFAKA

Decisions about Use of Income from Rice Farming

35. How much do you earn from rice farming? __________

36. To what extent does rice farming contribute in running your daily life?
a) Below 50%
b) 50%
c) 51-80%
d) 81-100%

37. Who owns the money obtained from rice farming?

a) Myself
b) My husband
c) My wife
d) Both
e) Children

38. Who makes most decisions about how to spend the money obtained from rice farming?
a) Myself
b) My husband
c) My wife
d) Both
e) Children

39. How do you spend the money obtained from rice farming?
a) Paying for school fees and school supplies
b) Household expenditure such as buying food, clothing and shelter
c) Family medication
d) Helping relatives with various problems
e) Buying farm to expand production
f) Getting prepared for the next farming season by buying inputs and paying labor
g) Building a house
h) Paying debt
i) Preparing a sendoff party

40. If you are buying food, which type of food do you usually buy?

____

41. Who provides money to buy food at your home?
(a) A man (b) A woman

42. Who usually makes decisions about the kind of food you should eat at home?
a) A man
b) A woman
c) Children
d) Housemaid
e) Close relative

43. Who cooks/prepares the food you eat at home?
a) A man
b) A woman
c) Children
d) Housemaid
e) Close relative

44. Who goes to buy the food you eat at home?
a) A man
b) A woman
c) Children
d) Housemaid
e) Close relative

Participation in Contract Farming

45. **What motivated you to participate in contract farming?**
    a) Presence of KPL
    b) Residence proximity with KPL
    c) Availability of reliable rice market from KPL
    d) Availability of farming inputs
    e) Training from NAFAKA
46. **Are there any advantages of contract farming?**
    (a) Yes (b) No

47. **If yes, how have you benefited from your participation in contract farming?____________________**
48. ***What challenges have you faced for participating in contract farming through SRI? __________________***
49. **Who benefits more from contract farming?**
    (a) A male farmer
    (b) A female farmer
    (c) KPL
    (d) Middlemen
    (e) Pesticide sellers
    (f) Fertilizer company
    (g) Casual laborer
    (h) Warehouse owner
50. **What are the disadvantages of participating in contract farming? ______________________**
51. **What led to the failure of KPL to proceed with contract farming? _______________________**

Thank you for your time and participation.

Dodoso kwa Wakulima Wadogo Wadogo wa Mpunga-Kata ya Mngeta

Kilimo cha Mkataba Tanzania: Hatima yake kwa Mahusiano ya Kijinsia ya Wakulima Wadogowadogo, Maisha yao, and Utambuzi wao

*** Nitawaapatia washiriki fomu ya ridhaa kabla ya kuwahoji***

Mimi naitwa Francis Lyimo, ni mwanafunzi wa chuo kikuu cha Minnesota, Marekani. Ninafanya utafiti kuhusu kilimo cha mpunga na athari zake kwa wakulima wadogowadogo wa mpunga. Utafiti huu ni sehemu ya kukamilisha masomo yangu katika chuo tajwa hapo juu. Ninaongea na wakulima wadogowadogo kuhusu ushiriki wao katika kilimo cha mpunga kupitia SRI na namna ambavyo kilimo hicho kinawasaidia kuendesha maisha yao ya kila siku. Maongezi haya ni siri na yote yatakayozungumzwa hapa hayatafahamika na mtu mwingine yeyote asiyehusika. Ili kuweka usiri zaidi, maongezi haya hayatahitaji kujua jina lako mahala popote pale. Wewe umechaguliwa kushiriki kutokana na uzoefu wako na ujuzi wako katika shughuli hizi za kilimo. Mazungumzo haya yatachukua takribani dakika kumi na tano na naomba ushirikiano wako. Unaweza kujitoa ama kutojibu swali lolote ikiwa unaona kuna sababu ya kufanya hivyo. Hautaadhibiwa kwa maamuzi yoyote yale utakayochukua.

1. Mkoa _______________
2. Wilaya _______________
3. Kata __________________
4. Kijiji unachoishi __________________________
5. Mahali ulipozaliwa _____________ (kama ni mzawa wa hapa, nenda swali la 7)
6. **Sababu za kuhamia** (a) kilimo cha mpunga
   (b) kufuata ndugu
   (c) ndoa
   (d) ajira kwenye kampuni ya KPL
   (e) biashara
7. **Umri wako** _______________
8. **Jinsi** (a) mwanaume
   (b) mwanamke
9. **Hali ya ndoa** (a) Nimeoa
   (b) Nimeolewa
   (c) sijaolewa/sijaoa
   (d) mjane/mgane
10. **Kiwango cha elimu uliyohitimu** (a)elimu ya msingi
    (b)elimu ya secondary kidato cha nne/sita
    (c) veta
    (d)diploma
    (e) shahada
11. **Dini yako** (a) mkristo
    (b)muislamu
    (c) mpagani
12. **Idadi ya wanakaya/wanafamilia** ________________
    (a) wanawake _____________
    (b) Wanaume _____________
    (c) Watoto (miaka 18 kushuka chini) _________________
13. **Je mkuu wa kaya yako ni** (a) mwanaume (b) mwanamke
14. **Kabila** (a)mndamba
    (b)msukuma
    (c) mhehe
    (d) mpogoro
    (e) Mluguru
    (f) Masai
15. **Shughuli kuu za kiuchumi** (a) kilimo cha mpunga
    (b) uvuvi
    (c) ufugaji kuku
    (d) ufugaji nguruwe
    (e) ufugaji wa ng'ombe
    (f) biashara ndogondogo
    (g) mama ntilie
    (h) ajira ya muda mfupi (kibarua)
16. **Ulianza lini kujishughulisha na kilimo cha mpunga?** _______________________
17. **Je wewe hufanya kazi gani wakati usio wa kilimo?**

(a) kazi za kibarua kwenye kampuni
(b) Uvuvi
(c) kazi za ujenzi
(d) biashara ndogondogo

Umiliki na matumizi ya Ardhi/shamba

18. **Shamba ninalotumia**
(a) ninamilimiliki
(b) nimekodisha
19. **Shamba lako linaukubwa gani? ___________________**
20. **Kama unalimiliki, je ulilipataje?**
(a) nilirithi
(b) nilinunua
(c) nilipewa na ndugu au rafiki
(d) nilijipakia mwenyewe
(e) nilipewa na serikali ya Kijiji
21. **Je wanawake wanamiliki ardhi katika kijiji chenu?** (a) ndiyo
(b) hapana
22. **Je wanawake wanapata Ardhi yenye rutuba katika jamii yenu?** (a) ndiyo (b) Hapana
23. **Je wanawake wanapataje Ardhi katika Kabila lenu?**
(a) wanarithi
(b) wanapata baada ya kuolewa
(c) wananunua
(d) wanapaka wenyewe
(e) wanapewa na serikali ya Kijiji
(f) hawapewi kabisa

Mgawanyo wa kazi za nyumbani na shambani na Ufanyaji wa maamuzi

24. **kwa uzoefu wako, ni nani hufanya maamuzi kuhusu namna ya kutumia shamba lako?**
(a) mimi
(b) mume wangu
(c) mke wangu
(d) Watoto
(e) mtaalamu wa kilimo
(f) kampuni ya KPL
(g) Nafaka
25. **Kwa uzoefu wako, ni nani hufanya maamuzi ya mazao gani yapandwe kwenye shamba unalolima?**
(a) mimi
(b) mume wangu
(c) mke wangu
(d) Watoto
(e) mtaalamu wa kilimo
(f) kampuni ya KPL
(g) Nafaka
26. **Kwa uzoefu wako, ni nani hufanya maamuzi ya namna ya upandaji?**

(a) mimi
(b) mume wangu
(c) mke wangu
(d) Watoto
(e) mtaalamu wa kilimo
(f) kampuni ya KPL
(g) Nafaka

27. Kwa uzoefu wako, ni nani huwa anafanya maamuzi kuhusu mgawanyo wa kazi za nyumbani?

(a) mimi
(b) mume wangu
(c) mke wangu
(d) Watoto
(e) mtaalamu wa kilimo
(f) kampuni ya KPL
(g) Nafaka

28. **Je ni nani huwa anatumia muda mwingi kuhudumia familia kama vile kuwaangalia Watoto, kupika, na kufanya usafi?**

(a) mwanaume
(b) mwanamke
(c) Watoto
(d) msaidizi wa kazi
(e) ndugu wa karibu

29. Kwa uzoefu wako, ni nani huwa anafanya maamuzi kuhusu mgawanyo wa kazi za shamba?

(a) mimi
(b) mume wangu
(c) mke wangu
(c) Watoto
(d) mtaalamu wa kilimo
(e) kampuni ya KPL
(f) NAFAKA

29. Je ni nani huwa anatumia muda mwingi Zaidi kufanya kazi za shamba?

(a) mwanaume
(b) mwanamke
(c) Watoto
(d) msaidizi wa kazi
(e) ndugu wa karibu
f) Kibarua

30. Kwa uzoefu wako, ni nani huwa anafanya maamuzi kuhusu ulimaji wa mazao yafuatayo:

Mazao	Anayefanya maamuzi						
	mimi	Mwenza	Wote	watoto	Mtaalamu wa kilimo	Kampuni ya KPL	Nafaka

Mpunga							
Mahindi							
Ndizi							
Cocoa							
Mitiki							

31. Kwa uzoefu wako, ni nani humiliki mavuno mkishavuna?
(a) mimi
(b) mume wangu
(c) mke wangu
(c) Watoto
(d) mtaalamu wa kilimo
(e) kampuni ya KPL
(f) Nafaka

32. Je huwa unahifadhi wapi mazao yako ya mpunga baada ya kuvuna?
(a) nyumbani
(b) ghala la kampuni (SRI)
(c) mashineni
(d) kwa watu binafsi

33. Kwa uzoefu wako, ni nani huwa na mamlaka ya namna ya kutumia mazao mkishavuna?
(a) mimi
(b) mume wangu
(c) mke wangu
(c) Watoto
(d) mtaalamu wa kilimo
(e) kampuni ya KPL
(f) Nafaka

Maamuzi kuhusu matumizi ya kipato kitokanacho na kilimo cha mpunga

35. **Makadirio ya kiasi cha pesa unachopata kwa mwaka kutokana na kilimo cha mpunga ___________**

36. **Kilimo cha mpunga kinachangia kwa kiasi gani katika kuendesha Maisha yako ya kila siku?**
(a) chini ya asilimia hamsini
(b) asilimia hamsini
(c) asilimia 51-80
(d) asilimia 81-100

37. **Nani humiliki pesa ipatikanayo kutokana na kilimo cha mpunga?**
(a) mimi mwenyewe
(b) mume wangu
(c) mke wangu

(d) wote
(e) Watoto

38. **Ni nani mara nyingi hufanya maamuzi ya namna yakutumia pesa mnayopata kutokana na kilimo?**
(a) mimi mwenyewe
(b) mume wangu
(c) mke wangu
(d) wote
(e) Watoto

39. **Je pesa ipatikanayo kutokana na kilimo cha mpunga hutumikaje?**
(a) kulipa ada za shule na mahitaji ya shule
(b) matumizi ya nyumbani kama vile kununua chakula, mavazi na malazi
(c) matibabu ya familia
(d) kusaidia ndugu wenye matatizo mbalimbali
(e) kununua shamba ili kuongeza eneo la kulima
(f) kujiandaa na msimu unaofuata wa kilimo kwa kununua pembejeo na kulipa vibarua
(g) ujenzi wa nyumba
(h) kulipia mkopo
(i) kufanya sherehe za kuoza mtoto

40. **Kama unanunua chakula, ni chakula gani huwa unapendelea kununua?**
____

41. **Ni nani hutoa pesa kwa ajili ya kununua chakula pale nyumbani?**
(a) mwanamke(b) mwanamke

42. **Ni nani hufanya maamuzi ya ni chakula gari mle pale nyumbani?**
(a) mwanaume
(b) mwanamke
(c) watoto
(d) msaidizi wa kazi (binti)
(e) ndugu wa karibu

43. **Ni nani hupika chakula mnachokula pale nyumbani?**
(a) mwanaume
(b) wanamke
(c) Watoto
(d) msaidizi wa kazi (binti)
(e) ndugu wa karibu

44. **Ni nani hufanya manunuzi ya chakula mnachokula pale nyumbani?**
(a) mwanaume
(b) mwanamke
(c) Watoto
(d) msaidizi wa kazi (binti)
(e) ndugu wa karibu

Ushiriki katika kilimo cha mkataba kupitia SRI

45. **Ni nini kilikushawishi kujiunga na kilimo cha mkataba kupitia SRI?**
(a) uwepo wa KPL
(b) ukaribu wa makazi yako na KPL

(c) uwepo wa soko la uhakika la mpunga kutoka KPL
(d) upatikanaji wa pembejeo za kilimo
(e) mafunzo ya Nafaka

46. **Je, kuna faida zozote za kilimo cha mkataba kupitia SRI?**
(a) Ndiyo (b) Hapana

47. **Kama ndiyo, umefaidikaje kutokana na kilimo cha mkataba kupitia SRI?**
____

48. **Umekabiliwa na changamoto gani kwa wewe kushiriki katika kilimo cha mkataba kupitia SRI?** ____________________

49. **Ni nani ananufaika Zaidi na kilimo cha mkataba?**
(a) Mkulima mwanaume
(b) Mkulima mwanamke
(c) KPL
(d) Mchuuzi
(e) Muuza madawa yakilimo
(f) Kampuni ya mbolea
(g) Kibarua
(h) Mmiliki wa ghala

49. **Ni nini hasara za kushiriki katika kilimo cha mkataba kupitia SRI?**
____

50. **Ni nini kilipelekea kushindwa kwa KPL kuendelea na kilimo chamkataba?**
____

Asante kwa muda wako na ushiriki wako.

Appendix 7: Observation Guide
Contract Farming in Tanzania: Implications for Smallholder Farmers' Gender Relations, Livelihoods, and Subjectivities

The observation process focused on, and took note, among others, of the following:

- The setting of Mngeta
- Type of livelihood activities in which the residents of Mngeta are engaged and the way they do their activities, cultural practices, etc.
- Farming practices
- Location of smallholder farmers' farms
- NAFAKA training sessions
- The way the residents of Mngeta interact and relate to their environment and towards each other
- Body movement and gestures during key informant interviews, and informal interviews