



Lund University Master of Science in
International Development and Management



Photo: Addax Bioenergy-Sugarcane-Biofuel Project: (Photo by Benjamin John Sesay)

**EFFECTS OF THE ADDAX BIOENERGY INVESTMENT ON FEMALE
FARMERS' RIGHTS TO LAND AND THEIR LIVELIHOODS IN
BOMBALI DISTRICT, SIERRA LEONE**

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Abstract

Attempts to promote women's rights to land in Sub-Saharan Africa have attracted attention in both academia and from an international development perspective. Female Farmers (FFs) in Bombali district in northern Sierra Leone gain access to farmland through male heritages under customary practices. This makes them dependent on maintaining connections with male lineages in order to gain rights to land, which include ownership, control, as well as access and use. The Swiss based company, Addax Bioenergy is involved in a sugarcane-biofuel-project in the district of Bombali, which has led to land ownership shifting legally to the company on a long-term lease. Land access and use have been limited in areas, which overlap the company's project site. Proponents of the Addax Bioenergy project have assumed such investment would contribute to Sierra Leone's development strides. This thesis examines three key concepts which include: ways of acquiring farmland and the Addax Bioenergy's Large-Scale Land Acquisition (LSLA), the female farmers' understanding of LSLA, and the impact on the rights to land and livelihoods. The thesis uses a mixed method approach together with Noam Chomsky's (1999) theoretical framework on profit over people: neoliberalism and the global order, and Naila Kabeer's (2005) Gender Equality and Women's Empowerment to analyse the data aimed at answering the research question.

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Table of Contents

ACKNOWLEDGEMENTS	3
LIST OF ABBREVIATIONS	7
CHAPTER ONE	7
1.0 INTRODUCTION	8
1.2 STATEMENT OF RESEARCH PROBLEM	9
1.2 AIM OF RESEARCH	10
1.3 RESEARCH RATIONALE	11
1.4 RESEARCH SCOPE	12
1.5 RESEARCH LIMITATIONS	12
1.6 THESIS OUTLINE	13
CHAPTER TWO	13
2.0 GENERAL BACKGROUND	14
2.1 COUNTRY PROFILE	14
2.2 FIELD RESEARCH AREA	14
2.3 THE CURRENT LAND RUSH AND THE DRIVING FORCES	15
2.4 A GLANCE AT THE ADDAX BIOENERGY INVESTMENT	16
2.4 FINANCIERS OF THE ADDAX BIOENERGY INVESTMENT	19
2.4.1 SCANNING THROUGH THE FDP FOR FOOD PRODUCTION	19
2.4.2 THE LAND LEASE AGREEMENT	20
CHAPTER THREE	20
3.0 THEORETICAL FRAMEWORK	21
3.1 KEY CONCEPTS AND DEFINITIONS	21
3.2 PROFIT OVER PEOPLE: NEOLIBERALISM AND THE GLOBAL ORDER	23
3.2.1 PROPONENTS OF NEOLIBERALISM	24
3.2.2 CRITIQUES OF NEOLIBERALISM	24
3.3 PASSION FOR FREE MARKETS	25
3.4 MARKET DEMOCRACY: DOCTRINE AND REALITY	26
3.5 GENDER EQUALITY AND WOMEN'S EMPOWERMENT	27
CHAPTER FOUR	27
4.0 RESEARCH METHODOLOGY	28
4.1 CASE SELECTION	28
4.2 SAMPLING DESIGN	29
4.2.1 SAMPLING VILLAGE CATEGORY	29
4.2.2 SAMPLING CATEGORY OF THE FEMALE FARMERS	29

4.3 SOURCE OF DATA	30
4.4 METHODS OF DATA COLLECTION	30
4.4.1 SURVEY	31
4.4.2 KEY INFORMANT INTERVIEWS	31
4.4.3 FOCUS GROUP DISCUSSIONS	32
4.4.4 DIRECT OBSERVATIONS	32
4.4.5 DESK RESEARCH	32
4.5 METHODS OF DATA ANALYSIS	33
4.5.1 DATA CODING AND INTERPRETATION	33
4.6 POSITIONALITY IN THE RESEARCH FIELD	34
4.7 RELIABILITY AND VALIDITY	34
4.8 ETHICAL DILEMMAS/CONSIDERATIONS	35
CHAPTER FIVE	36
<hr/>	
5.0 RESEARCH RESULTS AND ANALYSIS	36
5.1 SECTION ONE: WAYS OF ACQUIRING FARMLAND BY THE FFs AND THE ADDAX BIOENERGY’S LSLA	36
5.1.1 PARENTAL LINEAGE	37
5.1.2 OTHER WAYS OF ACQUIRING LAND	38
5.1.3 MARITAL LINEAGE	38
5.1.4 RENTAL	38
5.2 SECTION TWO: THE LSLA AND THE FEMALE FARMERS’ UNDERSTANDING	39
5.2.1 ACCESS TO EDUCATION/LITERACY LEVEL	40
5.3 THE RIGHTS’ TO LAND UNDERSTANDING AMID THE LSLA	41
5.3.1 THE RIGHTS TO LAND AWARENESS	41
5.3.2 CUSTOMARY PRACTICES	41
5.3.3 UNDERSTANDING THE ADDAX BIOENERGY’S LAND LEASE	42
5.4 SECTION THREE – THE IMPACT ON THE RIGHTS TO LAND AND LIVELIHOODS	42
5.4.1 LAND OWNERSHIP AND CONTROL	43
5.4.2 LAND ACCESS AND USE	43
5.5 LIVELIHOODS OF THE FEMALE FARMERS (FFs)	45
5.5.1 HOUSEHOLD SIZE	45
5.5.2 AGE DISTRIBUTION	46
5.5.3 HOUSEHOLD INCOME AND EXPENDITURE	47
5.5.4 CHANGING SYSTEM OF FARMING	48
5.6 THE COPING STRATEGY	49
5.6.1 CHARCOAL BURNING FOR SURVIVAL	49
5.7 CASE REFLECTIONS	50
CHAPTER SIX	51
<hr/>	
6.0 CONCLUSIONS	51

REFERENCE LIST	52
LIST OF APPENDICES	59
APPENDIX 1 - RECORD OF RESPONDENTS	59
APPENDIX 2 – INTERVIEW GUIDE FOLLOWED	60
APPENDIX 3: FOCUS GROUP DISCUSSION - CODE: FGD	61
APPENDIX 4: SURVEY FOR THE FEMALE FARMERS (FFs)	62
APPENDIX 7: CASE ANALYSIS ADDAX BIOENERGY	68
APPENDIX 8: MAP OF ADDAX BIOENERGY PLANTATION SITE	69
LIST OF TABLES	71
TABLE 2: VILLAGE HOUSEHOLDS' INCOME	71
TABLE 3: VILLAGE HOUSEHOLDS' EXPENDITURE	72

List of Abbreviations

CSOs	- Civil Society Organizations
FAO	- Food and Agricultural Organization of the United Nations
FDP	- Farmer Development Programme
FFLS	- Farmer Field and Life School
FFs	- Female Farmers
FGDs	- Focus Group Discussions
GoSL	- Government of Sierra Leone
ILC	- The International Land Coalition
IMF	- The International Monetary Fund
LSLA	- The Large-Scale Land Acquisition
MAFFS	- The Ministry of Agriculture, Forestry and Food Security
NGOs	- Non-Governmental Organizations
RAI	- Responsible Agricultural Investments
SiLNoRF	- Sierra Leone Network on the Right to Food
SLIEPA	- Sierra Leone Investment and Export Promotion Agency
SLL	- Sierra Leone Leones
SFs	-Smallholder Farmers
SPSS	- Statistical Package for Social Sciences
SSA	- Sub-Saharan Africa

CHAPTER ONE

1.0 INTRODUCTION

The rush for available land to invest in agri-business by multinational companies has increasingly gained attention in academia as a result of the social, economic, political and environmental transformations it has created. It has become a major concern in Sub-Saharan Africa (SSA) where more than 70% of the demand for farmland is focused (Leete, et al., 2013:1). Land is among the most important resources for food production and the groundwork on which virtually all agricultural activities are built. For people especially in the rural parts of the developing world, access to land is vital for sustaining livelihoods. Rural women are considered to provide 80% of food needs worldwide through working in agriculture, and yet they own less than 10% of the land in spite of the global commitments to address gender inequality on land and property rights (Ibid). Moreover, land has been part of the many social and political struggles, and remains the key property that rural people including women need to own and control on the one hand, and access and use on the other in order to secure their livelihoods (Action Aid, 2012). As such, women's rights to land and their livelihoods have continued to come under threat due to increased Large Scale land Acquisition (LSLA) in SSA. Female Farmers' (FFs) rights to land in this research signify the rights to own and control land as well as the rights to access and land in order to engage in productive smallholder farming for the sustenance of their livelihoods and well-being. Kay (2006) argues that the poverty level among smallholder farmer households such as FFs may reduce if their property rights including their land rights are boosted.

The FFs' level of understanding in SSA on land rights appears to be very low due to their poor educational background. Recent studies in Sierra Leone show that approximately 52% of the country's population is women, who account 55% of the workforce for agricultural production. Women are largely responsible for their family's wellbeing vis-à-vis food and the payment of school fees for their children in the country. Women suffer from extreme inequalities including low literacy rates, limited access to land, and minimal legal protection among others (Action Aid, 2013; Christian Aid, 2013; GoSL, 2013a:133).

1.2 Statement of Research Problem

The purpose of this research is to investigate the FFs' rights to land and their livelihoods amid the Addax Bioenergy's investment in Bombali district in northern Sierra Leone. Previous studies by Unruh & Turray (2006); SiLNoRF (2012); and Christian Aid (2013) confirm that the FFs used to do the bulk of the farming activities in areas overlap by the Addax Bioenergy-sugarcane-biofuel project. Nonetheless, the debarring customary laws limit the FFs from legal rights to land vis-à-vis land ownership and control titles. The FFs have the rights to access and use farmland through either parental, marital, rental lineage, male relatives or in other informal ways. The restriction of the FFs' rights to land such as ownership, control, access and use may contribute to increase their vulnerability in terms of securing their livelihoods. These restrictions may have led to the FFs' rights to land together with their landholding situation inherently dependent and insecure.

Unlike other parts of Sierra Leone, the entire north of Sierra Leone has a history of generally restricting women from owning and controlling land due to the existing customary practices. There is no definite reason as to why the north of Sierra Leone exclusively follows these customary laws as opposed to the other parts in the country. Education and literacy rates may play a significant role, since the other parts of the country have highly educated persons than those in the north. This assertion may connect to Sierra Leone's colonial heritage (Banya, 1993; Unruh & Turray, 2006). A study carried out by Mocan & Cannonier (2012) claim that increase in education has no effect on men's attitudes towards women's welfare or well-being. Although some of the men/landowners can read and write, they still hold on to the customary laws, which limit women's rights to land, particularly in northern Sierra Leone. The country's new national land policy draft did not provide adequate space for women entitlement or rights to land in the researched district. This makes women's rights to land uncertain (GoSL, 2013b).

In addition to the above uncertainties, the Addax Bioenergy's presence appears to have affected mostly the FFs' rights to land and their livelihoods, especially in areas overlap by the company's sugarcane-biofuel-project. The FFs are adversely affected by Addax Bioenergy's Large-Scale Land Acquisition (LSLA) or large-scale land lease due to their dependence on land. The FFs are generally land users through authorization from the landowners (men) in the district. Many smallholder farmers mostly FFs have been displaced from the land they previously used for

agricultural purpose as a result of the presence of Addax Bioenergy. The company is now competing for land with community food crops in areas touched by its sugarcane-biofuel project in the district (ActionAid, 2013; Christian Aid; Shepherd, 2013; English and Sandström, 2014). Previous studies also establish that women have to walk long distances to access water, medicinal herbs, firewood, and land to carry out their agricultural activities in areas which overlap the company's project. The environment in these areas has been negatively impacted through the destruction of economic trees, water sources, and thus putting community people's means of livelihoods at risk (ActionAid, Ibid; Christian Aid, Ibid). Borrás Jr & Franco (2010:7) argue that the risks of the land rush in the developing world have created loss of biodiversity, carbon stocks, and created long-term ecological sustainability problems.

The Addax Bioenergy-sugarcane-biofuel project in the district of Bombali in Sierra Leone is supported by the GoSL through the Sierra Leone Investment and Export Promotion Agency (SLIEPA) and the MAFFS. The GoSL's aim of supporting this project is to promote sustainable food security and to reduce poverty by creating jobs for its citizenry through large-scale foreign investment across the rural parts of Sierra Leone (Anane & Abiwu, 2011:20; Beall & Rossi, 2011; Magbity, 2013).

1.2 Aim of Research

This research seeks to examine the impact of the Addax Bioenergy's presence on the female farmers' rights to land and their livelihoods in Bombali district in northern Sierra Leone. In this thesis I draw on Noam Chomsky's (1999) theoretical framework on profit over people: neoliberalism and the global order in an effort to investigate the idea that the company's perceived personal profit backed by state actors and other institutions has not trickled down well to the most vulnerable group, namely the FFs. Chomsky's emphasis on the passion for free markets on the one hand, and the market democracy - doctrine and reality on the other are particularly useful to my analysis. The concepts help to explain how and why exactly the FFs are affected by the Addax Bioenergy-sugarcane-biofuel project. While neoliberalism helps to explain the problem in order to understand the potential solutions, I turn to Naila Kabeer's (2005) Gender Equality and Women's Empowerment. This perspective emphasizes on women's access to education in order to improve their wellbeing, which is vital in the context of this thesis. The chosen theories, and key defined concepts of this thesis will be useful in yielding

results to create understanding about the situation of the FFs in Bombali district in northern Sierra Leone.

In consistence with the overall aim of this thesis, the research question is posed as:

- ❖ *What impact does the Addax Bioenergy's presence have on the female farmers' rights to land and their livelihoods?*

In order to answer the research question, the thesis investigates: (1) ways of acquiring farmland and the Addax Bioenergy's Large-Scale Land Acquisition (LSLA), (2) LSLA and the female farmers' understanding, and (3) the impact on the rights to land and livelihoods. I focus on these three key standpoints in order to examine the impact on the ways of acquiring farmland by the FFs amid the LSLA, and to assess the understanding of the FFs about the trend. This will equally enable me to assess the impact on the rights to land and livelihoods of the FFs in the research area.

1.3 Research Rationale

The research will be beneficial due to the unique nature of the customary laws/practices which prevent women from owning and controlling land. These practices have been compounded with the constraints the FFs face to land access and use in areas affected by the Addax Bioenergy-sugarcane-biofuel project.

The study is vital to capture a clearer understanding about how the Addax Bioenergy investment has affected the FFs' rights to land and their livelihoods in the district. This thesis seeks to increase the necessary awareness about the FFs' rights to land among policy makers and the investors/financiers of Addax Bioenergy. This will help to infuse the needed awareness on relevant actors to empower the FFs in an effort to pave the way to secure their rights to land and livelihoods in the selected district.

The thesis helps to clearly pinpoint and describe some of the current barriers that the FFs face regarding land ownership and control, as well as access and use in the district. This thesis will likewise help to inform future researchers and the wider academic audience in adopting better ways of securing the plight of the FFs. The fact is that the barriers for equal land rights in the district may have socio-cultural, economic, and political implications.

1.4 Research Scope

The research was conducted in two chiefdoms that comprise six villages in Bombali district in northern Sierra Leone. For the purpose of this research, the villages are classified into three categories. They include: Roportor coded as (R) in Bombali Shebora Chiefdom and Man-Man (MM) in Makari Gbanti Chiefdom, both of which have totally been upset by the Addax Bioenergy project in the district. Makontho (M) in Bombali Shebora Chiefdom and Kolishoko (K) in Makari Gbanti Chiefdom have partly been affected villages in the district. Lastly, Worreh Wanda (WW) in Makari Gbanti Chiefdom and Rosheth Nin (RN) in Bombali Shebora Chiefdom are non-affected villages but close to Addax Bioenergy project proximity- (see table 1) in the list of appendices.

Maintaining the validity of the data collected in the field, I cross-checked the data through key informant interviews, which targeted Addax Bioenergy officials, government authorities, local chiefs, a small number of activists, and few staff members of the Sierra Leone Network on the Right to Food (SiLNoRF). SiLNoRF is a local NGO operating to promote the rights to food, since 2008 in the research area. The situation of the FFs before the Addax Bioenergy investment, their current situation and understanding about the rights to land and their livelihoods are explored in the research.

The subjects of the study are essentially the FFs themselves. I also contacted Addax Bioenergy officials, local chiefs at (R, M, and WW), the District Agricultural Officer of Bombali District, and SiLNoRF project team to triangulate information collected from the FFs. Subsequently, how the FFs understand that their rights to land and livelihoods have been worsened or improved due to the Addax Bioenergy-sugarcane-biofuel project is verified in the field.

1.5 Research Limitations

I conducted a basic survey and interviews despite constraints in the research area. Hard and soft copies of relevant materials are obtained despite unwillingness on the part of my respondents. I collected the required data despite the limited time and other constraints such as poor roads to access the research area. Time, financial and contextual constraints made me decide to do an explorative study. This choice is very good as it may pave the way for further research on the

topic. The field research took place in November 2013 to January 2014 as well as in June and July 2014.

1.6 Thesis Outline

This thesis is outlined with six chapters. The first chapter constitutes the thesis introduction on women's rights to land and their livelihoods in regards to the land rush by multinational companies in SSA. This comprises the statement of the research problem, which lay emphasis on the impact of the Addax Bioenergy-sugarcane-biofuel project on the FFs rights to land and their livelihoods amid the customary laws/practices in Bombali district. This is followed by the research aim, the research rationale, the research scope and the research limitations. The second chapter provides information about a general background of country profile, the research area, the current land rush and the driving forces, a glance at Addax Bioenergy investment, scanning through the FDP for food production, and the land lease agreement. Chapter 3 describes the thesis theoretical framework of Noam Chomsky's (1999) profit over people: neoliberalism and the global order. The chapter includes Naila Kabeer's (2005) gender equality and women's empowerment standpoints. This provides the premises necessary to analysis the data and to answer the research question. The outline is followed by Chapter 4, which presents the research methodology. A reflection based on the methods, reliability and ethical considerations were constructed. The fifth chapter comprises the research results and analysis. Lastly, the sixth chapter presents the conclusions of the thesis.

CHAPTER TWO

2.0 General Background

2.1 Country Profile

Sierra Leone has a total land space of 71,740 square kilometres. The tiny former British colony is situated in the West Coast of Africa. Estimate shows that 58% of the country's total land space is used for agricultural purposes, and 25% of the land is classified as arable or suitable for cultivation. Sierra Leone is a key location for tropical plants such as cassava, palm oil, sugarcane and other related food crops. The country's weather condition, large arable lands and irrigation friendly environment have led to an attraction for biofuel investment. Sierra Leone's agricultural sector employs around 60% of its population and accounts for approximately 49% of its Gross Domestic Product (GDP) (Magbity, 2013; Leete et al., 2013:2, 8).

The West African country emerged from eleven years of brutal civil war from 1991 to 2002. The country is recently plagued by an Ebola epidemic from March 2014 at present (2015). In 2011, the country has a population of 6 million with an average annual growth rate of 2.1% and more than 60% of its population lives outside urban areas. The West African nation was ranked eight last in the Human Development Index (HDI) and more than half of the population lives in poverty (Leete et al., Ibid). Evidence shows that the country was one of the world's poorest even before the Ebola outbreak in March 2014. The Ebola outbreak led to many of Sierra Leone's iron ore mines – a major employer and source of tax revenue to be shut down. Smallholder Farmers (SFs) including FFs became frightened and subsequently abandoned their farmlands. The government of Sierra Leone's (GoSL's) efforts to curb the outbreak led to disruptions in harvesting and planting (Magbity, Ibid).

2.2 Field Research Area

Addax Bioenergy is operating in two neighbouring districts namely, Bombali and Tonkolili in northern Sierra Leone. The two districts are major in agriculture and cattle rearing. A few mining activities are also taking place in the aforesaid districts. The estimated population of the districts according to the most recent Sierra Leone 2004 housing and population census was 755, 587 (SSL, 2004). In addition, the research area is regarded as among the poorest and most food insecure in the country (Christian Aid, 2013). Bombali district has 130 sections with

approximately 49,179 households. According to the country's housing and population census data, Bombali district has approximately 211,762 women inhabitants, whilst 196,628 are men. The district has an average household size ratio of 6.5 (SSL, Ibid). Figure 1 in the list of appendices indicates the household sizes of persons living together as one family in the context of the research area.

2.3 The Current Land Rush and the Driving Forces

According to a report by GRAIN, several research papers indicate that the majority of countries in Africa, smallholder farms are getting smaller. The report states that with the population pressure, farmers have to share access to existing farmland among additional people while gaining no access to new land (Grain, 2014:8). In Sierra Leone, land areas under lease or sold to foreign investors for agri-business/food production is estimated 501,250 ha (Grain, 2012:5). The land lease in Sierra Leone is aimed at attracting foreign investment in order to create jobs for the country's unemployed populace. Unfortunately, the phenomenon appears to have presented a win-loss situation at the detriment of the poor rural farmers. The trend has displaced and affected many SFs vis-à-vis the FFs rights to land access and use. This phenomenon is impacting on the livelihoods of the FFs in areas acquired/leased by large-scale foreign agri-businesses/multinational companies across the country (Grain, Ibid; Christian Aid, 2013).

From 2010, Sierra Leone has attracted a number of multinational, foreign-based companies investing in agri-business with the sole aim to maximize profit at the detriment of rural Smallholders Farmers (SFs), especially FFs in the country. In 2010, the Swiss-based Bioenergy Company, Addax Bioenergy started growing sugarcane in 10,000 ha of farmland to produce ethanol starting in 2013. This investment is followed by a subsidiary of the French Bolloré group, SOCFIN in 2011. SOCFIN Agricultural Company Limited Sierra Leone rented 12,500 ha of farmland for oil palm production in Pujehun district in southern Sierra Leone. This investment has met strong resistance from the local community, especially with SFs including FFs in that district. The Vietnamese firms are likewise initiating major rice and rubber projects in the country. This investment initiative received Chinese financial support in 2012. These different projects have however attracted support from a number of European development banks including from Sweden, Germany, the Netherlands, and Belgium, since 2011 before the Ebola outbreak in the country (Grain, 2012; Menzel, 2015).

In the context of this thesis, the primary global factor leading to investment in biofuels is the European Union (EU) policy, which by 2020 hopes to provide 10% of transport fuels from renewable fuels. On this noted, it is envisaged that 80 to 90% of this source of renewable fuels would come from biofuels. The Addax Bioenergy investment in Sierra Leone is expected to contribute in meeting the aforementioned target. A study by Magbity (2013) reveals that the global demand for biofuels is estimated to be at 170 million litres annually, whilst their annual demand is expected to reach 230 million by 2020.

Proponents of the new wave of LSLA, such as domestic governments and foreign investors argue that large-scale agricultural investment is more resourceful. They claim that it can make better use of the land than smallholder farming. The cultivation strategy that is often employed by large-scale foreign investors for agri-business and biofuel production in SSA does come with huge cost inputs such as fertilizer, increased water usage and the use of pesticides. The aforementioned factors have negatively affected the environment through water contamination, loss of soil fertility and quality (Havnevik, 2011; Havnevik, 2014).

Christian Aid (2013:12) study estimates that foreign investors have acquired 21.4% of Sierra Leone's total arable land for large-scale industrial agriculture investment between 2009 and the end of 2012. These projections may have changed on the ground with the awareness and advocacy work by Civil Society Organizations (CSOs) and Non-Governmental Organizations (NGOs) in affected communities across Sierra Leone. In other words, the intervention of CSOs and NGOs may have increased the knowledge of the SFs, especially with the FFs about the rights to land and their livelihoods.

2.4 A Glance at the Addax Bioenergy Investment

Addax Bioenergy is a subsidiary of the Addax and Oryx Group (AOG) based in Switzerland. The company was established in 2008 with its investment initiated in 2010 for the Sierra Leone-sugarcane-ethanol-project. In November 2011, the company signed an agreement with the Swedish based Swedfund to invest 10 million Euros in its sugarcane-ethanol project in Sierra Leone. The Addax Bioenergy project is the largest private agricultural investment ever made in Sierra Leone and it recorded an investment sum of 267 million Euros (Havnevik, 2014). Addax

Bioenergy originally leased 54, 000 ha of farmlands in both Bombali and Tonkolili districts for its sugarcane-ethanol project (see appendix 8). The company together with the GoSL claims that the investment is intended to benefit post-war Sierra Leone's development efforts including for the country's infrastructure and employment creation. The company intends to preserve 24,600 ha of its acquired/leased land for future expansion of its rural agriculture, ethanol and electricity project (RSB, 2013; English and Sandström, 2014; Havnevik, 2014).

Addax Bioenergy is growing 10,000 hectares of sugarcane with the view to produce ethanol for export to the European market. The by-product of the sugarcane is to be used to provide approximately 20% of electricity for domestic consumption in the Sierra Leone national grid (Christian Aid, 2013; Havnevik, Ibid). From my understanding, neither the area impacted by Addax Bioenergy or other regions of Sierra Leone will benefit from the added electricity to the national grid, since they are not covered by the grid. The Addax Bioenergy investment is part of the GoSL's development strategy through its agenda for Change/prosperity to create job opportunities for its citizens and to eradicate poverty (Christian Aid, Ibid). The Addax Bioenergy investment may not positively impact on the Sierra Leone energy sector and development strides as initially anticipated. See Appendix 9, which shows the Addax Bioenergy energy plant under construction and its sugarcane-ethanol-project site. The company's irrigation machine pumps water from Sierra Leone's second largest river Rokel in support of the nursery sugarcane plantation site. This according to Christian Aid (Ibid) has negatively affected water users in affected communities.

Addax Bioenergy has however received accolades as a role model for Responsible Agricultural Investment (RAI) in Africa. The company is faced with criticisms from Civil Society Organizations (CSOs), Non-Governmental Organizations (NGOs), and paralegal organizations due to the tax holidays/exemptions that it enjoys from the government of Sierra Leone (GoSL). Previous studies show that the majority of the community people have expressed similar apprehensions over the impact of the company's project activities on their rights to land, and livelihoods (Beall & Rossi, 2011; RSB, 2013; Christian Aid, Ibid; Shepherd, 2013).

Apart from the Ebola outbreak in Sierra Leone, the FFs' rights to land and their livelihoods have come under serious threats in the middle of the land rush by multinational companies across the country. The Swiss-based bioenergy company, Addax Bioenergy investing in northern Sierra Leone is among these multinational companies investing in the country. The Addax Bioenergy large-scale investment seems to be favoured by the existing customary (unwritten laws) in northern Sierra Leone. This is probably due to the fact that the customary laws allow the company to exclude the women in its land lease agreement with the landowners (men). Women are mostly land users and not land owners in Bombali district in northern Sierra Leone.

The map below shows an inscription of the Addax Bioenergy investment in a rectangular plot in northern Sierra Leone:



Source: (Site selected and survey methodology presented, 2010 cited in Millar, 2012)

2.4 Financiers of the Addax Bioenergy Investment

The Addax Bioenergy project in northern Sierra Leone is financed by eight international financiers that included: the Dutch Development Finance Company (FMO), the German International and Development Company (DEG), the British Emerging Africa Infrastructure Fund (EAIF), the Canadian Cordiant-managed ICF Debt Pool, the Belgian Investment Company for Developing Countries (BIO), the African Development Bank (ADB), the South African Industrial Development Corporation (IDC), and the Swedfund (Havnevik, 2014).

2.4.1 Scanning through the FDP for Food Production

The majority of FFs in the Addax Bioenergy operational areas were engaged in smallholder farming/food production. These FFs were specifically engaged in the growing of Sierra Leone's staple food crops, namely rice, cassava, oil palm, groundnut, etc. Their engagement in small-scale food production in the research area was largely due to the poor farming input systems employed by them. The research area is usually faced with food insecurity especially in the so-called August and September hunger period. This is compounded with the insufficient technical and lack of institutional support for SFs. Other constraints faced by SFs according to Addax Bioenergy were the barriers to shape development efforts, the lack of knowledge, insufficient technical and the lack of institutional support in the research area. Another constraint faced by the FFs is the poor coping strategies in combating extreme poverty in the research area (ActionAid, 2013; Christian Aid, 2013; Shepherd, 2013; English and Sandström, 2014).

The FDP project total cost according to English and Sandström (Ibid) was over US\$ 2.2 million, and it has a running cost of US\$ 700,000 per year. The project has contributed to life-skills training such as vocational skills, ploughing, harrowing (breaking down of large particles of soils into smaller ones), preservation of viable seeds and post-harvest loss prevention for SFs including the FFs in the research area (English and Sandström, Ibid).

The FDP was initiated in 2010, and most villages in the Addax Bioenergy project area were incorporated to benefit from it in 2011. Based on the company's claims, the FDP provides skills training in farming for over 2,400 farmers, and cultivate over 2,500 hectares (ha) of community fields for villages in the company's project area (Ibid).

2.4.2 The Land Lease Agreement

“There is no development strategy more beneficial to society as a whole – women and men alike – than the one which involves women as central players” (Annan, 2015). Women, including the FFs deserve as their male counterparts to be included into decision making and development processes affecting their wellbeing.

Caldwell (1973:760-761) argues that authority over land use and its disposition has always been in society through either representatives of the community, the monarch, or the state. The role of women in the context of the Addax Bioenergy’s land lease agreements in Bombali district in northern Sierra Leone appears to be largely under-represented due to the lack of involvement of women in the lease agreements.

An Addax Bioenergy official reveals that the company uses two types of instruments in 2010 to enforce the land lease agreements in the district. The first instrument is an agreement between the government including the local authorities such as the chiefs and Addax Bioenergy on behalf of the landowners/men. The second instrument involves the company and the landowners/men. In this sense, the company and the landowners signed an acknowledgement agreement.

The landowners received 50% of the land lease payment from Addax Bioenergy, whilst 20% went to the chiefdoms (Makari Gbanti and Bombali Shebora) in Bombali district, and Mala Mara chiefdom in Tonkolili district. This is followed by 20% to the Bombali and the Tonkolili District Councils respectively. Lastly, 10% of the land lease payment went to the Government of Sierra Leone (GoSL). The Addax Bioenergy official claims that the land lease agreement is renewable after 7 years between 2010 and 2017. Recent study by Christian Aid (2013) however indicates that Addax Bioenergy leases the land for 50 years and renewable after 21 years. This disparity may have contributed in confusing the understanding of SFs including the FFs and the landowners about the clarity of the whole land lease agreement of the two districts in northern Sierra Leone.

CHAPTER THREE

3.0 THEORETICAL FRAMEWORK

A number of studies have been carried out to describe and conceptualize the new trend of LSLA and its effects on women's rights to land. Some studies placed emphasis on the phenomenon of 'land grabbing' and its effects on smallholder farmers' (SFs') rights to land. To understand the connection between neo-liberalism and the arguments used in LSLA/ Foreign Investment (FI) on land for biofuel expansion, political and socio-economic factors affecting SFs' wellbeing cannot be downplayed. Behind the LSLA/large-scale FI appears a political class-driven plan that enables the state to engage in streamlining or reforming policies in the interests of free-markets for goods or privatization, more specifically referred to as neoliberalism. This chapter explores key conceptual definitions relating to the thesis, but focuses mainly on Noam Chomsky's (1999) profit over people form of neoliberalism, and Naila Kabeer's (2005) Gender Equality and Women's Empowerment. The aforementioned conceptions are based on laying the premises necessary to analyse the research question.

3.1 KEY CONCEPTS AND DEFINITIONS

The study defines key concepts below, since they are relevant to the research:

Land Tenure System - is defined in the context of the Sierra Leone national land policy as “*a system of land holding in Sierra Leone, which is dualistic in nature, that in the Western Area and those of the provinces*” (GoSL, 2013:9). The dualism of the land tenure system in Sierra Leone is a distinguishing factor. **Customary Laws** are defined as “*rules of laws which by custom are applicable to particular communities, and are unwritten laws established by long usage in such communities in Sierra Leone*”(Ibid).The term **Leasehold** is described as “*lands acquired by lease payment for a fixed period as spelt out in the terms of the lease agreement*”(Ibid). **The Rights to Land** in the context of this research, means the rights to own and control a piece of land on the one hand, as well as the rights to access and use it. Caldwell (1973:760-761) argues that property in land is distinguished from other forms of property. He claims that the rights of ownership in land have been distinguished from its rights of use. A person does not really own land, but own rights to it.

There is undoubtedly an emerging confusion as to which terminology fits between **LSLA** and **'land grabbing'** in defining the global land transactions or deals. Geary (2012:5) defines **Large-Scale Land Acquisition (LSLA)** as *“the acquisition whether by purchase, lease or rent of any tract of land larger than 200 hectares”*. **Land grabbing** is defined as *“the act of claiming ownership of a piece of land without following appropriate procedures recognized by statutory or customary law in Sierra Leone”* (GoSL, 2013:Ibid). This is also defined by Murmis & Murmis (2012: 490) as *“large-scale land deals by governments who act as buyers and sellers in order to produce basic staples”*. The context of the definition is linked to large businesses engaged in huge concentration and ‘forenization’ of land. By ‘forenization’, it links to the commodification of natural resources such as land to foreign investors in order to make profit in the form of neoliberalism. However, land grabbing in the context of this research is a form of claiming ownership of a piece of land without following appropriate procedures such as Free Prior and Informed Consent (FPIC) recognized by the laws of a country regardless of the size of land under consideration.

Neoliberalism is seen by Robert W. McChesney as the political economic paradigm of our time. It is referred to as the policies and processes whereby a relative handful of private interests are permitted to control as much as possible of social life in order to maximize their personal profit (Chomsky, 1999:7). According to Greenaway et al. (2002:230), **liberalization** is a sort of trade reform phenomenon. They claim that liberalization is a pre-requisite to a transition from a relatively closed to a relatively open economy. Affirming that, liberalization becomes a requirement for growth if openness to trade resulted to a relative positive growth of an economy. **Globalization** is viewed by Nayef R. F. Al-Rodhan and Gérard Stoudmann as having to do with economic integration, the transfer of policies across geographic frontiers, the transmission of knowledge, and cultural stability, as well as the reproduction, relations, and discourses/treatises of power. They claim that the term is a global process, a concept, a revolution, and “an establishment of the global market free from socio-political control.” Swedish journalist Thomas Larsson, in his book *“The Race to the Top: The Real Story of Globalization (2001)”*, defines globalization as *“the process of world shrinkage, of distances getting shorter, things moving closer.”* He further views the term (globalization) as something that *“pertains to the increasing ease with which somebody on one side of the world can interact, to mutual benefit, with somebody on the other side of the world”* (Al-Rodhan & Stoudmann, 2006: 3).

From a Social construction perspective, Lorber & Farrell (1991:100-101) define **gender** as such a familiar part of daily life that it usually takes a deliberate disruption of our expectations of how women and men are supposed to act to pay attention to how it is produced. As a process, they claim that gender creates the social differences that define women and men. This research is primarily viewing gender from the latter perspective, even though it centrally focuses on the FFs' wellbeing. Atul Malhotra & Sidney Ruth Schuler claim that **women's empowerment** is a key variable in international development. The fact is that, it has the potential to improve development effectiveness and pro-poor impact at grass root level. They argue that using an empowerment approach to poverty reduction is grounded in the opinion that poor people themselves are instrumental partners for development, since they are the most inspiring partners in poverty emancipation (Malhotra & Schuler, 2005:3). **Power Relations** - Robert A. Dahl views power as a relation among people and other animates or inanimate objects. He refers to the objects in the relationship of power and actors such as individuals, groups, roles, offices, governments, nation-states, and other human aggregates (Dahl, 1957:203). As part of examining the living conditions of the FFs in this thesis, I use **livelihoods** terminology, which Niehof & Price (2001:8) define as the material means whereby one lives or as the bundle of activities that people undertake to provide for their basic needs or surpass them.

3.2 Profit over people: neoliberalism and the global order

The concept of neo-liberalism was anchored on global politics particularly towards the end of the 1980s on the basis of the phenomenon known as globalization. The wide-ranging pro-market doctrines of neo-liberalism gained more footing when international corporations such as the World Bank's structural adjustment programmes and liberalization policies together with the International Monetary Fund (IMF) stabilization policies were found as essential to the economic growth of privatizing and individualizing land rights (Barnett, 2005:4). According to Razavi (2007), the monetary value added to land through the LSLA has reinforced liberalization policies in developing countries mostly in Sub-Saharan Africa (SSA). This trend has reportedly contributed in worsening the situation/livelihoods of smallholder farmers with low-income in accessing land through the market.

According to American social justice activist and analytic philosopher Noam Chomsky, the word “neoliberalism” literally implies “a system of principles that is both new and based on classical liberal ideas.” For Chomsky, one such classic liberal idea is the “exporting of American values to the developing world.” The word was first used to critique globalization-type policies that kept developing countries financially dependent on such as the aforementioned international corporations. These corporations imposed structural adjustment/regulation policies on economically dependent countries. They promoted these policies as poverty reduction programmes, which essentially have disseminated/publicized the systemic problems responsible for poverty. The concept of neoliberalism goes together with capitalism, which focuses on maximizing profit for few individual interest groups (Chomsky, 1999). This motivation is precisely why an understanding of neoliberalism may be indispensable in understanding the discourse around the effects of the Addax Bioenergy investment on the FFs’ rights to land in Bombali district in northern Sierra Leone.

3.2.1 Proponents of Neoliberalism

Neoliberal policies are important in boosting the national state’s economy and to create the business climate for foreign investment. This usually supports the national state’s efforts in creating the much needed job market for its citizenry (Ferguson, 2010).

Neoliberalism is often used as a suitable analytical tool in describing more or less current economic and political happenings. The concept of “neoliberalism” - has become prevalent in some political and academic debates. Several authors have viewed neoliberalism as “the dominant ideology shaping our world today”, and that we live in an “age of neoliberalism” (Harvey, 2005).

3.2.2 Critiques of Neoliberalism

Chomsky (1999:10-11) argues that neoliberal policies have the tendency to generate social inequality which undermines equality worldwide. He views neoliberalism in the immediate and foreseeable future as an obstacle in promoting a genuine and participatory equality in our today’s societies. The concept of neoliberalism undermines democracy and human rights in the interests of the wealthy few/elite individuals at the expense of the poor/weak. According to Jessop (2010:41), neoliberal policies seek to integrate the world market in order to enhance economic and political power of capital. On this note, the exchange value becomes supreme over the use

value moments of the capital relations. This undermines the power of national states in controlling economic activities within their national frameworks.

Neoliberalism often place national states at the endpoint in resolving economic, political and social problems/crises. The concept has paradoxically undermined the territorial and temporal sovereignty of especially weak states. In addition to the above, neoliberalism has undermined the capacity of states in resolving crises due to neoliberal capitalist forces such as the International Monetary Funds (IMF) and the World Bank. This makes states unable to effectively coordinate their interests (Jessop, 2010:43). Equally, Clarke (2008) argues that neoliberalism has been over used as a productive and a critical analytical tool in diverse studies including on studies relating to land and natural resources in developing countries. These criticisms have presented an undesirable impact on the use of neoliberalism as an analytical instrument in the field of research.

3.3 Passion for Free Markets

Neoliberalism most often focuses on creating a free market. A free market is an arrangement of exchanges that take place in society. Such an exchange involves a voluntary agreement between two parties who trade in the form of goods and services. There is however the tendencies for government control, or intervention through taxes, price controls and restrictions that prevent new business competitors from entering the market. In the context of this thesis, a free market is not described as a field within economics, but viewed as a political or ideological standpoint on policy. According to Noam Chomsky (1999), the passion for free markets has its origin for over half a century. He claims that the United Nations (UN) has been the key forum for the United States (US) in its attempt to create a world in its image. The US collaborates through its allies to forge global treaties or agreements centering on human rights, nuclear tests or the environment aimed at promoting its values (Chomsky, 1999:65). Recently, the US exports its free market values through global commercial agreements as it moves beyond the UN platform under the World Trade Organization (WTO). State governments around the world are embracing these values expound by US President Reagan and Prime Minister Margaret Thatcher of Britain since the 1980s, which have become the world “market revolution” (Ibid).

3.4 Market Democracy: Doctrine and Reality

The classical doctrine of democracy is based on promoting the interests of the common good and the will of the people (Schumpeter, 2003). Noam Chomsky (1999) claims that “America’s victory in the Cold War was a victory for a set of political and economic principles” under the banner of democracy and the free market. The aforesaid principles according to Noam Chomsky (1999) are doctrine of the global order of which America is equally the gatekeeper/porter and the model/ideal. This doctrine by America has become the international development model in the globe, especially in the third world countries. According to Chomsky (1999), the doctrine is anchored on creating a better world through promoting democracy and open markets with America’s interests highly upheld.

Noam Chomsky (1999) claims reality to be different from the doctrine of democracy. According to Chomsky (1999), the recent spectrum/range of public policy debate has minute significance to actual policy. He claims neither the US nor any other power has been guided by "global meliorism." The concept of meliorism has its origin in 1868 from the Latin word *Melior*, which means better – “belief that the world tends to become better”. Phyllis J. Schantz and Joseph E. Zimmer (2003) define meliorism as the aspect of belief by a society to take deliberate actions aimed at improving itself (Schantz & Zimmer, 2003:3).

The reality of market democracy in a neoliberal order has placed democracy under attack worldwide. Chomsky (1999) maintains that prominent industrial countries view democracy as involving opportunities for people to manage their own collective and individual affairs, which is true of markets. He argues that attacks on democracy and the markets are strongly built on the power of corporate institutions such as the IMF and the World Bank. These institutions have a totalitarian/dictatorial internal structure influenced by powerful states. Such institutions are usually viewed as unaccountable to the public. As a result, their social policies have enormous power and influence in globalizing the structural model of the third world including in SSA. These policy choices faced by the world cannot be likened to free market doctrine. State interference plays an influential role in ensuring that its original policy agenda is not altered by external powers (Chomsky, 1999:91).

3.5 Gender Equality and Women's Empowerment

According to Naila Kabeer, defines empowerment as being rooted in how people see themselves, their sense of self-worth, and critically bound up with how they are seen by those around them and society as a whole (Kabeer, 2005:15). This definition enables me to assess the Female Farmers' (FFs) rights to land and their livelihoods from the perspective of empowering them in order to reduce their poverty at household level in Bombali district in northern Sierra Leone. Increasing women's understanding about their rights to land in relation to the new wave of LSLA is vital in alleviating them from poverty and improving their well-being. Giving premium in creating gender equality in all sectors including education is crucial in increasing the understanding of women for their empowerment and welfare. For Kabeer, access to education is crucial in empowering women. She uses gender equality and women's empowerment model through a critical analysis of the third Millennium Development Goal (MDG) of the eight MDGs 2015. The model explores and highlights three indicators (education, empowerment, and political participation) associated in empowering women. Naila Kabeer argues that increasing women's understanding and well-being is based on education, employment, and political participation (Kabeer, Ibid: 16). According Naila Kabeer, to monitor progress in achieving the aforesaid indicators is be based on *closing the gender gap in education at all levels; increasing women's share of wage employment in the non-agricultural sector; and increasing the proportion of seats held by women in national parliaments* (Kabeer, Ibid: 13). In the context of this thesis, an increase in education on the FFs can induce positive effects on their reasoning abilities about the rights to land and their livelihoods. This will serve as a stepping stone to emancipate them (the FFs) from poverty and male dominance at household levels. In other words, the more women are educated, the better the possibility is to change the power relations and increase self-confidence within and outside the household levels (Ibid). Gita Sen and Avanti Mukherjee see the achievement of Gender Equality and Empowering Women as one that is based on accessing rights from a human rights perspective. They claim there is 'no empowerment without rights, and no rights without politics' (Sen & Mukherjee, 2014). The neoliberal concept by Chomsky (1999) of making profit over people does go with politics, but the issue of who has rights at the expense of the other is crucially important to assess in this thesis.

CHAPTER FOUR

4.0 RESEARCH METHODOLOGY

This chapter outlines the research design and the methods employed in the research. Creswell (2009:99) presents three types of case studies, which he outlines as: single instrumental, multiple or collective, and the intrinsic case study. The said case studies all fit into the context of the research, but I chose a collective case study. This research uses a collective case study in order to understand the diverse logic in the case study of the impact of the Addax Bioenergy – sugarcane-biofuel project on the Female Farmers’ rights to land and livelihoods in Bombali district in northern Sierra Leone.

Within the boundaries of a collective case study, mixed methods is used to collect the primary and the secondary data. This means obtaining data from both the use of qualitative and quantitative techniques through a non-experimental survey of the FFs. Considering the nature and the changing aspects of the Addax Bioenergy investment, the chosen case study will help to explore and obtain information about the prevailing situation of the FFs (Bryman, 2004:53; Creswell, 2009: 97-98).

4.1 Case Selection

I have used a collective case study in line with Creswell (2007:62) to benefit from the different worldviews of respondents. Fundamentally, four sets of actors are considered in this research, namely: Addax Bioenergy - as the investor that is to adopt appropriate ways to improve on the lives of the FFs; the local and central authorities - source of the land tenure system and policy determinants for the current situation; Non-Governmental Organizations (NGOs) - social pressure groups that influence policy change and investment strategies on the ground; and the FFs themselves– the affected party for whom actors should work for in order to improve or change their land rights and livelihood situation. The research use collective case study to avoid the demerits of the weakness associated when analysing more than one case. I am convinced that not much in-depth data are lost, since I use a wide range of data collection techniques (Creswell, 2007: 63).

4.2 Sampling Design

For the purpose of this research, I used a snowball sampling, a non-probability technique, by recruiting research participants who assisted me in identifying other potential participants relating to the research. The snowball sampling is used coupled with a purposive/judgmental sampling technique, meaning that my key informants such as the Sierra Leone Network on the Right to Food (SiLNoRF) used their social networks to find contacts relevant to my research. This technique aided in identifying and the recruitment of research assistants. These research assistants provided me the necessary support to organize the focus group discussions based on their knowledge in the research area. The aforementioned techniques are drawn from Mack (2005: 5-6).

4.2.1 Sampling Village Category

I selected the six sample villages randomly in Bombali district in northern Sierra Leone in order to avoid any preconceptions from other parties. The six villages are categorized into three and in pairs, which include: Roportor and Man-Man whose farmlands are totally overlapped by the Addax Bioenergy land lease/where Agricultural Households (AHs) are totally affected by the company's project; Makontho and Kolishoko are partly overlapped by the Addax Bioenergy project; and lastly, Worreh Wanda and Saithnin which are non-overlapped villages but close to the Addax Bioenergy operational area. The first categories of villages are located in Bombali Shebora and Makari Gbanti Chiefdoms. The second categories of villages are also located in Bombali Shebora and Makari Gbanti Chiefdoms. In the third categories, the villages are located in Makari Gbanti and Bombali Shebora Chiefdoms respectively. However, the entire six sample villages are situated in Bombali district in northern Sierra Leone (see table 1) in the list of appendices describing the category/allocation of the sampling villages.

4.2.2 Sampling Category of the Female Farmers

The survey went out to 199 FFs in the selected six villages. The FFs were divided into four categories according to varying rights and access to land. The first group is the FFs with the rights to land due to parental linages/inheritances. In this context, I refer to the FFs guaranteed with the rights to acquire or access and use a piece of farmland as a result of paternal parental connection in the research area.

The second group is the FFs with the rights to land because of rent or purchase or lease from the landowners (men) through either legal intent or consent of both parties. This may be on a long or medium or long-term basis.

In the third group, it involves the FFs with the rights to land because of marital linages. In other words, the FFs have the rights to access and use farmland due to their husbands' land holding entitlement. However, in the event of the death of the husband, the female farmer's rights to access and use a piece of farmland may be hindered.

Fourthly, I consider the FFs with the rights to farmland through other informal ways, which may be based on consent or mutual cooperation with the owners (men).

4.3 Source of Data

Considering the in-depth nature of the research, I used both primary and secondary data in order to create a clear understanding about the research topic. To do so, the primary data were exclusively sourced from the FFs who are vulnerable due to their difficulties to secure land rights and livelihoods. On this note, the survey and the focus group discussions with the FFs were helpful in sourcing useful data in the research area. My direct observations and the key informant interviews in the field also completed my source of primary data.

Finally, in accordance with Creswell (1981:99), I use a desk research to source my secondary data/empirical materials through mostly published and unpublished sources that include research journals, documents, books, articles, Non-Governmental Organizations (NGOs) publications, academic papers, the internet, and government archives.

4.4 Methods of Data Collection

The multiple methods use in this thesis is meant to demonstrate the possible changes that have taken place in the research area. On this note, I use diverse data collection methods to obtain information about the perceived changes in the research area (Bryman, 2004; Creswell, 2009). In addition to the above, I used: survey, key informant interviews, focus group discussions, direct observations, and desk research in order to obtain relevant data relating to the thesis topic.

4.4.1 Survey

A questionnaire of fifty questions was answered specifically by the FFs for at least ten to fifteen minutes per questionnaire in January 2014. This is aimed at obtaining quantitative results from the FFs themselves in order to complement the qualitative methods used in the research (see appendix 2). The surveys provided demographic and household information such as education/literacy level, age distribution, household size, ways of acquiring farmland by the FFs, and household income and expenditure realized by the FFs from their farmlands. I intended to administer 200 questionnaires, but ended up answering 199 which were answered by the FFs in the research area with the help of my recruited research assistants. I recruited three members of the Sierra Leone Network on the Right to Food (SiLNoRF) and an activist familiar with the relevant issues on the ground. They aided me in mobilizing the FFs to answer the survey questions in the research area.

4.4.2 Key Informant Interviews

I used key informant interviews through one-to-one discussions with my respondent stakeholders. I used probing questions to cross-check the results obtained from the basic survey at local level. The attention of my respondents was relatively easy to obtain in spite of the rescheduling of appointments.

The aforesaid interviews were carried out in the Makeni region with important stakeholders such as the District Agricultural Officer (DAO) of the Ministry of Agriculture, Forestry and Food Security (MAFFS) in Bombali district; the Addax Bioenergy Manager of Social Affairs and the Farmer Development Programme; two males and a female member of the Sierra Leone Network on the Right to Food (SiLNoRF); and the three local chiefs at Roportor, Makontho, and Worreh Wanda; a female elder at Makontho, a female gender and land rights activist in Bombali district. In totality, I conducted ten key informant interviews in Bombali district. As argued by Silverman (2003: 130-131) the key informant interviews I conducted are carried out at local level.

The purpose of such interviews is to triangulate the information obtained from the FFs during the survey conducted. The interviews provided the ground work in understanding the changes that have taken place on the FFs' rights to land and their livelihood. The aforesaid changes may be linked to the Addax Bioenergy investment amid the existing customary laws in the research area.

4.4.3 Focus Group Discussions

With support from my research assistants, I organized three Focus Group Discussions (FGDs) with FFs from three villages in Bombali district in northern Sierra Leone. As argued by Mikkelsen (2005:172), the FGDs aided me in obtaining a ‘huge body of knowledge’ around the issues in the research area. I divided my FF participants into groups of 6 to 12 members in the three selected villages due to my respondents’ population size.

My trained research assistants aided me in capturing the different perceptions and understanding of the FFs in regards to their rights to land and livelihoods in the research area. The three villages I selected including Roportor (R), Makontho (M), and Worreh Wanda (WW) in the district. I use FGDs to obtain diverse views of my FF respondents, since they may be affected differently. The FFs provide relevant information about their rights to land and livelihoods in the research area. Information relating to the FFs’ role and their grievances about the Addax Bioenergy investment effects coupled with the land lease agreement is obtained from them during the FGDs. The FGDs each lasted for approximately 25 to 30 minutes.

4.4.4 Direct Observations

In spite of the time consuming factor, I used direct observations to understand and obtain visual information relating to the livelihoods and the coping strategies of the FFs in the research area. This was done through visiting and taking of photos and videos in key areas overlap by the Addax Bioenergy-sugarcane-biofuel project in Bombali district. The approach enables me to avoid misleading or manipulation of informing from the FFs and other stakeholders. As argues by Bryman (2004:292-299), direct observations help the researcher to match the beliefs/perceptions of the respondents/participants with the reality on the ground.

4.4.5 Desk Research

The study used a desk research technique through the use of Internet, collected empirical materials from Addax Bioenergy archives, and other relevant literature reviewed archives in order to complement the various arguments presented in the thesis.

4.5 Methods of Data Analysis

Data processing and analysis are always fundamental in a research work. The data collected in this thesis are presented and analysed both qualitatively and quantitatively. The qualitative data were obtained through key informant interviews, focus group discussions, direct observations and desk research. Bryman (2008: 437) argues that the formulation of initial research ideas combined with the respondents' own worldviews/perceptions is vital in a thesis analysis. In the context of this thesis, the data are largely analysed guided by my theoretical framework.

The Statistical Package for Social Sciences (SPSS) is the main analytical tool used to process the quantitative data. The information is presented in graphic layouts such as pie charts, bar charts, and in tabular forms. The analytical SPSS software facilitated the quantitative description of the data collected, which exclusively target the FFs. To ensure the quality of data, consistent checks to avoid the mismatching of values in the dataset were used as a way of correcting errors. In view of this, I resolved to carry out both univariate and bivariate analyses of the data collected. Univariate (one variable) data such as ways of acquiring farmland and access to education/literacy level are analysed. Bivariate (two variables – nominal and ordinal variables) data relating to tables are also analysed.

The analytical variables described in the data collected however include: ways of acquiring farmland and access to education/literacy level. Other variables I considered are the household size, age distribution, livelihoods vis-à-vis the household income and expenditure, the changing system of farming, and the coping strategies of the FFs. The aforesaid variables seek to aid in answering the thesis research question.

4.5.1 Data Coding and Interpretation

The need for an interpreter is eliminated during the interviews and focus group discussions due to my background. The interviews are therefore easily transcribed, and notes taken in the field. The analysis of the audio and the video information collected is therefore made simple. However, after analysing the information gathered, interpretation to give meaning to the data collected is proceeded. Themes and concepts are generated, which aided my research results and analysis. These have also become useful in determining the qualitative and quantitative richness of each phenomenon in the final thesis (Bryman, 2004: 550-555; Creswell, 2009; Mikkelsen, 2005: 180-181).

4.6 Positionality in the Research Field

As Sultana (2007:374-375) argues, conducting a research in the global south requires taking into consideration of the low literacy rate, access to resources such as land, and the potential inequality in the research area. The majority of FFs interviewed could not read and write. Based on my direct observations in the field, the research area is potentially experiencing a sense of inequality between FFs/women and their male counterparts.

As a native of Sierra Leone that is familiar with the language and culture, I am an ‘insider’, which eliminates the need for an interpreter in the research area as mentioned earlier in section (4.5.1). On this note, I tried to avoid the possibility of being viewed by the FFs and other stakeholder respondents as an ‘outsider’ through recruiting research assistants who are familiar with the issues in the research area. Nevertheless, as argue by Scheyvens and Leslie (2000:123), the FFs may regard me as an ‘outsider’ with a western educational exposure that is capable to help them out of their problems. As indicated earlier, my research assistants aided me in the data collection. Thus, the initial assumptions of not getting the required attention of the FFs due to shyness, socio-political differences, and other apprehensions were effectively overcome in the field. In the context of this research, the aforesaid insights may contribute in increasing the chances for stronger cooperation between my respondents and I.

4.7 Reliability and Validity

There were a number of measures at my disposal to ensure the validity of the data collected in the field. To uphold these, notes taken and interview records were cross-checked to avoid mistakes and to maintain data reliability (Creswell 2009). I attained this through repeatedly listening to the recorded interviews.

I triangulated my data collected through the use of diverse quantitative (survey) and qualitative methods such as interviews and relevant document analysis coupled with the comparison of the various answers or information obtained from my respondents in the field. The triangulated information is put in place through verifying evidence from diverse sources for clarity and validity of my findings in line with (Creswell, Ibid: 251; Mack, 2005: 5-6; Mikkelsen 2005:197).

4.8 Ethical Dilemmas/Considerations

In the process of obtaining data, I adopted a flexible approach during engagements with my researched respondents. I sought the consent of my respondents before publishing their interviews. I gave my respondents the choice to either participate or not to in all the interviews and the focus group discussions. The protection of respondents' identity through avoiding calling them by their full names from their responses in order to enhance trust as supported by (Creswell, 2009:69-74; Mack et al. 2005:9; Scheyvens & Storey, 2003:5). I defined the aim of the research and the research questions to my respondents to enhance simplicity. I resolve to consider in the research manuscript only contributing individuals/research participants (Ibid).

The adoption of a cross-culture and a gender understanding with respect to the female farmers' customs and tradition in the collection of data were taken into consideration as supported by (Scheyvens and Leslie, 2000: 128). Consequently, my experience and knowledge with the help of my research assistants about my researched respondents helped me to navigate cultural norms in the context of the research.

CHAPTER FIVE

5.0 RESEARCH RESULTS AND ANALYSIS

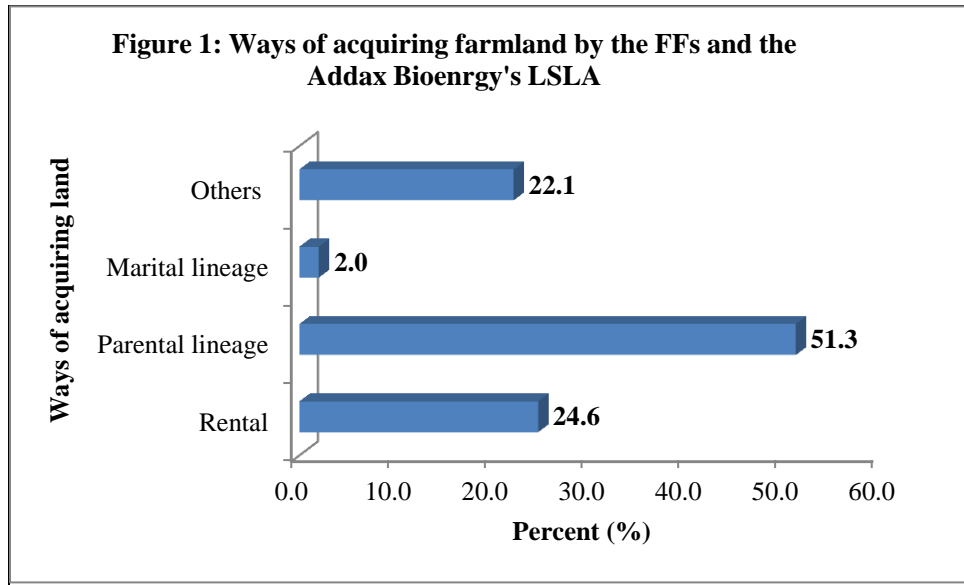
This chapter presents the research results with analysis supported by appropriate theoretical concepts. The chapter is divided into three sections aimed at answering the research question. To do so, the research results have been categorized within the framework of creating the necessary groundwork leading to the analysis. In view of this, the research results have been largely generalized and designed irrespective of the six sample village selections or locations in Bombali district in northern Sierra Leone. The results are mainly based on the survey and Focus Group Discussions (FGDs), which target specifically the Female Farmers (FFs) in the selected villages in the district. The results are also sourced from the key informant interviews with employees at Addax Bioenergy, the Ministry of Agriculture Forestry and Food Security (MAFFS) in Bombali district, the Sierra Leone Network on the Right to Food (SiLNoRF), the local chiefs and other relevant stakeholders such as gender/land rights activists in the district.

The FGDs which target specifically the FFs together with my direct observations in the field contribute in giving meaning to the quantitative data collected, and therefore aid the research results' analysis in their entirety. The major demerits of the research results gathered are the gaps involved within the limited time to analyse the general world-views of the respondents interviewed in the qualitative techniques. The aforesaid reflections are partly based on my experience in the research field.

5.1 Section One: Ways of acquiring farmland by the FFs and the Addax Bioenergy's LSLA

In this section I will analyse the ways of acquiring farmland by the FFs amid the LSLA in Bombali district in northern Sierra Leone. This is aimed at creating understanding about the situation of the FFs in the district, where the presence of Addax Bioenergy is reported to have restricted their ways of acquiring farmland (ActionAid, 2013). The monetary benefits/value added to land use may have contributed to increase the pressure for its acquisition by multinational companies in the developing world (Tomas, 2001). My recent survey in 2014 reveals that land is largely acquired by the FFs through parental lineage. The survey likewise reveals the least acquisition of farmland by the FFs through marital lineages. Moreover, land is acquired by the FFs through rent or lease or purchase as the second most common way, followed

by other informal ways. Figure 1 below indicates the ways of acquiring farmland by the FFs in the district:



Source: Field Survey, 2014

In the context of this thesis, lineage refers to direct succession entitlement for the FFs to acquire a piece of farmland after the demise of their male relatives such as male parents, brothers, a male child or a husband in the district. Based on these results, the death of any of the aforesaid relatives may lead to the inheritance of the land by another male relative. This thesis fundamentally lays emphasis on the rental aspect of acquiring farmland, since it relates to Addax Bioenergy. Kabeer (2005) argues that empowering women is vital to enable them to support their wellbeing.

5.1.1 Parental Lineage

Land in Bombali district is largely acquired through parental lineage. In this context, the demise of the parent (elderly man) may potentially lead to one of the male siblings to acquire the land. The survey conducted shows 51.3% of land is acquired through parental lineage in the district. The demise of the father may lead to the inheritance of land to the male child regardless of age. This is because of the general belief that the daughter would end up marrying into another male household. Furthermore, by tradition, the male child is expected to have the dominance or

rightful power over the inheritance of property including land. This claim is also supported in earlier studies by Banya (1993) and Unruh & Turray (2006).

5.1.2 Other ways of Acquiring Land

The third most common way for the FFs to acquire land in the district is through other informal ways, which may be based on consent or mutual cooperation with the landowners, who normally happens to be the male counterparts.

5.1.3 Marital Lineage

The results collected have shown that only 2.0% of the FFs can acquire land through marital lineage through maintaining connection with the husband or husband's male relatives. The demise of the husband who owns a piece of land may result to his widow wife forfeiting the land to the husband's male relatives.

5.1.4 Rental

The results in the field shows 24.6% of the FFs acquire land through renting from the male counterparts who have rights to the land. This way of acquiring farmland by the FFs is linked to legal arrangements with the landowners (men) in monetary terms through the consent of both parties on either a long, medium or short-term basis.

Addax Bioenergy uses this way to engage in a large-Scale Land Acquisition (LSLA) in the district. Some community people in the district including the FFs have earlier accused Addax Bioenergy of engaging in “land grabbing” at their own detriment (Action Aid, 2013). An employee at Addax Bioenergy claims “*we're not engaged in 'land grabbing', but legally acquire the land*” (Clive, 2014-01-15). He made this affirmation during his key informant interview with me. A FF elder, during my FGDs argues “*we were never involved in the land lease agreement, but our husbands (landowners) arranged with Addax unilaterally*” (Kadiatu, 2014-07-03). In view of these claims and counterclaims, John, a land rights activist involved in the Sierra Leone Network on the Right to Food (SiLNoRF), a Non-Governmental Organizations (NGO) on the ground, equally argues that “*what may be considered as legal may not be legitimate*” (2014-07-07). Apart from Addax Bioenergy and government officials, majority of stakeholders I interviewed expressed similar apprehensions against the company's LSLA in the district. Franco (2012:35) argues that mainstream international development institutions, foreign investors and the states have depoliticized the new trend of land rush by large-scale foreign investors in the

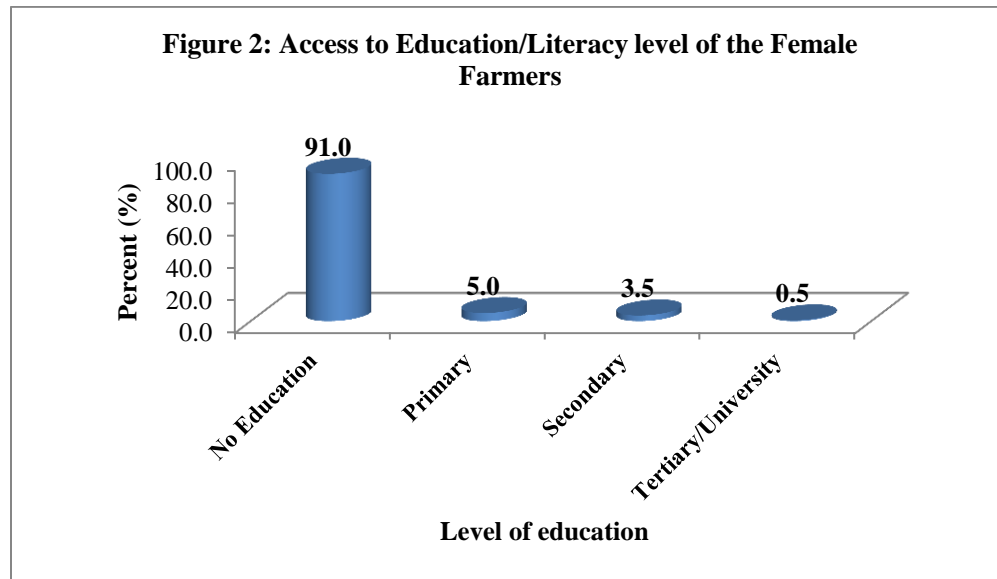
global south as “Large-Scale Land Investments/Large-Scale Land Acquisition (LSLA)”. He further claims that the rush for land to invest in agri-business and biofuel has jeopardized the livelihoods and the farming activities of Smallholder Farmers (SFs), in what is modelled as ‘land grabbing’ or ‘LSLA’ (Ibid). Studies in my research area have shown the trend tends to promote the interest of Addax Bioenergy (foreign investor) at the disadvantage of the SFs (ActionAid, 2012; ActionAid, 2013; Christian Aid, 2013). This claim seems consistent with Robert W. McChesney’s definition in Chomsky’s (1999:7), which indicates a relative handful of private interests are permitted to control as much as possible of social life in order to maximize their personal profit.

5.2 Section Two: The LSLA and the Female Farmers’ Understanding

The possible links between the rights to land, education, and the Large-Scale LSLA by Addax Bioenergy with respect to the FFs is vital in this thesis. The results obtained are generalized, since the FFs experience similar rights to land restrictions. In this section I have used access to education/literacy level (rights to land awareness, customary practices, and Addax Bioenergy land lease) by way of analysing the FFs’ understanding about their rights to land in the research area. To do this, my analysis about the FFs’ understanding is guided by my theoretical framework. As argued by Chomsky (1999:7), a relative handful of private interests are permitted to control as much as possible of social life in order to maximize their personal profit. This appears to be the case with the Addax investment.

5.2.1 Access to Education/Literacy Level

Based on information gathered in the field, the FFs' understanding about their rights to land in the research area is being affected in diverse ways amid the Addax Bioenergy-sugarcane-biofuel project. The household information from my survey which went out to 199 FF respondents' showed that 91.0% of them have not gone through formal education as indicated in the bar chart/figure 2 below:



Source: Field Survey, 2014

Figure 2 indicates 5% of the FFs go through primary school, whilst 3.5% have secondary school education. The results also reveal 0.5% of the FFs go through tertiary education. The educational background of the FFs is essential in answering the research question, since it may help to ascertain their understanding about their rights to land amid the Large-Scale Land Acquisition (LSLA) by Addax Bioenergy in the district. Proponents of the company's investment such as the GoSL have assumed that the company's investment would provide jobs for the country's unemployed, particularly for community people. An Addax Bioenergy official told me that his company employs only 10% women, which is slightly better-off. Clive claims that: *"Addax cannot employ more women due to the lack of skills and literacy among them"* (Clive, 2014-01-15). This claim is consistent with my results, as most FFs for instance cannot read and write in the district. Kabeer (2005:16) argues that an increase in education has the ability to influence positive outcomes on women's ability to think and make decisions that contribute to empower

them to secure their wellbeing. She upholds that the more women are educated the more they can influence the power relations within and outside the household levels.

5.3 The Rights' to Land Understanding amid the LSLA

Based on information obtained in the field, other factors affecting the understanding of the FFs in regards to their rights to land are as well linked to: the rights to land awareness, customary practices, and the understanding of the Addax Bioenergy's land lease.

5.3.1 The rights to land awareness

The level of understanding of the FFs is correspondingly linked in the context of this thesis to knowledge/awareness about their rights to land. Interviews with few gender and land rights activists suggest that the LSLA by Addax Bioenergy has threatened the FFs' understanding about their rights to land. They claim the FFs' understanding about their rights to land has potentially increased or been strengthened though raising awareness by Non-Governmental Organizations (NGOs) such as the Sierra Leone Network on the Rights to Food (SiLNoRF), ActionAid, para legal NGOs, and Farmers' organizations among others in Bombali district. These NGOs carry out sensitization and support work as a response to increased pressure on the rights to land by Addax Bioenergy. On the contrary, one would argue in theory that increased pressure on land can prompt 'good' governments, and donors among others to carry out work such as participatory land use planning to strengthen the rights to land of the FFs as a precondition to approving outside corporate investors to enter the land arena.

5.3.2 Customary practices

The FFs' dependence on male landowners for authorization to access and use land has affected their understanding about the rights to land due to the customary laws and traditional beliefs in the research area. The presence of Addax Bioenergy has not changed much of the FFs' understanding about their rights to land. The FFs prefer to take the back seat when it comes to land matters due to their pre-understanding/knowledge about the rights to land in the district. My findings also show that there is still lack of knowledge among the FFs about the newly drafted national land policy of Sierra Leone.

5.3.3 Understanding the Addax Bioenergy's Land Lease

Taking a look at the Addax Bioenergy land lease agreement, the interpretation of the agreement between the company and the male landowners has placed education to play a vital role. The landowners who happen to be men did not fully understand the land lease agreement because of their low level of education. The landowners simply accepted the agreement, and later changed their minds after consulting with their educated children living mostly in Sierra Leone's cities. But then, it was too late for the male landowners to re-negotiate with Addax Bioenergy on the terms of the land lease agreement (Christian Aid, 2013).

5.4 Section Three – The Impact on the Rights to Land and Livelihoods

The Female Farmers' (FFs') rights to land in the context of this thesis are simply about their freedom to own and control land, as well as access and use a piece of land for largely agricultural purposes to support their livelihoods. The rights to land are viewed by the United Nations (UN) as human rights and landless women equally have the rights to it (UNHRC, 2013). In this section, I use land ownership and control on the one hand, and land access and use on the other, as key variables about the rights to land for the FFs in Bombali district amid the Addax Bioenergy's Large-Scale Land Acquisition (LSLA). The Addax Bioenergy's LSLA is aimed at making personal profit for its financiers. This section will examine this trend in order to know whether the company's presence in the district is putting the rights to land and livelihoods of the FFs at risk in line with Noam Chomsky's (1999) theory about profit over people supported by other relevant concepts highlighted in my key terms and definitions. I will turn to Naila Kabeer's (2005) theory on gender equality and women's empowerment in order to examine what the FFs need to ease their risk amid the Addax Bioenergy's LSLA. To do so, I consider the land ownership and control, as well as the land access and use in the research area. This will be followed by examining the livelihoods of the FFs as a key variable. As such, the household size and the age distribution, the household expenditure and income, the changing system of farming, and the coping strategies of the FFs in the selected sample villages in the district will be analysed in this section.

5.4.1 Land Ownership and Control

The rights to land are viewed by the United Nations (UN) as human rights and landless women equally have the rights to it (UNHRC, 2013). Based on information gathered from my respondents, the land lease agreement between the Addax Bioenergy and the landowners who are predominantly men has legally shifted the land ownership and control on a long-term basis, particularly in the totally and partly affected households/villages in Bombali district in northern Sierra Leone. Most of the farmlands suitable for cultivation have been leased to Addax Bioenergy in the district by the landowners (men) – *see appendices (appendices 7 and 8, and table 1)*. Daley & Hobley (2005:34-35) argue that serious repercussions have been posed on women's rights to land amid patriarchal decision-making authorities. As a consequence of the above, most Female Farmers (FFs) during my Focus Group Discussions (FGDs) in the totally and partly affected villages (Roportor and Makontho) complain of finding it difficult to support their families including their children's education, and to make ends meet. Based on the information gathered in the field, the situation has further contributed in worsening the women's landholding, given that they already suffer from a lack of entitlement and control. Land ownership and control in the affected villages have legally shifted to Addax Bioenergy on a long-term basis. An employee at Addax Bioenergy claims that: *“we've legally acquired the land for our sugarcane plantation, and have compensated the landowners”* (2014-01-15).

5.4.2 Land Access and Use

In the context of this research, access to land for food production is vital in enhancing livelihoods in areas overlap by the Addax Bioenergy-sugarcane-biofuel project. Based on information gathered in the field, sugarcane which Addax Bioenergy is growing to produce ethanol/biofuel has made the farmland access and use difficult for the FFs, since they are mostly land users in the affected villages. This claim has also been supported by previous studies (SiLNoRF, 2012; Christian Aid, 2013; Havnevik, 2014). The FFs' usual farming activities and land access have been largely impacted in areas affected by the company's sugarcane-biofuel project. Previous studies by Widengård (2011:44) and Dahlbeck (2012:31) reveal that sugarcane is a food crop classified as a first-generation of biofuels. It accounts for approximately 40% of worldwide biofuel production. They claim that sugarcane unlike jatropha (non-food crop) cannot be grown on marginal lands and therefore competes with land for food production. In retrospective of the above context, previous studies' claims by ActionAid (2013) and Christian

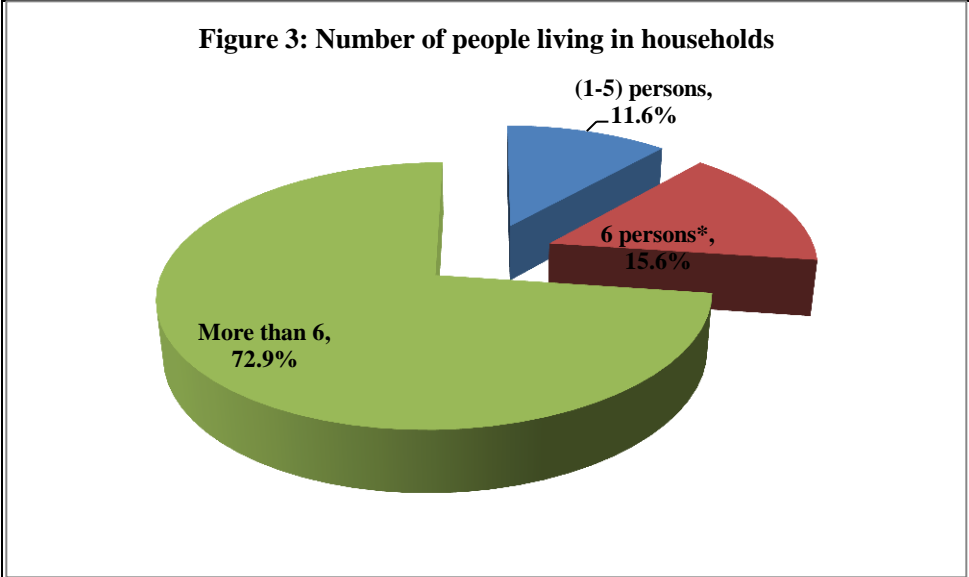
Aid (2013) may be proven true that the company's project has contributed in restricting land access and use for the rural poor such as the FFs in villages it overlaps. To examine this claim in the context of this thesis, each focus group FF respondents responded collectively but discretely/separately from the others in the three randomly selected villages in section (4.2.1) (R, M, and WW). The FF respondents in these villages expressed similar dissatisfaction over the company's project effects on them in the district. Although the latter village was non-affected by the LSLA, the focus group FF respondents still expressed similar sentiments in line with the former. The FFs in WW claim that there is also relative pressure on land due to the rural-rural migration of people from the neighbouring affected villages in search of farmlands for rent or through other informal ways. Based on information gathered in the research area, the commercial value added to land through the LSLA has contributed to restrict the land access and use for the FFs as compared to before the Addax Bioenergy sugarcane-biofuel project. A female farmer, Kadiatu claims that: *"Addax has displaced us from the lands we use to have access to for farming without restrictions"* (2014-07-10). This claim has earlier been dismissed by Addax Bioenergy. Clive at Addax Bioenergy claims that: *We've put in place the Farmer Development Programme (FDP) to ease the concerns of the smallholders"* (2014-01-15). On the contrary, most FFs interviewed expressed dissatisfaction that the FDP does not ease their concerns over land access and use in areas that overlap the Addax Bioenergy-sugarcane-biofuel project. The new land rush as argued by Razavi (2007) and Anseeuw et al. (2012) has put smallholder farmers' farming activities at risk and consequently restricts land access and use. They reiterated that the concept of using money for land access and use has given rise to neoliberalism, which has added to the smallholder farmers' constraints. The Addax Bioenergy's sugarcane-biofuel project has according to Christian Aid (2013) contributed to restricting the smallholder farmers' land access and use due to the commercialization of farmland by landowners (men) to Addax Bioenergy in the district. Tomas (2001) argues that land use patterns have vital environmental and social consequences. To understand the land use phenomenon, he claims, it requires learning about land owners in regards to how they make decisions on issues relating to land.

5.5 Livelihoods of the Female Farmers (FFs)

In this section, I will briefly look at the household size, age distribution, income and expenditure, changing farming systems, and the coping strategies used by the FFs to survive in mostly areas that overlap with the Addax Bioenergy-sugarcane-biofuel project in the district. My findings show that many FFs have lost their livelihoods partly due to areas overlapping with the company's sugarcane-biofuel project. In this region, women's livelihoods depend on their rights to land access and use to grow agricultural food crops in order to sell to the nearest local market to make ends meet (ActionAid, 2013; Christian Aid, 2013). Kabeer (2005) claims empowering women is crucial in securing their livelihoods or wellbeing. This research has created the understanding around the aspect of gender inequality in the research area. Ellis (1999) in an earlier study views gender as an essential and intimate part of rural livelihoods. This is to say, men and women should have access to land resources in order to support their livelihoods. A recent study by Naila Kabeer also claims from a growth/development perspective, that promoting gender equality seems to offer a "win-win" solution. She asserts that the issue of gender equality cannot be singly resolved by growth/development policies (Kabeer, 2013:3).

5.5.1 Household Size

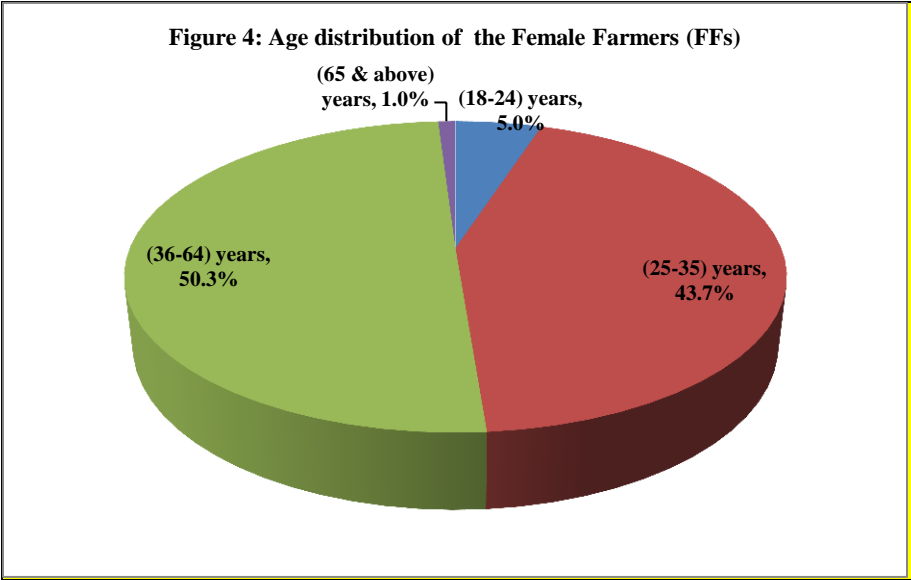
Households are one of the basic units of human social organization. Livelihood is generated within the household. Ingrid Rudie defines household as "a co-residential unit, usually family-based in some way, which takes care of resource management and primary needs of its members" (Niehof & Price, 2001:8, 19). The research suggests that the household size of the six selected villages ranges from 3 to 20 persons. Households are generally characterized by large size in the research area, above the national household size of 6 according to the Sierra Leone 2004 national population census (SSL, 2004).



“Average national household size (2004 Census), Sex distribution of the population reveals 51.5% male and 48.5% female; Average household size = 8.2” (SSL, 2004).

5.5.2 Age Distribution

The pie chart in figure 4 below indicates the ratios of different age groups of the FFs who engage in farming activities to make ends meet:



Source: Field Survey, 2014

The survey results show the different farming activities of the FFs. The results indicate 1.0% of the FFs within the age bracket (65 and above) and 50.3% of the age bracket (36-64) are engaged in mostly weeding as part of their farming activities in the research area. The results further reveal 5.0% of the younger FFs of the age bracket (18-24) and 43.7% of these FFs in the age bracket (25-35) are engaged in ploughing and harvesting. Moreover, the research area has more of FFs between the age bracket 36 and 65 (50.3%) with least number of them between the age 65 and above (1.0%).

5.5.3 Household Income and Expenditure

Household income from the land lease, sales from products of palm trees, payment of economic trees, income from the Farmer Development Programme (FDP), sales of crops from own farm, income from wage labour, and remittances show the variations in income realization in the six villages according to their categories in Bombali district. Findings from my survey that went out to specifically the FFs show that income is realized highest in the villages/households whose farmlands are totally overlapped by the Addax Bioenergy large-scale land lease. This is followed by the partly affected villages/households. My survey that went out also shows that the non-affected villages/households realized the least income from the Addax Bioenergy investment – see table 2 in the list of tables. Table 2 projections do not completely reflect whether the Addax Bioenergy investment has contributed to improve or worsen the FFs’ rights to land and their livelihoods in the research area. The projections instead largely show how the company’s investment has benefited mainly the landowners who are mostly men in the research area. Nonetheless, some of the FFs did benefit from the FDP based on findings from FGDs in mostly villages R and M in the district.

Meanwhile, my findings in households/villages totally affected by the Addax Bioenergy’s investment accrued more expenditure than the rest of the other households in terms of food, education, health, fuel crop, and local construction material such as sticks to erect dwelling houses. The partly affected households accrued less expenditure than the former, and lastly followed by the non-affected households. From the findings gathered during the FGDs, the household expenditure of the FFs interviewed has largely increased – see table 3. Most of the FFs claimed that their situation has been worsened by the Addax Bioenergy-sugarcane-biofuel project, since they find it difficult to access and use farmlands in areas that overlap with the

company's project. Previous study by Razavi (2007: 1484) claims that feminists had focused attention on the equal distribution of resources and power within the households along gender and generational lines. He further asserts that the equal distribution of resources including land is crucial for women's welfare, since they generally utilize the agricultural proceeds derived from land resource use to support their family and children's welfare. In the context of the research, households/villages that are totally affected by the Addax Bioenergy land lease benefited from the company's investment than the rest of the other households/villages in the research area. Nevertheless, more expenditure is incurred on the households totally affected by the company's land lease. Thus, the company has affected the households/villages both positively and negatively in the research area.

5.5.4 Changing System of Farming

Most of the FFs during my FGDs in R and M villages, expressed that the Addax Bioenergy-sugarcane-biofuel project has affected their way of living in the district. For some FFs, the coping strategy to survive is through charcoal burning in order to make ends meet. An anonymous FF in village R grieved over that: *"These days, I have no access to farmland simply because of Addax took our family land. I can't pay my children's school fees except I engage in charcoal burning, which is still inadequate to address my family needs (An Anonymous FF, 2014-07-10).*

In review of the above, out of 199 FF respondents in the survey, 113 of them equivalent to 56.8% claim that their current farming system has generally changed to shifting cultivation with short fallow period in areas that overlap with the Addax Bioenergy-sugarcane-biofuel project. They (the FFs) in mostly affected villages linked their depressed situation to the presence of Addax Bioenergy in the district. Many FFs are now practicing intensive cultivation in areas that overlap with the company's project site. The FFs, especially in the partly affected villages claim the trend has increased their cost of production in terms of labour, fertilizer, and farm tools. Previous study by Sylvia Chant (2007) claims that women are a bigger percentage of the world's poor. She further claims that the gender gaps with respect to poverty between men and women are on the rise, and landless women would continue to remain poor for lack of access to farmland resources (Chant, 2007). In the context of this thesis, most of the FFs complain of poverty level increasing due to their limited rights to land and livelihoods.

5.6 The Coping Strategy

5.6.1 Charcoal Burning for Survival

Based on findings gathered during the FGDs combined with my direct observations in areas overlap by the Addax Bioenergy-sugarcane-biofuel project, most FFs have been displaced by the company's project. They (the FFs) have resorted to charcoal burning as a way of coping with the Addax Bioenergy investment effects in the said areas - see photo below:



Photo: Benjamin John Sesay

An Addax Bioenergy employee confirmed to me that: “...10% of our employees are women, since them (women) in our land lease villages don't have the required expertise to work in some of our technical areas of operations” (Clive, 2014-01-15). Thus, the low employment rate is partly linked to the women's weak education/literacy level to meet the company's job criteria. Most FFs in the affected villages expressed apprehensions over the company's presence in the district. An anonymous FF at the FGDs in the affected village claims that: “Addax has not made our lives better, since they occupy our family farmlands”. According to my survey that went out to the FFs, it was with deep concern that a lot of households have not benefited from the Addax Bioenergy FDP. The findings suggest 82.4% of the total number of the FFs have not benefited from the FDP. As such, majority of the FF respondents whose rights to land have been limited by the Addax Bioenergy investment want to be given the rights to carry on with their farming activities.

5.7 Case Reflections

“Arguing as to whether the research area would have been better-off with the absence of Addax Bioenergy?” The fact is that, the absence or presence of Addax Bioenergy has not changed the customary laws that prevent, especially women from owning land in Bombali district in northern Sierra Leone. Before and at present, women’s land ownership has not changed. Ownership only changed legally on a long-term basis in favour of Addax Bioenergy, which now controls and determines the fate of the land leased or acquired in areas that overlap with its project. On the contrary, the pattern of land access and use entitlement has changed drastically as a result of the presence of Addax Bioenergy in the district. Based on my findings gathered in the field, the FFs’ land access and use have now been limited or restricted as opposed to before the Addax Bioenergy investment in the district. Land owners used to allow women to access and use land in areas that overlap with the company’s project without much restrictions. Supporters of the LSLA/FI such as governments in developing countries view the trend as necessary to promote free trade and to boosting economic growth in order to reduce poverty for the poor (Chomsky, 1999; Ferguson, 2010). These governments often focus on improving economic growth through, for instance, job creation. The aspect of human development such as the promotion of education for citizens is usually ignored. In the context of this thesis, the low literacy is making the FFs’ understanding about their rights to land difficult. The FFs who are mainly land users in the research area stand to lose to the benefits of the elites and Addax Bioenergy. Likewise, the company’s investment areas may be chosen due to the customary laws, which limit largely women’s rights to property including land in the district.

CHAPTER SIX

6.0 CONCLUSIONS

Further research on this topic would be beneficial in promoting women's rights to land in the context of the research area. Women's rights to land are still solely dependent on the existing customary laws/practices through maintaining connection with the landowners/men. These practices have not changed in spite of the presence of Addax Bioenergy in the district. The state elites/government has the ultimate or overall say to influence policy changes over rights relating to natural resources including land. Nevertheless, land access and use have changed particularly in areas the company's project overlap.

The need to secure the land rights of the world's poorest people, namely the FFs is even more essential amid the land rush by multinational companies for agri-business/biofuel in the global south. The constraints faced by smallholders such as the FFs to secure food on the table is equally based on overcoming poverty, environmental sustainability, the global rush for farmland, and securing the rights to land for the poorest of the poor.

The present case study reveals that the Addax Bioenergy-sugarcane-biofuel project has had more negative than positive impacts especially on the FFs' rights to land in Bombali district. Addax Bioenergy can also not be largely blamed, since the FFs rights to land were already restricted before the company's investment in the district. Nonetheless, the company, its financiers, and the controlling institutions such as the GoSL are expected to play a leading role to secure the rights to land of the FFs.

Apart from the issues discussed, the research area was still fundamentally faced with three key complex problems such as gender inequality, illiteracy, and poverty, which even in the long-term would be difficult to resolve.

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LIST OF APPENDICES

Appendix 1 - Record of Respondents

Number	Date	Type of Interview	Name (fictive)	Age	Male/Female Characteristics Comments
1	2014-01-15	Key Informant Interview	Clive	50s	Male Official, Addax
2	2014-01-15	Key Informant Interview	Thollie	50s	Male government Official
3	2014-07-10	Key Informant Interview	Anonymous elder	Late 60s	Male local chief in Roportor
4	2014-01-10	Key Informant Interview	Pa Abdulia	70s	Male local chief in Makontho
5	2014-07-10	Key Informant Interview	Anonymous elder	70s	Male chief in Worreh Wanda
6	2014-07-03	Key Informant Interview	Kadiatu	60s	female elder
7	2014-07-05	Key Informant Interview	Brima	Mid 20s	Male land rights activist
8	2014-07-07	Key Informant Interview	John	30s	Male land rights activists
9	2014-07-08	Key Informant Interview	Mariama	20s	Female land rights activist
10	2014-07-09	Key Informant Interview	Emilia	Mid 20s	Female gender and land rights activist
11	2014-07-10	Focus Group Discussions (FGDs)	Roportor village	18 and above	Female Farmers (FFs)
12	2014-01-10	FGDs	Makontho village	18 and above	FFs
13	2014-07-10	FGDs	Worreh Wanda village	18 and above	FFs

Appendix 2 – Interview Guide Followed

- *My Identity/Background*
- *Presentation of the aim of the study*
- *Explanation of how the data will be used and who will have access to the data*
- *Inform the participant of confidentiality and how confidentiality will be protected*
- *Explaining the structure of the interview and how long it will take*
- *Explaining that the informant does not have to answer all questions for instance*
- *Seeking for the consent that I would like to record the interview*
- *Asking if the informant has any questions before commencing*

Appendix 3: Focus Group Discussion - CODE: FGD

Introduction

Hello! My name is Benjamin John Sesay. Thank you for coming, it is highly appreciated. I am conducting my Master's Thesis research in six (6) villages, and would like to obtain information on how the Addax Bioenergy investment has contributed to either worsen or improve on female farmers' rights to land and their livelihoods in Bombali district in northern Sierra Leone. Your participation will be completely anonymous, so you are welcome to express yourself freely. Moreover, there are no rights or wrongs for answers to questions posed. I'm interested in hearing *your* stories, *your* perspectives/world views, reflections and experiences related to the research. Would you have time to participate for approximately 30 minutes to answer few questions? Yes1 or No2. I will use the information in my Master's Thesis in International Development and management Studies at Lund University in Sweden.

COMMUNITY LOCATION

District: _____
 Chiefdom: _____ Section: _____
 Village: _____
 Date: _____

SECTION A

RIGHTS TO LAND

1. How do female farmers acquire land before Addax Bioenergy's large-scale investment?

- (a) Paternal Linage.....1
- (b) Marital Linage2
- (c) Maternal lineage.....3
- (d) Others specify.....4

2. What is your understanding about land rights?

.....

3. Do female farmers have equal rights as men to own and utilize land in your community?

- (a) Yes.....1
- (b) No.....2

4. If no, why is it so?

- (a) Customs and tradition.....1
- (b) National Land Policy not in favour of women.....2
- (c) Others specify.....3

SECTION B

CURRENT SITUATION ON THE FEMALE FARMERS' RIGHTS TO LAND

5. Has Addax's presence contributed to worsen your rights to land?

- (a) Yes.....1
- (b) No2
- (c) Don't know3

6. If yes, how?

- (a) Through LSLA.....1
- (b) Farmland displacement.....2
- (c) Land lease agreement.....3
- (d) Others specify.....4

SECTION C

LIVELIHOOD AND FOOD SECURITY

7. Were better options put in place for female farmers losing their farmland to the company?

- (a) Yes1
- (b) No.....2

8. If yes, what has been put in place?

.....

9. To what extent has the presence of Addax affected your livelihoods?

- (a) Limited land space for cultivation.....1
- (b) Increase expenditure on fertilizer.....2
- (b) Others specify.....3

10. How are you coping as a result of Addax Bioenergy project in your community?

.....

Appendix 4: Survey for the Female Farmers (FFs)

Introduction

Hello! My name is Benjamin John Sesay. This is a non-digital survey about the impact of the Addax Bioenergy-sugarcane-biofuel project on the female farmers' rights to land and their livelihoods in six sample villages in Bombali district in northern Sierra Leone. The results will be used for my Master's Thesis at Lund University, Sweden. The results will help to inform policy makers, and will pave the way for further research on the situation of the Female farmers (FFs) in the district amid Addax Bioenergy investment in the district. It may take approximately 30 minutes to complete this questionnaire. Would you have time to participate? Yes.....1, No.....2. Thanks in anticipation!

COMMUNITY LOCATION

District: _____
 Chiefdom: _____ Section: _____
 Village: _____
 Enumerator's name: _____ Date: _____

SECTION A

HOUSEHOLD INFORMATION

1. Gender

2. Marital Status

Married.....1
 Single.....2
 Divorced.....3
 Others.....4

3. Age.....

4. Can you read and write?

Yes.....1
 No.....2

5. What is your highest level of education?

No education.....1
 Primary.....2
 Secondary3
 Tertiary/ University4
 Tech / vocational.....5

6. How many people do you have including yourself?

(a) No. of Male:
 (b) No. of Female:

7. How did you get to this village?

Birth place1
 My father land2
 My mother land.....3
 Through marriage4
 Stranger5

8. How long have you been in this village?

(a) 1 - 2 Year (s)1
 (b) 3 - 5 years2
 (c) 5years and above3

SECTION B

RIGHTS TO LAND

9. I. Who owns and controls land you have been farming in this community before Addax acquires it?

(a) Paramount chief.....1
 (b) Elders/father.....2
 (c) Others specify.....3

II. Why?

10. How does one acquire land before Addax came to this community?

(a) Household Heads.....1
 (b) Elders.....2
 (c) Chiefs.....3
 (d) Others specify.....4

11. Who use land more before Addax came to this community?

12. Where women involved in decision making on land use and ownership before Addax Bioenergy investment?

(a) Yes.....	1
(b) No.....	2
(c) Don't know.....	3
13. If no, why?	
.....	
14. Do you often take part in meetings related to land?	
(a) Yes.....	1
(b) No	2
15. I. If yes, what has been your role in these meeting?	
(a) Passive role.....	1
(b) Active role.....	2
(c) Others specify.....	3
II. If no, why?	
.....	

SECTION C

FEMALE FARMERS' RIGHTS TO LAND

16. How do you currently acquire land in this community?	
(a) Rental	1
(b) As gift from parents	2
(c) Labour supports	3
(d) Other specify.....	4
17. I. Who determines the type of land to give?	
(a) Paramount chief/local authority.....	1
(b) Land owner.....	2
(c) Others specify.....	3
II. And why?	
.....	
18. What percentage of your age understands female farmers' rights to land? (Proportional piling)	
.....	
19. In what way do female farmers participate in farming?	
(a) Weeding.....	1
(b) Ploughing.....	2
(c) Clearing.....	3
(d) Harvesting	4
(e) Other specify.....	5

SECTION D

LIVELIHOOD AND FOOD SECURITY

20. What is your main occupation?	
(a) Small-scale farming	1
(b) Petty trading	2
(c) Skilled labour	3
(d) Live skilled activities	4
(e) Other Specify.....	5
21. What is your main source of livelihood?	
(a) Fishing.....	1
(b) Small-scale farming	2
(c) Poultry management.....	3
(d) Petty trading	4
(e) Other specify.....	5
22. How do you describe the nature of migration of people in this community?	
(a) Rural-Urban	1
(b) Urban-Rural	2
(c) Rural-Rural	3
(d) Other specify	4

23. Which set of people were mostly displaced by the Addax Bioenergy-sugarcane-biofuel project?

- (a) Women1
- (b) Men2
- (c) Youths3
- (d) Children4
- (e) Elderly5
- (f) Other specify6

24. What is the reason for displacement?

- (a) In search for arable land1
- (b) Avoid land dispute2
- (c) Large-scale land Acquisition3
- (d) Other specify4

SECTION E

ADDAX BIOENERGY FARMER DEVELOPMENT PROGRAMME (FDP)

25. Did your household benefit from the FDP?

- (a) Yes1
- (b) No2

26. If your household benefited from the FDP, for how many years?

- (a) 1 year1
- (b) 2 years2
- (c) 3 years3
- (d) 4 years4

27. How did the FDP increase your livelihood options?

28. What extra support you need from Addax Bioenergy now that your rights to land have been limited?

SECTION F

LAND LEASE AND NEGOTIATIONS

29. Who has authority over land under cultivation?

30. I. Were you involved in the land lease negotiation with Addax Bioenergy?

- (a) Yes 1
- (b) No.....2

II. If no, why?

31. What benefits have you gained from Addax Bioenergy's land lease agreement?

32. Have you/your household leased any of your farmland to Addax Bioenergy?

- (a) Yes, leased all1
- (b) Yes, Leased part.....2
- (c) None was Leased.....3

33. If leased all or part of farm land, what is the total farm land that have been leased?

.....Acres

34. Of the total leased, what is the type and size of each?

- (a) Upland.....acres
- (b) Low landacres
- (c) Boli Landacres
- (d) Others.....acres

35. When was the farmland leased?

- (a) 1 year ago.....1
- (b) 2 years ago.....2
- (c) 3 years ago.....3
- (d) 4 years ago.....4

36. Have you been farming on it after lease agreement?

- (a) Yes.....1
- (b) No2

37. If yes, for how long have you been farming on farmland after lease?

- (a) 1 Year1
- (b) 2 Years.....2
- (c) 3 Years3
- (d) 4 Years.....4

SECTION G

COST BENEFIT DERIVED FROM APPROPRIATE LAND USE

38. How much land have you been cultivating for the past years?

- (a) Upland1
- (b) Low Land2
- (c) Boliland3

39. What were the types of crops grown and profit accrued from yield of crops harvested?

CROPS	UNITS	QUANTITY	UNIT COST (SLL)	TOTAL AMOUNT (SLL)
Rice				
Cassava				
Sweet potato				
Yarms				
Bread Beans				
Sorghum				
Others				

40. What has been your previous fallow period?

- (a) 0-4 years1
- (b) 5-10 years2
- (c) Non3

41. What were your favorite crops grown?

.....

42. What time in the year do you grow them?

- (a) First cropping season1
- (b) Second cropping season2
- (c) Third cropping season only3

SECTION H

AGRICULTURAL PRODUCTION AND FARMING SYSTEMS

43. What type of farming system are you practicing now as a result of Addax bioenergy project?

- (a) Intensive cultivation only.....1
- (b) Shifting cultivation with short fallow period2
- (c) Both3

44. What are your reasons for practicing intensive cultivation?

- (a) Most of farmlands have been leased to Addax1
- (b) Cattle grazing2
- (c) Land disputes3
- (d) Non-availability of arable land4
- (e) Other specify5

45. Now that you are practicing intensive cultivation, has your cost of production increased?

- (a) Yes1
- (b) No2
- (c) Can't tell3

46. If your cost of production has increase as a result of the intensive cultivation, by how much has it increased?

Input	Perceived previous Agric. Production cost (SSL)	Current Agric. Production cost (SSL)	Increased cost (SSL)
Labour			
Fertilizer			
Farm tools			
Rented/ Loyalty			

47. Did your household have any palm tree products in last year's farming season?

- (a) Yes.....1
- (b) No.....2

48. If Yes, how much of palm tree products were sold in last year's farming season?

Product	Unit	Quantity sold	Price per Unit	Total sales (SSL)
Palm oil				
Palm wine				
Palm kernel nut				
Palm kernel oil				
Other palm products				

SECTION I

HOUSEHOLD INCOME AND EXPENDITURE

49. What was the income realized from Land lease?

- (a) Income from land lease..... (SSL)
- (b) Income from sales products of palm trees.....(SSL)
- (c) Income from payment of economic trees..... (SSL)
- (d) Income from FDP..... (SSL)
- (e) Income from sales of crop..... (SSL)
- (f) Income from wage labour..... (SSL)
- (g) Remittances..... (SSL)

50. What was your Household expenditure?

- (a) Food..... (SSL)
- (b) Education.....(SSL)
- (c) Health.....(SSL)
- (d) Fuel crop..... (SSL)
- (e) Local income construction material..... (SSL)

Appendix 5: Key Informant Questionnaire - Code: KIQ

Introduction

Hello! My name is Benjamin John Sesay. I am conducting a thesis research, and would like to obtain information on how the Addax Bioenergy investment has contributed to either worsen or improve on female farmers' rights to land in Bombali district. Your participation will be entirely anonymous, so you are welcome to express yourself freely. Also, there are no rights or wrongs for answers to the questions I will pose. Hearing your stories, your perspectives, reflections and experiences related to the research. It may take approximately 15 minutes to complete this questionnaire. Would you have time to participate? Yes.....1, No.....2. Thank you for taking part in this interview, it is highly appreciated. The information obtains will be used in my Master's Thesis in International Development and Management at Lund University, Sweden.

COMMUNITY LOCATION

District: _____
Chiefdom: _____ Section: _____
Village: _____
Enumerator's name: _____ Interview date: _____

1. What was the status of the female farmers' rights to land before the Addax Bioenergy investment?

.....
.....

2. Who were the people involved in the land lease agreement and negotiations?

.....
.....

3. What are your plans for the land owners and users in the lease agreement?

.....
.....

4. How many hectares or acres of land have Addax Bioenergy leased from land owners?

- a. Upland.....acres/hectares
- b. Low land.....acres/hectares
- c. Boliland.....acres/hectares

5. How many hectares/acres has the company leased on partial basis?

- a. Upland.....acres/hectares
- b. Low land.....acres/hectares
- c. Boliland.....acres/hectares

6. When did the lease agreement effected?

.....

7. When will the land lease be renewed?

.....

8. What proportion of female farmers that have benefited from Addax Bioenergy's investment?

.....
.....

9. How have female farmers benefited from the land lease?

.....

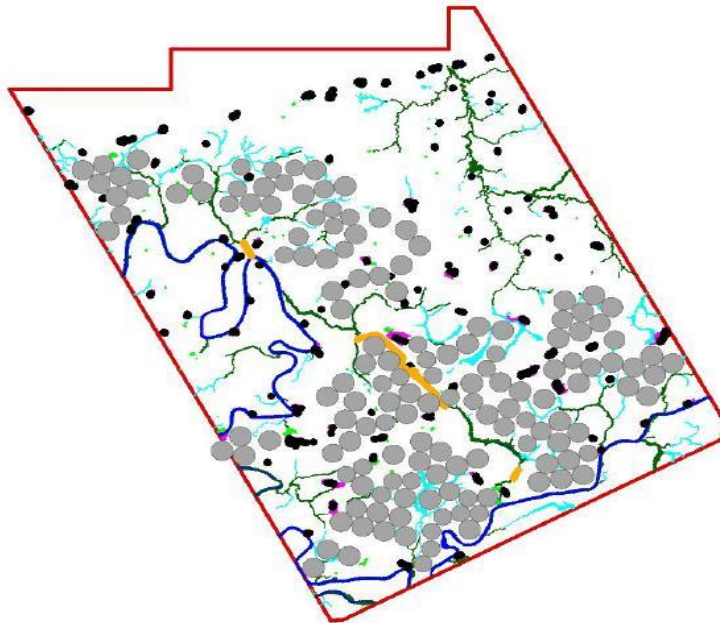
10. Do female farmers think that their rights to land have been improved or worsened as a result of the Addax Bioenergy investment in the district?

.....

Appendix 6: Main Documents selected for analysis KIQ

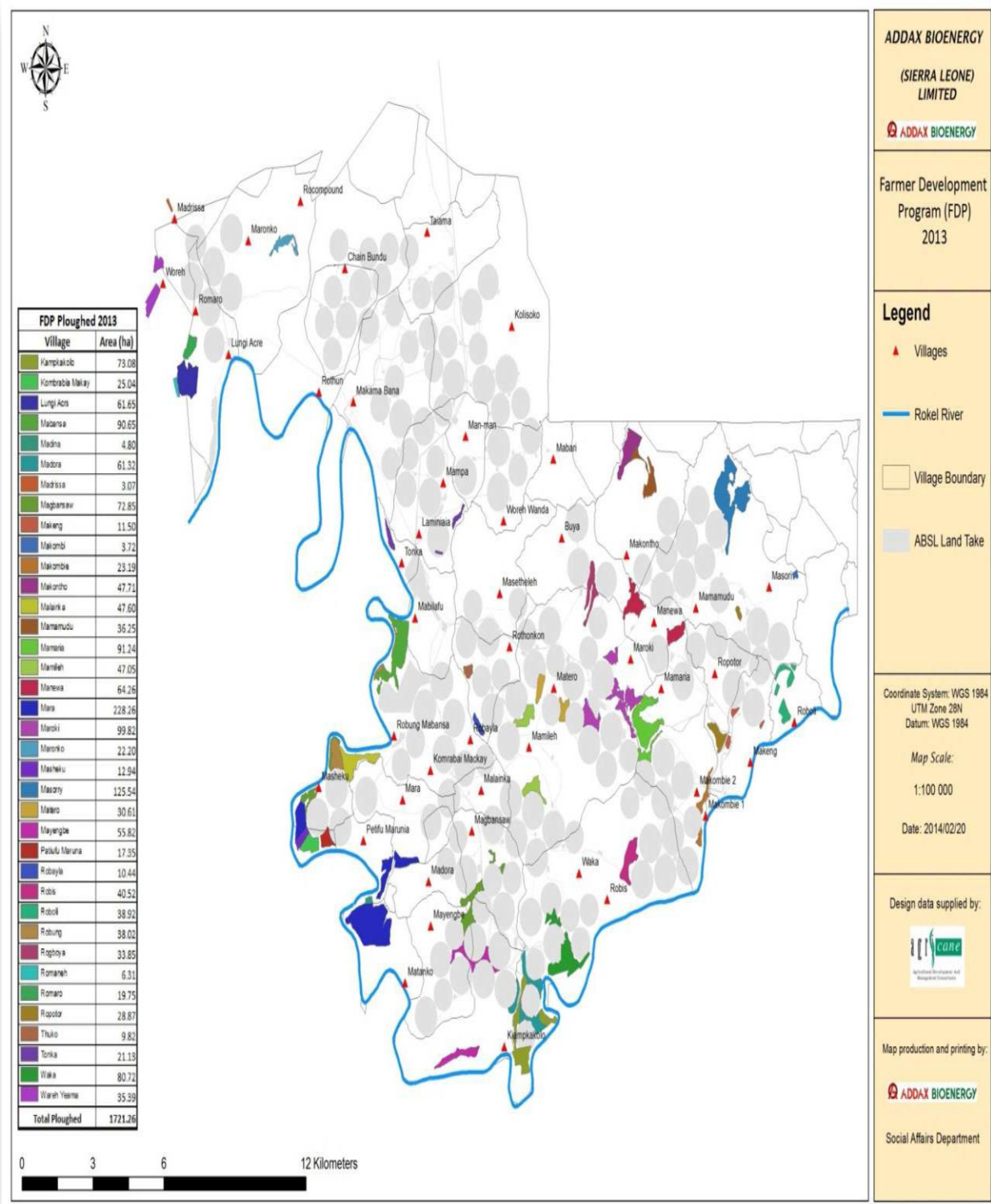
- ❖ Naila Kabeer's (2005) Gender Equality and Women Empowerment, a critical analysis of the Third Millennium Development Goals (MDG) 2015
- ❖ Sierra Leone Draft National Land Policy
- ❖ Statistics Sierra Leone's (2004) *Final Results, 2004 Population and Housing Census Report, etc.*

Appendix 7: Case Analysis Addax Bioenergy



Source: (Site selected and survey methodology presented, 2010:5 cited in Millar, 2012:3).

Appendix 8: Map of Addax Bioenergy plantation site



Source: English and Sandström (2014:34)

Appendix 9: Addax Bioenergy energy plant under construction and its sugarcane-ethanol-project site.

The researcher posing by the Addax Bioenergy irrigation machine which pumps water from the Sierra Leone second longest river Rokel in support of the nursery sugarcane plantation site:



Photos: Benjamin John Sesay and John Brima Kargbo

LIST OF TABLES

Table 1: Sampling Allocation of Villages in Bombali district

VILLAGE	Number of female farmers in the Focus Group Discussions (FGDs)	Category of villages	Village Section/chiefdom in the district
Roportor	6 to 12	<i>Totally affected by the land lease</i>	<i>Bombali Shebora chiefdom</i>
Man-Man	-		<i>Makari Gbanti Chiefdom</i>
Makonotho	6 to 12	<i>Partly affected by the land lease</i>	<i>Bombali Shebora chiefdom</i>
Kolishoko	-		<i>Makari Gbanti Chiefdom</i>
Worreh Wanda	6 to 12	<i>Non-affected but close to Addax Bioenergy project site</i>	<i>Bombali Shebora chiefdom</i>
Saithnin	-		<i>Bombali Shebora chiefdom</i>

Source: Field Survey, 2014

Table 2: Village Households' Income

Income source	Category of farmers			Total (SLL)
	Households totally affected by lease (SLL)	Households partly affected by lease (SLL)	Households not affected by lease (SLL)	
Income from land lease	1,755,000	1,561,000	-	3,316,000
Income from sales products of palm trees	2,514,000	1,950,000	0	4,464,000
Income from payment of economic trees	-	150,000	-	150,000
Income from FDP	620,000	60,000		680,000
Income from sales of crops from own farm	23,761,000	48,729,000	1,885,000	74,375,000
Income from wage labour	59,110,000	25,210,000	3,200,000	87,520,000
Remittances	30,193,000	8,466,000	920,000	39,579,000
Total	117,953,000	86,126,000	6,005,000	210,084,000

Source: Field Survey, 2014. Table 2 shows the income realized by the selected six villages' households from the Addax Bioenergy's land lease agreement.

Table 3: Village Households' Expenditure

Expenditure	Category of Households			Total (SLL)
	Households totally affected by lease (SLL)	Households partly affected by lease (SLL)	Households not affected by lease (SLL)	
Food	222,507,500	59,009,000	3,666,000	285,182,500
Education	33,730,000	23,625,000	1,290,000	58,645,000
Health	53,770,000	12,530,000	500,000	66,800,000
Fuel Crop	14,846,000	4,865,210	220,000	19,931,210
Local Income construction materials	15,655,000	12,030,500	730,000	28,415,500
Total	340,508,500	112,059,710	6,406,000	458,974,210

Source: Field Survey, 2014

Table 3 shows the expenditure accrued by the selected six villages' households from the Addax Bioenergy's land lease agreement.