

The Socio-Economic and Environmental Impacts of Large Scale (Agricultural) Land Acquisition on Local Livelihoods:
A Case Study in Bako Tibe *Woreda* of Oromia Region, Ethiopia

Desalegn Keba Dheressa



**Thesis submitted in partial fulfillment of the requirements
for the Degree of Master of Philosophy in
Culture, Environment and Sustainability**

Centre for Development and the Environment

University of Oslo

Blindern, Norway

May 2013

Table of Contents

Table of Contents	iii
List of Tables, Figures and Annexes.....	iv
List of Abbreviations and Acronyms	vi
Acknowledgements	vi
Abstract	vi
Chapter One: Introduction.....	1
1.1 Background	1
1.2 Statement of the Problem	3
1.3 Objectives and Research Questions	4
1.4 Scope of the Study.....	4
1.5 Thesis Outline.....	4
Chapter Two: Conceptual Framework.....	6
2.1 Sustainable Livelihood	6
2.1.1 Capabilities.....	6
2.1.2 Equity	7
2.1.3 Sustainability.....	7
2.2 Sustainable Rural Livelihood Framework.....	7
2.2.1 Contexts, Conditions and Trends	8
2.2.2 Sustainable Livelihood Outcomes.....	8
2.2.3 Livelihood Resources.....	11
2.2.4 Livelihood Strategies:	12
2.2.5 Institutions and Organizations.....	16
Chapter Three: Review of Literature	19
The Concept of Large Scale Land Acquisition	19
3.1 Debates on Large Scale Land Acquisitions.....	19
3.2 Major Motives for LSLAs	20

3.3	Determinants of Land Selection for Large-Scale Agriculture.....	23
3.4	Limitations of Large Scale Land Deals	25
3.5	Land Rights and Land Governance in Host Countries	27
3.6	The Extent of Local Impacts of LSLAs	29
Chapter Four		32
Ethiopia’s Agriculture, Rural Land Governance and Large Scale Land Acquisition		32
4.1	Ethiopia’s Agriculture Sector	33
4.2	Rural Land Governance in Ethiopia: The Land Tenure System	35
4.3	Large Scale Land Acquisition in Ethiopia	38
4.3.1	Investment Legislations and Institutional Arrangements.....	40
4.3.2	The State of LSLA in Ethiopia.....	43
4.3.3	Land Deals and Investors’ Obligations	48
4.3.4	Investment Land Rents, Size and Lease Period	50
4.3.5	Assessing Impacts of Land Acquisition.....	52
Chapter Five: Research Methodology.....		55
5.1	Description of the Study Area	55
5.2	Types and Instruments of Data Collection	58
5.3	Sampling Design and Sample Size.....	59
5.4	Data Analysis and Interpretation	60
5.5	Limitations of the Study	60
5.6	Ethical Considerations.....	61
Chapter Six: Analysis of Household Resources.....		62
6.1	Household Demographics	62
6.1.1	Household Head Background	62
6.1.2	Household Size, Age Distribution and Dependency Ratio	66
6.2	Economic and Financial Resources.....	67
6.2.1	Major Economic Activities and Household Expenditures	67

6.2.2	Major Food Productions and Consumptions.....	73
6.3	Land Holding in Bako Tibe Woreda	77
Chapter Seven: Results and Discussions		81
7.1	Extent of Land Acquisition and Role of Local Communities	81
I.	Community Consultation	82
II.	Transparency	83
III.	Compensation.....	84
7.2	Socio-Economic and Environmental Impacts of the Land Acquisition on Local Livelihoods.....	85
7.2.1	Socio-Economic Impacts of the Land Acquisition	86
7.2.2	Environmental Impacts	99
7.3	Coping Strategies	101
I.	Land use change.....	102
II.	Sharecropping	103
III.	Tenant Farming	104
IV.	Change of occupation.....	104
V.	Migration.....	105
VI.	Other Coping Strategies	105
Chapter Eight: Conclusion and Recommendations		106
8.1	Conclusion.....	106
8.2	Recommendations	110
9.	Annexes	115
10.	Bibliography.....	124

List of Tables, Figures and Annexes

Tables

Table 1: Investment Land Transferred to the Federal Land Bank	47
Table 2: Land rents in selected regions (Birr/ha/year)	50
Table 3: Household Head Background	63
Table 4: Average household size, age distribution and dependency ratio	66
Table 5: The major economic activities and estimated annual earnings during 2010/11	67
Table 6: Table 6: Major crops produced, consumed and sold during the fiscal year 2010/11	73
Table 7: Average inventory of livestock during the fiscal year 2010/2011 E.C	74
Table 8: Major livestock products produced during the 2010/2011 fiscal year	75
Table 9: Households' landholding	78
Table 10: Change in household landholding over the past four years	78
Table 11: Major Land Use Arrangements	80
Table 12: Number of households who lost a portion or all of the land they used (either directly or indirectly), due to the investment project:	81
Table 13: Role of the community during the land transfer	82
Table 14: Social impacts of the project	87

Figures

Figure 1: Sustainable Rural Livelihoods Framework	10
Figure 2: Average annual household expenditure during 2010/11	72
Figure 3: Major sources of domestic food consumption	76
Figure 4: Major categories of previous land use	93
Figure 5: Major coping strategies for lost opportunity following the land acquisition	102

Annexes

Annex 1: Household Interview	115
Annex 2: List of Informants	121
Annex 3: Map of Bako Tibe	122
Annex 4: Slashed and burned land	123

List of Abbreviations and Acronyms

ADLI	Agricultural Development-Led Industrialization
AISD	Agricultural Investment Support Directorate
BADP	Bechera Agricultural Development Project
CSA	Central Statistics Authority
DA	Development Agent
E.C.	Ethiopian Calendar
EEPCo.	Ethiopian Electric Power Corporation
EIA	Environmental Impact Assessment
EPA	Environmental Protection Authority
EPRDF	Ethiopian Peoples Revolutionary Democratic Front
ERA	Ethiopian Road Authority
ETB	Ethiopian Birr
EWCA	Ethiopian Wildlife Conservation Authority (EWCA)
FAO	Food and Agriculture Organization
FDRE	Federal Democratic Republic of Ethiopia
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GoE	Government of Ethiopia
GTP	Growth and Transformation Plan
Ha	Hectare
IDS	Institute of Development Studies
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
Kg.	Kilogram
km	Kilometer
km ²	Square Kilometer
°C	Degree Celsius

LSLA	Large Scale Land Acquisition
m	Meter
mm	Millimeter
MoARD	Ministry of Agriculture and Rural Development
MoFED	Ministry of Finance and Economic Development
No.	Number
ONRS	Oromia National Regional State
PASDEP	Plan for Accelerated and Sustainable Development to End Poverty
PLC	Private Limited Company
REDD	Reduced Emissions from Deforestation and Forest Degradation
SDPRP	Sustainable Development and Poverty Reduction Programme
SNNPR	Southern Nations, Nationalities and Peoples Region
UN	United Nations
UNDP	United Nations Development Program
US\$	United States Dollar

Acknowledgements

My sincere acknowledgement goes to my supervisor, Professor Sidsel Roalkvam for her guidance and vital comments in all stages of the research project. I am also grateful to the LEVE project for the scholarship extended to me in the course of writing this thesis.

I would like to take this opportunity to thank the Center for Development and the Environment (SUM) for such a wonderful learning environment. I also sincerely appreciate the whole staff at the center for their diligent work ethic and immense assistance.

This research would not have been successful without the cooperation of my informants in the communities, who provided me all the information I sought and I am truly grateful for that. My special thank also goes to all key informants in the five *kebeles*, Bako Tibe *Woreda* Administration, West Shewa Zone, Oromia Investment Commission and the Federal Ministry of Agriculture; for committing their invaluable time for interviews as well as for providing me secondary data. I am also thankful to Karuturi Global PLC for allowing me to inspect the investment land.

Finally, I acknowledge my field assistants and the Development Agents (DAs) for their companionship during the field work and sharing their knowledge of the area.

Abstract

Large scale land acquisition for commercial agriculture is a fast-evolving type of investment in many developing countries. However, such investments entail negative impacts particularly on the local communities, who see their livelihood hampered by land acquisitions. This study examined the socio-economic and environmental impacts of large scale land acquisition on local livelihoods in Bako Tibe *woreda* of Oromia National Regional State, Ethiopia. The analysis is done on the basis of the Sustainable Rural Livelihood Approach. Data was collected through household interviews, key informant interviews, focus group discussions, direct observation and field notes of the researcher. Besides, secondary data have also been drawn from various sources to complement the primary data. After analyzing the data set, the study found that the investment project has no significant social benefits to the local communities, as measured by technological transfer, employment opportunity, crop production and local infrastructure development. It is also determined that the project has negative impacts on local economy in terms of loss of grazing land, crop land, grass land, firewood and water resources; all of which have negatively affected local livelihoods. Moreover, the investment project has negative environmental effects as demonstrated by clearing of vegetation cover, depletion of water resources and soil degradation. The study then identified the coping strategies pursued by local communities in response to the impacts of the land acquisition. These strategies include changing land use, sharecropping, tenant farming, changing occupation and migration. Lastly, recommendations have been given in order to address the socio-economic and environmental impacts of the land acquisitions on local livelihoods.

Key Terms: Large Scale Land Acquisition, Bako Tibe *woreda*, Local Communities, Investment Project, Sustainable Rural Livelihoods, Socio-economic Impacts, Environmental Impacts, Coping Strategy

Chapter One: Introduction

1.1 Background

Large Scale Land Acquisition (LSLA) refers to leasing of large tracts of land by domestic/foreign companies, governments or individuals for the purpose of undertaking commercial agriculture. It is a form of Foreign Direct Investment¹ (FDI) that usually targets developing countries with abundant supply of land and water resources and low production costs (von Braun and Meinzen-Dick 2009:1). Although such kinds of investments have existed for quite some time, they expanded following the recent food price hike of 2007 – 2008². The crisis endangered the food security of non-self sufficient nations who traditionally relied on imports from other nations. In response to the crisis, some countries rich in capital but with limited land and water resources (such as the Gulf States) scrambled for securing reliable food supply through increased overseas investment (Ibid). Besides, other countries with large population and food security concerns (such as India and China) have also sought for increased overseas investment in agriculture (Ibid). These countries offer lucrative loan and aid packages which are much needed by host governments (Wily 2011: 738). While these countries managed to secure overseas land for investment during this period, the crisis, however, aggravated the vulnerabilities of host countries as these are usually poor and already food insecure nations (Rahmato 2011:2).

Africa is rapidly becoming a hub for LSLAs with millions of hectares of land leased out every year, mainly to foreign investors. Investors perceive Africa as ‘the last frontier’ where land can be obtained at low cost, this in turn led to rush to secure as much land as possible (Aabø and Kring 2012: 15). A 2012 report based on the Land Matrix Database³ shows that Africa is the most

¹ FDI is a direct investment into a host country by a company or government in another country.

² A culmination of factors such as drought in grain producing countries and rising oil prices led to high food prices globally.

³ Land Matrix database is an online public database of large scale land deals (<http://landportal.info/landmatrix>). The Land Matrix Project records transactions involving the transfer of rights to use, control and own land through

affected region by land deals where there were 754 deals covering 56.2 million ha of land (Anseeuw, Boche et al. 2012: vii). The total land sold out/leased in Africa account for some 48% of the total agricultural area in the continent, which is approximately the size of Kenya (Ibid: vii). It is claimed that many developing countries in Africa and beyond seem to be keen on adopting a development model that places LSLAs or agri-businesses supported by FDI at the heart of their policy (Richards 2013: 28).

There are two main investment interests in large scale agricultural investments; these are (1) investments for growing food or agro-industry crops and (2) those for the purpose of growing biofuel. Investment in food crops include rice, maize, pulses and edible oil crops (like sesame) whereas the major agro-industry crops grown are cotton and sugarcane. Large scale agricultural investments can also be carried out for growing biofuel plants such as palm oil trees, *jatropha curcas*, and castor oil trees (Rahmato 2011: 13).

Ethiopia is one of the developing countries that are increasingly attracting foreign investment in their agricultural sector recently. Over the past ten years, the Government of Ethiopia (GoE) leased out large tracts of land for investors, mainly foreign investors. One of the features of LSLA in Ethiopia is that lands given to foreign investors are larger than those given to domestic investors. This is because of the belief by the government that foreign firms are capitally and technologically better equipped than the domestic ones to carry out big investments successfully (Ibid: 12). In addition, the government offers very generous incentives for foreign investors including lower capital requirement, guarantee against expropriation or nationalization and attractive financial incentives, such as exemptions of income tax on exports (tax holidays) and free custom duties on imports (Rahmato 2011: 9, Tamrat 2010: 15).

sale, lease or concession; that cover 200 hectares (ha) or larger; and that have been concluded since the year 2000. It extracts 246 agricultural land acquisitions across the world (Ibid).

One of the largest foreign investors in Ethiopia's agricultural sector is Karuturi Global PLC, an Indian based agro-company, which acquired large tracts of investment land in Gambella and Oromia regions. The company, which is also the largest producer of cut roses in the world, acquired 11,000 hectares of land from the Oromia Investment Commission to grow palm oil trees and other crops. In addition, it has been given more than 300,000 hectares of land in Gambella region by the government (Rahmato 2011: 12). Details of the Bako Tibe project are discussed in Chapter Five.

1.2 Statement of the Problem

The issue of LSLA is an often controversial topic; partly because of the existence of conflicting views on its impacts on host countries. Consequently, the topic is subject to ongoing debates not only among researchers, but also among politicians and policy makers. The GoE claims that the country has plenty agricultural land and that most of the lands issued for investment are 'idle' land that can better be managed by capitally bigger foreign investors without hampering the livelihoods of smallholders (Ibid: 5). However in reality, these lands have been used by local communities for generations for farming, grazing or settlement purposes. The assertion that investment lands are previously unused is also flawed as land in many cases could be temporarily left for various purposes, such as shifting cultivation or bush fallowing by local users. As a result, it is feared that the government's agricultural land investment policy could marginalize rural population by depriving them of a crucial asset for their livelihoods.

On the other hand, as we will discuss in Chapter Four, the state owns all land whereas peasant farmers and pastoralists have only the right to use. For this reason, local communities have no say over LSLAs and hence the government can transfer any land it wishes to investors. This in turn makes rural communities voiceless because the ultimate power of deciding on the fate of agricultural land vests on authorities. Consequently, these communities could

see their livelihoods hampered when large scale land is transferred to investors at the expense of their interests.

1.3 Objectives and Research Questions

This study attempts to examine the socio-economic and environmental impacts of LSLA on local communities' livelihoods, taking the case of an investment project in Bako-Tibe *Woreda* of Oromia Region, Ethiopia. More specifically, the study will answer the following questions:

1. What are the social-economic and environmental impacts of the large scale land acquisition on local communities' means of living?
2. What are the coping strategies adopted by local communities in response to the lost opportunities due to the large scale land acquisition?

1.4 Scope of the Study

The impacts of large scale land acquisition can be studied by looking at a range of factors such as economy, environment, health or even on politics. However, this research project is delimited to the socio-economic and to a less extent environmental impacts of the LSLA on local livelihoods. The study is also limited to Bako-Tibe *woreda* and relies on data set from the first four years after the land transfer.

1.5 Thesis Outline

This thesis is divided in to eight different chapters, all organized according to the logical flow of the argument. The introductory chapter briefly reviewed the concept of LSLA, its history in Ethiopian context and outlined the statement of the problem. It also outlined the objectives, scope and limitations of the study. Chapter Two presents the conceptual framework, namely the Sustainable Livelihood Approach, which forms the blue print of the study. It discusses some of the central concepts of sustainable livelihood approach and reviews the framework of analysis.

The third chapter will review the concept of LSLA in detail: the debates surrounding it, its major motives, limitations and its impacts on livelihoods. In short, this chapter will give readers more understanding of what LSLA is. Chapter Four is dedicated to discussing Ethiopia's agriculture, rural land governance and the history of LSLA in Ethiopian context. With respect to LSLAs, the chapter assesses the investment legislations, institutional arrangements, the roles of foreign investments, land rents, size and lease period; and impacts of LSLAs in the country.

Chapter Five outlines the research methodology of the study. It begins with the description of the study area: highlights the geographic, economic and social realities of the region. It will then discuss the sampling design, nature and source of the data, methods of data analyses, limitations of the research and the ethical considerations undertaken in the research. The sixth chapter analyses and presents the various household resources, including human, economic/financial and natural capital (mainly land). These resources determine the mix of livelihood strategies to be pursued in order to achieve sustainable livelihood outcomes.

Chapter Seven presents and discusses the major findings of the study. It begins by exploring the extent of land acquisition in the study area and the roles of the local communities during the land transfer. The chapter will then present the socio-economic and environmental impacts of the land acquisition on local livelihoods. After this, the chapter will also present the different coping strategies adopted by households in response to the land acquisition. The last chapter will summarize the core findings of the study and recommends possible courses of actions that should be undertaken to address the problems.

Chapter Two: Conceptual Framework

The conceptual framework applied in this research is the Sustainable Rural Livelihoods Approach. The main reason for choosing this approach is that the nature of the research problem fits with the concept of the sustainable livelihood framework. As Scoones (1998: 3) argues, the concept of sustainable rural livelihood is central in the debates about rural development, poverty reduction and environmental management. Before discussing the sustainable livelihoods approach, it is important to understand the various concepts of sustainable livelihoods.

2.1 Sustainable Livelihood

According to Chambers and Conway (1991: i), livelihood consists of ‘people, their capabilities and their means of living, including food, income and assets’. The concept of sustainable livelihoods is normatively based on the ideas of capability, equity, and sustainability, each of which is both ends and means of livelihood (Ibid: 1). This is to say that each can be good in itself, as an end, or each can be a means to good ends as long as it can support the others (Ibid).

2.1.1 Capabilities

Capabilities, as formulated by Amartya Sen, refer to one’s ability to perform certain basic functionings, for which a person is capable of doing and being (Sen 1985: 48). It includes, for example, to be ‘adequately nourished, to be comfortably clothed, to avoid escapable morbidity and preventable mortality, to lead a life without shame, to be able to visit and entertain one’s friends, to keep track of what is going on and what others are talking about’ (Sen 1987:18, Dreze and Sen 1990: 11; cited in Chambers and Conway 1991: 4). While Sen’s use of capability is a more general concept, there are also livelihood capabilities that are more specific and include the ability to cope with stress and shocks, and the ability to generate and make use of livelihood opportunities (Chambers and Conway 1991: 4). However such capabilities are not just reactive, meaning they are not only limited to responding to adverse changes in conditions, but they also are proactively and dynamically

adaptable. In other words, livelihood capabilities may also involve ‘gaining access to and use services and information, exercising foresight, experimenting and innovating, competing and collaborating with others, and exploiting new conditions and resources’ (Ibid: 4).

2.1.2 Equity

Although equity can be measured in terms of relative income distribution, the word as applied here implies a ‘less unequal distribution of assets, capabilities and opportunities and especially enhancement of those of the most deprived’ (Chambers and Conway 1991: 4). It also includes such issues as an end to discrimination against women, minorities and all who are weak, as well as an end to urban and rural poverty and deprivation (Ibid).

2.1.3 Sustainability

Although there are many meanings and interpretations of the term ‘sustainable’ in development studies, it has replaced ‘integrated’ as a synonym for ‘good’. Thus, environmental sustainability deals with such global concerns as pollution, global warming, deforestation, overexploitation of non-renewable resources and physical degradation (Chambers and Conway 1991: 4).

Sustainability connotes such words as self-sufficiency, long-term self-restraint and self-reliance. Sustainability also advocates for earth-friendly life styles of organic agriculture with low external inputs, institutions that can raise their own revenue and self-supporting processes which operate without subsidy (Ibid: 5). Meanwhile, the social meaning of sustainability in the context of livelihood refers to the ability to ‘maintain and improve livelihoods while maintaining or enhancing the local and global assets and capabilities on which livelihoods depend’ (Ibid).

2.2 Sustainable Rural Livelihood Framework

Having discussed the concept of sustainable livelihood, I now present and discuss the framework for analysis of sustainable rural livelihood. Figure 1 below shows the sustainable rural livelihood framework as formulated by the

Institute of Development Studies (IDS) at the University of Sussex (Scoones 1998: 4). This framework provides a holistic and integrated view of the processes by which people achieve (fail to achieve) sustainable livelihoods (Ibid: 13). It shows how, in different contexts (of policy setting, politics, history, agro ecology and socio-economic conditions), sustainable livelihoods are achieved given access to various livelihood resources or ‘capitals’ (such as natural, economic, human and social capitals) which are combined to pursuing various livelihood strategies (agricultural intensification or extensification, livelihood diversification and migration). Also part of the framework is the analysis of various formal and informal organizational and institutional factors that affect the sustainable livelihood outcomes. The key elements of the framework are shown in the figure as well as discussed below.

2.2.1 Contexts, Conditions and Trends

The first task in the analysis of sustainable rural livelihood is to identify the contexts, conditions and trends which include such factors as policy settings, history, politics, macro-economic conditions, terms of trade, climate, agro-ecology, demography and social differentiation. Assessment of these factors will enable us to understand the wider environment which affects sustainable livelihood.

2.2.2 Sustainable Livelihood Outcomes

Building on the definition given by Chambers and Conway (1992) above, the IDS team put forward a more comprehensive definition of livelihood:

A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base (Scoones 1998: 5).

The definition of sustainable livelihood given above can be disaggregated in to five key sub-components: three of which focusing on livelihoods, i.e.,

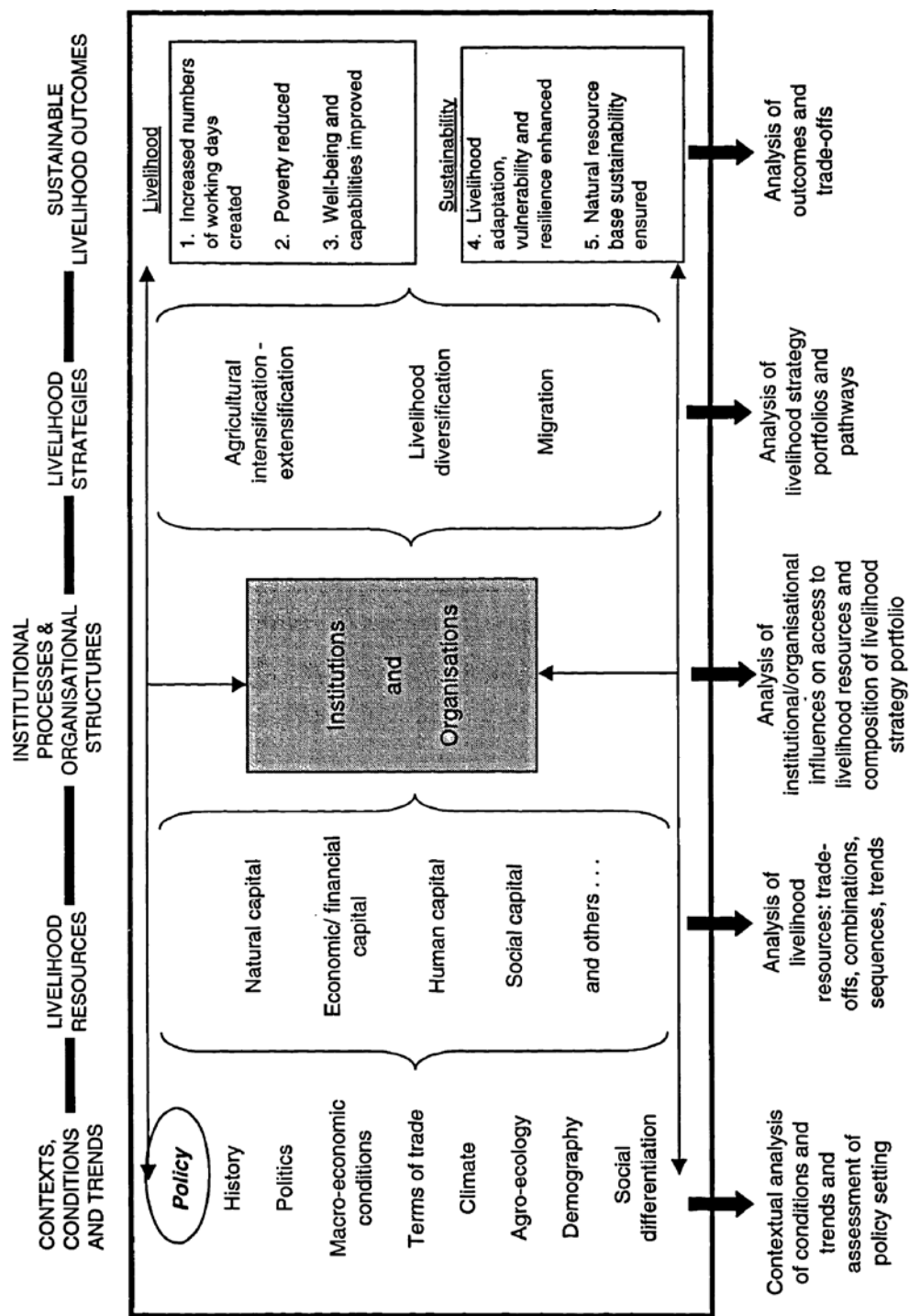
emphasis on employment, poverty reduction and well-being improvement. The other two components include the sustainability dimension focusing on resilience of livelihoods and natural resource base. In short, these components can be used as criteria for assessing livelihood outcomes.

- I. Creation of working days:** - The creation of more working days depends on the ability of a particular combination of livelihood strategies (discussed in section 2.2.4) to enhance employment for certain portion of the year (Scoones 1998: 5). Such combination may include on-farm or off-farm employment, wage labor system or subsistence production.

- II. Poverty reduction:** - Another criterion in assessment of livelihood is the change in poverty level. There are some indicators of this change with an absolute 'poverty line' being one such measure which is based on income or consumption level (Ravallion 1992, Baulch 1996), whereas relative poverty and inequality can be assessed using the Gini coefficient measures. Such quantitative measurement of poverty can be used in combination with other qualitative indicators of livelihood to overcome major measurement challenges.

- III. Well-being and capabilities:** - Well-being and Capabilities are the third livelihood outcomes in the framework. According to Sen (1984, 1987; cited in Scoones 1998: 6), capabilities are 'what people can do or be with their entitlements', a concept that involves more than material concerns of food or income. Analysis of well-being and capabilities results in certain criteria to measure sustainable livelihood outcomes, such as self-esteem, security, happiness, stress, vulnerability, power, exclusion, in addition to conventionally measured material issues (Scoones 1998: 6).

Figure 1: Sustainable Rural Livelihoods Framework



Source: Scoones 1998, p.4

IV. Livelihood adaptation, vulnerability and resilience: - these refer to the ability of a livelihood to cope with and recover from stresses and shocks. It is argued that people with least ability to cope (temporarily adjust to change) or adapt (longer term shifts in livelihood strategies) at times of stresses and shocks are more vulnerable and unlikely to achieve sustainable livelihoods (Ibid). Assessments of resilience as well as the ability of coping and adaptation require certain considerations such as the evaluation of previous experiences of responses to shocks and stresses (Ibid). This is because different types of shock/stresses prompt different responses such as avoidance, repartitioning, resistance or tolerance mechanisms (Payne and Lipton 1994: 15).

V. Natural resource base sustainability: - natural resources are resources most rural livelihoods depend on at least to some extent (Scoones 1998: 6). The wider literature refers to natural base sustainability as the ‘ability of a system to maintain productivity when subject to disturbing forces, whether a ‘stress’ (a small, regular, predictable disturbance with a cumulative effect) or a ‘shock’ (a large infrequent, unpredictable disturbance with immediate impact)’ (Ibid). Thus, ensuring natural resource base sustainability helps avoid depletion of stocks of natural resources to a level where they are exposed to permanent decline in natural resource base yields as well as inability to generate useful livelihood products or services⁴ (Ibid: 7).

2.2.3 Livelihood Resources

The third component of the sustainable rural livelihood framework as shown in Figure 1 is livelihood resources. These are the different types of ‘capital’, that include basic material and social, tangible and intangible assets which are possessed by people and which also determine the livelihood strategies to be undertaken (Ibid). From economic metaphor point of view, such livelihood

⁴ See Piers Blaikie and H. Brookfield (1987). Land Degradation and Society. London, Methuen.

resources are seen as ‘capital’ because they yield different productive streams from which livelihoods are formed (Ibid). The four different types of capital identified in the framework are:

- Natural capital: - include resource stocks (such as soil, water, air, genetic resources) and environmental services (hydrological cycle, pollution sinks etc) that provide resources important for livelihood.
- Economic or Financial capital: - are essential capital bases in the pursuit of livelihood strategy such as cash, credit/debit, savings, and other economic assets, including basic infrastructure and production equipment and technologies.
- Human capital: - represent the skills, knowledge, ability, good health and physical capability useful for successful undertaking of different livelihood strategies.
- Social capital: - these are social resources such as networks, social claims, social relations, affiliations, and associations that determine the different livelihood strategies pursued by people and that require coordinated actions.

2.2.4 Livelihood Strategies:

The fourth component of the sustainable rural livelihood framework is the different livelihood strategies pursued by rural people to achieve certain livelihood outcomes. The sustainable livelihood framework shown in Figure 1 identifies three livelihood strategies: agricultural intensification/extensification, livelihood diversification and migration. Rural people may combine any of these options towards the achievement of certain outcomes. For example, agricultural intensification results in a gain to livelihood from agriculture due to livestock rearing, aquaculture or forestry; through the processes of intensification (i.e., more output per unit area through capital investment or increases in labor inputs) or extensification (by bringing more land under cultivation). Rural people may also diversify their livelihood to a range of off-

farm income generating activities (livelihood diversification) or walk away to seek other livelihood elsewhere, either temporarily or permanently (migration). However in most cases people pursue a combination of two or more of these strategies together or in sequence.

The above livelihood strategies can be unpacked to distinguish between the different dynamics and outcomes for each strategy (Scoones 1998: 9).

- Agricultural intensification/extensification: - can be distinguished between capital-led (external inputs supported and policy-led) and labor-led (based on own labor and social resources and a more autonomous process) intensification.
- Livelihood diversification: - between an active choice to invest in diversification for accumulation and reinvestment, and diversification aimed at coping with temporary adversity or more permanent adaptation of livelihood activities, when other options are failing to provide a livelihood.
- Migration: - between different migration causes (e.g. voluntary and involuntary movement), effects (e.g. reinvestment in agriculture, enterprise or consumption at the home or migration site) and movement patterns (e.g. to or from different places).

In analyzing the mix of livelihood strategies to be pursued, the key issue to understand is the scale at which the assessment is being made. In other words, since livelihood strategies can be described, for instance, at individual, household and village level, as well as at regional or even national levels, they determine what mix of strategies to pursue. At individual level, it could be wise to pursue a combination of sets of strategies, although this could have positive or negative effects on other members of the household or the community in general (ibid: 10). For example, if an individual successfully implements agricultural intensification strategy, this may provide an opportunity for another person's livelihood diversification strategies such as

agricultural processing or petty trading (Ibid). To the contrary, another type of agricultural intensification strategy by an individual ‘may undercut’ others’ strategies by diverting certain factors of production such as land, labor, credit or markets (Ibid). Likewise, when pursuing livelihood diversification strategy, it is logical for individuals to specialize whereas for households to diversify, or the whole village may specialize in a particular activity if the regional economy is highly diversified (Ibid).

The combination of activities undertaken to ensure one’s livelihood can be considered as ‘livelihood portfolio’, some of which could be highly specialized with a focus on only one or limited activities; whereas others could be diverse. Livelihood pathways also differ with time-scales⁵: they can vary over seasons and between years (Chambers et al 1981; cited in Scoones 1998: 10). Besides, different combinations of strategies can be pursued sequentially depending on the state of dependency ratios within households, health conditions of members and other factors (Ibid). Moreover, the combinations of livelihood strategies may also occur over long term, when both local and external conditions change. Thus it is important to examine such dynamic elements while assessing the sustainability of the various options (Ibid).

The extent of specialization and diversification depend on availability of resources and the risk level associated with alternative options. However, certain measures can be undertaken to avert such risks. Five such alternative measures have been identified (Ibid):

- Accumulating livelihood resources in order to create reserves and buffers to be used at times when stresses and shocks occur.
- Activities associated with different livelihood strategies may be spread over space and time so that a particular risk, like drought, does not affect all livelihood activities.

⁵ ‘A livelihood pathway can be seen as the result of a series of livelihood choices that have emerged over time. This may have been the consequence of a set of conscious and planned choices or the result of the unintended consequences of other actions’ (Scoones 1998, p.18).

- Changing the mix of activities to reduce the covariances among different sources of stress or shock.
- Employing risk-pooling options through various forms of insurance or consumption smoothing to ameliorate the effects of a shock or stress.
- Enhancing the overall resilience of the system so that the impacts of stresses and shocks are less felt.

The question of whether livelihood paths and portfolio combinations result in positive or negative change on sustainable livelihood outcome indicators is determined by other factors as well. First, the level of livelihood intensity, other than the total number of sustainable livelihoods created, is also important factor (Chambers 1987: cited in Scoones 1998: 10). In other words, combining livelihood resources creatively and innovatively, often in complex ways, may help improve livelihoods in a particular area. For instance, investment in labor and skills can transform degraded land, thereby resulting in accumulation of natural capital and thus paving the way for more livelihood opportunities. In addition, by creating local economic linkages and recirculating knowledge, skills and resources, livelihood intensity can also be increased.

Since rural livelihood strategies are heavily reliant on the natural resource base, IDS's assessment of such strategy choice is based on gradients running from relatively high to low natural resource endowment (IDS 1996; cited in Scoones 1998: 11). Such gradient is also associated with the level of risk and uncertainty that resource users face, where areas with low resource endowment being subject to frequent drought, flooding or other natural hazards (Scoones 1998: 11). Nonetheless, regardless of the existence of higher levels of risk relative to income in such areas than areas with high resource endowment, absolute income loss is however much less if things go wrong in such areas (low resource endowment areas). This in turn also makes the potential size of the loss (not just the risk of loss) an important factor differentiating sites based on such resource endowment gradients. Therefore,

depending on natural resource endowment gradients, livelihood portfolios can be expected to differ. Besides, within the same area, different resource types may also exist side by side. For instance, people can make use of small patches of wetland, together with irrigated areas, in combination with dry land arable land, grazing areas, woodlands and hills (Ibid). Consequently such variations in resource types, along with agroecological gradients and between sites, affect the choice of development investment strategies, with actors selecting contrasting approaches across areas with different natural resource endowment.

Socio-economic differences within any site have also major impact on the composition of livelihood portfolios. Such differences could be in terms of asset ownership, income levels, gender, age, religious affiliation, caste, social or political status and so on (Ibid). In the analysis of sustainable livelihood framework shown in Figure 1, these factors may refer to differences in basic livelihood resources or the broader contextual factors.

2.2.5 Institutions and Organizations

We have discussed that the various livelihood resources combine in order to promote various strategies for the realization of a certain outcomes. However the process is also dependent on institutions that link this framework together. Institutions and organizations refer to structures and processes that ‘mediate the complex and highly differentiated process of achieving a sustainable livelihood’ (Ibid). The sociological and anthropological definitions of institutions is ‘regularized practices (or patterns of behavior) structured by rules and norms of society which have persistent and widespread use’ (Giddens 1979; quoted in Scoones 1998: 12). Institutions are often fluid and ambiguous and hence are subject to different interpretations; they may also be both formal and informal. There is also power relation within institutional forms, leading to contestation over institutional practices, rules and norms. Institutions are also dynamic social processes, continually shaped and

reshaped over time and therefore they are part social negotiation process instead of just being ‘objects’ or ‘bounded social systems’ (Scoones 1998: 12). One must, therefore, distinguish between institutions (rules of the game) and organization (the players), whose interplay is important in the sustainable livelihood framework given in Figure 1.

There are some reasons why institutions matter for policy and practice of development for sustainable livelihoods:

- An understanding of institutional processes helps us to identify the restrictions/barriers and opportunities (or ‘gateways’) to sustainable livelihoods. Formal and informal institutions, ranging from tenure regimes to labor sharing systems to market networks or credit arrangements, determine access to livelihood resources which in turn affect the composition of portfolio of livelihood strategies. Understanding of institutions and organizations is, therefore, key to designing interventions which aim to improving sustainable livelihood outcomes.
- Investigating institutions also helps us understand social processes that underline livelihood sustainability. An understanding of social relationships, their institutional forms (both formal and informal) as well as the power dynamics embodied in these is also important while studying sustainable livelihood.
- An institutional matrix of both formal and informal institutions and underlying rules and norms is also another factor worth understanding. For instance, a particular institutional matrix can determine which combinations of formal and informal institutions and organizations operating at different levels, such as from within the household to the national (or even international), particularly influence people’s abilities to pursue different combinations of livelihood strategies and with what results for sustainable livelihood outcomes.

In general the framework for the analysis of sustainable livelihood discussed in this chapter gives a holistic and integrated view of the processes that determine whether people could achieve or fail to achieve sustainable livelihoods. All the subsequent chapters will be based on this framework of analysis. Accordingly, the entire research is broken down in to the five basic elements of the sustainable livelihood framework: contexts, conditions and trends (parts of Chapter Three and Four), livelihood resources (Chapter Six), institutional processes and organizational structures (parts of Chapter Four), livelihood strategies (parts of Chapter Seven) and sustainable livelihood outcomes (most of Chapter Seven).

Chapter Three: Review of Literature

The Concept of Large Scale Land Acquisition

This chapter discusses the various concepts of LSLA, building on the brief introduction given in Chapter One. Here, some of the contexts, conditions and trends of the sustainable livelihood framework discussed in the previous chapter will be applied. More specifically, this chapter deals with the history LSLAs, the macroeconomic trends affecting it and the agro-ecological factors that determine selection of investment land.

3.1 Debates on Large Scale Land Acquisitions

There exist ongoing debates on whether LSLAs are beneficial to local livelihoods, particularly in the context of developing countries. The fast-evolving land acquisitions create opportunities to improve living standards in recipient countries, but also entail risks of losing land and being marginalized to the local communities (Vermeulen and Cotula 2010: 13). Proponents argue that LSLAs have the potential to bring the much needed FDI to developing parts of the world, particularly to African countries (Aabø and Kring 2012: 10). This is because FDI can benefit the recipient countries both by increasing their foreign exchange reserves and enhancing their development ‘through providing local economic spillovers, trade benefits and access to new markets’ (Ibid). They also argue that since developing countries’ governments cannot fulfill the much needed investment in rural agriculture due to limited financial capacity, LSLA by investors is seen as an opportunity for increased investment in agriculture (von Braun and Meinzen-Dick 2009:2). Thus giving out land for investment improves productivity through technology transfer and introduction of best practices. It could also stabilize global food price and increase food crop production which would be available for local and national consumers in addition to overseas consumers’ (Ibid). Proponents also argue that rural poor would benefit from foreign direct investments in agriculture through, among other things, creating on farm and off- farm jobs, development

of rural infrastructure and construction of schools and health centers provided that negotiations are carried out transparently, existing land rights are respected, and benefits are shared between local communities and foreign investors (Daniel and Mittal 2009: 9).

To the contrary, critics point out that LSLAs have rather devastating consequences on local livelihoods and ecological sustainability. First, land-lease agreements are often in favor of foreign investors than local communities, because foreign firms hold greater bargaining power in negotiating these agreements especially when the host government and local elites support the investment (von Braun and Meinzen-Dick 2009: 2). Second, as will be discussed later in this chapter, it is often the case that smallholders will be displaced from their lands and the promised job and local development may not be fulfilled. It is argued that the transfer of land to investors not only denies local communities their entitlements to land, but also violates their rights to use it. According to the United Nations (UN) Special Rapporteur on the right to food, states would violate the human rights of citizens to food if they deprive local populations of access to productive resources important for their livelihoods, by selling or leasing land to investors (De Schutter 2009: 2). Giving out land to foreign investors also disrupts the local land tenure system by altering formal land rights that are under state control (Anseeuw, Boche et al. 2012: ix). Consequently, local authorities who play a key role in allocating land rights often fail to act in communities' interest.

3.2 Major Motives for LSLAs

LSLAs have particularly accelerated since 2008, corresponding to the period of food price hike. Although the crisis was a big factor for the increase in LSLAs in recent years, there are also a number of other reasons. Generally, the following factors are identified as the main motives for LSLAs in developing countries

I. Food Security

Although food prices have been perceived to be in long-term decline over the last one century, the 2007/08 price hikes changed this assumption. During 2007/08, aggregate food prices doubled and although slightly dropped in the aftermath of the crisis, they remain high. It is expected that prices will continue to rise in the long-term and hence prompt mass investment in agriculture (Cotula, Vermeulen et al. 2009: 52). For countries that heavily rely on imports for domestic food consumption, such as the Gulf States, food security concerns are extremely significant (Ibid: 54). Hence overseas land acquisition is an important strategic decision for such states in order to address their concerns of food security.

II. Biofuels

Apart from food security concerns, increased investment in biofuel is another catalyst of LSLAs in developing countries. Biofuels are fuels produced from biomass for the purposes of transport, heating, electricity generation and cooking (Dufey, Vermeulen et al. 2007: 19). There are certain reasons that compel the use of biofuels over fossil minerals such as oil. These include: energy security, rural development, export development and climate change mitigation (Ibid: 9).

III. Non-food agricultural commodities

The demand for non-food agricultural commodities is also another factor behind the rush for LSLAs, particularly by countries that are dependent on these commodities for smooth operation of their industries. As the global economy grows, the demand for such commodities as rubber, cotton, sugar, coffee, cocoa, tea and soya beans will increase and hence importing countries need to secure supply by acquiring overseas lands (Cotula, Vermeulen et al. 2009: 56).

IV. Expectations of returns

This refers to investment in agricultural products not for the sake of food or energy security, but for fetching financial returns from such investment.

Because of rising price for agricultural products, private and government backed land acquisitions are becoming increasingly attractive sources of wealth. Such investments target return in agricultural investment over the long-term. Following the financial and food crises of 2007/8, agricultural land is highly considered as strategic asset, because it is cheap and relatively risk free (GRAIN 2008: 2).

V. Emerging carbon markets

Carbon markets may also foster land acquisitions in the expectation of long term increase in land values. These may include afforestation projects under the Reduced Emissions from Deforestation and Forest Degradation (REDD) scheme of the post Kyoto climate change regime. Because potential returns from carbon markets may increase land value, investors that look at long-term returns (such as investment funds) are attracted to acquiring large tracts of land (Cotula, Vermeulen et al. 2009, p.58).

VI. Host country incentives

For host countries, such as African states, agriculture is a major source of employment, growth and revenue as well as assures food security in the long term. Besides, foreign investment in agriculture is seen as a vehicle of technological transfer, improved productivity, infrastructure development and increased supply of food to local markets. Thus, host countries strongly support such investments by providing various incentives⁶ to investors. The favorable investment environment in turn attracts more and more investors who shall acquire land in good terms (Ibid: 58).

In addition to the above motives, the World Bank claims that population growth and high rate of urbanization also contribute to the increase in LSLAs (Deininger, Byerlee et al. 2011: 13). Moreover, rising incomes tend to increase the demand for food products, which in turn need to be addressed by

⁶ E.g. adoption of favorable investment codes, new and less strict legislations on land; banking, taxation, and customs incentives

increasing cultivable land and improving productivity (Ibid). Consequently, there will be increased land acquisition to meet these challenges.

3.3 Determinants of Land Selection for Large-Scale Agriculture

Once the need for LSLA arises, the next step is to select the appropriate site or location where investment land can be acquired. The decision about where to acquire investment land depends on a set of several factors. These factors include resource endowments, particularly agro-ecological characteristics of the target countries (Arezki, Deininger et al. 2011: 16). In this regard, such characteristics as ‘yield gap’⁷ and ‘land availability’ are major determinants and they are used to provide typology of target countries (Deininger and Byerlee 2011: 17). The underlying assumption in terms of the yield gap is that farmland is underused compared to the potential yields and that such land can be improved to increase its market value through additional inputs (such as water, fertilizers, seeds, infrastructure, and know how) (Ibid: 16-17).

Meanwhile land availability refers to the availability of land that is not being used, but suitable for rain fed cultivation and that has a population density of less than 25 persons per km² (Ibid: 17). Thus countries with high yield gap and abundant land availability are the most preferred investment destinations according to a typology developed by Deininger and Byerlee (Ibid: 17). This typology accounts for the largest share of land acquired according to Land Matrix database, representing 58% of all deals. Most of the countries affected in this category are located in Africa, particularly East Africa (Anseeuw, Boche et al. 2012:12).

In addition to yield gap and land availability, the types of land covers also determine the choice of suitable land for large scale agriculture. According to Land Matrix Project, cropland and forests are the most commonly targeted land covers followed by shrub land/grassland and marginal land respectively (Ibid: 17). The Land Matrix Project shows that out of 82 cases for which there

⁷ ‘Is a measure to compare current yields with potential yields in a given location’ (Anseeuw, Boche et al. 2012: 12)

is information about former land use, most land (about 56) were reported to have been used by smallholders for cultivation, followed by communal use (particularly for grazing animals) (Ibid: 39). Meanwhile only few of the reported cases of land acquisition were under forest cover or under conservation prior to the investment (Ibid). Croplands make up 43% of all 246 land deals (and 22% of the land acquisition surfaces), which include different cropping mosaics of stallholders (Ibid: 16). Other croplands targeted also include irrigated areas and rain fed croplands.

Thus contrary to the aggregate, nation-wide data that suggest ‘unused land’ as the common targets of land acquisition, this local- level analysis shows nearly half of the land acquisitions target land with some form of cropping activities (Ibid: 18). Lands covered by forests are the second preferred target by investors with 24% of the 246 land deals (31% of the total surface) targeting such land covers (Ibid). The third preferred land covers for land acquisition are shrub lands and grasslands, which account for 28% of all deals (and 17% of their surface area) (Ibid). While the economic benefit of converting these lands to croplands is probably enormous, it has however significant negative impacts on non-measurable benefits of the local people. These losses include important grazing fields for pastoral communities as well as local biodiversity. Finally, the remaining 5% of the recorded land deals (or 30% of the total surface area) targeted bare areas (for instance desert), wetlands, and urban or peri-urban areas (Ibid).

Other determinants of land acquisition for large scale agriculture are accessibility of the land and local population density. Often, the main targets of agricultural land are those with good accessibility and considerable population densities (Ibid: 18). This in turn affects local population’s livelihoods. Accessibility, measured by travel time to urban centers, determines the ease of delivering agricultural produce to the nearest markets or to a processing plant. It also determines accesses to inputs such as

fertilizers, pesticides, seeds, and machinery. Besides, it represents the ease of access to market information, extension services and policy making processes (Ibid). On the other hand, many land acquisitions have targeted areas with a population density of more than 25 persons per km². According to the Land Matrix project, more than 60% of the land deals fall in this category (Ibid: 20). Thus, land deals often result in strong competition with local land users who themselves rely on smallholder agriculture. This is usually the case in areas with fertile land in East and West Africa as well as South and South East Asia, whose agriculture is dominated by very small farm sizes and high population densities (Ibid).

3.4 Limitations of Large Scale Land Deals

There are a number of shortcomings associated with large scale land deals. These include lack of transparency and consultation in land governance (particularly during the planning and decision-making processes and contractual agreements), absence of community involvement, risk of eviction for the local people, lack of compensation and lack of monitoring, enforcement and conflict resolution mechanisms. Evidences show that these problems are very common during the process of land transfer for large scale agricultural investment (Anseeuw, Boche et al. 2012: 1). First, lack of transparency and consultation with local people may bring unfair deals, which in turn result in controversies and long-term conflicts among all the parties involved (Aabø and Kring 2012: 14). Second, lack of adequate information about the extent of land deals also hinders involvement of local communities, civil society organizations and other actors, which in turn provides opportunity for graft, corruption and other misconducts (Ibid). The Land Matrix database reveals that only few projects have been launched with adequate consultation of local communities, and even if there are few cases of community involvement, the process was 'limited' (Ibid: ix). There is limited evidence from the Land Matrix on community involvement in land deals for which information was recorded only for 86 cases. It was observed that only six

cases had prior and informed consent with community before the start of the projects, whereas 29 cases had some form of community participation but such processes were limited (Ibid: 40).

Third, even if communities are consulted in the processes of LSLAs, displacement is often the case in developing countries (Ibid: 41). Such evictions due to land acquisitions may be substantial since land acquired by investors is equal to land used by several smallholders (Ibid: 42). The Land Matrix shows that most land acquired was at least used for some purposes by local farmers prior to the land acquisition and some of the projects recorded in the database led to substantial evictions (Ibid: ix).

Fourth, compensations for local people are other factors of concern that often attract criticism. As discussed above, land acquired for large scale investment is often used by local population for some purpose and that land transfer could lead to substantial displacement for the local people. Local communities are often given vague promises of ‘benefits’ and employment, together with inadequate or, sometimes inexistent compensation for their loss of land and livelihoods (Aabø and Kring 2012: 14). This is compounded by the difficulty to provide legal proof of ownership or title for the land used especially by local inhabitants who have customary land rights, which are not recognized by laws (Cotula, Vermeulen et al. 2009, Wily 2011: 741). Besides, people who have only ‘use’ rights are not entitled to sell land as in the case of Ethiopia, where state owns all land and farmers have only the right to use. Thus, there is no guarantee for such people to receive compensation for lost livelihood base as a result of land deals. However, this does not mean compensations do not occur at all. Investors may offer various compensation schemes depending on the legislation of the host country with regard to foreign investment and on the power of former user as well as the investor (Anseeuw, Boche et al. 2012: 42). There are different forms of compensation scheme and they range from in-kind compensations, such as building social or productive infrastructure, to

cash-payments for affected individual farmers. Nevertheless, compensation and lease payments are often received by local authorities on behalf of communities and are usually subject to nepotism (Ibid: 44).

Finally, large scale land deals are also characterized by lack of monitoring, enforcement and conflict resolution mechanisms, which are other sources of controversy in land deals (Cotula 2007: 83). Neither the state organs nor independent agencies scrutinize the activities of large scale agricultural investors, particularly in those countries that have weak institutional capacity. This in turn leaves the ground for tensions between the investors and local communities, sometimes resulting in conflicts.

3.5 Land Rights and Land Governance in Host Countries

Resource Tenure systems, including but not limited to Land Tenure system, are parts of rules and institutions governing the way land and other resources are held, managed, used and transacted (Cotula 2006: 9). Apart from ownership, land rights (tenure) also include a range of land holding and user rights such as leasehold, usufruct, servitudes, grazing rights and so on, which may coexist over the same plot of land (Hodgson 2004). Land rights may be held by individuals or groups as private property or by the state in the form of ownership, trusteeship and so on (Ibid). There are usually two major types of land tenure systems: customary land tenure and statutory (legal or formal) land tenure systems. In between the two systems, there could be a combination dual or mixed (of customary and statutory) land tenure systems.

According to Cotula (2007), ‘customary ‘‘law’’ is a body of (usually unwritten) rules founding its legitimacy in ‘‘tradition’’, i.e. in its claim to have been applied for time immemorial’ (Ibid: 10). In customary resource tenure systems especially in Africa, land is usually held by clans or families intertwined with group and individual rights, and accessed on the basis of group membership and social status (Ibid: 11). Meanwhile statutory or legal

land rights are rights legally granted by the state to use land for limited/unlimited period of time and hence could provide legal protection for holders against any voluntary or involuntary losses. In most countries of Africa, customary ownership of land, rather than statutory law dominates land governance (German, Schoneveld et al. 2011: 2). However, customary and statutory land rights normally coexist over the same territory often resulting in overlapping of rights, contradictory rules and competing authorities (Cotula 2006: 9).

Customary land tenure entails rights not recognized by law and hence provides no guarantee for holders against any potential expropriation. As a result, customarily held lands in Africa, especially those which are unsettled or unfarmed (i.e., land normally held collectively by individual communities or ‘the commons’), have always been vulnerable to involuntary loss (Wily 2011: 733). Although the majority of African governments have implemented land reform programs to grant customary rights a legal recognition, customary claims hardly receive the same type of legal protection as formal/statutory rights and are still subject to expropriation (Ibid: 750). Besides, since investment flows to Africa are becoming increasingly conditional on the ease of access to land and other resources, host countries’ governments will have to choose between conflicting policy objectives of strengthening customary rights or promoting investment (German, Schoneveld et al. 2011: 2).

According to recent study, investors exploit weak land tenure systems across developing countries to their advantages (Anseeuw, Boche et al. 2012: 17). This is because investors prefer countries with weak land tenure system in order to secure easy and cheap land (Ibid). One of the features of land rights and land governance in developing countries is that such countries have poor land governance systems which cannot secure land-related property rights for the citizens (Ibid: 37). For instance as discussed above Sub-Saharan Africa’s land tenure systems are often characterized by ‘dual land tenure systems’

where a mix of customary land rights and formal (statutory) property rights is practiced. Although such dual system under the dominant customary land tenure systems does not lead to inefficiencies in itself, the introduction of large scale investment projects may alter the rules of the game. In other words, since customary land rights do not represent formal ownership, it leads to local population losing their access to land without adequate compensation and this could in turn lead to potential conflicts (Ibid).

3.6 The Extent of Local Impacts of LSLAs

Although LSLAs may provide capital for Africa's land-dependent economies, in the presence of weak domestic governance of investments they could pose socioeconomic and environmental risks (Schoneveld 2011). In this section, I will discuss some of the impacts of LSLAs on local livelihood.

Studies show that most affected countries of LSLAs are countries which are significantly poor, whose economies depend mostly on agriculture and countries that are less involved in world food exchanges (Anseeuw, Boche et al. 2012: 10). Thus local people could lose access to the resources on which they depend, including not only land but also water resources, wood and grazing areas (Vermeulen and Cotula 2010: 13). LSLA could marginalize smallholder farmers, who are known to be very efficient and resilient producers (Ibid).

The Land Matrix Database indicates that the highest number of farm deals (roughly 66% of the land areas acquired) target countries that are significantly affected by hunger and those which have higher agricultural share to their GDP (Anseeuw, Boche et al. 2012: 14). This implies that hunger affected countries are significantly dependent on agriculture as their main source of livelihood (Ibid). Since most of the investment in large scale agriculture is aimed at non-food production or export crop, it can have a negative effect on local food availability (Ibid: 12). Such dependency on agriculture suggests that

poor people have no other alternative for income generation and any eviction and resettlement will likely have bad consequences to these people than to richer societies with diverse economies (Ibid).

LSLA also shifts control of food resources and food producing lands away from domestic to foreign firms, which in turn, reduces the likelihood of food self-sufficiency among poor nations. Because most of the host countries of such investments are themselves net food importers or food aid recipients, critics view such land transfers as host governments' outsourcing of food at the expense of their most food insecure citizens (Daniel and Mittal 2009: 16). It is also often the case with land deals that even if national indicators may suggest the abundance of large reserves of suitable land for investment, in reality land given out is often found within cultivated areas and farmlands (Anseeuw, Boche et al. 2012: vii). This contradicts the claims made by governments that investments are carried out on 'idle' land.

There are also indirect impacts of LSLAs on local livelihood; which include loss of access to seasonal resource for non-resident groups such as transhumant pastoralists, shifting of power from women to men when land's commercial value gets high, eviction of local users from higher-value lands to marginal lands which could create more pressure on the latter (Cotula, Vermeulen et al. 2009: 15). The introduction of large scale agriculture in countries dominated by subsistence or smallholder farmers could lead to social unrest, socio-economic inequalities and local political turmoil (Daniel and Mittal 2009: 11).

There is mixed evidence on the impacts of LSLAs on local infrastructure development and employment opportunities. According to the Land Matrix database, the majority of the projects brought infrastructure development particularly in the form of health or educational facilities, better access to markets and project infrastructure that can be used by the local population (Anseeuw, Boche et al. 2012: 44). In addition, financial support and capacity

building are some of the facilities extended to the local communities although they are not significant (Ibid). However, only few projects ensured environmental protection to the local people through LSLAs (Ibid).

Although employment creation is another important potential benefit expected from LSLA, the type of jobs created is often characterized by low wages and is often in poor working conditions (Ibid: 45). Employment impacts are difficult to judge due to the difficulty in differentiating between additional employment and job replacement particularly when smallholders lose access to land. Besides, information is hard to come with regarding the type of job created as in the case of agriculture, for example, most jobs are seasonal and are mainly performed by unskilled laborers (Ibid: 45). Employment creation is also often confused with contract farming, which is not a particular type of employment creation in itself but rather contracting of existing farmers leading to no additional employment (Ibid).

The impact of large scale land investment on ecological sustainability is also significant. Large scale foreign investments are characterized by intensive agricultural production that can ‘threaten biodiversity, carbon stocks, and land and water resources’ (von Braun and Meinzen-Dick 2009: 3).

In sum, this chapter highlighted the history of LSLAs, the macroeconomic factors for increased LSLAs and host government policies towards LSLA. Based on the concept of sustainable rural livelihoods, these factors constitute the contexts, conditions and trends of the framework outlined in Chapter Two.

Chapter Four

Ethiopia's Agriculture, Rural Land Governance and Large Scale Land Acquisition

This chapter discusses some of the features of Ethiopia's agricultural sector, the rural land governance and the state of LSLA in the country. Based on the concept of sustainable rural livelihoods approach, the chapter will identify the institutional processes and organizational structures of rural land governance in Ethiopia. The chapter will also highlight additional contexts, conditions and trends by looking at the different policy settings in Ethiopia.

Before discussing the state of agriculture, land governance and LSLA in Ethiopia, I would like to present a brief background of the country's rural population. Ethiopia is one of the poorest nations in the world with per capita income of only \$350, and about 29% of the people live below the national poverty line (IFAD 2012). The 2012 Human Development Index also ranks the country at 173th, out of 186 countries in terms of human development (UNDP 2013: 143). The following factors are often cited as the main causes of rural poverty (IFAD 2012):

- An ineffective and inefficient agricultural marketing system;
- Underdeveloped transport and communications networks;
- Underdeveloped production technologies;
- Limited access of rural households to support services;
- Environmental degradation;
- Lack of participation by rural poor people in decisions that affect their livelihoods.

Although poverty remains to be wide spread phenomenon, its intensity varies across households on the basis of size, quality and productivity of land owned as well as climate conditions and productive technologies (IFAD 2012).

4.1 Ethiopia's Agriculture Sector

In Ethiopia, agriculture is a source of livelihood for overwhelming majority of the population. It is the main source of food and cash both to the people working in the sector and others (CSA 2012: 1). The economy is dominated by small scale farmers who contribute the bulk of food supply, foreign exchange as well as labor and raw materials for other sectors (Getnet 2012: 7). These smallholders, who account for about 12.7 million, produce more than 95% of the agricultural GDP of the country (IFAD 2012).

There are different types of farming systems across the various agro-ecological zones of the country. These include (MoARD 2009: 4):

- Mixed farming which is predominantly practiced in high land and mid high land areas by peasant farmers
- Large scale commercial farming mainly practiced by private investors and;
- Pastoral production system, mainly rearing of livestock, widely practiced in lowland areas

Cereals are by far the major grain crops produced in the country, accounting for 81% of land cultivated during the year 2011/12 and providing 87% of quintals produced, followed by pulses and oilseeds (CSA 2011: 14). The major cereals produced include *teff*⁸, maize, sorghum, wheat and barley (Ibid: 14). In addition to grain crops, root crops (such as potatoes, sweet potatoes, *Taro (Godere)* and *Enset*⁹) also play important roles in households' food consumption (Ibid: 20). The majority of the population in south and south west of the country mainly rely on root crops for daily consumption both during surplus and/or poor harvest seasons. Among root crops, *enset* is the major grown and consumed crop by households (representing 66% of the area cultivated for root crops and 35.7% of the production in quintals), and is followed by *Taro (Godere)*, potatoes and sweet potatoes respectively (Ibid).

⁸ *Teff* is a major staple crop used for making traditional Ethiopian flat bread called '*Injera*'

⁹ *Enset* is a root crop widely used for making *kocho* and *Bulla*, both widely used in southern parts of the country

Nevertheless, the agricultural sector is predominantly characterized by subsistence farming and production is usually far less than the demand. Smallholder farmers struggle to produce enough food to feed their households let alone to abundantly supply the market with their produce. Apparently, most of these smallholder farmers are very poor and constitute the single largest poor group of people in the country (IFAD 2012). Smallholders are also very vulnerable to external shocks such as volatile global food markets and other natural disasters (Ibid). Agriculture is also hampered by structural problems that include ‘fragile soil and environmental degradation, small and declining size of land holdings, fragmentation of farm plots, poor farm management, population pressure, poor road networks and weak markets, and poor human development’ (Getnet 2012: 7).

The bulk of agricultural activities are dependent on the amount of rainfall, which affects the volume of production. The average annual rainfall in Ethiopia varies from 200-2500 mm, where highland areas get more rain than lowlands (MoARD 2009: 4). The level of rainfall is generally considered moderate by global standards and hence agricultural production remains low (Ibid: 4). There are two main rain seasons, particularly in most of the highlands: the less intensive ‘*Belg*’ season - from February to May; and the main rainy season of ‘*kiremet*’ from June to September. Rainfall not only determines the level of production, but it also defines rural poverty in any given period of time. It is claimed that persistent lack of rainfall is a major factor in explaining rural poverty (IFAD 2012). It should be noted that lack of rainfall caused frequent and severe drought throughout the country over the last decade, and the trend indicates sign of worsening (Ibid).

The impact of drought is most felt on such vulnerable groups as lowland pastoralist and high-density areas of highlands (IFAD 2012). Every year, a large number of households face a prolonged season of hunger, particularly during the pre-harvest period (Ibid). In fact, the country has historically

experienced severe famines; often in drought affected rural areas and significant number of the population are still dependent on food aid every year for their survival. For instance, in 2009 about 22% of the rural population were dependent on emergency food aid and productive safety net programs (PSNP)¹⁰ (Rahmato 2011: 3). Households in such areas usually find it difficult to feed the entire family since own production of food falls short of the demand in the household.

4.2 Rural Land Governance in Ethiopia: The Land Tenure System

This sub section outlines the institutional and organizational factors that determine the achievement of sustainable livelihood outcomes; based on the framework of sustainable livelihood approach discussed in Chapter Two. These institutional factors are the existing land tenure systems.

Agricultural land, be it large or small, is a core livelihood base and hence its governance is an important issue. According to the Ethiopian ministry of Agriculture and Rural Development (MoARD), the total land area of the country is about 111.5 million hectares, of which 74.3 million hectare is suitable for annual and perennial crop production (MoARD 2009: 4). The total irrigable land potential of the country is also estimated at 4.3 million ha (Ibid: 4). However, despite the presence of large sizes of agricultural land, only about 18 million ha (about 25%) is being cultivated with rain fed crops (MoARD 2009: 4, IFAD 2012). This in turn, has created huge problem on the size of land possessed by smallholders, along with other factors. For instance, land holding for such an agriculture-dependent economy is very low, especially in the face of large family sizes, where around 55.7% of farming households cultivate less than 0.5 ha and around 80% cultivate less than 1 ha (Getnet 2012: 7). Besides, out of the total land area, 45% (50.2 million ha) is

¹⁰ PSNP is a policy initiative by government and donors to shift millions of chronically food-insecure rural people from recurrent emergency food aid to a more secure and predictable, and largely cash-based, form of social protection. Beneficiaries usually get paid for such social works as constructing roads, wells and so on.

highland the remaining is lowland, both of which are not may not be very suitable for agricultural activities (Ibid: 4).

The institutions governing access to and use of land as well as land tenure security vary from exclusive or traditional to registered or legally protected land (Ibid: 9). Land tenure in Ethiopia has significantly evolved during the last four decades. The pre 1974 era was described as mainly feudal system, where tenant – landlord relationship dominated land governance. When the Marxist regime of *Derg* came to power in 1975, it abolished the feudal system, transferred land in to public ownership and redistributed it to the tillers. Following the fall of the *Derg* in 1991 in the hand of Ethiopian People’s Revolutionary Democratic Front (EPRDF), market oriented economy has been introduced but land still remained under public ownership. According to the current constitution of Ethiopia, land is owned by the state and people have only the right to use (FDRE 1994). The constitution states that:

The right to ownership of rural and urban land, as well as of all natural resources, is exclusively vested in the State and in the peoples of Ethiopia. Land is a common property of the Nations, Nationalities and Peoples of Ethiopia and shall not be subject to sale or to other means of exchange (Ibid: Article 40(3)).

Following the ratification of the constitution, several proclamations and guidelines have been introduced in different times with regards to land governance. One of these proclamations is the Rural Land Administration and Use Proclamation of 2005. The proclamation states that peasant farmers as well as pastoralists shall be given land (to use) free of charge to undertake agricultural activities (FDRE 2005: Article 5 (1.a)). The proclamation further asserts that any member of a peasant farmer, pastoralist or semi-pastoralist family, who have the right to use rural land, has the right to get land by donation, inheritance or lease from the competent authority (Ibid: Article 5(2)). Rural land can also be acquired either by distribution (of government land, communal land, other unoccupied land and land with no inheritor),

redistribution or settlement programs (Getnet 2012: 9). Farming households can also rent land from other holders in the form of fixed rent or sharecropping.

The majority of land being used by farming households is allocated by rural *kebele*¹¹ administrations (Getnet 2012: 9). Accordingly, rural *kebele* administration can allocate land within their jurisdiction to farming households whereas regional states allocate land through resettlement programs. The duration of land use rights is not limited and smallholders can use it indefinitely. With respect to communal land holdings, the government may allocate land to communities for common grazing, forestry and other social purposes (Tamrat 2010: 6). However, the laws do not specify the extent of communal landholding rights. Besides, both the Federal as well as regional laws provide the government absolute right to convert communal lands to private holding (such as for investment purpose) whenever necessary (Tamrat 2010: 6, FDRE 2005: Article 5(3)). Thus, communal land holders do not have the same rights that individual landholders have and only the government decides on the transfer of communal land use rights for other purposes. In fact, Ethiopia like some African countries (for instance Mauritania and Rwanda) does not provide legal protection for customary land rights (Schoneveld 2011: 13).

Meanwhile the 2005 Rural Land Administration and Use Proclamation states that peasant farmers, semi-pastoralist and pastoralist who have land holding rights can lease land to other farmers or investors from their holding of a size equivalent to the intended development in a way that does not displace them, for a period of time determined by regional rural land administration laws on the basis of local conditions (FDRE 2005: Article 8(1)). It also states that any

¹¹ *Kebeles* are the smallest administrative units of Ethiopia, a collection of which (about 800 households) form *Woredas*. *Woreda* refers to a district and it grows into Zones, which in turn form Regions or *Kilil*. There are 9 such administrative Regions in Ethiopia that form the Federal Democratic Republic of Ethiopia.

land holder shall have the right to transfer his rural land use rights to members of his family through inheritance (Ibid: Article 8(5)).

In sum, the land tenure system in Ethiopia is generally characterized by state ownership of all land in the country. Hence individuals have only the right to use land by leasing from the state or other individuals. However, some land is also customarily held by communities for which there is no legal recognition. Contrary to customary tenure, statutory land tenure in Ethiopia provides legal recognition to individual landholders.

4.3 Large Scale Land Acquisition in Ethiopia

In the past two decades, agricultural development policies of Ethiopia mainly focused on smallholder farmers because they were seen as catalysts of the country's development. Strategies such as the Agriculture Development-Led Industrialization (ADLI)¹² were very prominent pro-smallholder initiatives. However smallholder-focused development strategy proved to have limited economic and social success in Ethiopia (Lavers 2011: 21). Therefore, smallholders are no longer seen as the engines of economic transformation and it became necessary to introduce commercial agriculture. Nevertheless, smallholders are still protected due to their political sensitivity while great emphasis is given to Foreign Direct Investment thereby creating a dual agricultural system of smallholder and large scale commercial agriculture (Ibid: 21).

The need for shift from smallholder to large scale farming was clearly indicated on the 2006 Plan for Accelerated and Sustained Development to End Poverty (PASDEP) (MoFED 2006). It is stated (on the PASDEP) that in order to eradicate poverty and improve peoples' livelihood, there must be accelerated and sustained economic growth (Ibid: 46). And to achieve such

¹² ADLI was a development strategy adopted by GoE in 1993 to transform the economy to industrialization through the agriculture sector development. This strategy was a guiding principle for three successive 5-year development plans: the Sustainable Development and Poverty Reduction Programme (SDPRP) - 2002/03-2004/05, the Plan for Accelerated and Sustained Development to End Poverty (PASDEP) - 2005/06-2009/10 and the Growth and Transformation Plan (GTP) - 2010/11-2014/15 (Getnet 2012: 13).

growth, two big steps would be undertaken: commercialization of agriculture and accelerating private sector development (Ibid). The elements of PASDEP with respect to agricultural development include the ‘shift to higher-valued crops, promoting niche high-value export crops, a focus on selected high-potential areas, facilitating the commercialization of agriculture, supporting the development of large-scale commercial agriculture where it is feasible, and better integrating farmers with markets -both locally and globally’ (Ibid: 47).

The introduction of private sector in agricultural development was, however, not clearly seen in the previous two plans until the current development plan - the Growth and Transformation Plan (GTP) – came in to scene in 2010 (MoARD 2010). In this plan, the government showed great determination to incorporate private sector in agricultural development. The plan also emphasizes that private investors will focus on lowlands, where there is abundant supply of land. Meanwhile, the government will identify suitable land for investment and keep a land bank, from which local and foreign investors can rent or lease. Accordingly, the government planned to transfer nearly 3.3 million ha for commercial farming to investors who primarily intend to engage in the production of export crops (MoARD 2010; See Table 19: 49).

The government of Ethiopia strongly encourages large scale agricultural investment in order to develop the sector. Even international development agencies such as the World Bank stress that if carefully managed, commercializing land for large scale agriculture could be an essential measure for modernizing agriculture and improving productive efficiency which would lead to increased food production and economic growth (Deininger, Byerlee et al. 2011). Because the current land under cultivation is very low compared to what could have been achieved and given the availability of plentiful farmland, the World Bank expects Africa to benefit from large scale agriculture (Ibid).

4.3.1 Investment Legislations and Institutional Arrangements

Since the introduction of reforms in major sectors in 1992/93, the regulatory regime governing FDI has evolved to a great extent. The most significant initiatives for attracting foreign investment and encouraging large scale farm investment were however the formulation of the 2002 Investment Proclamation (No. 280/2002) and the amended Investment Proclamation of 2003 (No. 373/2003). The first proclamation identified the need to attract foreign investors, in addition to domestic investors in order to enhance the country's investment activities (FDRE 2002a). This proclamation was, however, amended with the 2003 proclamation which incorporated some changes in the original text of the former, including renaming of the Ethiopian Investment Authority as Ethiopian Investment Commission (FDRE 2003b). One of the notable provisions in these proclamations was the incentives allotted for foreign investors.

Generally, the investment legislations are very generous to foreign investors, who must meet the following light conditions to be allowed to start up a venture (FDRE 2002a: Article 11). First, any foreign investor must allocate a minimum capital of \$ 100,000 for a single project he is willing to set up in Ethiopia. A foreign investor who shall launch business jointly with domestic investors is required to allocate a minimum capital of \$ 60,000 (FDRE 2002a: Article 11). However, the capital limits could be less if investors want to engage in other businesses like engineering, architectural, accounting and audit services, project studies or business and management consultancy services or publishing. In such cases, foreign investor must allocate \$ 50,000 if the project is set up alone and \$ 25,000 if it is to be undertaken jointly with domestic investor. Second, a foreign investor who reinvests his/her profits/dividends, or who exports 75% of his output shall be exempted from allocating the above minimum capital requirements (Ibid).

Subsequent regulations that have been issued by the Council of Ministers have also outlined lucrative financial incentives. Articles 4 and 5 of Regulation No. 84/2003 for instance indicate that the agricultural sector is eligible for tax exemption and the same articles list a set of investment activities which could win tax exemption (FDRE 2003a). Article 2 of Regulation No. 146/2008 also includes some conditions for exemption of income tax (FDRE 2008).

Agricultural investment projects engaged in expanding or upgrading the existing activities are exempted from income taxes for up to two years given that the project exports at least 50% of the output and increases the value of production by at least 25% (Ibid: Article 2). Foreign investment in agriculture is exempt from income tax for a period of two to eight years depending on the proportion of their output to be exported to foreign markets, location of the investment, and the decision of the Board of Investment (Getnet 2012: 15).

Besides, eligible investors are also allowed to import, free of customs duty, all capital goods, construction materials and spare parts that they use for establishing or upgrading of their enterprises (Ibid).

Generally, the legislations imply that the government is determined to encourage investors to produce export goods. The shift in focus to large scale agriculture aims to boost export and foreign earnings and hence much of the agricultural products are destined to foreign markets and not consumed locally. This is, however, carried out at the expense of domestic food security.

The second instrument which is as important as the legislations is institutional arrangement. The 1994 constitution empowers the ethnically delineated regions to undertake land management (FDRE 1994: Article 52(2d)). The constitution states that basic land policy and laws are prepared by the Federal government and respective regions are given the mandate to issue their own land policies within the framework of federal laws. Accordingly, the responsibility of administering land (its distribution, transfer, leasing, use and development) lies within the jurisdiction of regional states. The regional states

conclude land deals through their regional Investment Commissions, after the environmental feasibility of the project is studied by the federal Environmental Protection Agency (EPA). The EPA has the legal authority to review and approve Environmental Impact Assessment (EIA) report, which as a rule is prepared by the project itself (FDRE 2002a). However, there are conflicting mandates among the institutions involved in large scale land transfer. The mandates of such institutional authorities as investment authorities, land administration authorities, environmental agencies and agricultural bureaus often clash with each other (Tamrat 2010: 10). For instance, while the environmental laws require strict environmental impact assessment before the land transfer, investment laws do not impose such requirements.

The increase in demand and importance of agricultural investment led the federal government to centralize the responsibility of land allocation from the regions to the Federal Ministry of Agriculture and Rural Development (MoARD). In 2008, the government designated MoARD to become the lead agency in dealing with large scale land deals with foreign and domestic investors. Some of its responsibilities are preparing information and other inputs for potential investors, assessing land suitability, signing contracts with and transferring land to eligible investors, undertaking follow-up and oversight, and other relevant matters (Getnet 2012: 15). To speed up these processes a new agency called Agricultural Investment Support Directorate (AISD) was established within the MoARD.

The justification for launching AISD was that it would speed up land allocation compared to regional processes, especially in emerging regions¹³ where the processes are considered slow, bureaucratic and corrupt. Thus, AISD is tasked with allocating land to all foreign investors and large scale domestic investors, who seek land for the area of more than 5,000 ha (Lavers 2011: 5). Regional States are barred from deals involving such land, a large

¹³ Emerging regions refers to regions which are relatively least developed and have weaker institutional capacity. They include Afar, Somali, Benishangul-Gumuz and Gambella regions

hectare of which was incorporated in to the federal land bank to be accessed by investors through AISD/MoARD (Getnet 2012: 15). Although AISD/MoARD undertakes all aspects of land deals in excess of 5000 ha, the income generated from the transactions, i.e. rent, income tax, and other payments are supposed to be given back to the region concerned (Ibid).

The new arrangement of centralizing regional authority to the federal government has attracted serious criticism for at least two major reasons. First, the constitutionality of transferring land management from the regions to the Federal Government is disputed. Critiques argue that there is no provision in the constitution that allows an upward delegation of authority from the regions to the federal government. It is rather the federal government that may delegate the mandates given to it, to regional states under the constitution (Tamrat 2010: 9). Thus the above centralization of regional mandates to administer their land ‘stands on a shaky constitutional basis’ (Ibid: 9). Second, there is no clear division of roles between the regions and MoARD in practice and until now only emerging regions are represented by MoARD for land investment related issues while established regions¹⁴ still carry out some large scale land transfers in their regions (Lavers 2011: 5)

In sum, the shift in the government’s policy towards encouraging large scale agricultural investments constitutes the contexts, conditions and trends in the analysis the Sustainable Livelihood Framework (See Figure 1).

4.3.2 The State of LSLA in Ethiopia

The government of Ethiopia has been trying to attract FDI in all sectors, especially in agriculture, by easing regulatory framework and providing various incentives. Accordingly, between October 1995 and July 2011, the Ethiopian Investment Agency issued investment licenses for 1,055 FDI projects in farming with a total of about 4,219,780 ha of land to be cultivated (Getnet 2012: 16). These projects were also expected to create 320,474

¹⁴These are Amhara, Oromia, Tigray and Southern Nations, Nationalities and People’s Regions

permanent jobs and 844,052 temporary jobs (ibid: 16). However, only 126 of the expected projects became operational over the period, accounting for only 11.9% of the total approved projects (Ibid: 16). The 126 projects being carried out created 19,543 permanent and 209,829 temporary employment opportunities, which represent 6.4% and 25%¹⁵ of the projected permanent and temporary jobs respectively (Ibid). There are a number of reasons for the under implementation of the planned projects, some of which are poor infrastructure facilities such as irrigation schemes, roads, communication, and inhospitable climate in some lowland areas (Getnet 2012: 16). Generally, delays in investment projects in developing countries may arise due to lenient legal practices and low land prices (Deininger, Byerlee et al. 2011)

There are a number of foreign investors, mainly from Asia, the Middle East, Europe and the USA, who have acquired land in various parts of the country. Based on the size of farmland acquired, Indian firms are the largest, with over 35 companies acquiring extensive tracts of land particularly in Benishangul-Gumuz, Gambella and Oromia national regional states (Getnet 2012: 17). Many of these companies hold lands measuring 25,000 ha to 50,000 hectares while a few have received land measuring over 100,000 hectares (Ibid). There are reports that out of total land earmarked for investment under the GTP, about half (1.8 million ha) are set aside for Indian investors who can show sufficient interest (Ibid).

After Indian investors, the second prominent LSLA comes from the Middle East, mainly Saudi Arabian investors. The Ethiopian-born Saudi billionaire Sheikh Al-Amoudi and the Saudi Star company are the two biggest investors from Saudi Arabia. Other major actors of LSLA are companies from US, Israel, and Europe.

The Ethiopian government has so far leased out large tracts of land to foreign investors and is in the process of leasing out much more. Expanding the scope

¹⁵ Based on calculation of the author

of investment in commercial farming is part of the government's overall plan to promote agricultural products destined for export and to supply local industries with raw materials (Ibid: 18). Towards this end, the government is providing favorable investment climate that include, but not limited to, offering financial incentives. The government firmly believes that large scale land investment, particularly foreign investment, will bring in the much needed technology and capital. Other expectations include foreign exchange earnings, employment creation and achievement of national food security (Lavers 2011: 5). In sum, the following benefits of large scale agricultural investments are foreseen by GoE.

Foreign large-scale land investment will (Rahmato 2011: 13):

1. produce export crops and hence increase the country's foreign earnings; it is also expected to expand production of crops needed for agro-industry such as cotton and sugar cane;
2. create employment opportunities in the localities concerned;
3. benefit local communities through the construction of infrastructure and social assets such as health posts, schools, access to clean water;
4. provide the opportunity for technology transfer; and promote energy security

The GoE often claims that the country possesses abundant land suitable to grow any kind of crop, sufficient water resources and that it will extend favorable investment conditions for those willing to engage in investment. Besides, the government believes that these resources are 'unused' by peasants, herders or others that they will not threaten any livelihood (Getnet 2012: 19). However, lands transferred for investment purpose are not always idle or unused as claimed by the government. In fact, the term 'unused' land as defined from the government's perspective may refer to 'land objectively unused for any human purpose and land used by people for purposes considered insufficiently productive or invisible to the state (e.g. pastoralism

and shifting cultivation)' (Lavers 2011: 2). Thus such 'unused' land is given out to investors with the expectations that they will turn them into 'productive land' or to replace 'inefficient' practices with settled agriculture (Ibid: 2). Other categories of land transferred to investors include state farms, communally-held land and individual holdings and investors could also be entitled to such land if they are expected to make them more productive compared to the previous users (Ibid).

Data compiled from the regional investment data of the Ministry of Agriculture and Rural Development (MoARD) shows that between the late 1990s and end of 2008, land transfers to both domestic and foreign investors totaled approximately 3.5 million hectares (Rahmato 2011: 5). In 2008 alone, the country allocated more than one-third of the total land leased out during the ten years preceding it (Ibid: 12). Evidences suggest that by the end of the Growth and Transformation Plan¹⁶ (GTP) period in 2015, a total of 7 million hectares of land will have been transferred to investors, which is about 38% of all lands currently held by smallholders (Rahmato 2011:12, Getnet 2012: 19). Documents also show that between 2003 and 2009, about 500 foreign investors were granted about one million hectares of land either on their own or as joint ventures with local businesses (Rahmato 2011: 12). The total land holding during this period was about 1 million ha, although the World Bank puts the figure at 1.2 million ha (and only between 2004 and 2008) (Getnet 2012: 19). The increasing attraction of investors in the agricultural sector has been evident in the growing number of both domestic and foreign investors acquiring land over recent years.

However, land is just one of the resources transferred to investors; investment projects also require access to and use of large quantities of water resources (Getnet 2012: 19). Land given to investors also includes arable land, grazing land, woodland, forestland, savannah grassland, wildlife habitats, and

¹⁶ GTP is the current 5-year national development plan that runs from 2010 through 2015.

wetlands (Ibid). There are documented cases where land leased for investors in Gambella and eastern Oromia regions fell inside area initially designated for national park, protected areas and a wildlife sanctuary (Ibid). Besides, large tracts of land have also been leased in highly populated areas, where it can be cultivated by smallholders (Lavers 2011: 15). Consequently, there is no clear separation between smallholder and investor sectors contrary to the claims made by the government (Ibid). There are three main types of land use in populated areas: state farms, communal grazing land and individual holdings (Ibid).

Currently, the majority of investment projects are being carried out in Benishangul and Gumuz, Gambella, Oromia and SNNP regions because of their abundant supply of water. A total of 3.6 million ha of land has been transferred to the federal land bank from these regions. The other regional regions such as Afar, Amhara and Tigray host relatively few projects (Getnet 2012: 20).

Table 1: Investment Land Transferred to the Federal Land Bank

Region	Land Transferred (ha)
Benishangul and Gumuz	1,149,052
Gambella	1,226,893
Oromia	1,079,866
SNNPR	180,604
Total	3,636,415

Source: (Getnet 2012: 20).

In Ethiopia, land allocation is done in a fairly simple manner. First the concerned investor fills in an application form and presents the business plan along with written request for land. However, there are no stringent commitments or obligations for investors in their application forms or the business plans. Besides, there exist no mechanisms to cross check the accuracy of the information provided by the investors and consequently the investors tend to exaggerate capital they are going to invest and the potential benefit of their projects in order to secure approval from the government (Tamrat 2010: 17, Getnet 2012: 20). Investors are not required to provide

detailed information about the proposed project and on average, it takes only 10-15 days for investors to obtain an investment license (Tamrat 2010: 15). However, the allocation and delivery of investment land takes longer, although it varies from region to region. After the land to be given is determined, the investor is required to prepare Environmental Impact Assessment (EIA) report, which will be reviewed by the MoARD (Getnet 2012: 20). The EIA should incorporate a range of issues outlined in the Environmental Impact Assessment Proclamation (No. 299/2002). The proclamation states that:

A proponent shall undertake an environmental impact assessment, identify the likely adverse impacts of his project, incorporated the means of their prevention or containment, and submit to the Authority or the relevant regional environmental agency the environmental impact study report together with the documents determined as necessary by the Authority or the relevant regional environmental agency (FDRE 2002b: 1954).

According to the proclamation, no investor should commence a project that requires environmental impact assessment without the authorization of the Federal EPA or respective regional environmental agencies. However, no strict environmental requirement is put forward by investment authorities. If the EIA is approved, which is almost always the case, MoARD instructs the concerned regional authorities to cooperate and facilitate the land transfer (Getnet 2012: 20).

4.3.3 Land Deals and Investors' Obligations

Generally, there are no laws, regulations or directives that oblige benefit-sharing between the investor and the public (Tamrat 2010: 16). Land acquisition contracts have neither provision for meeting the country's food security needs nor stipulate obligations for the investors to provide social services to communities. Investors are not obliged to supply the local or national markets, but rather they are strongly encouraged to export most or all of their products to foreign markets (Getnet 2012: 21). Basic infrastructures such as roads and irrigations schemes for the projects are even constructed by

the government in most cases (Ibid: 22). The most common item in almost all contracts in the Oromia region is the obligation on investors to plant native tree species in at least 2% of the project land, whereas the federal contracts do not impose such obligations but require projects to ‘conserve tree plantations that have not been cleared for earth works’ (Ibid).

Although projects are required to include, in their EIA, assurance that the project would not damage the environment as a result of land management practices, there is significant clearing of woody and herbaceous vegetation in some parts of the investment areas. Subsequently, the resulting loss of vegetation cover is exposing lands to serious erosion and land degradation thereby depriving local community of their valuable natural resources (Getnet 2012: 22).

The regional offices and staff have the responsibility to monitor and enforce project obligations. However, they have very limited institutional and technical capacity to undertake these tasks effectively. The projects are scattered across the country, which makes it difficult for the staff, who are already overburdened with other duties, to conduct periodic visits for on-site inspection and monitoring (Ibid).

There is also lack of inter-agency consultation in decision making, with the federal MoARD carrying out almost all the decision while more concerned agencies like the Ethiopian Wildlife Conservation Authority (EWCA) often not consulted. Although management of the country’s national parks, game reserves and sanctuaries are the core responsibilities of EWCA, its jurisdiction is often violated. For instance, EWCA was not aware of the decision to transfer thousands of hectares of land inside the Gambella National Park as well as the Babile Elephant Sanctuary in eastern Oromia region to investors until after the issue was brought to the attention of authorities concerned by environmental and conservation groups (Ibid).

4.3.4 Investment Land Rents, Size and Lease Period

The land laws stipulate the rent charged for agricultural land and these laws vary widely from region to region. Most of the regions determine the rent on the basis of location, access to transport, markets, communication and banking services, and depending on whether irrigation water is accessible for the project (Getnet 2012: 21). Accordingly, lands closer to urban centers and those which have adequate access to roads and other basic services as well as benefiting from irrigation schemes have higher rental value (Ibid: 21). The following table gives the various rent rates across selected regions. As can be seen from Table 2, the highest rent charged is in Oromia region, which stood at 135 birr per hectare per year while the lowest rate exists in Amhara region.

Table 2: Land rents in selected regions (Birr/ha/year)

Region	Maximum	Minimum
Amhara	79	14
Benishangul and Gumuz	25	15
Gambella	30	20
Oromia	135	70
SNNPR	117	30
Tigray	40	30

Source: (Adopted from Getnet 2012: 21)

However, these rents are considered very low by any standards and they do not reflect the market price for the land. Generally, the annual rent is equivalent to between US \$ 1.00 and less than US \$ 9.00 per hectare. When compared to other countries, the rent investors pay in Ethiopia is very flimsy. For example, the rent in Punjab region of India ranges from US \$ 556 to US \$ 667 per hectare per year (Deccan Herald, 14 February 2001; cited in Getnet 2012). Thus, the rental fees charged in Ethiopia, along with the financial incentives are considered very generous by many Indian and other foreign investors. The Ethiopian authorities also acknowledge the rents are so low but they seem comfortable with that. Owing to these considerably attractive incentives, investors seek to secure more lands than they could manage to operate, leaving the land idle for years (Getnet 2012: 21). However there are

some recent suggestions from MoARD that it could increase the rental fees, although no concrete decision has been made about it yet. MoARD also drafted new guidelines on the establishment of new rental fees and these too have not been adopted. If adopted, these guidelines could have increased the rates significantly, albeit still lower than other countries. For instance it proposes a maximum of 2,660 and 2,541 Birr (US\$ 156 and US\$149) per hectare for irrigated and rain-fed land respectively, provided that both are located within 100 km of the capital, Addis Ababa. It also proposes a minimum of 158 and 111 Birr for similar land located more than 700 km from Addis Ababa (Ibid).

The draft guidelines also establish a ceiling for lands to be transferred to investors for various types of crop. Accordingly, a maximum of 50,000 ha is to be allocated for investors who would like to grow biofuel plants including palm-oil trees (Getnet 2012: 21). Whereas, for those growing cereals, oil seeds or agro-industry crops such as cotton and sugar cane, the document permits up to 20,000 ha while for tea and coffee growers the maximum land to be transferred is 5,000 ha. Nevertheless, these rules are yet to be implemented and in some cases investors acquire more land than what is permitted in the ceiling or grow their preferred crop type contrary to what the land is allocated for. For instance Saudi Star company, apart from the 10,000 ha it acquired in Gambella region in 2008, is reportedly been given additional 129,000 ha to the project by MoARD to grow rice for export to Saudi Arabia and other Gulf state (Getnet 2012: 21). Reports also indicate that the company is seeking a total of 500,000 ha, of which 300,000 ha from Gambella region and the rest from Benishangul Gumuz and Oromia regions (Ibid). With such a large land size, the company aims to produce one million tons of rice annually, which will be exported to earn US \$ 1 billion annually (Ibid).

Land lease period for investment projects also varies from region to region and depending on the access of the land to irrigation scheme. The lease period in

Benishangul Gumuz, Gambella, SNNPR and Tigray is up to 50 years, whereas in Oromia and Amhara regions the lease period is 30 and 25 years respectively (Ibid). However, the draft guidelines discussed above recommend a lease period of 25 to 45 years.

4.3.5 Assessing Impacts of Land Acquisition

In Ethiopia land acquisition on small scale has been carried out since 1995, although only few of the projects launched went operational until now. The acquisition of large tracts of land by foreign investors is a recent phenomenon, but these too have not begun full-scale operations. Nevertheless, few of the investors have started clearing land and planting crops on small plots of their land to test the suitability of seed varieties and their response to different inputs and technologies. Thus it is expected that it will take many years before a given investment project becomes fully operational. This makes it difficult to determine the various impacts of land acquisition (economic, social, agricultural, technology transfer, employment, government tax income, food security, etc) accurately and comprehensively in most cases.

Studies suggest that some projects are carried out without consultation with local communities and without their knowledge (Getnet 2012: 23). If the planned land lease program of the government is completed, it is feared that the entire agrarian structure of the country will radically change, leaving foreign capital the dominant player (Ibid). This will ultimately threaten the long-term viability of smallholder agriculture, with the harms on local livelihood are being observed even now. Among the damages observed are loss of farmland, of pasturage and grazing rights, of source of water, and of access to firewood and useful plants (Ibid).

Although the long-term effects of LSLA is not fully evident, there are instances of likely impacts which are already creating tension within local communities. In other words, competition for scarce resources between the project and local communities has been apparent over key resources. This is

particularly observed in the competition for water resources, since most projects monopolize water resources and force local communities to seek water from sources far away from their village (Ibid). In many areas of projects, the majority of rural people do not have access to piped water and hence exclusively depend on natural streams, rivers, and springs in their locality.

The so called resettlement program is also another source of conflict between the project and local communities. In regions where investors have acquired extensive land, particularly in Benishangul Gumuz and Gambella, because of the resettlement program, now renamed 'villagisation', local communities are relocated away from their areas (Ibid). The main justification given by the regions and the federal government for this is that the program 'will enable local authorities to provide essential services such as education, health, clean water, etc' (Ibid: 23). However, the communities' account of the story gives different picture in that local communities unanimously opposed the relocation program for it is solely aimed at giving investors unlimited access to land and other resources (Ibid).

The impact on the environment and wildlife of the area surrounding the project was also tremendous. In some cases, forest areas were also given out for projects despite strong local opposition to the move. For example, some projects in Gambella Region have led to clearance of forest to plant tea and other crops, where the region is very rich in wildlife and biodiversity. Besides, some projects are also found even inside National Parks and protected areas, or inside established wildlife habitats. Still some others are set up in transit corridors and wildlife migration routes, which would effectively block or interfere with free movement of wildlife, while others are located in places where they deny animals access to seasonal pasture and water resources (Ibid). The impact on the soil is also considerable because the contracts have no adequate provisions to prohibit the use of toxic agro-chemicals. In addition,

the main purpose of investors for acquiring large scale land is to carry out industrialized monocropping, which will in turn exhaust and damage the land (Ibid).

The other important aspect of large scale foreign investment is its impact on local food security. Investment projects have no formal or informal obligations to contribute to the food security of the country. As was discussed in the previous section, the main objective of the projects is to produce crops destined for export and their business plans as well as contracts contain no requirement to supply the local market, even in emergency circumstances (Ibid). Nevertheless, the projects generate foreign exchange, pay land rents and provide the government with some tax from their revenues.

In summary, this chapter discussed the institutional and organizational factors affecting sustainable rural livelihood discussed in Chapter Two. More specifically, it dealt with the rural land governance (the land tenure system), which is a major institutional factor in the analysis of sustainable livelihood in the study area. The chapter also presented the policy regime governing LSLA in the country.

Chapter Five: Research Methodology

This chapter will discuss the research methodological approach employed in the study. In general, the study uses triangulation technique, which in social science is the mixing of data and methods (methodological pluralism) so that diverse viewpoints or standpoints are brought together to solve a particular research problem (Olsen 2004: 3). As Bryman (2008) argues, a combination of different methodologies will result in a leading strategy for carrying out the research and a follow up strategy for rounding out and widening the inquiry (Bryman 2008).

The chapter begins by presenting an overview of the study area, followed by instruments of data collection, the sampling design, data analysis techniques, limitations and ethical considerations of the study.

5.1 Description of the Study Area

The field work was conducted in West Shewa Zone, Bako Tibe *woreda* of Oromia National Regional State. The Bako Tibe *woreda* lies between approximately 8° 56' and 9° 06' Northern Latitude as well as 37° 01' and 37° 12' Eastern Longitude (See Annex 3). The district has an altitude of 1650m – 2800m above sea level. It is located in the western part of the country and has a distance of some 125 km from Ambo (the zonal capital) and 250 km from Addis Ababa, the capital city of Ethiopia. The study site is about 16 km from Bako Town (the *woreda* capital) and 6km off the main road.

According to the 2007 population and housing census, there were an estimated 123,031 people in the district, whom 61,018 were males and 62,013 were females (CSA 2007: 8). The total number of people living in urban areas during the same year was 22, 851 (11,761 males and 11,090 females) while the rural population was 100,180 (49,257 males and 50,923 females) (Ibid). Thus the proportion of people living in rural areas was 81.4%, while the proportion in urban areas is 18.6%. The population age groups of 0-14, 15-64 and 65+ years in both urban and rural areas account for 45.9%, 50.9% and

2.5% respectively while the figure is 48.5%, 49.2% and 2.4% in the rural area respectively¹⁷. There is no significant difference between rural and urban average family size with both roughly being 5 persons per family (CSA 2008, p.83). Crude population density is estimated at 151 persons per km² (ONRS 2011). However, other sources put the population density at 210 persons per square km (ERA 2006: Section 3.4.1). Based on the 2007 population and housing census, there were 26,274 households in the *woreda* (CSA 2007: 112).

The total area of Bako Tibe is 637.19 km² or 63,719 ha (Ibid: Section 5.2, Table 2) and the total arable land is 34,975 ha (54.25% of the total area), of which 27,855 ha is currently being cultivated by farmers excluding land owned by investors. About 23.98% of the total area was grazing (pasture) land and 5.12% is forest land, whereas land used for settlements and various infrastructure account for 16.65% (ERA 2006: Appendix 3). A total of 1400 ha of the arable land is irrigated by traditional techniques, whereas 118 ha of the arable land is irrigated by government irrigation system.

According to the Agricultural Bureau of the *woreda*, the region has three climatic zones: ‘*Kolla*’ (tropical zone) covering 51% of the area, ‘*Woyna Dega*’ (sub-tropical zone) covering 37% and ‘*Dega*’ (cool zone) accounting for 12% of the area. The average annual rainfall is 1266 mm, whereas the mean monthly temperature ranges from 18.8°C to 22.4°C (Fisseha 2011: 12). The major soil types are Rendzinas, Haplic and Luvic phaeozems (4.0%), chromic and Orthic Luvisols (14.9%), Dystric Nitosols (60.2%), and Chromic and Pellic Vertisols (20.9%) (ONRS 2011). The two major rivers in the district are *Gibe* and *Amara* and they are the main sources of water for both human and livestock consumptions (Fisseha 2011: 12). The area’s vegetation mainly includes high forest, woodland, riverine, shrub and bush, savannah and manmade forests. In addition to these, there are also government and

¹⁷ source author’s calculation based on CSA Census Report 2007: 170

community owned forests. Although there are no game reserves, the area is home to some animals such as vervet monkey, baboon, warthog, hippopotamus, leopard, duiker, colobus monkey, bush buck, spotted hyena and civet cat are found dispersedly in the district (Ibid).

The main economic activities in Bako-Tibe are farming and livestock rearing; and the major crops grown include *teff*¹⁸, maize and sorghum whereas the main cash crop grown is chili pepper. Meanwhile, the major livestock reared are cattle (both ox and cow), sheep and goat. There is intermittent drought in the area and the people received food aid from 2003 to 2009. Besides, diseases especially water-borne are common. Animal fodder is also scarce.

As mentioned in the first chapter, about 11,000 hectares of land is given out to a foreign investor in the district. This investment project is called the Bechera Agricultural Development Project (BADP) and is owned by Karuturi Agro Products Plc, a subsidiary of the Indian company Karuturi Global Limited. The lease period of the investment is for 30 years and the annual lease rent is 135 birr (\$8) per hectare per year. However, the company is exempted from lease payment for the first six years. The company planned to cultivate mainly palm oil trees; however other crops would also be grown on the land. The now investment land has been considered 'vacant' land since it was identified by the Ethiopian Electric Power Corporation (EEPCo.) as a reservoir for construction of hydroelectric dam back in 1984 (Maru and Rutten 2013: 7). Until this study was concluded, the Karuturi's Bechera Agricultural Development Project is the biggest investment project in the district involving large tract of land. The project incorporated land that was used by local people in five *kebeles*, either directly or via indirect means such as purchase of crops grown on the field.

¹⁸ The stable grain in Ethiopia

In the study area, both statutory and customary land tenure systems exist side by side. There are individual land holdings with statutory rights, on which local farmers mainly grow crops. Whereas, communal lands are customarily held and used by local people for grazing animals, growing crops, collecting grasses or fetching water. The land transferred for large scale agricultural investment falls under customarily held communal land. The Federal Land Law and regional state laws have a provision that communally held lands would be registerable as 'common holds', although such provision gives less legal protection and hence the land can easily be revoked in favor of large scale commercial farming (Wily 2011: 750).

5.2 Types and Instruments of Data Collection

The study relies on both quantitative and qualitative data which were collected from various primary and secondary sources. According to Johnson & Christensen (2008), qualitative research is used to understand and interpret social interaction whereas quantitative research will enable us to test hypotheses, look at cause and effect, and make predictions (Johnson and Christensen 2008). Qualitative researches have an advantage of recognizing the inherently subjective nature of social relationships (Olsen 2004: 7). On the other hand, quantitative research is based on precise measurements using structured and validated data collection instruments (Johnson and Christensen 2008).

In this study, a variety of quantitative and qualitative data have been juxtaposed to provide more accurate findings. The quantitative data was gathered through structured and semi-structured household interviews; whereas the qualitative data were collected through Key Informant Interviews, Focus Group Discussions, Direct Observation and Field Notes. In addition, secondary data was also obtained from review of documents and published works, including government legislations and policy documents as well as works produced by international agencies (such as the World Bank, IFPRI and

FAO). Online sites of international activist organizations, media outlets and other web sources have also been accessed for more secondary data.

5.3 Sampling Design and Sample Size

The sampling design combines both probability and non-probability sampling techniques. The district of Bako Tibe has a total of 28 rural *kebeles* including the ones where the investment project is located. Prior to its transfer for investment, the land had been used by households in five *kebeles* for various purposes. These *kebeles* are: *Bechera Oda Gibe*, *Oda Gibe*, *Tarkafata Gibe*, *Oda Korma*, and *Amarti Gibe* and they are inhabited by 926, 521, 584, 403 and 849 households respectively. This study was conducted on all of these five *kebeles*, which have thus a combined number of 3283 households. These *kebeles* are selected because of their direct association with the land given for investment purpose. The list of households in the five *kebeles* were obtained from the respective *kebele* administrations and continuously updated with the help of local Field Assistants.

Proportional samples of 5% of the households were selected for the household interviews from each of the five *kebeles*, using systematic random sampling techniques. Accordingly, a total of 163 household interviews were conducted, of which 148 were successfully executed, the rest having missing data or other defects. In the events when household heads were not available for interviews, frequent visits were made to reach them.

The Key Informant Interviews were held with focal persons such as *woreda*, regional and federal officials, officials from the investor company and employees of the company. These respondents were selected on the basis of non-probability sampling techniques (Judgment Sampling) because of their association with project. A total of 8 individuals have been interviewed using this mechanism.

The Focus Group Discussions were organized and carried out with selected Farmers' Association members, community elders and *kebele* officials of

different age and sex. Accordingly, a total of 2 Focus Groups, each of which comprising 8 people were randomly drawn from the above groups.

5.4 Data Analysis and Interpretation

After the field work was finalized and all the necessary data were collected, the quantitative data have been coded, entered into Excel Spreadsheet, and cleaned and verified. The data is then analyzed using descriptive statistical tools such as tabulation, graphs and charts. Then, the result of the quantitative data is discussed by juxtaposing with the qualitative data.

The qualitative data meanwhile have been transcribed¹⁹, carefully read line by line and divided into meaningful analytical units (segments). This process is called coding, in which segments of data are made with symbols, descriptive words, or category names. Following the process of coding, the qualitative results are analyzed and presented.

5.5 Limitations of the Study

The first limitation of this study is lack of adequate information from the investment company about the project as well as its business activities since the company under consideration was less willing to cooperate at the time of the field work. Some government offices were also reluctant to provide practical information due to the sensitivity of the topic in the country as a whole. These limitations made it difficult to get sufficient secondary data particularly facts and figures to support the research.

Second, it might be too early to examine the impacts of the LSLA on some of the indicators used in this study (such as the impacts on local infrastructure); since the project has been operational only for the last four years by the time the data was collected. Besides, the company has not been able to cultivate the entire land it acquired to date. Only some 2800 hectares of land have been cultivated by the time the field work was conducted. This is also the case for a

¹⁹ Transcribing is typing texts collected from interviews, observational notes, memos, etc., into word processing documents.

great majority of investment projects in the country, which have not begun full-scale operations during their first few years (Rahmato 2011: 37). The small plots of land cultivated by the investor so far have been used to test the productivity of different seed varieties and therefore it will take years before the investor cultivates all the land it acquired. Studies in the early stages of projects may result in a bias towards adverse impacts since some of the benefits of projects claimed by investors (such as promised social infrastructure) might take time to materialize (Anseeuw, Boche et al. 2012: 44). Hence, more studies need to be done in the long run to determine the impacts of the investment project on such issues.

The third limitation is lack of resources, i.e., financial, time and human resources. This created huge burden on the researcher at the time of the field work.

5.6 Ethical Considerations

In this research, care has been taken to meet basic ethical principles in social science research. Accordingly, the communities' cultures and their way of life are treated respectfully. The researcher and the enumerators explained to all respondents the purposes of this research before commencing interviews. Proper care is also taken to keep the confidentiality of the participants; their names have not been used anywhere. Besides, the responses have not been used for other purposes than what was communicated to the participants.

Participation in interviews was voluntary and the respondents had the right to abstain from answering any question that they do not want to answer. They had also the right to withdraw from the interviews at any time for any reason.

Chapter Six: Analysis of Household Resources

This chapter analyses the household resources of the sample data using various descriptive tools such as tables, graphs and charts. These resources include human, economic and natural capital; all of which are vital for local livelihood. The analysis is done in relation to the concept of sustainable rural livelihood framework outlined in Chapter Two. It is discussed that the ability to pursue different livelihood strategies is dependent on the basic material and social, tangible and intangible assets that households possess (Scoones 1998: 7). From economics point of view, these livelihood resources provide the capital bases (natural, economic or financial, human and social capitals), from which livelihood are constructed (Ibid). It is the combination of these livelihood resources that determines the different livelihood strategies that must be adopted by households to achieve sustainable livelihoods.

6.1 Household Demographics

Before starting the analysis of demographics, it is important to understand the terms '*household*' and '*household demographics*'. The term 'household' as used in this study refers to a person or group of people, who live together in the same housing unit and share common cooking arrangements, regardless of whether they have blood relationship. And household demographics include basic information such as information about household heads, household size and age distribution. Analysis of these factors helps to better understand the pattern of characteristics of the sample households.

6.1.1 Household Head Background

Household head (or head of the family) refers to an individual in a family setting, who is primarily responsible for providing actual support and maintenance to one or more individuals who are or are not related to him/her through blood, marriage or adoption. Information about household head sex, age, marital status, education level and employment status have been collected through household interviews and the results of which are given on Table 3.

Table 3: Household Head Background

Household Head Background	Male		Female		Sum of both male and female	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Household Head Sex	127	86	21	14	148	100
Household Head Age:	-	-	-	-	-	-
Under 20	3	2	0	0	3	2
21 -30	10	8	3	12	13	9
31-40	26	20	3	15	29	20
41-50	38	30	5	25	43	29
51-60	31	25	7	32	38	25
61-70	14	11	2	10	16	11
71 and above	5	4	1	6	6	4
Total	127	100	21	100	148	100
Household head marital status:	-	-	-	-	-	-
Married	103	81	2	9	105	70
Never married	12	9	1	5	13	9
Widowed	7	6	10	48	17	12
Divorced or Separated	5	4	8	38	13	9
Total	127	100	21	100	148	100
Household head Education:	-	-	-	-	-	-
Illiterate	47	37	9	43	56	38
Grade 1-4	24	19	6	28	30	20
Grade 5-8	17	14	3	14	20	14
Grade 9-10	14	11	2	10	16	11
Grade 11-12	13	10	1	5	14	9
Certificate	9	7	0	0	9	6
Higher Education	3	2	0	0	3	2
Total	127	100	21	100	148	100
Household head Occupation:	-	-	-	-	-	-
Farming	65	52	10	48	75	51
Petty Trading	22	17	2	9	24	16
Craftsmanship	13	10	0	0	13	9
Home brewery	4	3	4	19	8	5
Forestry	9	7	0	0	9	6
Unemployed	11	9	5	24	16	11
Other	3	2	0	0	3	2
Total	127	100	21	100	148	100

Source: Author's Survey

As can be seen in Table 3, the majority of household heads interviewed were males (86%) while the rest (14%) were females. This finding aligns with the fact that male are traditionally heads of households, particularly in rural areas of the country. Like elsewhere in the country, the authority of leadership and administration of households usually vests on males provided that they are capable of supporting and sustaining one or more individuals within the household. However, in the event when the male dies, becomes incapacitated or divorces, woman can assume the role although they tend to face tough challenges under such circumstances. This is because female headed households are more vulnerable to different kinds of problems than the male-headed ones (IFAD 2012). For example, women are much less likely than men to receive education or health benefits, and have less voice in decisions that affect their lives (Ibid). Consequently, for female headed households this means more infant deaths, undernourished families, lack of education for children and other problems (Ibid). Besides, female heads are less used to outdoor farm works and may have difficulty of handling labor-intensive jobs unlike their male counter parts. This in turn reduces the productivity of the household unless there are grown up children who can assist the female household head.

Table 3 also shows the household heads' age distribution, in which most of the household heads fall in the age group of 41-50 years (29%), followed by 51-60 years (25%) and 31-40 years (20%), all of which account for about three quarters of the age distribution. Thus about 74% of the household heads have an age range of between 31 – 60 years and we can infer that most of the household heads are within the productive age group of 15-64 years. Gender wise, the majority of male household heads are also between 41 and 50 (30%), followed by those between 51 and 60 years old (25%) and 31-40 (20%) years respectively. For female household heads, most (32%) fall under the age group 51-60 years of age followed by the age group 41-50 years (25%) and 31-40 (15%). These results suggest that while the majority of male household heads

are relatively younger, female household heads tend to be older. As discussed above, females usually assume the role of household head in the absence of males due to death or incapacitation; both of which occur usually during late ages of the spouses.

The marital status of household heads is another factor studied here. Overall, about 70%, 9%, 12%, and 9% of the heads are married, never married, widowed and divorced (separated) respectively. Gender wise, most male household heads (81%) are married, followed by those never married (9%), widowed (6%), and divorced or separated (4%) heads. However, most of the female household heads (48%) are widowed, while about 38% are divorced (separated). This finding consolidates the assertion that most females take up the role of heading households only in the absence of their male partners either due to death or divorce.

Out of the total household heads surveyed, the majority were illiterate (38%) followed by those who attended grades 1 to 4 (20%) and 5 to 8 (14%). Only few household heads (2%) have higher level education (college diploma or above). Generally, male household heads have better education than female heads as shown in Table 3, although their proportion in the sample set makes it difficult to generalize accordingly (owing to the fact that there are only 21 female heads as opposed to 127 male household heads).

The majority of the household heads (51%) were engaged in farming job including both crop production and animal husbandry. About 16% of them do some kind of petty/retail trading, followed by craftsmanship (9%), forestry (6%) and home brewery (5%) respectively. There are also unemployed household heads (11%) and heads with other occupations such as public employment, mining and so on (2%). Gender wise, the unemployment rate among female heads (24%) is more than that of male heads (9%). There are a number of reasons for high unemployment rate among female household heads than males. As discussed previously, males are natural household heads

because they are more actively engaged in income generating activities than women. Thus women are dependent on males for income since most women do not engage in income generating activities. Rather, women are usually unpaid family workers in most parts of rural areas, whose main responsibilities are domestic jobs and taking care of children. In the event of death or separation from their husbands, women assume the head role with no genuine income generating occupations and hence remain unemployed.

6.1.2 Household Size, Age Distribution and Dependency Ratio

The study also gathered information on the number and age distribution of each household member, which is summarized in Table 4 below.

Table 4: Average²⁰ household size, age distribution and dependency ratio

Age (years)	(Average) No. of male	Percent	(Average) No. of female	Percent	(Average) Both Sexes	Percent (percent)
0 – 14	1.13	23	1.17	24	2.30	47
15 – 64	1.20	24	1.30	27	2.50	51
65 and above	0.07	2	0.03	0	0.10	2
Totals	2.40	49%	2.50	51%	4.90	100
Dependency Ratio	-	-	-	-	96%	-

Source: Author's Survey

As shown in Table 4, on average, about half of members of the households (51%) have an age of 15 to 64 years, while 47% of the people fall in the group 0-14 years and just 2% were 65 years old and above. The average dependency ratio²¹, as calculated on the basis of the average figures, was 96%. This means that for every 10 productive people in the household (15-64 years), there are 9.6 dependent people (0-14 years and 65 years or above). The average family sizes in the study area is 4.9 persons (see Table 4), of whom 2.4 (49%) are males and 2.5 (51%) are females. This finding is closer to the average family size in rural parts of the Oromia Region, which according to the 2007 population and housing census is 5.0 (CSA 2008: 83). Such a family size

²⁰ The figures given in the table are averages and are calculated based on the data from each household.

²¹ Dependency ratio is a ratio of people not in the labor force (the dependent group) to those in the labor force (the productive group), and it is used to measure the pressure on the productive population. The dependent people are people between 0- 14 years and 65+ year old, while the productive ones are those between 15 and 64 years old.

might be considered big and this could have both positive and negative implications for household wellbeing. For instance larger family size, particularly those in the productive age group of 15-64 years, provides more labor force which in turn could potentially boost household income. In contrast, larger family size where many members are dependent on one or two individuals has a number of negative effects; such as on household food security, among others.

6.2 Economic and Financial Resources

Having discussed the human resources of households, I now present the various types of economic/financial resources such as income and food.

6.2.1 Major Economic Activities and Household Expenditures

A. Major Economic Activities

Table 5 gives the list of major economic activities and their respective contribution for household income.

Table 5: The major economic activities and estimated annual earnings during 2010/11

Source of Income	Average Annual Income per Household	
	(in Birr)	Percent
Farming Activities	5327*	51
Retail Trade/Petty Trading	1440	14
Non-Farm Wage and Salary Employment	1080	10
Property Renting	960	9
Migrant work	600	6
Craftsmanship	480	4
Home brewing	420	4
Other activities	240	2
Total	10,547	100

Source: Author's Survey

*calculated based on the annual earnings from crop production and animal husbandry (see Tables 6,7 and 8 below)

As shown in Table 5, farming activities (both employment in others' farms and self employment) are the major economic activities of the sample households, accounting for 51% of all incomes generated. The other activities in their chronological order are retail/petty trading, nonfarm wage and salary

employment, property renting, migrant work by members of families, relatives or friends; craftsmanship and home brewing. These activities account for 14%, 10%, 9%, 6%, 4% and 4% of the annual household incomes respectively. Other activities include forestry, bee-keeping and working on safety net programs, which all constitute 2% of the incomes.

Apart from farming activities, all the other activities are called non-farm activities and they are not directly related to farming. Rural people would naturally diversify their sources of income due to uncertainties over crop production and inadequacy of the return to support the household. Consequently, many rural households will be forced to undertake diverse activities in order to boost additional income sources besides farming. Such non-farm activities are usually carried out during the dry seasons when farming activities slow down (Bogale 2003: 10).

I. Farming Activities

Farming activities, including crop production and animal husbandry, are the major economic activities as well as main sources of household income in the district. Hence they constitute a major basis of livelihoods of the communities in the area. Farming activities are usually seasonal and rain fed, however they are by far the biggest income generators for the local people. In fact, the Ethiopian economy is heavily dependent on agriculture/farming, which provides employment for about 85% of the population and accounts for 45% of the GDP (FDRE 2013). Every year, the Bako plains receive rain for about three months during the wet season of July to September. During this season, there is an intensive cultivation of rain-fed crops such as maize, *teff*, pepper, and niger seed (Fisseha 2011: 14). However, in the dry season of October to June, the plains are largely used for communal grazing (Ibid). A more detailed assessment of farming activities in the district is made in section 6.2.2 below.

II. Retail/Petty Trading

Retail/Petty Trading is the second major economic activity and includes small scale trading of items in open markets or in shops for profit. This form of business activity is considered as non-farm self employment and can be carried out by individuals or the household as a group. Trading items include various stuffs such as coffee, soap, salt, cotton products, cooking oil and so on, which are brought to the market centers by head-carrying or by donkeys. Such retailing activities are particularly common among female-headed households in the district.

III. Non-Farm Wage and Salary Employment

These are employments in non-farm activities such as guarding jobs, constructions works, mining activities, public employment and so on. They are the third major sources of income in the study area, where at least one member of a household is engage in such activities. Non-farm wage laborers or employees have fixed periodic earnings (monthly daily or even hourly wages) and hence it is predictable source of income.

IV. Property Renting

Some households also rent out properties they own such as their land, houses, domestic animals (e.g. bull, donkey, horse and mule) and other equipments to someone in return for specified amount of money. Some of the households surveyed depend on such activities to generate incomes.

V. Migrant Work

Migrant work is also important economic activity and it generates income for some household of the district. Migrant workers could be members of households, relatives or friends who live and/or work in other areas of the country and send back remittances to their families back home. Household income sent by migrant workers, who work in the same country is known as Domestic Remittance. Domestic remittance is considered as one of the non-farm income sources (or non-agricultural income sources) along with non-

farm rural wage employment, non-farm rural self-employment, property income (rents, etc) as well as international remittances (Ellis 1998: 5).

Domestic remittance is common source of income among female-headed households since female heads have limited capacity to make adequate means of living for the household by themselves. Instead they rely on one or more members of the household who are engaged in day labor or other businesses elsewhere in the country.

As revealed in some interviews with the households, there has been an increase in recent years both in the number of people migrating to other areas as well as amount of remittances sent by them. It is becoming common source of income for some households who have at least one person working in other areas.

VI. Craftsmanship (Artisan)

Craftsmanship is also an important economic activity in the district, which includes blacksmith, weaving, matting, as well as basket and rope makings for sale. It also includes pottery, tannery, masonry and carpentry. Craftsmanship can be reliable sources of income especially at times when agricultural production is low due to the seasonal variation or other factors. Traditional blacksmithers produce farm tools and household equipments such as plough tips, axes, sickles and knives. Weaving is also common among female household heads who make and sale cotton spun, which will be used in the manufacturing of clothes. However, since modern textile products are widely available with a relatively low price, only few household dare to carry out weaving business. Besides, undertaking craftsmanship sometimes results in social segregation and stigma, and for these reasons many craftsmen give up the business.

VII. Home brewing

Home brewing is the making of local drinks for sale and it is also another source of income mainly in female-headed households. The two most common

drinks made for this purpose are local alcohol (*areke*) and *tella*. Some households also make and sell local beverages.

VIII. Other Activities

Other economic activities mainly include forestry (lumbering, charcoal making and firewood gathering), bee-keeping and safety net works.

Households who rely on forestry are being blamed for causing a decline in the forest and bush land covers in the district and hence are subject to scrutiny by local authorities. As a result, only few households undertake these activities fearing the legal consequences.

Some households also work on social safety net programs by contributing labor in different community works such as road construction and raise modest amount of income. The common program in this regard is the Productive Safety Net Program (PSNP), which is also being undertaken in many rural areas of the country.

B. Household Expenditure

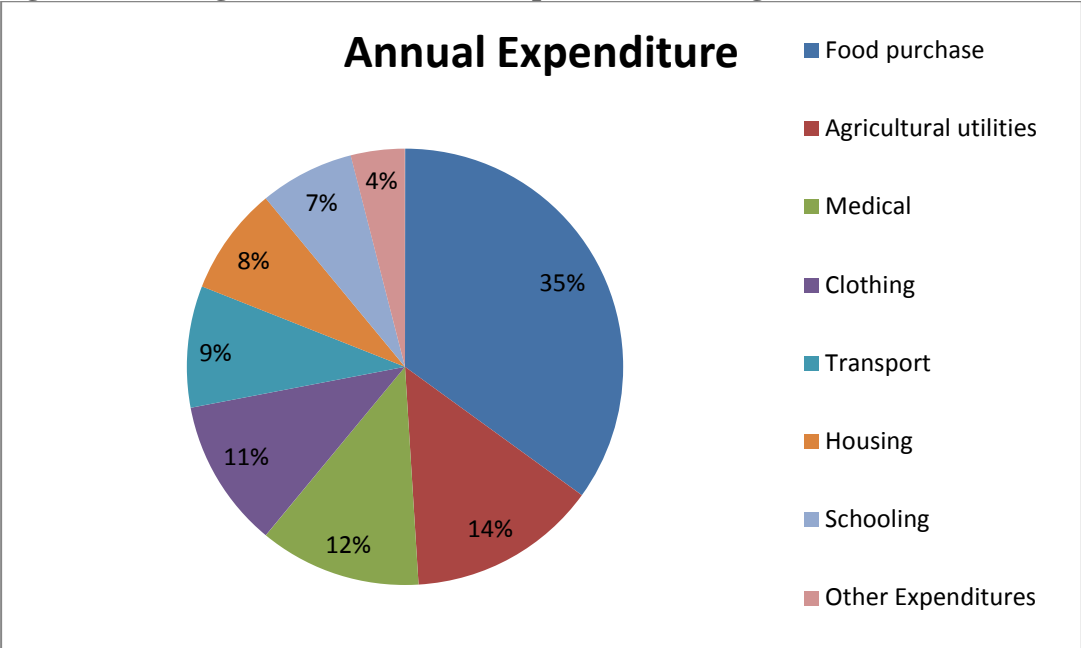
Household expenditure is the sum of household consumption expenditures and non-consumption expenditure. Consumption expenditures are those incurred for consumable items such as food, clothing, medical, transport and communication. Whereas non-consumption expenditures are contributions to social institutions, cash gifts and so on. However, most of the household expenditure is incurred for consumption purposes as shown on Figure 2 below.

Figure 2 shows that the bulk of household expenditure goes for food purchases (35%), followed by agricultural utilities (14%), medical (12%), clothing (11%), transport (9%), housing rents (8%), schooling (7%), other expenditures (4%).

Food purchases include crops and livestock products bought mainly for household consumption. In this regard, cereals are the major crops purchased

for household consumption whereas butter, milk and cheese are the main livestock products.

Figure 2: Average annual household expenditure during 2010/11



Source: Author’s Survey

Agricultural utility expenses include payments for land rent, expenses for fertilizers, animal fodder, seeds etc, which are integral parts of agricultural activities. Medical expense is the third main expenditure for the households in the district, where malaria and other water-borne diseases are prevalent especially during the dry seasons. Clothing expenses, mainly for children, also consume considerable share of household expenditure. Such expenses go up during the holiday seasons as it is a tradition to buy children clothes during holidays. Transport expenses are incurred by members of a household for journeys to distant towns for the purpose of trading, medical treatment or other purposes. Although in many cases local people own mud-houses, they may rent in house from relatives or other people for fixed periodic payments. Generally schooling is free in public schools; however related costs such as for learning materials (books, exercise books, and pen), uniforms and a small amount of registration fee must be covered by households. Finally, there are also other expenses which include social contributions paid for social

institutions such as *Idir, Mahber, Ikub* and so on, which provide insurance for households at times of hardship or during rituals. There are also other miscellaneous expenses such as hair cut, recreation and communication, donations, gifts and grants to other people or households.

6.2.2 Major Food Productions and Consumptions

This sub-section discusses the non-monetary sources of household production and consumption, particularly food production and consumption. Food production refers to the production of crops and livestock, both of which are vital sources of food in the district.

A. Major Food Productions

Table 6: Table 6: Major crops produced, consumed and sold during the fiscal year 2010/11

Estimated average production/consumption/sale balance for production year 2003 E.C								
Type of crop grown	A	B	C	d	e	F	g	h
	Area cultivated (ha/yr)	Output (kg/yr)	Home conspn. (Kg/yr)	Sale (kg/yr)	Seed (kg/yr)	Balance (kg/yr)	Price/kg (Birr)	Total income (Birr)
Teff	0.40 ha	325	200	100	25	0	7.50	750
Maize	0.32	280	200	50	25	5	3.50	175
Sorghum	0.24	196	100	50	25	21	2.60	130
Wheat	0.17	216	150	25	25	16	3.80	95
Barley	0.09	185	100	50	25	10	4.20	210
Horse bean	0.07	172	150	0	22	0	-	-
Niger seed (<i>noug</i>)	0.05	124	50	50	20	4	4.0	200
Total	1.34	1498	950	325	167	56	-	1560

Source: Author's Survey

As can be seen in Table 6, the average total area cultivated during the 2003 E.C²² was 1.34 hectares, and it was allocated mainly for *teff* (0.40 ha), maize (0.32 ha) and sorghum (0.24 ha). The major crops produced during the year 2003 E.C were *teff* (325 kg), maize (280 kg), sorghum (196 kg), wheat (216 kg), barley (185 kg), horse bean (172 kg) and niger seed (124 kg). Thus, on

²² E.C stands for the Ethiopian Calendar, which runs from July 7 of a current year to July 6 of the next year.

average, a total of 14.98 quintals²³ of crops have been produced during 2010/11. Whereas, the main crops consumed at household level are teff, maize, wheat, horse bean, sorghum, barley and niger seed, which account for 200, 200, 150, 150, 100, 100, and 50 kgs respectively. Therefore, the average household consumption of crops is 9.5 quintals per year and 1.9 quintals per person per year²⁴. The national estimate of grain requirement per person per year is 1.2 quintals, which indicates that households in the district consume more food per person than average requirement. Households also generated about 1560 birr through the sale of crops; mainly *teff*, barley, niger seed, maize, sorghum, and wheat respectively. These sales generated 750, 210, 200, 175, 130 and 95 birr respectively.

In sum, as is the case with other parts of the country, cereals are the major types of crops produced, consumed and sold in the district as well.

Table 7: Average inventory of livestock during the fiscal year 2010/2011 E.C

Type of livestock	No. owned	Estimated value (birr)	Average inventory change in the year 2003 E.C					
			Purchased	Birr	Consumed/died	Birr	Sold	Birr
Cow/heifer	3.0	4200	0.6	600	0.1	120	0.7	850
Ox/bull	2.2	3600	0.4	650	0.4	640	0.6	900
Sheep	2.0	600	0.8	210	1.0	300	1.1	300
Goat	1.0	250	0.5	170	0.3	75	0.7	160
Donkey	0.7	560	0.3	240	-	-	0.2	140
Horse	0.6	520	0.4	300	-	-	0.2	155
Mule	0.6	580	0.3	270	-	-	0.3	270
Poultry	2.0	40	1.2	25	0.2	4	1.0	17
Total	12.1	10,350	4.5	2465	2	1139	4.8	2792

Source: Author's Survey

Livestock rearing is also an important agricultural activity in the district. As shown in Table 7, the average inventory of livestock in the households mainly includes cow/heifer (3), ox/bull (2.2), sheep (2), goat (1), donkey (0.7), horse (0.6), mule (0.6) and poultry (2). Thus, an average household in the district owned 12.1 head of animals which, as we will see in the next chapter, are

²³ 100 kg equals 1 quintal

²⁴ Obtained by dividing the total consumption of 9.5 quintals by the average household size of 4.9 persons

dependent on the availability of pasture in the district. The average estimated values of these livestock are 4200, 3600, 600, 250, 560, 520, 580 and 40 birr respectively. By comparison to other areas of the region, the values of the livestock are relatively lower. It is claimed that due to the LSLA in the area, much of the grazing land has been lost and hence the availability of fodder is drastically reduced. Consequently, some farmers sold out large number of livestock, causing the prices to fall (by as much as 20–30%) (Fisseha 2011: 20).

Table 7 also gives the average livestock inventory change during the 2010/11 fiscal year due to purchase, sale and consumption as well as the monetary values of these changes. Accordingly, each household on average purchased 4.5 animals, consumed 2 animals and sold 4.8 animals. The sale of livestock contributed 2792 birr to household income during the year 2010/2011. In addition to their contribution for livestock productions, domestic animals in the district are also used for other activities. For instance, oxen are used for ploughing and other agricultural activities such threshing grain and pulling carts to transport farm produce.

Table 8: Major livestock products produced during the 2010/2011 fiscal year

Type of livestock products	Estimated value in ETB during the year 2003 E.C (Average)					
	Produced (kg/lt./no)	Estimated value (Birr)	Consumed (kg/lt./no)	value (Birr)	Sold (kg/lt./no)	Value (Birr)
Milk	60	180	20	60	40	120
Butter	22	550	6	150	16	400
Cheese	32	512	12	192	20	320
Egg	120	180	30	45	90	135
Total	-	1122	-	447	-	975

Source: Author's Survey

The major livestock products along with their estimated annual production are milk (60 liters), butter (22 kg), Cheese (32 kg) and Egg (120) (see Table 8).

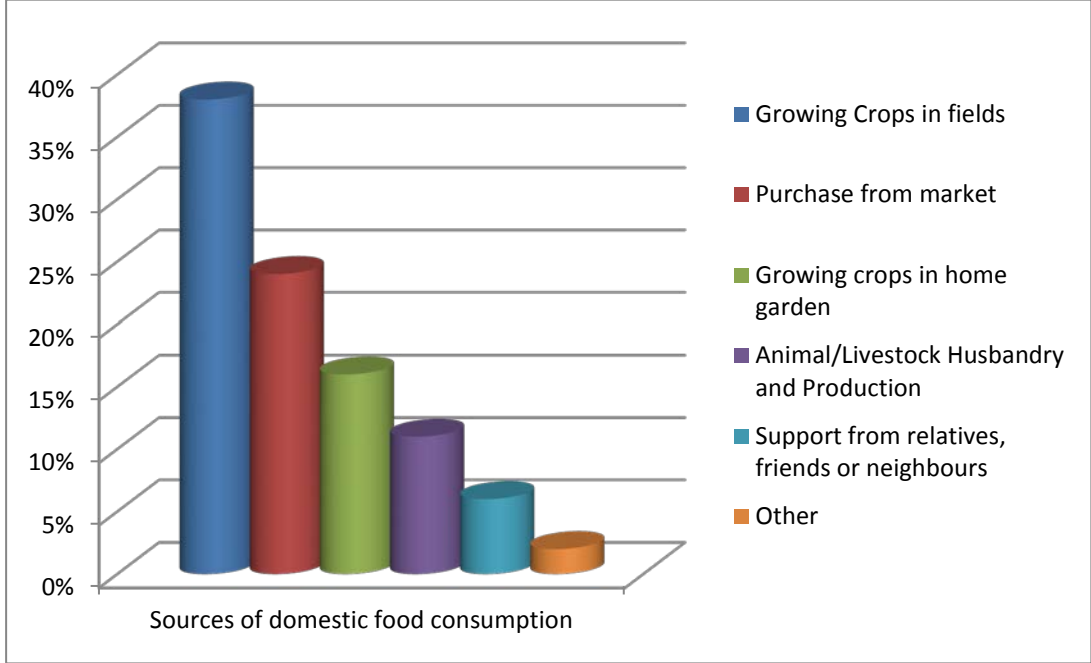
The estimated values of these products are 180, 550, 512 and 180 birr respectively. Households earned about 975 birr from the sale of these products during the year 2010/2011.

B. Sources of Household Food Consumptions

We have discussed in the previous section that that households produce both crops and livestock products for household consumption. In this sub-section a summary of these and other sources of consumable food will be identified.

As shown in Figure 3, the major source of domestic food in the households are own productions on farms (38% of the households), followed by purchase from the market place (24%), production in home gardens (16%), animal/livestock husbandry and production (14%), support from relatives, friends or neighbors (6%), and other means such as food aid, hunting, fishing, gathering and so on (2%). Growing crops in fields includes crops grown on land possessed by the household or through share-cropping with other land owners. The second main source of food for domestic consumption was purchase from the market and as we have seen in the previous section much of households' income (as much as 35%) is allocated for this purpose.

Figure 3: Major sources of domestic food consumption



Source: Author's Survey

A key informant interview with one officer at the Bako Tibe *Woreda* Agricultural Bureau reveals:

The main food items purchased for household consumption in the district are cereals (teff, maize and wheat). Livestock products, vegetables and root crops are also purchased from the market to fulfill household food demand. Purchase of food for household consumption is especially common during the dry season when agricultural production is small. However, some food-insecure households do buy food even during the harvesting seasons as what they get from their fields may not be sufficient for consumption (Respondent # 1: interviewed on 15.02. 2012).

Growing crops in home garden, mostly vegetables and fruits, is also important source of food for household consumption. As discussed in the preceding section, livestock/animal husbandry and production also provides some households with dairy products as well as meat. In some households, support from relatives, friends and neighbors is also important sources of food. This type of food sourcing is especially common in female-headed households that have dependent children. Female household heads do not actively engage in crop production due to lack of capacity, and may rely on support from others. Finally, there are also other sources of food for household consumption such as gathering, hunting and fishing although these are not so common. Few households also get food aid, especially during the dry seasons when food production is very low. Again the main beneficiaries of food aid in the district are households with female heads and/or those with predominantly unproductive age group people (below 15 year and over 65 years).

6.3 Land Holding in Bako Tibe Woreda

The third type of livelihood resource is land, which is an important natural capital in the study area. Land is critical household asset, just like the rest of rural areas in the country since it greatly determines household livelihood. Almost all of the households interviewed held at least some hectares of land on which they grow crops or use for other purposes. In this sub-section, I will discuss the state of household land holding and changes in holding size. The following table gives the household land holding distribution in in the study area.

Table 9: Households' landholding

Land Size (ha)	Frequency	Percent
0.00-0.50	12	8.1
0.50-1.00	22	14.9
1.00-1.50	30	20.3
1.50-2.00	17	11.5
2.00-2.50	15	10.1
2.50-3.00	11	7.4
3.00-3.50	7	4.7
3.50-4.00	9	6.1
4.00-4.50	5	3.3
4.50-5.00	8	5.4
5.00-5.50	6	4.1
5.50-6.00	4	2.7
6.00 and above	2	1.4
Total	148	100.0

Source: Author's Survey

As shown in Table 9, most households (20.3%) have land size of between 1.00 and 1.50 hectares. Nearly a quarter of the households (23%) held less than 1 hectare and more than half of the households (54.7%) held less than 2 hectares of land, while only a quarter of the households (27.7%) hold more than 3 hectares. When we compare these findings with the national average, it is somewhat better: for example in 2000 cropping season, about 87.4% of the rural households in Ethiopia as a whole held less than 2 hectares of land; and 64.5% had less than one hectare; while 40.6% of the households held only 0.50 hectares or less (Gebreselassie 2006: 8). However, relative to household size, it can be considered that there is land shortage in the Bako Tibe as well. The ratio of household land holding to the number of people in the household is generally low even by Ethiopian standard (Ali, Descheemaeker et al. 2007: 3). The land holding could likely diminish even further over time due to such reasons as partitions and inheritance (see Table 10).

Table 10: Change in household landholding over the past four years

Direction of Change	Change in household land holding	
	Frequency	percent
Increased	4	2.7
Decreased	98	66.2
No change	46	31.1
Total	148	100.0

Source: Author's Survey

As shown in Table 10, there have been significant changes in households' land holdings over the past four years. Only 2.7% of the households reported that the size of their land holdings increased during the last four years. Most of the households (66.2%) reported that there have been decreases in their land holdings while about 31% of the households claimed their land holding size has not changed during this period.

A number of reasons can be given for diminishing land holding size in the area. These include the buying and selling of land use rights as well as inheritance and redistribution of land to other household members. Like in many rural areas of the country, whenever a member of the household leaves his/her family due to marriage or other reasons, he/she will be given a plot of land to establish himself/herself. In most parts of rural Ethiopia, parents are responsible to oversee direct transfers of resources, such as land, cattle and other material goods to their children and grandchildren (Gibson 2009: 1). This process continues for generations causing a land shortage for future as well as current generations. As it will be discussed in the next chapter, the recent LSLA in the district has also big impact on the size of land holding in some households. Prior to the land acquisition, households in the district used to cultivate an average land size of 2 hectares; half of it (1 hectare) was held by households through statutory rights, while the rest was customarily held (Maru and Rutten 2013: 10). The latter was eventually transferred to the investor in 2008, thereby reducing the size of land holding in the district (Ibid).

There are a number of effects of decreased land holding size, mainly on household economy and food security. For example, according to Nega et al. (2003), landholding is a major factor constraining household farm income and household food security (Nega, Adenew et al. 2003: 8). This is because declining landholding will lead to declining per capita food production and farm income, indicating that small-sized farms cannot be productive enough,

even with improved technology (Ibid). The other related consequence of declining landholding size is that it reduces the fallowing practices or shortens the fallow cycle and rotation, which in turn result in declining soil quality and fertility (Ibid).

Farmers in Bako Tibe *woreda* use different arrangements to get access to land such as share-cropping²⁵ and renting in²⁶ land from other farmers. The following table summarizes the three major land use arrangements.

Table 11: Major Land Use Arrangements

Major land use arrangements:	No.	Percent
Households who mainly rely on own land holding	97	65.5
Households who mainly rely on-shared cropping	35	23.7
Households who mainly rely on rented land	16	10.8
Total	148	100.0

Source: Author’s survey

The land use arrangements of households given in Table 11 shows that 65.5% of the households mainly cultivate their own land holdings; while 23.7% of them engage mainly in share-cropping arrangement with other land holders. Meanwhile, 10.8% of the households mainly rent land from other people to grow crops. An interview with a farmer reveals the following:

...in our area, we have different land use arrangements. It is common to see some farmers entering one or more arrangements to access land for agriculture. Even those who hold land can engage in share-cropping or rent land from others to boost crop production. A household may pursue two or more land use arrangements depending on the accessibility of land. In these ways, households boost crop production for consumption or trade purposes (Respondent # 2: interviewed on 12, 2012).

In summary, this chapter presented three major household resources; human, economic and natural capital (land). These resources determine the livelihood strategies and outcomes, which are discussed in the next chapter (Chapter Seven).

²⁵ Farmer rents land from another land owner with the agreement that the former covers all costs of production and finally shares a certain amount of the output (usually 50%) with the land owner.

²⁶ Farmer rents the land for one year or more years and pays only cash rent and does not share the crops grown.

Chapter Seven: Results and Discussions

Having discussed the various household resources that are essential for the achievement of sustainable livelihood outcomes, I now present and discuss the main findings of this study. Here the socio-economic and environmental impacts of the LSLA on local livelihoods (livelihood outcomes) will be presented in relation to the framework of sustainable rural livelihood discussed in the second chapter. Besides, this chapter identifies the various livelihood strategies pursued by households.

7.1 Extent of Land Acquisition and Role of Local Communities

In this sub-section, I will briefly show the extent of the land acquisition in terms of the number of households affected and the roles of local communities during the land transfer.

Table 12: Number of households who lost a portion or all of the land they used (either directly or indirectly), due to the investment project:

Have you lost any useful land due to the investment project?	Count	Percent
Yes	146	98.6
No	2	1.4
Total	148	100.0

Source: Author's Survey

As shown in Table 12, the majority of the households (98.6%) indicated that they lost land they used in some way (either directly or indirectly) due to the LSLA. Only 1.4% of the households surveyed indicated that they lost no useful land as a result of the LSLA. Thus it can be concluded that almost all households in the study area had been benefiting from the land now transferred for investment. As discussed later in this chapter, the households in the district used the land for various purposes such as crop land, grazing land, source of grass for roof making, source of firewood and source of water. All of these land uses provided the households with substantial benefits.

Consequently, there was huge discontent among the local communities following the land transfer and there were even conflicts with the *woreda* officials as well as with the company itself. Moreover, the investor wanted to

claim more land than it was entitled to because the *woreda* officials failed to demarcate the leased land or did not inform community members the exact boundaries of the land.

We have seen in Chapter Three that some of the empirical studies identified a number of limitations of large scale land deals (Anseeuw, Boche et al. 2012). These studies identified that large scale land deals are characterized by lack of transparency, absence of community involvement and lack of compensation to the local people who have been evicted as a result of the land transfer (Ibid: 1). I will thus examine the roles of local communities in terms of consultation, transparency and whether the local people received compensation for the lost opportunities.

Table 13: Role of the community during the land transfer

Role of the local community:	Yes	Percent	No	percent
The household was consulted during the land deal	3	2.0	145	98.0
The land deal was made in transparent way	4	2.7	144	97.3
Household received direct compensation	7	4.7	141	95.3

Source: Author’s survey

Table 13 reveals that nearly all households (98%) claimed they were not consulted during the land deal in any way. Besides, the majority of the respondents (97.3%) do not believe that the land deal was made in transparent way and that it was engulfed with secrecy. The table also reveals most of the households (95.3%) did not receive any kind of direct compensation for the lost land.

I. Community Consultation

The above result suggests that the local people were not consulted during the land transfer or they were not provided information explaining how they would benefit or be affected by the project. Therefore, there was no prior or informed consent with the people about the project and they had no involvement whatsoever. Empirical studies indicate that most agricultural investment projects in Ethiopia are undertaken without consultation with local communities and without their knowledge or consent (Rahmato 2011: 37).

During the first focus group discussion, I was told that no one had information about the land transfer until the investor came to take possession of the land. And later the *woreda* officials announced that the land has been given for investment and that local communities could no longer use it for any purpose. The participants said they were shocked hearing this and bitterly complained about their eviction from the wetlands which they used for generations. A group of local elders travelled to Addis Ababa twice to complain about their exclusion from the land to the regional administration and sought for protection of their interests. However, they were told that the regional government would contact concerned offices in lower hierarchy so that measures would be taken. However, both zonal and *woreda* administration officials could not exert pressure on the investor to safeguard the interests of the local people because the investor is protected by the higher officials. Thus local communities could no longer graze their cattle or cultivate the land ever since then.

The region's investment commission meanwhile claims that there were consultations between the investor and the local community prior to the land transfer and that these were documented in the Environmental Impact Assessment (EIA). However no officer was willing to show us the contents of the EIA and their claim remains not credible.

II. Transparency

There was also lack of transparency during the land transfer. The whole process of land transfer was not disclosed to the local people and they had no mechanism to understand the various matters associated with the land transfer. Issues such as how the land was going to be used, what the investor's commitments would be, how the local peoples' interests would be protected, how they would benefit or be affected by the land transfer etc were not sufficiently addressed. During an interview with one farmer, I was told the following:

...none of our community members saw the contents of the agreement [between the regional government and the investor] such as about the obligations of the investor, protection of our interests and rights. And I heard that even officials in the *woreda* bureaus were not aware of the details of the land deal. Hence, there was lack of awareness on the part of the community as well as local officials regarding the contents of the deal (Respondent # 3: interviewed on 17.02.2012).

III. Compensation

As discussed early, the land transferred for investment was mainly customarily held communal land. This in turn makes it difficult to challenge investors or the government against the land transfer since such land use rights has no legal protection. Besides, absence of legal protection for communal lands makes it difficult for the local people to sue the investor for the lost opportunity and get compensation. Besides, both Federal and regional laws seem to exclude communal holdings from eligibility for compensation, as opposed to individual holdings. However, there are provisions for individually held land to receive compensation for the lost opportunities. For example, the Land Administration and Use Proclamation (2005) obliges investors to provide compensation to the local community in the event of eviction. It states:

Holder of rural land who is evicted for [the] purpose of public use shall be given compensation proportional to the development he has made on the land and the property acquired, or shall be given substitute land thereon. Where the rural landholder is evicted by federal government, the rate of compensation would be determined based on the federal land administration law. Where the rural land holder is evicted by regional governments, the rate of compensation would be determined based on the rural land administration laws of regions (FDRE 2005, Art. 7 (3)).

In the study under consideration, compensation was made in few occasions and to some victims. The most common types of compensation given to these individuals as a result of land acquisition are cash payouts and allocation of substitute land. But, the amount of compensation was too little relative to the loss as found out in the second focus group discussion. Participants of the discussion claimed that some individuals received compensation in the form of cash or substitute land for the lost opportunity during the land transfer. This

was fulfilled only after a group of individuals repeatedly complained to the *woreda* investment bureau. However, the size of the compensation was not sufficient to adequately cover the losses and the individuals claimed they deserved more.

7.2 Socio-Economic and Environmental Impacts of the Land Acquisition on Local Livelihoods

Based on the sustainable rural livelihood framework discussed in Chapter Two, this section will analyze the various livelihood outcomes and trade-offs. Accordingly, the various socio-economic and environmental impacts of the LSLA on local livelihoods will be discussed in this section.

A livelihood is said to be socially sustainable when it can cope with and recover from stresses and shocks and provides means of living for future generations (Chambers and Conway 1991: 1). Meanwhile a livelihood is environmentally sustainable when it maintains and enhances local assets (both tangible and intangible assets such as natural resources, claims or assets) on which livelihood depends on and when it can generate net benefits on other livelihoods (Ibid: 1).

Here, an assessment of livelihood outcomes is done by examining the socio-economic and environmental impact of the land acquisition. This is done by studying some indicators, such as whether the project resulted in technological transfer, increased crop production, employment creation and construction of local infrastructure (social outcomes); or economic indicators such as impacts on key household resources (such as crop land, grazing land, grassland, firewood and water resources). The impacts (outcomes) are also measured by environmental indicators such as changes in vegetation cover, depletion of water resources and soil degradation.

The regional government claims that it is in the best interest of the community and the country to give the land for investment purpose. It believes foreign investors come with superior capital resources and expertise, which are of

paramount importance to local agriculture. Therefore, LSLA is the only way to boost agricultural productivity in the country in general and the district in particular. A key informant interview with an officer in the Bako Tibe *woreda* agricultural bureau reveals that:

Agriculture in our district has been predominantly subsistence. Partly, this has to do with the farming techniques employed by farmers. Smallholders rely on archaic and backward means of cultivation, which often proved ineffective. Crop production has been minimal relative to the size and quality of arable land. As the result, the regional government decided to transfer the land to foreign investors with the expectations of boosting agricultural productivity. We believe that investors, particularly foreign ones have better resources to develop the land than smallholders who have generally little resource at their disposal (Respondent # 4: interviewed on 21.02.2012).

The regional investment commission also claims that the land had minimal use to the local communities and hence there was no significant impact of the transfer on the local livelihoods. However, as found out during the second focus group discussion, such claim is contrary to what the local communities tell. Local communities complain that they have been denied access to the land they had been using for grazing livestock and growing crops. It should be noted that for a communities with narrow livelihood base, such as those in the study area, even a small amount of land loss could have significant consequences on their livelihoods. Nevertheless, the extent of the socio-economic impacts due to the land acquisition varies from household to household; some households heavily relied on the land while others benefited from it modestly. Therefore, we may not expect equal degree of impacts on all of the communities' livelihoods.

In the following two sub-sections, the socio-economic and environmental impacts of the investment project on local livelihoods will be discussed.

7.2.1 Socio-Economic Impacts of the Land Acquisition

One of the arguments in favor of foreign direct investment is that it helps local people in the form of technology transfer, increased crop production, creation

of jobs and construction of rural infrastructures such as roads, school, health centers and so on. In this sub-section, I will discuss whether such benefits are delivered in the study area following the LSLA.

A. Social Impacts

There is generally no evidence so far if any of the expected social benefits of projects in the country (such as technology transfer, increased crop production, employment creation and infrastructure expansion) are achieved due to LSLAs. To the contrary, it is claimed that the damage done by agricultural investment projects in the country outweighs the social benefits (Rahmato 2011: 37). Generally, contracts signed between investors and the government often do not explicitly oblige investors to undertake social investments (Ibid). However, investors normally include the expected social benefits of the proposed projects in their applications for land. The following table summarizes the extent of social impacts of the land acquisition in the study area.

Table 14: Social impacts of the project

How does the community benefit from the project?	Yes	Percentage	No	Percentage
Transfer of technology	6	4.0	142	96.0
Increased crop production and supply	13	9.0	135	91.0
Creation of employment	10	7.0	138	93.0
Construction of roads, schools, health centers	21	14.0	127	76.0

Source: Author's Survey

I. Transfer of Technology

Technology transfer is the first measure of the social impacts of the LSLA in the study area. The evidence shows that the overwhelming majority of the respondents (96%) said they have not been introduced with new technologies of farming as a result the project (See Table 14). The remaining 4% claimed they benefited from the investor's technology in the form of paving rocks in adjacent farms they hold. Nevertheless, this does not constitute a direct technological transfer to the households. In fact, there is no meeting ground

between large scale farming and smallholder farming techniques under the present policy environment as they are managed quite differently (Rahmato 2011: 38). Smallholder farming is mostly labor-intensive; while large scale farming is done by capital-intensive means. Besides, the technologies being used by the company are not transferrable to the local people because they are expensive and/or require technical know-how to operate them. The company has stocks of heavy machinery which in most cases are operated by skilled workers from urban areas or personnel who came all the way from India. Consequently, the local people are not capable to either buy such equipments or operate them given the fact that most of these people are poor and not adaptive to new technology. In an interview with one local farmer, I was told the following with respect to technology transfer. Asked whether any farmer has acquired any kind of machinery similar to that being used by the project, he replied:

Ever since the project commenced, we see different kinds of machineries which we never saw before. As you see, our agriculture is based on subsistence farming which depends on oxen and human labor and therefore it is too expensive for us to buy tractors and harvesters. I do not think that any farmer can afford to buy such equipments in our village given the expensive cost (Respondent # 5: interviewed on 02.02.2012).

Meanwhile, contrary to the expected technological transfer to the local farmers, the company is seeking indigenous knowledge about farming techniques following disappointing productivity in the initial stage of the farming.

Yet again, the whole project is in its early stage and therefore we cannot verify that it failed to bring technological transfer to the local communities. The role of the project in technological transfer can be positive if it is studied in the long run after it becomes fully operational.

II. Crop production and supply

The contribution of the investment project for crop production and supply is also minimal as shown in Table 14 (only 9% of the respondents believe that

crop production and supply increased as a result of the large scale investment). However, like stated above the company was still at trial stage for possible high-yield crop and subsequent crops cultivated on the farm failed to provide satisfactory results. There have been attempts to produce maize, wheat and then rice one after the other but all failed to yield the desired productivity. During the first focus group discussion, participants claimed the company harvested only 700 quintals of maize in 2011 from the farm, much less than what local farmers would have produced on the same plot of land. The crop was still kept in the company's storage facility in Bako Town at the time of the field work and there was no plan by the company to sell it in the local markets.

The lack of productivity in the company's yields could be associated with a number of factors as found out during the second focus group discussion. First, we said that the technology employed by the company has not been efficient vis-à-vis indigenous techniques. Second, as suspected by some farmers, the soil is not adaptable to extensive farming compared to small-scale subsistence farming, which in many countries proved to be effective (Vermeulen and Cotula 2010: 13). Thirdly, the company might have also used too much fertilizer which turned counterproductive.

Even though crop production may increase once the project is fully operational, this too is not expected to boost crop supply in the district considering the future plan of the investor. It is stated that the main aim of the company is to produce export crops, which are destined to foreign markets. The government also strongly encourages investors who export their products; by providing more benefits to such investors than those who do not intend to export (Rahmato 2011: 38). Thus large scale agriculture is driven by priority for exports and foreign earnings and tends to ignore the need for domestic food security. Thus agricultural investment projects are criticized for not having formal and informal obligations to contribute to the food security needs

of the country. In most cases investors' contracts and business plans do not contain provisions requiring projects to supply food to the local markets, even during emergency circumstances (Ibid). Thus the main objective of the project under consideration is to produce export crops to foreign markets. During a key informant interview with an official of the company, I was told the following:

...our main objective is to export various types of crops to the regional markets and beyond. We have already finalized our preparations to export rice to South Sudan, Kenya and subsequently to the other countries in Africa. We have also a plan to export crops to the Asian markets, particularly India (Respondent # 6: interviewed on 23.02. 2012).

If operations go according to the company's plan, there will not be any benefit to the local community in terms of increased food availability. Thus, the project has no positive effect on the food supply to the district.

III. Employment Opportunity

Employment opportunity is another area of evaluating the social impacts of the LSLA, which was expected to generate different types of direct and indirect employments. Generally, studies suggest that the contribution of FDI to agricultural employment in Ethiopia is very limited (Getnet 2012: 17).

Thus, looking into the roles of FDIs in creating employment for local people, we may not expect significant employment opportunities as a result of such investments. However, some of the large scale agricultural investment projects which started operations in the country have provided employment opportunities to local people in the form of short term and seasonal employments (Rahmato 2011: 38).

Contrary to earlier claims made by the investor to provide significant employment opportunity for the local people, in this study only few households (7%) said they benefited from job opportunity in the company (see Table 14). The expected benefit of direct and indirect employment to the local people seems far from being reality since there is a tendency to bring workers

from other areas than hiring the ones in the district. Although some local people were employed as casual laborers during land clearing and other heavy works²⁷, most of the workers who carry out the skilled jobs came from urban areas of the country and even India. By the time the field work was conducted, some 50 Ethiopian and 20 Indian workers were employed as supervisors, technicians and drivers. The justification given by the investor for not employing the local people is that there is no skilled human power in the district. However, once again the project is still at its early stage and therefore we cannot conclude at this point that it has not resulted in significant employment for the local people. As I discussed earlier, it takes several years for such impacts to materialize.

The other concern over the impact of the investment project on local employment is that even those who are hired in the project do not have employment security. This is also the case elsewhere in the country, where casual workers are paid only daily wages (Rahmato 2011: 38). Besides, the wage rates are insignificant and many workers complain they have not been paid enough. In the case of the Bechera Agricultural Development Project, those who have been hired were initially paid 15 birr²⁸ a day although this was later increased to 17 birr. This is slightly lower than \$ 1 a day and it is much lower than what workers get paid in other similar investment projects or even by the country's standards (Ibid).

The company has also tougher working conditions for those who are employed, some of whom even quit their job alleging the harsh working environment. An interview with a local farmer who once worked for the company as manual laborer revealed that:

I used to work for the company at the beginning of the project. My job was to clear bushes and grasses from the land manually. I used to work for ten hours a day and six days a week. The job was so intense that we were hardly given

²⁷ Some 200 to 500 casual laborers were hired during land clearing and other heavy works

²⁸ During the study period (January – February 2012), \$1 was traded for ETB 17.30.

enough breaks. Even we could not use toilets at our convenience since they restrict the time we could have break. We were not allowed to stand idle for a second or talk to our colleagues while working. If we did that, we would get fired. Consequently, many of us found the working condition very tough and many workers have quit their job ever since. I quit the job complaining harsh treatment by the company and since then I am unemployed (Respondent # 7: interviewed on 13.02.2012).

Besides, the investment project has not created any indirect job opportunity to the local communities, contrary to earlier claims made by the company. For instance, the employees eat from cafeteria inside the company's premise with no opportunities to the local people to set up their own restaurants and so on. In all of the five *kebeles* where the study was conducted, no single indirect business existed as a result of the project.

IV. Infrastructural Development

Finally, there is also no significant evidence of infrastructural expansion in the district as the result of the LSLA (only 14% of the respondents claimed that they benefited from infrastructures built by the company). Such infrastructures as school fencing, electricity, roads and health care centers were promised by the investor to the local people prior to commencement of the project.

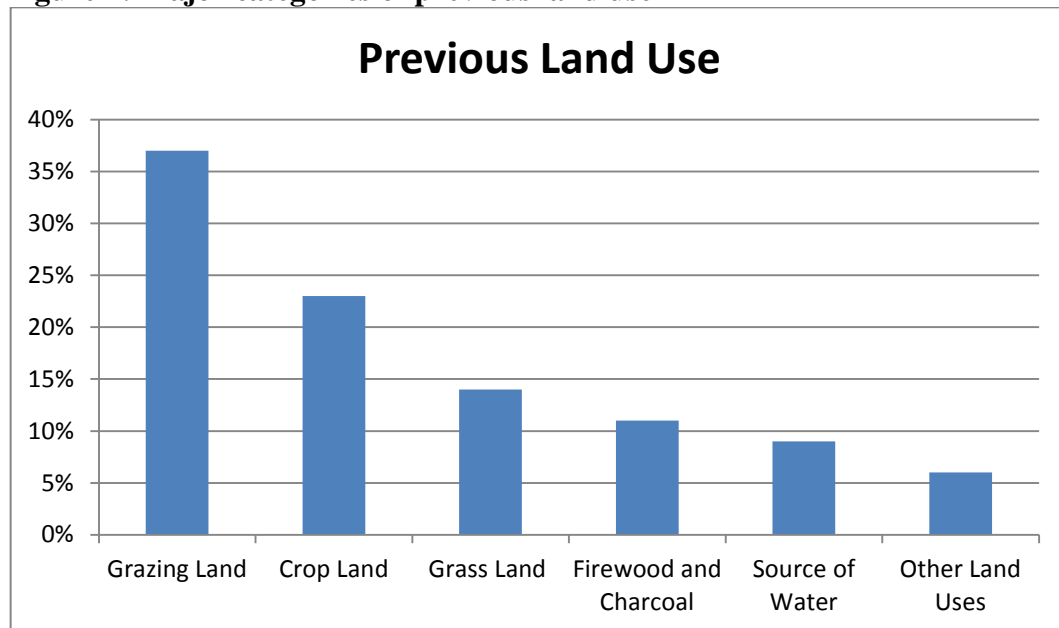
Although the area has seen, to some extent, the construction of roads, there are no schools or health centers built until the field work was concluded. The only infrastructure provided by the investor was paved road connecting the main road to the village. Even this road was built to connect the company's premise with the main road and was not primarily intended for helping the local communities.

B. Economic Impacts

The immediate economic effects of the land acquisition on the communities' means of living are discussed in this sub section. Here an attempt will be made to examine the effects by exploring the previous land uses and the opportunities lost as a result of the land acquisition. In other words, the economic impacts of the land acquisition are discussed in relation to the lost access to grazing land, crop land, grass land, firewood, and water resources.

It has been argued that investment on individual and communal land holdings has considerable risks for previous users (Lavers 2011: 2). Following the LSLA in Bako Tibe, some households lost access to cultivable and grazing lands, which they customary held. Prior to the transfer, local communities had been making a living from the land through grazing animals, cultivating crops and other uses. Therefore, the land used to contribute for generating significant income and food production to the local people.

Figure 4: Major categories of previous land use



Source: Author's Survey

As shown on Figure 4, the major types of land uses before the land acquisition were grazing land (37%), crop land (23%), source of grass for roof thatching (14%), sources of firewood (11%), source of water (9%) and other uses such as residential land (6%).

I. Grazing Land

The first type of land transferred for investment purpose was grazing land. Generally in Ethiopia, livestock feed resources are mainly natural grazing, which can be made on permanent grazing areas, fallow land and cropland after harvest (Mengistu 2006: 23). Most households in the study area depended on the land now transferred for investment for grazing their livestock. As found

out in the second focus group discussion, significant number of cattle population in all of the five *kebeles* depended on the plains for grazing, prior to the land transfer. The grazing land was customarily held by local communities and it offered good pasture for domestic animals. Although forage availability and quality were not adequately available year round and what is abundant in the wet season is lost in dry season, the land was important grazing field for the local livestock. However, after the grazing land was transferred for investment, there has been shortage of pasture in the district. This led to different problems such as massive sale of cattle by some households, which in turn resulted in significant price decline. In some cases, shortage of pasture due to the land acquisition also led to the death of livestock. Those who wanted to keep their livestock converted some of their crop lands into grazing field, which in turn reduced crop production. They also sorted to graze their animals on crop residues; however that did not provide sufficient and lasting grazing option.

Thus, the land transfer had direct impacts on livelihood of households in the study area. It is claimed that in the case of loss of communal grazing land, there may not be displacement but it will affect the livelihood of the poor (Platteau 2002). This is because of the link between availability of adequate pasture for livestock and their productivity, which in turn strengthens or weakens local livelihood.

Following the loss of access to grazing land due to the land acquisition, the local people were promised to be given a replacement land to graze their cattle. However this promise has not been fulfilled and alternative grazing area was not yet demarcated to the local people until the field work was concluded. Local people also requested the investor to graze their cattle on the project's crop residues, but the company did not allow.

II. Crop Land

The second type of land given for investment purpose is crop land, on which some farmers had been growing different crops. Even though crop was grown only on parts of the land, the loss can be considered significant given the small amount of land farmers usually cultivate to grow much of the crops for consumption or sale. Some local farmers cultivated *teff* and niger seed on the hilly side of the land, which were sold to generate income. Participants of the first focus group discussion stated that production of crops in the land was vital and that it presented important source of crop for household consumptions as well. However, local farmers now buy these crops from the market or cultivate them on other farms due to loss of crop land. In response to the lost opportunities from the land, some farmers began shared-cropping with other farmers around or far away from their villages. This in turn costs the farmers more in terms of time, money and production as they have to pay the land lords significant amount. An interview with one farmer reveals:

...we used to cultivate some crops for household consumption and sale before the land was given for investment purpose. However, since the land has been taken up for investment, we have difficulty of producing adequate crops for household consumption. This in turn, forced us to purchase additional food from the market to compensate the lost opportunity. In addition to our own purchase, we now also depend on help from relatives, friends or neighbors to satisfy our food demand in the household (Respondent # 8: interviewed on 11.02.2012).

It is expected that the loss of resources of small farmers and herders could result in reduced food production and livelihood deprivation in the future. Although there is no evidence at present that the LSLA has directly caused local food insecurity, some of the households who lost access to the farm land were already food insecure.

There are also financial impacts of the loss of crop land on local farmers as identified during the second focus group discussion. Before the land acquisition, the annual rent for land paid to the government or for people with extra land holding used to be some 300 or 400 birr per half hectares. However

following the land acquisition, land became scarce and the rent soared to 3000 – 4000 birr for the same size of land. Thus, the local farmers have previously used to pay less for the land rent and this increased by many folds following the LSLA.

III. Grass Land

The third economic benefit of the land now transferred for investment was that it served as a source of grasses for roof thatching for traditional local houses. Investment lands in many regions of the country are often given out with the surface grass, which is vital resource among local communities. In Gambella region, for example, local communities have been denied access to the an investment land from which they used to collect grass for roof thatching (Getnet 2012: 23). The investor (Saudi Star company) later converted this grass land in to large commercial farm.

Most people in the study area (and in rural areas of the country in general) live in traditional grass thatched houses or huts, whose walls are made from woods painted with mud. The grasses for making the roof usually grow naturally in grasslands, such as in parts of the Bako plain. Participants of the second focus group claim that after the land was given for investment, local people have now limited source of grasses for making new houses or rehabilitating the existing ones. This paves the way for scrambling to other grasslands, which will in turn lead to reduced supply and/or increased price for grasses.

IV. Firewood and Charcoal

The other economic benefit forgone due to land transfer was loss of firewood and charcoal making. In many rural areas of Ethiopia, firewood is the cheapest, most suitable and accessible energy source for households (Abbiw 1990, Cotton 1996; Bahru, Asfaw et al. 2012: 141). The transfer of land means that some households lost their cheapest sources of firewood and would have to rely on more expensive sources and/or means of energy. Although one can assume the diminishing use of firewood as potential benefit than loss (as far as

the environment is concerned), there is however less alternative source of energy to the local people such as electricity. In fact, electricity is not widely accessible to the local people, like other rural areas of the country.

Consequently, there is fear that the remaining sources of firewood and charcoal would be exploited unsustainably leading to environmental damage.

V. Water Resources

Local water resources are the other assets lost following the LSLA. It is claimed that large scale agricultural investments result in increased competition between projects and local communities over access to scarce resources such as water (Rahmato 2011: 37). This, in turn, creates resentment and protest among local communities. It was observed that competition over water is becoming serious as the project monopolized water resources in the land, thereby forcing local communities to turn to sources far away from their residences. In Oromia region in general, investment projects are given not only the investment lands, but also control of water resources thereby depriving the local communities of their essential supplies (Getnet 2012: 23).

In the context of the study area, as found out during the second focus group discussion, households located closer to the project land had access to a pond water and river. The wetland ponds are no longer available since they have been converted into cultivable land by the investor. Households which did not have access to the river or pond relied on a well water built by themselves, for which they contributed 50 birr each. There also existed pump water constructed by NGOs, but this too has been lost due to the land transfer. These utilities were important sources of water from which the local communities used to get their water requirements both for household consumption as well as to drink their animals. Some households heavily relied on the land for their water supply that the loss affected their livelihoods. The participants also claimed that after the land transfer, some households tried to access the water resources but the company blocked the routes to these resources.

Consequently, the local communities now have to travel long distances to fetch water.

VI. Other Land Uses

The other uses of the land given for investment mainly include residence plots. During the first focus group discussion, I was told that there had been a couple of households who were evicted from their homes as a result of the land acquisition. This resulted in serious conflicts with the local officials who insisted the houses be demolished. It should be noted that the Rural Land Administration and Land Use Proclamation (2005) entitles *woreda* officials the right to expropriate smallholders' land if they believe that the land could better be used for development project (FDRE 2005: Article 3 (1)). This leaves the local officials with enormous power vis-à-vis the local people who are rendered powerless. However, for smallholders with registered land, there is a legal framework whereby they can receive a legally required compensation of ten times the average annual income over the previous five years (FDRE 2005: Article 8 (1)). In this regard, the Rural Land Administration and Use Proclamation states that:

Peasant farmers, semi pastoralist and pastoralist who are given holding certificates can lease to other farmers' or investors' land from their holding of a size sufficient for the intended development in a manner that shall not displace them, for a period of time to be determined by rural land administration laws of regions based on particular local conditions (FDRE 2005: Art. 8 (1)).

Nevertheless, even if such compensation was made, there is doubt as to whether it is enough since the displaced people are not allowed to buy replacement land. Elsewhere in Oromia region, the government takes different measures to limit eviction-resulted problems such as migration by requiring investors to hire local people in their companies (Lavers 2011: 16). This is particularly the case in the expanding flower industry. However, no such provisions exist in the case of the Bechera Agricultural Development Project.

7.2.2 Environmental Impacts

In this sub-section, an attempt will be made to examine the environmental impacts of the investment project. It is claimed that LSLAs in Ethiopia often harm the environment through, among other things, large scale land clearance, removal of woods and other vegetation covers, which all expose soil to serious erosions and damage natural water resources (Getnet 2012: 23). This is also the case in the study area, where LSLA resulted in different environmental challenges discussed here. As stated before, the land given for investment consisted of grazing land, crop land, grass land and wetlands. The transfer of these lands for large scale commercial farming not only resulted in economic losses to the local people, it also affected the environment. As observed during the field work, the major environmental impacts are clearing of vegetation cover, depletion of water resources and soil degradation. These impacts are serious and could even be irreversible unless appropriate measures are taken.

I. Clearing of Vegetation Cover

One of the environmental consequences of the land acquisition is the clearing of grasses and vegetation covers from the land. Grasses have been cleared and trees were cut to ready the land for large scale farming, which resulted in deforestation and elimination of vegetation cover. The grasses and bushes that were used to feed animals and make roof thatching for local houses have been slashed and burned down. An interview with one farmer echoes this:

...I have seen significant land clearing activity by the company at the start of operation, which resulted in the removal of all vegetation covers from the land. This in turn exposed the land to soil erosion and leaching thereby washing away nutrients from the soil and rendering it to be unproductive. That is probably one of the reasons for the failed crop production until now (Respondent # 9: interviewed on 22.02.2012).

Besides, when the vegetation cover is cleared, the various plant species could be swept away. Thus, the impact on the existing plant biodiversity is also significant. These problems will likely get worse when the company fully cultivates all the land under its concession.

II. Depletion of water resources

The investment project has also impacts on water resources of the area. First, the pond water that existed on the land has later dried up due to conversion of the wetland to farm land and clearing of the vegetation covers surrounding it. As a result, the wetland water and the biodiversity it hosted have been lost due to the LSLA. Second, some of the tributaries of Gibe River dried up thereby altering the flow of the river. This will in turn affect downstream users in the form of reduced water supply. Third, mechanized commercial farming requires the use of large quantities of fertilizers and pesticides and therefore rivers crossing the project area could get contaminated. If this happens, there might be health risks to humans and animals that fetch water from these rivers for consumption.

III. Soil degradation

The third environmental impact of the land acquisition is soil degradation due to extensive slash and burning process carried out to remove bushes and grasses from the land. This in turn severely damaged the soil and its nutrients as observed during the field work (See Annex 4). An officer from the *woreda* land and environmental protection bureau claims that there has been increased soil degradation due to the slash and burning process of the company. He argues that:

...farmers in the area commonly apply fallowing, crop rotation, manure and chemical fertilizers to maintain the fertility of soil. These practices are more environment-friendly than slash and burning processes and they conserve the soil nutrients. However what we saw following the land transfer was intensive slash and burning processes, which certainly affected the soil texture and will likely have an impact on the productivity of the soil (Respondent # 10: interviewed on 08.02.2012).

As observed in the field, the slash and burn activity has also exposed the land to erosion, which washes away the essential nutrients of the soil. This could in turn reduce the productivity of the soil as discussed earlier in this chapter.

7.3 Coping Strategies

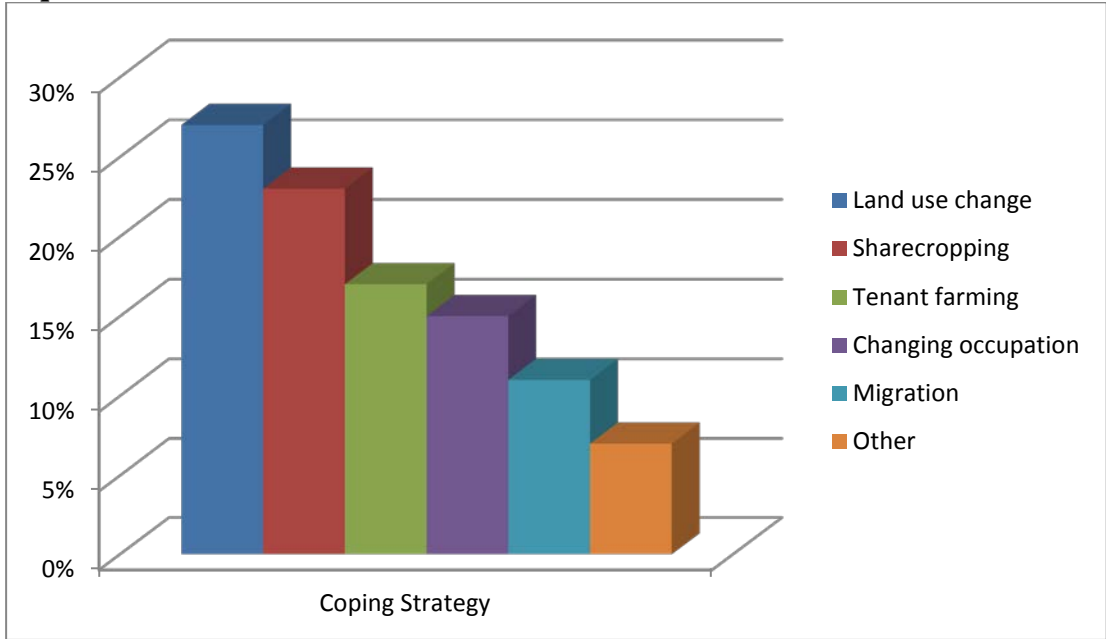
We have seen that the introduction of LSLA in the study area has tremendous impacts on local livelihoods. In response to these impacts, local people have adopted certain coping strategies to overcome the impacts. This section outlines the various livelihood strategies pursued by households, based on the sustainable livelihood framework discussed in Chapter Two. The framework establishes that the key to determining what kind of livelihood strategies to pursue is to identify the livelihood resources that household possesses (Scoones 1998: 9) and this was done in Chapter Six. Accordingly, understanding how the different livelihood resources are combined and sequenced to pursue a certain livelihood strategy is critical (See Figure 1 in Chapter Two). It is important to note that households may pursue a particular livelihood strategy due to factors other than the LSLA. However, such factors are beyond the scope of this study since this study is only confined to those strategies that have been undertaken in response to the LSLA. Therefore, more studies are required to identify other determinants of a particular livelihood strategy.

It is claimed that investment on individual holdings may force smallholders to change their economic activities, depending on the options available at their disposal (Lavers 2011: 2). Although this is not necessarily the case in the study area, households adopted some coping strategies to overcome the lost opportunities as a result of the land transfer. Some households diversified their livelihood strategies, while others strengthened existing ones. For instance some farmers who depended on the land for their livelihood prior to the land transfer have now changed their land uses or even their occupation. Some others have engaged in share cropping, while still others became tenant farmers on some one's farm. Although farmers customarily employed such strategies even prior to the land acquisition, the frequency has increased during the last four years as found out during the second focus group

discussion. However, econometric study is needed to establish detailed analysis of the associations between the land transfer and the coping strategies.

Figure 5 presents the major coping strategies being pursued by households in the study area in response to the lost opportunity following the land acquisition. As shown in the figure, the major strategies pursued are changing land use (27%), share-cropping (23%), tenant farming (17%), changing occupation (15%), migration (11%), and other strategies such as seeking employment in the company itself (7%). See Figure 7 below.

Figure 5: Major coping strategies for lost opportunity following the land acquisition



Source: Author’s survey

I. Land use change

Following the land acquisition, some households have been forced to change their land use practices. Land used for grazing purpose is now converted to crop land and vice-versa. Prior to the land transfer, households used to graze their domestic animals on the now investment land so that they could cultivate other lands they hold. But now since the grazing field has been given for investment, they should cultivate only part of their land in order to reserve the

rest for grazing. This in turn reduced households' crop production and affected their livelihood. An interview with a farmer who switched his grazing land to crop land reveals that:

I used to graze my livestock in some parts of the land now possessed by the company, while tilling all the land I hold. Following the land acquisition, however, I am not tilling all my crop land because I must graze my livestock on parts of it. I also sold out some of the animals due to shortage of pasture, but with low price. Since a lot of farmers also sold their animals due to shortage of grazing area, the price declined significantly in the market (Respondent # 11: interviewed on 10.02.2012).

Thus, there have been significant land use changes over the past couple of years, following the LSLA.

II. Sharecropping

Sharecropping is also another coping strategy undertaken to overcome the loss of crop land in the district. In sharecropping, the land owner allows the tenant to cultivate his/her land in return for a share of crop produced on the land. Traditionally, sharecropping provided access to land for the landless in many developing countries (Vermeulen and Cotula 2010: 55). Sharecropping in these parts of the world is seen as an important alternative to fixed-rate rentals (such as tenant farming) because it allows the tenant farmer to share production risks with the landlord and hence it gives incentives for the tenant to undertake such arrangement.

In response to lost agricultural land due to the LSLA in the district, some farmers have been forced to share-crop with those who have relatively abundant land. During an interview with one female farmer, I was told the following:

I used to cultivate some crops as well as graze animals on the land now given for investment. Following the transfer, both cultivable and grazing lands became scarce and therefore I started to share-crop some one's land. This land is, however, located far from my home; it takes two hours to get there. The other problem is that I am widowed and have no grown people in the

household to help me cultivate the land. Therefore, I am having a hard time taking care of the farm (Respondent # 12: interviewed on 16.02.2012).

Sharecropping arrangements therefore generate variable returns for both the landlord and the tenant depending on the volume of production. Often, the landlord is entitled a share of up to 50% of the production.

III. Tenant Farming

Tenant farming is the third major coping strategy pursued by local farmers as a result of loss of crop land due to the LSLA. In tenant farming, a tenant resides on and farms a land held by another person for a given period of time and gets his payments either in the form of a share of the product, money or a combination of the two. Thus, the difference between sharecropping and tenant farming lies on the form of payments; in tenant farming the usual arrangement is a fixed rental fee while in sharecropping the land holder and the sharecropper divide the crop (or its proceeds) based on a pre-agreed percentage (Vermeulen and Cotula 2010: 4). However, both tenancy and sharecropping allow redistribution of income-generating activities to landless, usually small-scale farmers (Ibid: 58). Unlike sharecropping, tenant farmer assumes the whole risk because the land holder gets a fixed amount of crop or rent for his land irrespective of the outcome of production.

IV. Change of occupation

Changing occupation is the other strategy used by some households to cope up with the loss of useful land. Households who had been using the investment land in various ways have now switched to other economic activities to sustain their livelihood with some households resorting to petty trading, craftsmanship other economic activities. As participants of the second focus group claimed, some farmers quitted farming altogether following the land acquisition. Such farmers are mostly those who relied solely on the land (now given for investment) for their livelihood and are now seeking other means of living.

V. Migration

As a result of the loss of agricultural and grazing lands, some local people also migrated particularly to urban areas seeking employment opportunities. As found out during the second focus group discussion, although migration occurred prior to the land acquisition, it became however more common following the LSLA in the area. Such migration is usually destined to major urban areas where people can get better employment opportunities and make a living from it.

Migration is common especially among the landless youth, who exclusively depended on the land now transferred for investment. This group of the society migrates to other areas in search of jobs to make a living for themselves as well as their dependent families back home. Many of them work as hired laborers in distant towns and cities while others set up their own businesses and send back remittances to their families.

VI. Other Coping Strategies

Finally, there are also other strategies being pursued by some households to deal with the effects of the land transfer. These include seeking either direct or indirect employment in the company itself, although only few local people have secured job. As discussed early in this chapter, the contribution of the investment project for local employment is insignificant.

In sum, this chapter identified the various socio-economic and environmental impacts of the LSLA on local livelihoods. In relation to the sustainable livelihoods framework, the chapter presented the livelihood outcomes. Besides, the different livelihood strategies have been discussed here.

Chapter Eight: Conclusion and Recommendations

8.1 Conclusion

This study examined the socio-economic and environmental impacts of the large scale land acquisition on local livelihoods in Bako Tibe *woreda* of Oromia region. This is done on the basis of the concept of the Sustainable Rural Livelihoods discussed in the second chapter. Accordingly, the whole paper is classified into the five key elements of the sustainable livelihood framework (i.e., contexts, conditions and trends; livelihood resources, institutional processes and organizational structures, livelihood strategies and livelihood outcomes). Then the complex interactions and links among these elements have been analyzed and the findings are presented. This chapter summarizes the main findings and forwards recommendations to different stakeholders.

The first finding is related to livelihood resources, which determine not only the livelihood outcomes but also livelihood strategies to be pursued. In this regard, the three major livelihood resources identified are human, economic and land resources. With respect to human resource, the majority of the households studied have roughly equal proportions of people in the productive and unproductive age groups. In terms of economic resources, most of the households are engaged in subsistence farming and are mainly dependent on farming activities for their income as well as livelihoods. However, there are also non-farm activities that are undertaken by local communities in the district, such as retail trading, non-farm wage and salary employment, property renting, migrant work, craftsmanship and home brewing; all of which provide households with income and employment. Meanwhile, the major crops grown by the households include *teff*, maize, sorghum, wheat, barley, horse bean and noug/Niger seed. These crops are main sources of consumption food and also generate income from sale. Most of the crops used for household consumption are grown on farms held by households, whereas some of them

are purchased from the market. Besides, livestock rearing is also widely practiced in the study area, where such activities also contribute both for household food consumption and income generation. Analysis of land resources found out that there is shortage of arable land to the local communities in the study area. The average land holding size of households is between 1 and 1.5 hectares, and this is considered too small relative to the number of people who depend on it. The small size of land holding is partly due to land inheritance and redistribution to members of households. Besides, due to the LSLA, local communities lost customarily held communal lands and this in turn reduced land holding among households in the district.

After livelihood resources, the second finding relates to livelihood outcomes. In the study, these outcomes correspond to the socio-economic and environmental impacts of the land acquisition. As found out in this study, the LSLA has by and large negative socio-economic and environmental impacts on local livelihoods. Based on analysis of social factors such as technology transfer, crop production, employment opportunity and infrastructure development; it is found out that the investment project has no significant social benefits at local level. First, there is no or little technology transfer to local farmers contrary to the claim that the LSLA would facilitate technological transfer to local communities. The kind of technology employed by the project is non-transferrable because it is either too costly or is beyond the technical knowhow of the local farmers. Second, there is no significant increase in crop production and supply in the study area as a result of the project. In fact, the company's productivity has not been satisfactory as determined by subsequent crop failure. Even if crop production is significant, the expected benefit to the local people is going to be negligible as the company intends to export much of it. Thirdly, there is no significant job opportunity to the local communities as a result of the investment project, since the company employed only a couple of workers who came from urban areas or abroad. Finally, there was also no significant infrastructural expansion

in the study area as a result of the project. The only infrastructure built by the company was road linking the district to the main road, but this too was intended to connect the project site to the main road and hence was not intended to benefit local communities. However, the investment project is at its early stages and we may not conclude that it has no positive social contributions at all. Such impacts usually take long time to evolve and hence more studies need to be conducted in the long run to assertively determine the social impacts of the LSLA.

Meanwhile, the project has negative economic impacts on the local livelihoods because it resulted in loss of vital livelihood resources to the local communities. These include loss of grazing land, crop land, grass land, firewood, water resources and residence areas. The first economic impact of the LSLA is the loss of grazing land. Although the grazing portion of the land given for the investment purpose was considered idle by the government, it had in fact significant benefits for the local communities in terms of providing good pasture for their domestic animals. In response to the loss of grazing land, some farmers sold out their livestock while other lost them due to death arising from lack of adequate pasture. As a result, livestock productivity declined and therefore local livelihoods have been gravely affected. Second, the investment project resulted in loss of crop land to the local communities, on which they had been growing crops both for household consumption and sale. Consequently, some households are forced to buy crops from the market to compensate for the loss and this incurs them additional cost. Following the land acquisition, land rent and lease prices have also increased, further aggravating the economic impacts. The third economic impact of the land acquisition is the loss of grass land, from which local households obtained grasses used in roof thatching for their houses. Hence, grasslands have become scarce and many households now buy grasses from others' land holdings for relatively higher price. The fourth economic impact of the land acquisition is loss of firewood and charcoal, which are the main sources of household

energy in the region. Since firewood is the cheapest and most accessible source of energy for the local households, its loss affects their energy supply and/or forces them to resort to relatively expensive sources. The fifth economic impact is loss of water resources, on which many households depended for consumption. The investment district was the main sources of water because it possessed ponds, rivers and pump water. These water resources supplied drinking water to both humans and domestic animals and their loss deprived local communities of adequate water.

The study also identified some environmental impacts of the project, which include clearing of vegetation cover from the land, depletion of water resources and soil degradation. In order to prepare the land for large scale agriculture, grasses and trees were cleared and burned down. Consequently this resulted in wide deforestation and elimination of vegetation cover from the land, exposing the soil for erosion. The water resources have also been depleted while preparing the land for agriculture; some of the ponds that existed on the land are no longer available and the wetlands have dried out following the land transfer. In addition, the slash and burning process resulted in severe damage to the soil and its nutrients.

Finally, the study also identifies the different livelihood strategies pursued by local communities in order to cope with the effects of the LSLA and sustain their livelihoods. The most common coping strategies are changing land use, sharecropping, tenant farming, changing occupation, migration and other strategies such as seeking employment within the company.

8.2 Recommendations

We have seen that the large scale land acquisition in Bako Tibe *woreda* brought no significant social benefits to the local communities. Besides, the investment project has negative economic and environmental impacts on local livelihoods. However, such negative impacts can be minimized and/or investment projects can be made beneficial to the local communities if proper measures are taken. In this section, I will put forward some recommendations to the government, investors and the civil society in general; which they can adopt to protect the interests of local communities. The recommendations can also be used by other policy makers and can contribute to public discussions on the subject matter.

I. To the Government

The government has the obligation to protect the interests of local communities while also promoting its development policies. Development projects must not be carried out with complete disregard to local communities. Although the land transferred for investment purpose is dubbed as ‘idle’ by the government, this study found out that it had indeed valuable contributions to local livelihoods. Any large scale land transfer should strictly be carried out on lands not directly or indirectly used by local communities.

One of the controversial issues related to the land tenure system in Ethiopia is that customarily held communal lands have no legal protection. In this regard, the government should uphold the rights of local communities to use communal lands by extending legal protection for such land. Since large tract of communal lands provide essential pasture for domestic animals, the government should secure access and use rights to smallholder farmers.

Prior to any proposed land transfer for large scale investment, the government should consult local communities. Both the government and investors should be accountable to local communities and hence should involve them in all

stages of the land transfer process. This is done to ensure that local people either benefit from investment projects or the negative consequences are minimized. Lack of adequate consultation leads to lack of public confidence on the project. Prior consultation with the local communities will give them the opportunity to assess how they will benefit and/or be affected by the project and to be prepared for such outcomes. Thus, large scale agricultural projects should be permitted only after full consultation with local communities.

Large scale agricultural land deals should also be carried out in a transparent way so as to incite adequate public awareness on the project. The whole processes of land transfer should be disclosed to the public, and most importantly to the local communities. Expected benefits and costs of the proposed project as well as the details of contracts must be known to the local communities. In this way local communities may develop a sense of ownership and responsibility than being hostile to investment projects.

If the proposed project is deemed to have negative impacts on local communities but should it go ahead anyway, then the local people must be compensated properly. For instance, those who had been grazing animals, growing crops, fetching water, collecting grasses or firewood on the land should be given alternative land. Large scale agricultural projects not only dispossess local communities the important assets for their livelihoods, we have also seen that they can result in eviction of local people. The government should ensure that any proposed project will not result in eviction, and if eviction is inevitable, then government must make sure that victims get financial and other compensation packages based on independent assessment prior to the eviction.

The government must also make sure that land contracts contain clear, enforceable benefit-sharing mechanism with the local people. This can be done by placing obligatory requirements on the project proposals regarding

expected employment opportunities to the local people, infrastructural development in the project area, contribution to local food security and so on, and imposing strict follow ups once the project commences operation. In the event when the investor fails to deliver the promises, it should be held accountable and proper legal action must be taken.

Strong regulatory requirements should be included in both social and environmental impact assessments (EIA), by incorporating strict requirements that stakeholders should be properly informed of the contents of the reports before any agreement so that they receive independent and objective advice on legal, economic and social issues. In this regard, the government should strengthen its institutional capacity to monitor and regulate the activities of investors so that they will be held accountable in cases of harm to the local people. Institutional capacity building should be made in all regions where big agricultural investment activities are being carried out.

Finally, the government must also conduct periodic inspection of the project site to evaluate the environmental effects of the project. Although the Environmental Protection Authority (EPA) is tasked with ensuring investment projects do no harm the surrounding environment, I learned that no visit has been made in the study area by the time the field work was completed. Thus, a panel of experts should be organized and carry out periodic visits to the investment project. Besides, the government must oblige the investor to take measures to avert the environmental damages.

II. To Investors

Investors have a legal responsibility to respect the rights of local communities in host countries and should avoid actions that may infringe these rights. In case such rights are violated, investors must extend remedy by establishing grievance handling mechanisms to those who have been affected by the project.

As found out in this study, the local communities have relied on the land now given for investment for their livelihood. However, most of these households have not been compensated for the loss of opportunities from the land. Thus, the victims should be given adequate compensation, either monetary or non-monetary. For instance, one possible way by which the investor could help local communities is to allow them to graze their livestock on its crop residues. By doing so, local communities may secure alternative means of grazing for their livestock.

Although the investment project is still at its early stage, we discussed that it has virtually no contribution to the local food security. However, once it becomes fully operational, the project should contribute to the local food security by selling a certain percentage of its production in the local market, preferably with fewer prices. Besides, the investor company may also contribute to local food security through food aid for the needy at times of emergencies. The investor may also set up funds to help local people for social purposes such as education, medical or other special needs. It can also support the local people by providing seeds, fertilizers, pesticides and technical advice or by linking the local farmers in the value chains of the company.

To overcome the environmental impacts of the projects, certain measures should be taken. These may include minimizing the slash and burning activities and/or increasing the fallow period of the land; both of these measures could minimize the negative impacts on the soil. The investment project should also undertake measures to protect the soil and water resources through sustainable farming.

The investors should also establish transparent mechanisms to independent inspectors or auditors who wish to examine the extent of impacts of the investment project. In this regard, the company under consideration should cooperate with researchers who wish to study the impacts of the project.

III. To Civil Society Organizations

Civil society organizations can help local voices heard so that the desired attention is given to the local communities. Civil society may also raise the awareness levels of both the authorities and the rest of citizens through campaigns and education. They can also help put pressures on the company and its country of origin to oblige it adopts standard practices in its business conduct.

9. Annexes

Annex 1: Household Interview

0.1 Interviewer's Name _____

0.2 Date |__|/|__|/|__|

0.3 *Kebele* Name: _____

Consent Form

My name is _____ and I am an enumerator in this survey on behalf of Mr. Desalegn Keba Dheressa, a graduate student of 'Culture, Environment and Sustainability' at the University of Oslo. The purpose of this interview is to collect data for his master's thesis titled 'The Socio-Economic and Environmental Impacts of Large Scale Agricultural Land Acquisition on Local Livelihoods: A case study in Bako Tibe *Woreda* of Oromia Region, Ethiopia'. The information gathered in this interview will be used only for academic purpose and that you will not be prosecuted for whatever you respond. Your full name will not be written down anywhere and your identity is kept strictly confidential. Your participation is voluntary; you may refuse to answer any question and choose to stop the discussion at any time.

There is no direct benefit or money to be given to you for participating in this study. However, I hope that the study will benefit your community by helping the researcher understand the impacts of the investment project and recommending what should be done to minimize the negative impacts/ increase the benefits. Thank you in advance!

The interview could take about two hours. Are you willing to participate in the survey? Do you have any question?

Part I: Basic Household Data

1. What is your name? _____
2. What is your gender? 1. Male 2. Female
3. How old are you? (years): _____
5. What is your marital status?
 1. Married
 2. Never married
 3. Widowed
 4. Divorced or Separated
6. Which of the following best represents the highest level of education that you have completed?
 1. Illiterate
 2. Grade 1-4
 3. Grade 5-8
 4. Grade 9-10
 5. Grade 11-12
 6. Certificate
 7. Higher Education
7. What is your occupation? _____
8. Please tell us the number of people in your household and their relation to the family?

Age category (years)	Number of Male	Number of Female	Family relation	Total
0-14				
15-64				
65 and above				

9. How long did you live in this area?
 1. Less than five years
 2. Less than ten years (5-10 years)
 3. More than ten years
 4. Native to the area
 5. Other (specify) _____

10. If moved in from other place, where is your place of origin? _____

11. Why did you come to this place? _____

Part II: Household Resources and productions

12. What are your household's three major economic activities in their chronological order?

Major Economic Activities (in terms of their importance for household income)	Annual Income (in Birr)
1.	
2.	
3.	

13. What are your household's three major expenditures in chronological order?

Major Expenditures	Annual Expenditure
1.	
2.	
3.	

14. What major crops do you grow for home consumption and sale?

Production/consumption/sale balance for production year 2003 E.C.								
Type of crop grown	A Area cultivated (ha/yr)	B Output (kg/yr)	C Home conspn. (Kg/yr)	d Sale (kg/yr)	e Seed (kg/yr)	F Balance (kg/yr)	g Price/kg (Birr)	h Total income (Birr)

15. What is the inventory of your livestock during the fiscal year 2003 E.C.?

Type of livestock	No. owned	Estimated value (birr)	Inventory Change in the year 2003 E.C					
			Purchased (No.)	Birr	Consumed/died (No.)	Birr	Sold (No.)	Birr
Ox/bull								
Cow/heifer								
Sheep								
Goat								

Donkey								
Horse								
Mule								
Poultry								

16. What were the major livestock products during the year 2003 E.C?

Type of livestock products	Estimated Value in ETB during the year 2003 E.C.					
	Produced (kg/lt./no.)	Value	Consumed	Value	Sold	Value
Milk						
Butter						
Cheese						
Egg						

17. How do you satisfy the food consumption of your family? Circle the three important ones:

1. Growing crops in fields
2. Purchase from market
3. Growing crops in home garden
4. Livestock rearing
5. Support from relatives, friends and neighbors
6. Other, Specify_____

18. Do you farm?

1. Yes 2. No.

19. Do you own land?

1. Yes 2. No

20. Do you farm all the land you own?

1. Yes 2. No

21. What do you do with the land you own and do not farm? _____

22. Do you also farm land that you do not own?

1. Yes 2. No

23. Under what arrangement do you use this land? _____

24. Can you describe the size and characteristics of land you own and use (in hectares)?

Code	Description	Plot 1	Plot 2	Plot 3	Plot 4	Plot 5	Total (ha)
01	Size of land owned						
02	Land quality(1,2,3)						
03	Rented (in=1, out=2)						
04	Sharecropping(1=in, 2=out)						

Land quality: 1=Fertile 2=medium 3=poor

25. Has your landholding changed during the past four years?

1. Yes 2. No

26. If 'yes', how did it change? (increased or decreased): _____

27. Why did it change?

1. Sale
2. Inheritance
3. Redistribution
4. Investment acquisition
5. Other, specify:_____

Part III: Large Scale Land Acquisition and its Impacts

28. Have you lost any useful land due to the investment project?

1. Yes 2. No. If no, end the interview

29. For what purpose did you use the land before the acquisition?

1. Grazing
2. Crop land
3. Grassland
4. Source of firewood
5. Source of water
6. Other, specify_____

30. Were you consulted when the deal was made?

1. Yes 2. No

31. If yes, how did you participate? _____

32. Do you think that the land deal was made in transparent manner?

1. Yes 2. No

33. What made you to think so?_____

34. Were you evicted from the land because of the project?

1. Yes 2. No

35. Does the project have any direct effect on your means of living?
1. Yes 2. No
36. If yes, how did it affect you? _____
37. What are the other problems associated with the investment project?
Please specify? _____
38. Did you get any direct compensation for lost opportunities?
1. Yes 2. No
39. If yes, what kind of compensation did you receive? _____
40. Have you benefited from the project in the form of technology transfer?
1. Yes 2. No
41. Has crop production and supply increased in your village as a result of the investment project?
1. Yes 2. No
42. Have you or other members of your family got any employment opportunity in the project?
1. Yes 2. No
43. If yes, what kind? (temporary or permanent) _____
44. Has any infrastructure been provided by the investor in your village?
1. Yes 2. No
45. If yes, what kind? _____
46. Have you benefited from the investment project in any other way?
1. Yes 2. No
47. If yes, how? _____
48. How did you cope with the effects of the land acquisition?
Please specify the coping strategy _____

Annex 2: List of Informants

Informant	Title/Description of Informant	Place of Interview	Date of interview
Respondent # 1	Officer at the Bako Tibe <i>Woreda</i> Agricultural Bureau	Bako Town	15.02.2012
Respondent # 2	Local Farmer	<i>Bechera Oda kebele</i>	12.02.2012
Respondent # 3	Local Farmer	<i>Bechera Oda kebele</i>	17.02.2012
Respondent # 4	Officer in the Bako Tibe <i>Woreda</i> Agricultural Bureau	Bako Town	21.02.2012
Respondent # 5	Local Farmer	<i>Tarkafata Gibe kebele</i>	02.02.2012
Respondent # 6	Official of the company	Addis Ababa	23.02.2012
Respondent # 7	Local Farmer	<i>Oda Gibe kebele</i>	13.02.2012
Respondent # 8	Local Farmer	<i>Bechera Oda Gibe kebele</i>	11.02.2012
Respondent # 9	Local Farmer	<i>Amarti Gibe kebele</i>	22.02.2012
Respondent # 10	Officer from the <i>Woreda</i> Land and Environmental Protection Bureau	Bako Town	08.02.2012
Respondent # 11	Local Farmer	<i>Tarkafata Gibe kebele</i>	10.02.2012
Respondent # 12	Local Farmer	<i>Oda Korma kebele</i>	16.02.2012

Annex 3: Map of Bako Tibe



Source: (USAID/Ethiopia Map Room)

Annex 4: Slashed and burned land



Photo: Author

10. Bibliography

Aabø, E. and T. Kring (2012). *The Political Economy of Large-Scale Agricultural Land Acquisitions: Implications for Food Security and Livelihoods/Employment Creation in Rural Mozambique*. Maputo, Mozambique, United Nations Development Program.

Ali, H. O., K. Descheemaeker, T. S. Steenhuis and S. Pandey (2007). "Comparison of Land Use and Land Cover Changes, Drivers and Impacts for a Moisture-Sufficient and a Drought-Prone Region in the Ethiopian Highlands."

Anseeuw, W., M. Boche, T. Breu, M. Giger, J. Lay, P. Messerli and K. Nolte (2012). *Transnational Land Deals for Agriculture in the Global South*. T. Bending, CDE, CIRAD, GIGA.

Arezki, R., K. Deininger and H. Selod (2011). *What drives the global land rush?*, IMF Institute.

Bahru, T., Z. Asfaw and S. Demissew (2012). "Indigenous knowledge on fuel wood (charcoal and/or firewood) plant species used by the local people in and around the semi-arid Awash National Park, Ethiopia." *Journal of Ecology and the Natural Environment* 4(5): 141-149.

Baulch, B. (1996). *Neglected Trade-offs in Poverty Measurement*.

Bogale, A. (2003). *Why Does Poverty Persist in Rural Ethiopia?* 25th International Conference of Agricultural Economists. Durban, South Africa.

Bryman, A. (2008). *Social Research Methods*. New York, Oxford University Press Inc.

Chambers, R. and G. R. Conway (1991). *Sustainable Rural Livelihoods: Practical Concepts for the 21st Century*.

Cotula, L. (2006). *Land and water rights in the Sahel: Tenure challenges of improving access to water for agriculture*, IIED.

Cotula, L. (2007). *Legal empowerment for local resource control: Securing local resource rights within foreign investment projects in Africa*, iied.

Cotula, L., S. Vermeulen, R. Leonard and J. Keeley (2009). *Land grab or development opportunity? Agricultural investment and international land deals in Africa*, FAO, IIED and IFAD,.

CSA (2007). Population and Housing Census. Addis Ababa, Central Statistics Authority.

CSA (2008). Summary and Statistical Report of the 2007 Population and Housing Census. Addis Ababa, Population Census Commission.

CSA (2011). Crop Production Forecast Sample Survey, 2011/12 (2004 E.C.). Addis Ababa, CENTRAL STATISTICAL AGENCY.

CSA (2012). CROP AND LIVESTOCK PRODUCT UTILIZATION: (PRIVATE PEASANT HOLDINGS, MEHER SEASON). AGRICULTURAL SAMPLE SURVEY. Addis Ababa, CENTRAL STATISTICAL AGENCY. **VII.**

Daniel, S. and A. Mittal (2009). The Great Land Grab: Rush for World's Farmland Threatens Food Security for the Poor. M. Moore. Oakland, CA, The Oakland Institute.

De Schutter, O. (2009). Large-scale land acquisitions and leases: A set of core principles and measures to address the human rights challenge, United Nations.

Deininger, K. and D. Byerlee (2011). The Rise of Large Farms in Land Abundant Countries, The World Bank.

Deininger, K., D. Byerlee, J. Lindsay, A. Norton, H. Selod and M. Stickler (2011). Rising Global Interest in Farmland: Can it Yield Sustainable and Equitable Benefits? Agriculture and Rural Development. Washington, D.C., The World Bank.

Dufey, A., S. Vermeulen and B. Vorley (2007). Biofuels: Strategic Choices for Commodity Dependent Developing Countries. Amsterdam, Common Fund for Commodities.

Ellis, F. (1998). "Household strategies and rural livelihood diversification." The Journal of Development Studies **35**(1): 1-38.

ERA (2006). EVIEW OF ENVIRONMENTAL IMPACT ASSESMENT REPORIT. E. R. Authority. Addis Ababa.

FDRE. (2013). "Economy." Retrieved 04.03, 2013, from <http://www.ethiopia.gov.et/English/Information/Pages/Economy.aspx>.

Fisseha, M. (2011). A case study of the Bechera agricultural development project, Ethiopia, International Land Coalition.

Gebreselassie, S. (2006). Land, Land Policy and Smallholder Agriculture in Ethiopia: Options and Scenarios. Future Agricultures Consortium. Institute of Development Studies.

German, L., G. Schoneveld and E. Mwangi (2011). Contemporary processes of large-scale land acquisition by investors: Case studies from sub-Saharan Africa. Situ Gede, CIFOR.

Getnet, A. (2012). Rural Land Policy, Rural Transformation and Recent Trends in Large-scale Rural Land Acquisitions in Ethiopia, European Report on Development.

Gibson, M. (2009). Land inheritance establishes sibling competition for marriage and reproduction in rural Ethiopia. Intergenerational Transfers of Resources. Marrakesh.

GRAIN (2008). Seized: The 2008 landgrab for food and financial security.

Hodgson, S. (2004). Land and water –the rights interface. Rome, FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS.
IFAD (2012) "Rural poverty in Ethiopia."

Johnson, B. and L. Christensen (2008). Educational research: Quantitative, qualitative, and mixed approaches. Thousand Oaks, CA, Sage Publications.

Lavers, T. (2011). The role of foreign investment in Ethiopia's smallholder agricultural development strategy R. Pointer.

Maru, S. and M. Rutten (2013). Impact of Large Scale Agricultural Investment on Income and Food Security in Oromiya Region, Ethiopia. Annual World Bank Conference on Land and Poverty 2013. Washington, D.C.

Mengistu, A. (2006). Country Pasture/Forage Resource Profiles: Ethiopia, Food and Agriculture Organization.

MoARD (2009). Agricultural Investment Potential of Ethiopia. Addis Ababa.

MoARD (2010). Growth and Transformation Plan. M. o. F. a. E. D. (MoFED). Addis Ababa.

MoFED (2006). A Plan for Accelerated and Sustained Development to End Poverty (PASDEP). M. o. F. a. E. D. (MoFED). Addis Ababa.

Nega, B., B. Adenew and S. Gebre Sellasie (2003). *Current Land Policy Issues in Ethiopia*. Addis Ababa, Ethiopian Economic Policy Research Institute.

Olsen, W. (2004). "Triangulation in Social Research: Qualitative and quantitative methods can really be mixed." *Developments in Sociology*.

ONRS. (2011). "Bako Tibe Woreda Profile." from http://www.oromiyaa.com/english/index.php?option=com_content&view=article&id=228&Itemid=551.

Payne, P. and M. Lipton (1994). *How Third World Rural Households Adapt to Dietary Energy Stress*. *FOOD POLICY REVIEW 2*. Washigton, D.C., International Food Policy Research Institute.

Piers Blaikie and H. Brookfield (1987). *Land Degradation and Society*. London, Methuen.

Platteau, J.-P. (2002). *The Gradual Erosion of the Social Security Function of Customary Land Tenure Arrangements in Lineage-Based Societies*. Helsinki, UNU World Institute for Development Economics Research (UNU/WIDER).

Rahmato, D. (2011). "African soil for sale: Large-scale land acquisitions." *A journal of peace research and action* **16**(4).

Rahmato, D. (2011). *LAND TO INVESTORS: Large-Scale Land Transfers in Ethiopia*. Addis Ababa, Forum for Social Studies.

Ravallion, M. (1992). "Poverty Comparisons: A Guide to Concepts and Methods." *Living Standards Measurement Study LSM- 88*.

Richards, M. (2013). *Social and Environmental Impacts of Agricultural Large-Scale Land Acquisitions in Africa—With a Focus on West and Central Africa*. Washington, DC, Rights and Resources Initiative.

Schoneveld, G. C. (2011). *The anatomy of large-scale farmland acquisitions in sub-Saharan Africa*. Bogor, Indonesia, CIFOR.

Scoones, I. (1998). *Sustainable Rural Livelihoods: A Framework for Analysis*. *IDS Working Paper 72*, Institute of Development Studies.

Sen, A. (1985). *The Standard of Living*. *THE TANNER LECTURES ON HUMAN VALUES*. Clare Hall, Cambridge University.

Tamrat, I. (2010). Governance of Large Scale Agricultural Investments in Africa: The Case of Ethiopia. Washington DC.

UNDP (2013). Human Development Report 2013. The Rise of the South: Human Progress in a Diverse World. K. Malik. New York, United Nations Development Programme.

Vermeulen, S. and L. Cotula (2010). Making the most of agricultural investment: A survey of business models that provide opportunities for smallholders. London/Rome/Bern, IIED/FAO/IFAD/SDC.

von Braun, J. and R. Meinzen-Dick (2009). "Land Grabbing" by Foreign Investors in Developing Countries: Risks and Opportunities. IFPRI Policy Brief. **13**.

Wily, L. A. (2011). "'The Law is to Blame': The Vulnerable Status of Common Property Rights in Sub-Saharan Africa." Development and Change **42**(3): 733-757.

Proclamations

FDRE (1994). Constitution of the Federal Democratic Republic of Ethiopia. Addis Ababa.

FDRE (2002b). Environmental Impact Assessment Proclamation. Addis Ababa.

FDRE (2002a). Federal Negarit Gazeta, Re-Enactment of the Investment Proclamation, Proclamation No. 280/2002 Addis Ababa.

FDRE (2003a). Council of Ministers Regulations on Investment Incentives and Investment Areas Reserved for Domestic Investors, Regulations No.84/2003. Addis Ababa.

FDRE (2003b). Federal Negarit Gazeta, A Proclamation to Amend the Investment Re-Enactment Proclamation No. 280/2002, Proclamation No. 373/2003.

FDRE (2005). Federal Negarit Gazeta, Rural Land Administration and Land Use Proclamation, Pro No. 456/2005. Addis Ababa.

FDRE (2008). Federal Negarit Gazeta, Council of Ministers Regulation to Amend the Investment Incentives and Investment Areas Reserved for Domestic Investors Regulation. Addis Ababa.