CHAPTER 3: LARGE-SCALE FARMING AND LOCAL ECONOMIC DEVELOPMENT IN ETHIOPIA

3.1 Introduction

The push to large-scale farming in Ethiopia is promoted by the incumbent government with the aim of modernizing and transforming the agricultural sector from its current status, which is largely based on the use of traditional farming tools, production for subsistence rather than for the market, risk-prone and dependent on the vagaries of nature. As discussed in Chapter 2, the promotion of large-scale farming in Ethiopia is not new, but a continuation of past government efforts to modernize. In Ethiopia, the national and regional governments are actively involved in the current wave of large-scale land transfers throughout the process from land identification and transfer to monitoring of investor performances. High expectations from large-scale farming in Ethiopia are clearly presented in various government policy documents (cf. MoFED 2006, 2010).

As a result, the renewed interest in agricultural land by private investors, corporations and capital-rich governments is viewed by the EPRDF government as an opportunity to achieve its vision of modernization. In fearing of missing out on the unprecedented flow of foreign capital to the agricultural sector, which had not been considered attractive for several years, the Ethiopian government rushed to welcome interested groups, without putting in place the mechanisms to maximize the benefits and to minimize possible trade-offs in these investments. Selection of best investors, identification of suitable lands for farming, compatibility of intervention to existing settlement and livelihood patterns, instituting the needed human and material capacity that manage land deals and monitor implementation, identification of impact mitigation mechanisms, etc., were neither done well or not at all. Everything was done hastily in a bid not to miss the opportunity to 'match' the government's vision of modernization with investors' interests in large-scale farming. This was what Rahmato (2011) called an 'open-door policy' for investment in large-scale farming.

The contributions of large-scale farming to, *inter alia*, local economic development are a function of a set of land governance variables such as: careful mapping and identification of available land and land-related resources; identification of the best, capable and committed investors; negotiations, effective contracting of deals and enforcement of contracts; and

monitoring of project implementations. The outcomes of investment in large-scale farming in Ethiopia should, therefore, be understood against the following background information:

(1) identification of 'suitable'' and 'unused' land for investment was done quickly with the help of satellite images with minimal involvement of other stakeholders (e.g. local people) and with little effort to take into account land-use patterns of agro-pastoralists based on temporal mobility and livelihoods based on forests and shifting cultivation;

(2) an open-door approach of welcoming everyone who showed interest in large-scale farming with little diligence in terms of screening the best investors. A case in point, is that Karuturi was handed 300,000 ha of land in Gambella during the first land deal without making sure that the investor had the capacity to develop the land in a few years. Later, the area was reduced to 100,000 ha following criticism from various groups;

(3) weak capacity of the government in terms of carrying out effective negotiations that will bring the best outcomes or help to achieve the huge rural development targets anticipated. For example, the government anticipated contributions from large-scale farms in the form of social and physical infrastructure construction while contract agreements do not include such provisions; and

(4) the government's weak land governance capacity and poor enforcement of contracts. There is a weak linkage and poor co-ordination among various government bodies that are responsible for the governance of large-scale plantations and sometimes with conflicting roles of government structures at different levels (federal to district).

3.2 The Research Gap

There is a growing body of literature on large-scale farming in Ethiopia. None of these works, however: 1) evaluated the economic returns of large-scale farming to the local/regional economy by comparing it to previous land use; and 2) discussed the expectations and actual experiences to date of the government – the key actor in the land transfer process in the case of Ethiopia – and the households who are directly affected by large-scale farms. For example, studies conducted by Abbink (2011), Lavers (2012a, 2012b), Rahmato (2011) and Shete (2011) discuss early outcomes from large-scale farming in Ethiopia without evaluating

whether earlier expectations of different stakeholders from large-scale farms converge with actual experiences. This chapter attempts to fill these gaps by analysing qualitative and quantitative data collected from: government and company records; households that have been directly affected by large-scale farming; key government informants who have direct roles in large-scale land transfers; and company wageworkers who are working on the farms. Finally, the chapter evaluates the extent to which expected outcomes have been achieved, and contributes to policy debates on large-scale land acquisition and to the governance of large-scale farming in Ethiopia and beyond.

3.3 Methods

Qualitative and quantitative research approaches were adopted to address the objectives of the research. Secondary data were collected from large-scale farms, local government revenue office and district administrations. Variables collected from large-scale farms include, land size developed, costs and benefits, employee data, contributions to local development in various forms, etc. Primary data were collected from key government informants, households and employees via interviews and the use of structured and semi-structured questionnaires. These were complemented with field observations and focus-group discussions. A list of households that had been using the land resources was drawn up[28] and this was used as sampling frame for the household survey.

In a bid to address the three objectives identified above, different data collection and analyses methods were used. First, to identify the economic returns of large-scale farming, data on the various dimensions of economic benefits such as revenue generation (e.g. income tax, profit tax, and land rent), contributions to raw material for local industry and value of food crops produced, employment creation, contributions to physical infrastructure (e.g. road, schools, and clinics), etc., were collected from large-scale farms and government offices. Costs and benefits of large-scale farms were collected from the companies. Information generated from companies was further triangulated for its correctness and reliability with data collected from government offices that keep records in relation to large-scale farms. For example, both companies and government offices keep records of the number of jobs generated, employees' income tax, payment for land lease, profit tax, etc. In such cases, triangulation was carried out to check the correctness of the information provided by both parties. The benefit of large-

[28] A list of households was obtained from the lowest administrative unit (*kebele*), which was updated with the help of elders who have been living in the area for many years and who know individuals missing from the list.

scale farming to the local economy was estimated by adopting a minimum and maximum scenario. The minimum scenario was established by assuming that the companies maintain current productivity, cultivate only the size of land they have developed so far,[29] continue to be operated by the current number of employees and do not change current levels of technology for the whole leasehold period. The maximum scenario, on the other hand, was established based on the companies' planning documents, which stipulate anticipated costs to be incurred and the benefits expected to accrue to the company when the companies develop their entire leasehold concession. Similarly, the average number of family members employed and the average value of crop, livestock and livestock products generated by smallholder farmers from the land transferred to the companies were calculated from the household survey. The average value per household was calculated first. This was then re-scaled to fit all of the households that have lost access to the land handed over to the companies. This was projected over the entire leasehold period, and the average annual benefit generated by smallholder farmers was compared to the benefit generated by the companies after it was discounted to the present value.

Both financial cost-benefit and economic cost-benefit analysis were done in this study. While past and current costs and benefits were taken as they are, future costs and benefits for the years to come were discounted at 10% interest rate using the present value method of project valuation. The discounted mean annual net financial benefit for the large-scale farms was calculated by deducting the total costs from the total benefits for the whole leasehold period; this was then divided by the number of leasehold years. Similarly, the discounted net annual economic cost-benefit analysis method[30] was used between two land-use types (the land-use type before the land transfer and the current land use) to identify the economic contributions of the large-scale farms to the local economy. In the calculation of economic cost-benefit analysis, direct and indirect contributions of the company to local development – such as land rents for the entire leasehold period, income taxes from (projected) land development, value of crop/raw materials, value of physical infrastructure (in this case it was subjected to

[29] The companies have so far only developed and cultivated a small proportion of the land they leased despite their commitment to developing the entire concession in three years. Thus, given their capacity, the minimum scenario assumes that companies will hardly manage to develop additional plots.

[30] It should be noted here that the analysis is done based on financial and economic cost benefit analysis and did not include social and environmental costs. Detailed analysis of the environmental impact of the interventions is presented in Chapter 6.

depreciation) – were included and their values were discounted at a 10% interest rate to bring future benefits to current prices. I relaxed the estimation at the local level by adding values to companies' contributions to the national economy and discussed what these contributions mean overall for Ethiopia's situation. All these economic benefits were summed up and averaged for a single year to estimate the economic returns of land use by the large-scale farms. This was then compared to the economic benefits of handing the land over to local people for use to see if there is overall gain or loss.

Data on the costs and benefits of previous land-use by local people were also collected using household surveys. Data collected from the non-affected households were used to estimate the average value of crops and livestock generated from each hectare of land as a proxy indicator to calculate the total value of crops produced, livestock and livestock products produced and other non-timber forest products harvested per annum by smallholder farmers from the land transferred to the large-scale farms. Since the purpose is to estimate the benefit generated on the land that was transferred to large-scale farms, the estimation considered both marketed and consumed products such as crops, livestock and livestock products and non-timber forest products for a period of one year and valued at local prices. Since there are variations among households, average costs and benefits were estimated, which were finally multiplied by the total number of households who depended on the land transferred to the companies.

Second, having determined the economic benefits of large-scale farming versus the situation before, I established in how far the initial expectations within government circles have been achieved. To identify perceived prior expectations and actual benefits, data were collected through a survey of 42 key government informants. The key government informants included experts from AILAA, the Ethiopian investment commission, regional and district investment offices, district administrations, regional land administration offices, and agriculture and rural development offices. Similarly, data on perceived expectations and actual benefits from large-scale farming were collected from local people in the three regional states living around the large-scale farms. The surveys comprised of households that are directly affected by large-scale farms in the three regional states (details are presented in Chapter 1).

Respondents (both key government informants and households) were asked to rank their expectations on a six-point scale (0= 'nothing expected', 1= 'very low expectations', 2= 'low expectations', 3= 'average/medium expectations', 4= 'high expectations' and 5= 'very high

expectations'). They were subsequently requested to rate the extent to which their expectations were met (0= 'nothing changed', 1= 'a very small part of expectations achieved', 2= 'a small part of the expectations achieved', 3= 'expectations achieved on average', 4= 'most of the expectations realized', and 5= 'expectations completely realized'). Although it is generally acknowledged that identifying ex-ante expectations after communities have experienced a project might be a source of bias, efforts were made to minimize this during the survey period by probing respondents and asking them to justify the reasons for their earlier expectations. To understand the determinants of the disconnects, if any, between ex-ante expectations and ex-post reality, respondents were requested to qualify their responses.[31]

3.4 Results and Discussion

3.4.1 Overall returns of large-scale farming to economic development

Different social and economic benefits are anticipated from investment in large-scale farming by investment recipient countries. Anticipating possible flow of benefits that are untapped in previous forms of land uses, the Ethiopian government provided lucrative packages of incentives to attract investors to invest in large-scale farming. This includes granting land at attractive lease rates,[32] tax holidays for the first five years, duty free imports of machinery and equipment, loans from Ethiopian banks and expropriation of profit in any currency note. Data from AILAA and companies' records showed that Ethiopian banks provided ETB 1.3 billion for 11 large-scale farms, which is equivalent to ETB 6,020 (US$ 314) for each hectare of land acquired by the investors, far higher than the rent payable (Table 3.1).

[31] Technical notes: Data were analysed using median, mean, mode, percentage and a paired t-test technique to identify the disconnects between earlier expectations and the praxis of large-scale farming. In the paired t-test analysis, an equal distance between the six-point scale was assumed. The median/mode value was used in the analysis to assess the consistency of the results with mean values, in case the assumption of equal distance between the responses fail. To improve the validity of the results, the paired t-test analysis was complemented with the qualitative responses of the key informants and triangulated with the mode scores of the responses.

[32] The lease rates applied when granting land lease contracts lack consistency. While there is a directive issued at federal level in determining lease rates based on the distance of the farm from the nearest port, the land lease contracts do not reflect this in most of the cases (see Annex 3.1 for details).

Table 3.1: Loans provided to large-scale farms by commercial banks in Ethiopia (2008–2013)

Company	Land Size (ha)	Origin of Company Founder	Loan Size (in millions)	
			In ETB	In US$
Karuturi Agro. Products PLC	111,700	Indian	127.27[33]	6.64
Basen Agric. & Industrial PLC	10,000	Ethiopian	122.00	6.36
Lucci Farm PLC	4,003	Ethiopian	106.49	5.55
CLC (Spentex)	25,000	Indian	124.39	6.49
White field	10,000	Indian	90.15	4.70
Verdanta Harvest	3,012	Indian	89.49	4.67
BHO	27,000	Indian	45.48	2.37
Tracon Trading	5,000	Ethiopian	46.47	2.42
Ruchi	25,000	Indian	410.07	21.38
Green Valley Agro PLC	5,000	Indian	99.90	5.21
Agro Peace Bio Ethiopia PLC	2,000	Israel	109.24	5.69
Total	227,715		1,370.97	71.48

Data source: AILAA and company data, 2013

Although complete data were not possible to generate for each of the case studies in this dissertation, the duty free imports of Karuturi Agro Products PLC for its Gambella and Bako sites and those of the S&P Company showed that the companies imported machinery with substantial forgone benefit to the government from import taxes (see Annex 3.2 and 3.3 for details). It was alleged, however, that Karuturi Agro-products PLC had routed the farm machinery it had imported using the duty-free privileges away from their farms and into a rental business (Davison 2013). This implies that the Ethiopian government is subsidizing large-scale investment by providing cheap land, duty-free imports and credit windows. A key question here is, if smallholder farmers were to receive similar support, would it be possible to transform and commercialize the agricultural sector as envisaged by the government?

In the following paragraphs, I discuss the overall returns on investments in large-scale farming by comparing two different land uses. The comparison calculated considering various (current and future) benefit streams that (will) accrue to the district/regional economy and to the national/macro economy. In addition, the year the company will break even is estimated. The analysis of returns on investment at micro (household) level is also subsequently presented – while the impact of large-scale farming on household income levels is discussed in this chapter, its impacts on household food security is presented in Chapter 4. The

[33] According to a report by a human rights activist, the amount of money borrowed by Karuturi from Ethiopian banks is ETB 170 million (see G/Mariam 2015).

following discussion is based on data generated from three large-scale farms – Karuturi at its Bako site, Basen and S&P farms – using the discounted net present value of economic cost-benefit analysis to show the returns on investment in large-scale farming at a local (district/regional) level. Since Karuturi's Gambella farm station has been reported bankrupt, it has been dropped from the NPV analysis in this dissertation.

Case 1: Karuturi Agro Products PLC in Oromia Regional State

The net present value analysis of Karuturi's investment in Oromia Regional State for the minimum and maximum scenario showed that the local economy experienced a decline of 38%–74% in overall economic benefit due to the current land use (i.e. maize production by Karuturi) when compared to the previous land use by the local population (i.e. grazing land and cultivation of *teff* and niger seed). On average, the local population had generated an estimated value of ETB 18,758,870.76 per annum by using the land for the production of *teff* and niger seed and by rearing livestock. The estimated value of different streams of benefits had declined to ETB 4,875,618 and 11,603,029 in the minimum and maximum scenario, respectively, after the land was taken over by Karuturi and put under maize production. Despite the overall loss in economic benefit from the current land use by Karuturi, the regional state had earned some short-term income that it had not received from the local population. This includes income from land rent fees, employment income tax, profit tax, etc. (Table 3.2). The local people in Bako Tibe District pay land rent tax at a rate of ETB 134 per ha for the lands they have statutory rights to, but never paid land rent for the valley bottom that they had been using for livestock grazing and production of *teff* and niger seeds. In this regard, Karuturi is expected to pay ETB 411,816 (at current price) per annum for each leasehold year. Similarly, except for the livestock sales taxes – such as ETB 5 per cattle and ETB 3 per sheep/goat – smallholder farmers seldom pay profit taxes. By putting the land under large-scale farming, the regional state anticipated collecting corporate profit tax, which is a new source of revenue for the regional state to finance other development plans.

Table 3.2: Mean annual discounted economic benefit to local and national economy, the case of Karuturi's investment in Oromia Regional State, Ethiopia

	Mean annual NPV (ETB)*		
	Karuturi's land use		
Benefit streams	Minimum Scenario	Maximum Scenario	Farmers' land use[34]
Revenue from land rent fee	411,816	411,816	0
Revenue from profit tax	148,145	1,813,750	0
Revenue from employees' income tax	30,959	67,052	0
Value of direct employment	2,126,985	3,197,862	4,776,480
Value of crop sold at local market**	2,133,791	6,079,673	11,290,136
Value of maize sold at national market	4,978,846	14,185,903	0
Value of livestock production	0	0	2,685,106
Contributions to community development	23,922	32,876	NA
Total contribution to the district/regional economy	4,875,618	11,603,029	18,751,722
Total contribution to national economy	9,854,464	25,788,932	18,751,722
Contribution to the district/regional economy	0.26 times the value generated by farmers (**Loss**)	0.62 times the value generated by farmers (**Loss**)	
Contribution to the national economy	0.52 times the value generated by farmers (**Loss**)	1.37 times the value generated by farmers (**Gain**)	

Note: *Rounded to the nearest integer; **Crop refers to value of maize for Karuturi and it refers to *teff* and niger seed for farmers.

Source: Own computation from survey data, 2012 and 2014

Based on the NPV estimation, Karuturi's investment in Bako will break even in 2015 for the minimum scenario and in 2017 for the maximum scenario, after operating with a net loss for 4–7 years. The company is estimated to make an annual profit of ETB 387,204 to 2,845,896, with an average return on its investment of 2.9% to 11.5% for the minimum and maximum scenario, respectively. It will thus contribute, on average, a corporate income tax of ETB 148,145 to 1,813,750 per annum to the district/regional accounts for the minimum and maximum scenario, respectively. Peasant farming is mostly operated by family labour, and if there is any hired wage labour, wages are not reported officially to the government for any income tax purposes. In addition, putting the land under large-scale investment brings immediate cash income in the form of employment income tax to the district/regional state.

[34] This was calculated by multiplying the average value of different benefit streams generated from each hectare of land per household with the total number of households that depended on the total land transferred to the company.

This is not, however, to deny the fact that in Bako Tibe District landlessness is very high and the youth had been engaged in family-operated farming by cultivating the valley bottom; this is now under the leasehold concession of Karuturi. Under the previous land-use regime, the area generated significant employment for the local people; more than the current land use by Karuturi, despite wage labour by smallholder farmers often being informal in nature and not providing cash income to the district in the form of employment tax. According to the estimation based on the field survey, the land generated a value of ETB 4,776,480 as direct employment for the entire household population when it was used by the local population. This employment benefit reduced to ETB 2,126,985 and ETB 3,197,862 for the minimum and maximum scenario, respectively, after the land was taken on by Karuturi. This was due to the use of capital-intensive technology.

During the field survey, the manager of Karuturi Farm explained that Addis Ababa is the main market destination and the company supplied 70% of its total production to it. In this regard, the price dampening effect of the company on local farmers who are net sellers is not significant. By taking into account the supply of food grain to the national market, the economic contribution of Karuturi is re-calculated for the minimum and maximum scenario. In this case, the current land use by Karuturi under the maximum scenario generated 1.37 times the value of production by local farmers, which is equivalent to an annual gain of 37% over the previous land use. Under both the minimum and maximum scenario, the district economy, however, generated only 0.26–0.62 times the total value generated by farmers, which is equivalent to a loss of 38–74% (Table 3.2). The recipients of the large-scale investment – regional government (meso-level) and federal government (macro-level) – are therefore experiencing different outcomes from investment in large-scale farming, in the maximum scenario, which can be described as a loss-win situation.

Deepening the argument further, four tiers of actors with different outcomes from the investment can be presented. These are the local population (micro level), the district/regional government (meso level), the federal government (macro level) and the investor with a generally loss-loss-win-win scenario. Further analysis of the impact of the intervention on household income levels and food security (micro level) are discussed in subsequent chapters. The local population and the district/ regional economy were better off when the land was under use by the local people. This raises the question, ‘development for whom?’, a

politically-sensitive and ethically-laden concept. Ethiopia has been experimenting with a federal state arrangement based on ethno-lingual arrangements for over two decades. The justification was a narrowing of the regional economic disparity by allowing regional states to determine their own development. Ethnic regions are constitutionally permitted to use their local/regional resources for the benefit of their own population. The case in Bako, however, demonstrates that local resources are being expropriated from local people to the benefit of the national/macro economy. Dispossession of local resources for the accumulation of private capital and for the benefit of macro-economic development has been taking place in Bako in the same way as Makki (2012) argues that it is happening elsewhere.

Case 2: Basen Agricultural and Industrial Development PLC in Gambella Regional State

Following a similar procedure of the discounted net present value analysis, the overall returns from Basen's investment to local (district/region) and national economy were estimated for maximum and minimum scenario. The maximum scenario is calculated based on the plans of the company to cultivate its entire concession and therefore an assumption that it will generate the planned number of jobs and value of employment, produce value of cotton and cotton seed and generate fiscal revenue in terms of tax for the district economy as predicted. On the other hand, the minimum scenario was estimated based on the assumption that the company will continue to operate under current capacity and will generate employment, fiscal revenue and value of cotton for the remaining leasehold period. The current capacity was calculated based on the actual performance of the company collected from its records during the survey period. This was then projected for the remaining leasehold period. The estimated future benefits generated from the company under the minimum and maximum scenario were discounted to produce current values and the average annual benefits were calculated. The average annual benefits generated by smallholder farmers was compared to the benefits generated by the company after it was discounted to the present value.

Based on the NPV estimation, Basen's investment in Abobo district in Gambella regional state break even in 2011 after operating with a net loss for seven years. From the year 2011 onwards, the company has been earning a gross annual profit of ETB 21,117,404 under the minimum scenario, and ETB 35,417,899 under the maximum scenario. It will thus contribute, on average, corporate income tax of ETB 11,521,905 and ETB 18,231,961 per annum to the district/regional account under the minimum and the maximum scenario, respectively.

Annually, the farm is estimated to generate a substantial gain of 42.3% and 30.1% of its invested capital under the minimum and the maximum scenario, respectively.

Table 3.3: Mean annual discounted economic benefit to local and national economy, the case of Basen Farm in Gambella Regional State

Benefit streams	**Mean annual NPV (ETB)***		
	Basen's land use		Farmers' land use
	Minimum Scenario	Maximum Scenario	
Revenue from land rent fee	337,968	337,968	0
Revenue from profit tax	11,521,905	18,231,961	0
Revenue from employee income tax	563,844	639,021	0
Value of total employment*	8,457,661	9,585,310	4,557,000
Value of maize sold at local market	0	0	10,253,250
Value of livestock	0	0	23,188,295
Value of cotton sold at national market	20,656,127	31,967,331	0
Value of cotton seed sold at national market	12,423,717	19,639,243	0
Contributions to community development	0	0	0
Total contribution to the district/regional economy	13,100,329	28,794,260	37,998,545
Total contribution to national economy	53,961,222	80,400,834	37,998,545
Contribution to the district/regional economy	0.34 times the value generated by farmers (**Loss**)	0.76 times the value generated by farmers (**Loss**)	
Contribution to the national economy	1.42 times the value generated by farmers (**Gain**)	2.1 times the value generated by farmers (**Gain**)	

Note: Based on the estimation of this study (see Table 4.1), only 8% of total jobs are occupied by local people. Thus, the value of employment for local population under the minimum and the maximum scenario is ETB 676,612 and ETB 766,825, respectively.

Source: Own calculation based on survey data, 2013

The result showed a similar outcome to the case of Karuturi's investment in Bako Tibe District, albeit with different magnitude. After the land was transferred to Basen for cotton farming, the local/district economy generated only 0.34–0.76 times the value of production by farmers, which is equivalent to a 24–66% decline in overall economic returns. More specifically, the loss had come from the replacement of food crops and livestock production valued at ETB 10,253,250 and ETB 23,188,295 respectively, with cotton production that has contribution to the macro economy rather than to the local economy. Despite the decline in overall returns from large-scale farming, the District Revenue Office had received cash

income that seldom flowed to its treasury when the land had been used by the immigrant settlers. This is being considered as sources of finance for local development. For instance, the local population had been using the land through customary land tenure regime and produced food grains for local consumption, and never paid land rent fee. Basen Farm, on the other hand, acquired the land on long-term leasehold basis and will pay, on average, ETB 337,968.3 per annum when the land lease is discounted at current price. Similarly, employees and corporate income taxes are the other sources of cash income to the district revenue office that had not been captured as benefits in the previous land uses (Table 3.3).

Basen's investment in cotton farming had generated greater employment opportunities than when the land was used by the local population for maize production. Nevertheless, the benefit of employment accrued mostly to labourers from the South. Therefore, it is possible to argue that other than the employment income tax payable to the District's Revenue Office, the value of employment generated contributes little to the local economy.

Cotton production receives policy support from the federal government since the country is unable to supply the needed raw material for the textile and garment factories. There are about 136 textile and garment factories operating in the country, with 10 more expected to join the sector soon. The demand for lint cotton is estimated to range between 90,000 and 100,000 tons per year (Fortune 2015). The domestic supply is not more than 50% of the demand and financing cotton imports has impacted the country's foreign currency. In this regard, land allocation for cotton production, as in the case of Basen Farm, is of national priority. When the value of cotton and cotton seed are considered in the NPV calculation, the overall economic contribution of Basen's investment to the national economy becomes positive, and the company generated 1.42–2.1 times the value of production when the land was under farmers' use. In terms of proportion, the overall gain to the national economy is estimated to be 42% under the minimum scenario, which can go up to 112% under the maximum scenario (Table 3.3). Similar to the argument I presented in the case of Karuturi's investment in Bako, four-tiers of actors *vis-a-vis* the local people (micro-level), the district/regional economy (meso-level), the national economy (macro-level) and the investor can be presented to discuss who has gained and who has lost from the investment. While, the federal government and the investor generally gained from the investment, the local people and the district/regional economy lost from the land-use change. This takes us back to the big question of development for whom? Local resources are expropriated to the benefit of the national economy, in a

similar fashion to what happened during past government regimes in Ethiopia in which the centre and the periphery were linked for resource exploitation.

Case 3: Benshanguel Gumuz Regional State: S&P Energy Solutions PLC

A similar minimum-maximum scenario approach with discounted NPV analysis was followed to estimate the overall contribution of S&P Farm in Benshanguel Gumuz Regional State. The minimum scenario analysis for S&P Farm showed that the local economy generated 0.49 times the value produced by farmers, which is equivalent to a 51% loss in the overall economy. Under the maximum scenario, both the local and the national economy respectively generated a return of 2.2 and 20.3 times the value that was generated by the local population. Despite an overall economic loss to the local economy under the minimum scenario, the district/regional economy generated cash income that did not accrue to its treasury when the land was under local people's use, which is largely viewed by the government as source of development finance. In this regard, the District receives a total income of ETB 2,277,161 per annum from land rent fee, corporate income tax and employment income tax. Income accrued by the district/regional economy is estimated to increase to ETB 12,938,302 under the maximum scenario (Table 3.4).

As part of its community development contribution, the company launched a school feeding scheme with a total outlay of ETB 160,000 per year. The scheme increased primary school enrolment. Children follow their mothers to collect foods from the forest and primary school attendance had previously been low. The school feeding programme, as reported by the Kota School Director, improved school attendance. The company installed a gasifier that converts biomass to electricity. It has also constructed an earth dam to harvest water. Domestic investors are privileged to get access to electric power and water from the earth dam on the farm. The road that passes through S&P's farm also provides service to the local people who pass through the farm. These could be some of the CSR contributions that were not available during the previous land use.

When the NPV calculation takes into account the contributions made by the large-scale farm to the national agricultural GDP, the mean annual gain from putting the land to investment was found to increase by 3.42 times the value generated by farmers for the minimum scenario and 20.3 times the value generated by farmers for the maximum scenario. The large-scale farm is expected to break even in 2014 after five years of operating at a loss. The company is

estimated to make an average of ETB 181,871 annual profit under the minimum scenario and ETB 25,505,993 annual profit under the maximum scenario with a return to average invested capital of 0.01 % and 0.63%, respectively. With this estimation both the national economy and the investor gained from the land transfer while the local population generally lost from the new investment.

Table 3.4: Mean annual discounted economic benefit to local and national economy, the case of S&P Farm in Benshanguel Gumuz Regional State

Benefit streams	**Mean annual NPV (ETB)**		
	S&P's land use		
	Minimum Scenario	Maximum Scenario	Farmers' land use
Revenue from land rent fee	1,402,316	1,402,316	0.0
Revenue from profit tax	112,088	7,846,608	0.0
Revenue from employee income tax	762,757	1,412,217	0.0
Value of direct employment*	1,089,653	2,017,453	500,760
Value of crop sold at local market	0	0	2,372,037
Value of crop sold at national market	14,160,355	87,467,916	0.0
Value of livestock production	0	0	1,581,358
Value of non-timber forest products	0	0	379,526
Contributions to community development	47,293	47,293	0.0
Total contribution to the district/regional economy	2,392,009	10,833,516	4,833,681
Total contribution to national economy	16,552,364	98,301,432	4,833,681
Contribution to the district/regional economy	0.49 (Loss)	2.24 (Gain)	
Contribution to the national economy	3.42 (Gain)	20.3 (Gain)	

* Based on the estimation of this study (see Table 4.1), only 6.2% of total jobs are occupied by local people. Thus, the value of employment for local population under the minimum and the maximum scenario are ETB 67,555 and ETB 125,082, respectively

Source: Own calculation based on survey data, 2014

In summary, as the three case studies demonstrate, the returns to investment in large-scale farming are not the same for different levels of actors. The results from the case studies confirmed that the local/regional economies were not better off when the previous land use by the local population was replaced by large-scale investment other than in terms of generating cash income to the District that, in the past, had not been provided by the local people. The macro-economy and the investors consistently gained from the investments in all the three cases. In terms of the magnitude of effect, the district/regional economy in the highland regions (e.g. Oromia Regional State) had lost substantial amounts of net returns to investment compared to the cases in the lowland areas of Gambella and Benshanguel Gumuz regional

states. This demonstrates the high opportunity cost of putting land under large-scale investment in the highland parts of the country, which are often densely populated and where land is scarce. In the subsequent sections, the prior expectations and actual experiences of large-scale farming as perceived by government key informants and the local people are discussed.

3.4.2 Expectations and actual experiences of government key informants from large-scale farming in Ethiopia

As discussed earlier, the incumbent government has pushed a policy of large-scale farming in Ethiopia. Expectations about the potential contributions of large-scale farming are clearly set out in government policy documents, and have been discussed earlier in Chapter 2. The following discussion aimed at deepening our understanding by analysing the perceived expectations and actual experiences of government key informants. Such analysis is important because outcomes from large-scale farming are determined by, *inter alia*, a shared vision/expectation among government officers who are responsible for the governance of large-scale farming. Lack of shared vision is an impediment to success. Smooth implementation of policy documents is affected by, among other things, the shared-level of expectations held by government stakeholders who are engaged in the implementation process of large-scale farming. The key questions central to this analysis are:

(1) are expectations about large-scale farming shared equally among government officers working at district, regional and federal levels. In other words, are government stakeholders engaged in the governance of large-scale farming 'on the same page' and equally committed to achieving the expected benefits of large-scale farming?
(2) To date, have these expectations been met, from the perspective of these government officers?
(3) If there are divergences in the expectations and actual experiences of the government stakeholders, could this result in a change in the approach to future land deals?

As discussed in the methodology section, 42 government key informants completed a structured questionnaire that asked them to reflect on their perceived ex-ante expectations and ex-post experiences of large-scale farming. The informants were selected from Oromia, Gambella and Benshanguel Gumuz Regional States and from federal government offices that are responsible for or engaged in the governance of large-scale farming. In particular, the

questionnaire asked key informants to rate their perceived expectations and actual experiences in reference to the case studies used for this research.

The results indicated that government key informants had huge expectations about large-scale farming. Mirroring the presentations in the government strategy documents, the key informants believed that large-scale farming will serve as a centre of modern technology generation and transfer and, consequently, smallholder farmers in the vicinity of such projects will be able to learn about best practices and acquire farm inputs that increase farm productivity. Eventually, this is expected to facilitate the transformation process of the traditional agricultural sector into a modern and sustainable sector, and an increase in food availability and the supply of raw materials to local industries that replace imports and generate the much-needed foreign currency through value-added exports is also anticipated. The majority of the informants (95%) had huge expectations (mean score=4.5) about the role of large-scale farming in modernizing the agricultural sector, which indirectly reflected their dissatisfaction with smallholder farming and the agro-pastoralist system of production (Table 3.5). The high degree of expectations of government key informants about the role of large-scale farming in technology transfer to smallholder farmers emanates from the fact that agriculture in Ethiopia is predominantly subsistent and the use of improved farm inputs is very limited (cf. Endale 2011). The World Bank (2011) also indicates that, currently, only slightly more than 20% of the potential yield is realized by the Ethiopian agricultural system.

Technology transfer is expected in Oromia Regional State, where smallholder mixed crop-livestock farming is widely practised adjacent to the large-scale farm at Bako. A key informant from Bako, interviewed on 20 March 2012, explained that Karuturi's investment in the area is planned for sugarcane and oil palm plantations, but that the total land leased by the company is not enough to establish a sugarcane or palm oil processing plant. The key informant explained that he expected the company to adopt an inclusive business model, such as out grower or contract farming schemes, that provides an opportunity for smallholder farmers in the vicinity to engage in the production of sugarcane and oil palm. While the government had the expectation that Karuturi will engage in sugar cane or palm oil cultivation in Bako, the investor had, in fact, shifted to maize growing and shifted the palm oil nursery site from Bako to Gambella. Moreover, the government's expectations are cannot easily be attained due to differences in the types of crops produced by the smallholder farmers, which are largely cereals.

In less developed regions such as Gambella and Benshanguel Gumuz Regional States, (agro-) pastoralism[35] and shifting cultivation, respectively, are extensively practised and there is limited chance of integrating the local people into large-scale farming, at least in the short term. In 2010, Gambella and Benshanguel Gumuz Regional States embarked on resettling the population in selected villages where the local people were provided with farm plots. One of the aims of the collectivization scheme is to transform (agro-) pastoralists into sedentary farmers. Government key informants interviewed on 25 March 2013 in Nynyang (Gambella) and on 11 April 2014 in Manbuk (Benshanguel Gumuz) similarly explained that the resettlement scheme enables peasants to practise farming similar to those in the highland areas of the country, which eventually increases the opportunity of integrating them in the value chain of agricultural production by large-scale farms. This is again anticipated through the adoption of inclusive business models by large-scale farms. I argue here that the possibility of inclusion of peasants and agro-pastoralists is very small given the fact that the large-scale farms are not fully developing their huge leasehold concessions. For example, Karuturi and S&P managed to develop only 5% and 3.7% of their leasehold concessions, respectively, in four years; therefore it does not sound logical for these companies to implement contract farming or out growers' schemes while their leasehold concessions are not yet fully developed. This echoes the evidence presented by Robinson *et al.* (2012) and the FAO (2013), which states that only 1% and 1.7% of the land acquired for large-scale farming globally and in Ethiopia, respectively, are actually cultivated.

While adoption of an inclusive business model by large-scale farms so as to integrate smallholder farmers into the global food chain is attractive in theory, it is not clear how this can be achieved in the Ethiopian context. First, crop commodities produced by large-scale farms are mostly new to the area and different from the food cultures and livelihood settings of the local population. This demonstrates the illusive expectations of key government informants regarding including smallholder farmers or agro-pastoralists in the large-scale farms. Second, companies have already acquired large swathes of land from the government, mostly beyond their capacity to farm their entire concessions, and they do not need contracting smallholder farmers. Third, inclusiveness through using local labour is envisaged as a mechanism of income generation and skill transfer to farmers in the vicinity, which will

[35] Agro-pastoralism consists of production of livestock, such as cattle, sheep and goats, through extensive management system and mobility. This is complemented with small-scale cultivation of crops such as maize and sorghum. Livelihoods based on extensive livestock production system are put at risk due to large-scale farms.

eventually contribute to poverty reduction and modernization of the agricultural sector. Again, this is an elusive expectation since the evidence from fieldwork activities (discussed in detail later in this chapter) confirms that wageworkers coming from outside the regions are benefitting more than the local people, due to a mismatch between the livelihood systems of the local population and the crops cultivated by the large-scale farms.

Table 3.5: Perceived expectations and actual experiences of key government informants' from large-scale farming in Ethiopia (n=42)

Outcome variables	Perceived expectation		Perceived actual experience		Mean difference	St. Error (t-value)
	Mean	Mode (%)	Mean	Mode (%)		
Technology transfer	4.48	4 (95.2)	2.47	2 (92.8)	2.01	0.13 (16.36***)
Generates employment	4.13	4 (92.8)	3.30	3 (88.1)	0.83	0.16 (5.04***)
Source of revenue	4.10	4 (92.8)	2.93	3 (71.4)	1.17	0.12 (9.50***)
Infrastructure development	4.10	4 (90.5)	2.00	2 (61.9)	2.10	0.12 (17.18***)
Generates foreign currency	4.02	4 (88.1)	1.43	1 (95.2)	2.60	0.16 (16.21***)
Provides raw material	3.13	3 (52.3)	1.86	2 (88.1)	1.27	0.20 (6.17***)
Increases food supply	2.96	3 (47.6)	1.79	2 (78.6)	1.17	0.15 (7.87***)

*** Significant at $p<0.01$

Source: Own survey data, 2012

Other outcomes are also expected from large-scale farming. Given the fact that labour is abundant in the country, companies are expected to create jobs for the rural masses. In lowland areas like Benshanguel Gumuz and Gambella Regional States, where large-scale farming is expanding, labour is scarce and large-scale farms are expected to generate jobs for migrant workers from densely populated highland regions. This was a particular point mentioned by key informants at the federal level who were the subject of this study. In the cases considered (e.g. Basen in Gambella, S&P in Benshanguel Gumuz and Karuturi in Gambella), migrant labour from Southern Nations, Nationalities and People's, Amhara and Oromia Regional States dominated wage employment. In addition, the majority of key government informants (88–93%) had high expectations from large-scale farming insofar as it creates employment with decent wages, generates revenue and much-needed foreign currency, and contributes to the expansion of infrastructure (Table 3.5).

Reflecting on their actual experiences to date, the key informants explained that there are huge gaps between their earlier expectations about the contributions of large-scale farming and the outcomes. They are generally dissatisfied with the projects' contributions, which represents a statistically significant difference across all outcome variables (Table 3.5). The

majority of the key informants explained that only a very small part of their prior expectations had been realized so far. The divergence between earlier expectations and actual experiences are not the same across the different outcome variables. The key government informants considered employment generation to have been at least partially realized. They believed that some landless youth have started to earn incomes by working for Karuturi in Bako, despite low wages (ETB 12 per day). Similarly, they argued that wage employment is created at some level by large-scale farms in Gambella and Benshanguel Gumuz Regional States for migrant labour coming from the highland regions. Nevertheless, key government informants are not satisfied with either the number of jobs generated or the salaries offered to employees compared to their earlier expectations. For instance, after more than three years, Karuturi in Oromia generated jobs for 43 permanent and 200–300 casual labourers in 2012. In the same vein, S&P employed up to 700 casual labourers during pick seasons, which goes down to 200 during slack seasons.

Similarly, actual experiences of expected outcomes such as foreign currency and revenue generation, technology transfer and infrastructure development showed that only a small part of the key government informants' expectations were realized. With regards to technology transfers, government bemoaned the lack of direct smallholder engagement in the production process of the large-scale farms in all the cases. In Oromia, Karuturi typically achieves maize yields (1.5–2 tons per ha) that are less than half of those of smallholder farmers (4–6 tons per ha). Before the land was leased to Karuturi, the local people cultivated *teff* on the black soils and produced about 1.5 ton of *teff* per ha. In terms of its market value, a kilogram of *teff* sells for ETB 16, while a kilogram of maize is valued at ETB 3.50. If the value of the maize produced by Karuturi is compared with the value of *teff* that was previously produced by the smallholder farmers on the same parcel that is now under maize cultivation by Karuturi, the smallholder farmers used to generate a more valuable crop than the large-scale farm does from the same land. This example is a warning that large-scale farms might not possess the best knowledge of technology and crop choice, as initially anticipated. In Gambella (where cotton is produced by Basen) and Benshanguel Gumuz (where pongomia is produced by S&P) Regional States, companies are cultivating crops that are not produced by the local people and, consequently, technology transfer is not achieved.

Some have argued that the Agricultural Development-Led Industrialization (ADLI) strategy of the Ethiopian government has failed to achieve its objective of improving the productivity

of smallholder farmers (Dercon & Hill 2009 in Lavers 2012b; Rahmato 2003) and that the promotion of large-scale farming by the Ethiopian government in recent years is a result of its dissatisfaction with the ADLI strategy (Lavers 2012a). I disagree with the view of this researcher that the government's strategy clearly shows that the promotion of large-scale farming in Ethiopia is because of its vital and complementary roles and not to replace smallholder farming with large-scale farming. The ADLI strategy is still maintained and smallholder farmers are acknowledged for their contributions and are being supported. My argument is in line with Keeley *et al.* (2014). The conference on Land Policy Initiative of the African Union held in Addis Ababa from 11 to 14 November 2014 also strengthened the vital roles of smallholder farmers in African Agricultural development (UN-ECA 2014). But, this is not to deny the fact that large-scale farming was promoted on the lands that were being used efficiently by smallholder farmers, as in the case of Bako Tibe District, but which failed to deliver the expected outcome. A key informant interviewed on 20 March 2012 in Bako Tibe District also questioned whether the company had the capacity to affect the transfer of technological know-how to smallholder farmers in its vicinity.

Key government key informants are also dissatisfied with the level of contributions of the large-scale farms to community development endeavours. As previously mentioned, S&P Energy Solution in Benshanguel Gumuz Regional State launched a school feeding programme for the local Gumuz population in Kota village, with an outlay of ETB 160,000 per year, with the aim of increasing primary school enrolment and attendance in the area. Although this primary school participation has improved, the contribution is considered to be less than initially expected. It was revealed that the company had previously promised to upgrade the primary school to a high school during community discussions. The company has also constructed a three-room labour ward for the local people in Kota village, but again the local people and the local administration are not satisfied because the company did not live up to its promise to furnish it with facilities to make the ward fully functional. Karuturi in Bako constructed feeder roads, boreholes and an electricity grid largely for its own use rather than as a form of Corporate Social Responsibility (CSR). Despite various requests by the local people to get access to these facilities, the local people were refused access to electricity supplies and to the boreholes the company dug on its estate. In a similar vein, S&P constructed feeder road that passes through Kota village to its estate. While both S&P in Benshanguel and Karuturi in Oromia believed that this is CSR in action, key government informants and the local people did not view it as a contribution to community development.

During my fieldwork, I observed that local people in both regions had used the feeder roads for input-output marketing. In Gambella, both Karuturi and Basen farms had not contributed any meaningful CSR to the local population. One should note here that the divergence between expectations and actual experiences about the company's contributions to community development was due to the huge and unrealistic expectations held by key government informants before the inception of the companies.

Due to sluggish land development and incorrect reporting about the large-scale farms, benefits in the form of fiscal revenue generation and foreign-exchange earnings seldom materialize. Examination of the payroll of Karuturi in Bako Tibe District revenue office indicated that the contributions in the form of employees' income tax are insignificant, irregular and marred by false income statements and employment data records. For example, an Ethiopian working as a Human Resource Manager for the company was reported to earn ETB 8,000 per month, while his Indian supervisors were reported to receive ETB 1,500–5,000 per month, much less than their subordinate. Similarly, at the time of the survey, I observed about 13 Indian expatriates working for the company, but the payroll reported to the district's revenue office showed that only three Indians are employed by the company. Similar examination of data from Dangur District revenue office in May 2014 showed that the S&P paid income taxes from 2011–2013 but not for 2014. Land rent taxes are paid to the regional government while income taxes are paid to the district revenue office. An interview with an expert working at the district revenue office indicated that his office collects income taxes based on what is reported by the company, and there is no mechanism to triangulate whether the report is genuine. The report by S&P to the revenue office showed similar inconsistencies to that of Karuturi. The record of the company showed that there were 21 Indian expatriates before they were laid off in 2013, and in 2014 there were two Indians working for the company. None of the incomes of these expatriates were reported to the district's revenue office for income tax purposes. Such discrepancies suggest tax evasion practices. Expressing his dismay, the head of the district's revenue office in Bako Tibe District alleged that Karuturi is 'cheating' the local government and his office plans to sue the company in the court.

I further analysed the views of key government informants by disaggregating the respondents in three categories. I found out that there are marked variations among government key informants at federal, regional and district levels in their ex-ante expectations. While those at federal (mean score=4.25 and median value=4) and regional (mean score=4.13 and median

value=4) levels had 'high' expectations of large-scale farming, those at the district level (mean score=3.1 and median value=3) had relatively lower expectations (Table 3.6).

Table 3.6: Disaggregated analysis of key government informants' perceived expectation and actual experiences from large-scale farming in Ethiopia (n=42)

Outcome variables	**Federal level key informants (n=12)**		**Regional level key informants (n=16)**		**District level key informants (n=14)**	
	Expected	Realized	Expected	Realized	Expected	Realized
Technology transfer	4.5	2.5	4.44	2.83	4.5	2.07
Generates employment	4.5	3.67	4.12	3.3	3.78	2.93
Generates revenue	4.25	3.0	4.43	3.0	3.64	2.79
Infrastructure development	4.25	2.0	4.56	2.0	3.5	2.0
Generates foreign currency	4.58	1.5	4.43	1.5	3.07	1.29
Protects natural resources	4.17	1.83	4.0	1.75	3.21	1.79
Provides raw material	3.92	2.0	3.68	1.87	1.78	1.7
Increases food supply	3.83	1.92	3.35	1.81	1.7	1.64
Overall Mean	***4.25***	***2.3***	***4.13***	***2.25***	***3.1***	***2.02***

Source: Own survey data, 2012

Key government informants at federal and regional levels had a much clearer vision of the strategic objectives of promoting large-scale farming compared to those at district level, who had little or no roles in the land-lease negotiation process. A key government informant from the Agricultural Investment and Land Administration Agency (AILAA) who was interviewed on 15 March 2012 for this study expressed his opinion that 'the Growth and Transformation Plan envisaged agricultural transformation, and this could be achieved if large-scale farms are promoted, developed well and integrated into smallholder farming.' The decision to transfer farmlands to the projects under review in this study came either from the regional government (e.g. Karuturi in Bako and Gambella) or from the federal government through the AILAA (e.g. S&P Energy Solution).

In terms of actual experiences from large-scale farming, a general consensus among key government informants was observed at federal (mean score=2.3 and median value=2), regional (mean score=2.25 and median value=2) and district (mean score=2.02 and median value=2) levels that large-scale farms are not contributing in the way previously anticipated(Table 3.6).

Although expected benefits cannot be fully realized when the projects are not fully developed, the sluggish pace of land development has raised concerns about the capacity of investors to

fully develop the land acquired. The key question here is would the government change its policy of promoting large-scale farming given the significant divergences between expectations and actual experiences? Dissatisfied with the performance of the large-scale farms, the government has questioned its open-door approach to investors interested in acquiring land, which was prevailed in the mid-2000s. The AILAA has now decided not to transfer land in excess of 5000 ha to an investor in a single deal, and future decisions to provide additional land will be decided based on the performance of the investor on the land acquired in the first phase. This was also confirmed in an interview with the Ethiopian's Minister of Agriculture (Sethi, 2013).

The change in approach is contrary to the practices of early 2008, when parcels of up to 100,000 ha were transferred to a single investor. Nonetheless, the government's position regarding the contributions of large-scale farming is intact and land transfer for large-scale farming is set to continue in the future. The AILAA monitoring report mentioned the high cost of land clearing and development and poor infrastructure as critical challenges for successful large-scale farm development in Ethiopia (Ministry of Agriculture 2011a, 2011b, 2012, 2013). The government has reportedly adopted a strategy of developing land and leasing out farmlands to investors to allow them to start production immediately after land contracting (Keeley *et al.* 2014). This approach is similar to the government's approach of establishing industry district zones for companies interested in engaging in the manufacturing sector. The history of state farm development in Ethiopia has shown that there have been huge inefficiencies in spending public resources on land development. The same problem might reoccur if the EPRDF government commits itself to spending meagre levels of public finance on land development for large-scale farming.

3.4.3 Expectations and actual experiences of local people from large-scale farming in Ethiopia

3.4.3.1 Introduction

In this section, the perceived expectations and actual experiences of the local people who are direct stakeholders affected either positively or negatively by the large-scale farms will be discussed. Free, Prior and Informed Consent (FPIC) of the local people about the transfer of land to investors for large-scale farming is not practised in Ethiopia. As discussed in the introductory chapter, this was largely because of the widely-held belief in government circles

that unused land is available and can be allocated for large-scale farming without significant economic trade-offs.

In each of the study regions, the key informants explained that the local administration facilitated a kick-off meeting to introduce the investors to the local people. Among the key issues commonly discussed during these community gatherings were the type of engagement the investors would make in the villages and the potential contributions of the investment to the local economy. Promises by company representatives that substantial benefits would accrue were the rule in most cases, and this raised expectations (cf. Focus on Land in Africa 2013). Against this background information, I further deepened my inquiry by asking local people the following key questions: (1) What were your expectations and actual experiences of large-scale farming? (2) Are you satisfied with the outcomes of large-scale farming to date? (3) If there is a divergence between the expectations and actual experiences of large-scale farming, are there any emerging agrarian struggles in response? The following section discusses the perceptions of local people in terms of their earlier expectations before investors started developing the land, their actual experiences after the investor started farming, and their responses to any possible divergences between earlier expectations and actual experiences.

3.4.3.2 Perceived expectations of the local people from large-scale farming

The majority of the local people (60–95%) who had lived around the four large-scale farms had very high expectations regarding the contribution of the companies in terms of employment. In particular, the local youth had expected to become supervisors of daily labourers and work as tractor operators after receiving the needed skill training by the companies. The majority (69–90%) had very high expectations of receiving decent and stable wages from such engagements (Table 3.7).

In an information meeting held four years ago between the community members and the managers of Karuturi Agro Products PLC in Bako, the local people were promised employment opportunities at the farm at a daily wage rate of ETB 25–30. There were similar expectations among the local people in Gambella and Benshanguel Gumuz Regional States following promises by company representatives to engage local people in various types of employment that would provide them with decent wages.

Other promises by company representatives were also mentioned by the local people in each region. Among these were promises to get access to infrastructures such as roads, clean water, electricity, school facilities, etc. Companies' participation in community development activities was one of the greatest expectations held by the majority (67–98%) of the local people in the cases examined. Contribution of large-scale farms to technology transfer, with the exception in Oromia, was one of the outcome variables about which the majority (61–91%) of the local people in Gambella and Benshanguel Gumuz Regional States had no meaningful expectations. In Oromia, close to 83% of the local people had very high expectations that Karuturi Farm could serve them as a place to access improved farm inputs and farming skills. The engagement of the local people in mixed farming activities in Bako Tibe District of Oromia Regional State boosted their anticipation that some technical knowledge and farm inputs could spill over from the large-scale farm to the smallholder farmers. On the contrary, in Gambella and Benshanguel Gumuz Regional States, the engagement of the local people in livelihood activities other than crop farming (agro-pastoralism, shifting cultivation and hunting and gathering) and the type of agricultural commodity planned for cultivation by the large-scale farms (cotton by Basen Farm and pongomia by S&P Farm) resulted in the local people not having any meaningful expectations in the form of technology spillover.

Table 3.7: Perceived expectations and experiences of land users from large-scale farms in Ethiopia

Outcomes	Karuturi-Oromia (n=142)		Karuturi-Gambella (n=200)		Basen-Gambella (n=100)		S&P-Benshanguel Gumuz (n=96)	
	Expected	Experienced	Expected	Experienced	Expected	Experienced	Expected	Experienced
Technology transfer								
Mean	4.06	0.24	0.39	0.16	0.09	0.08	0.71	0.69
Mode (%)	4 (83.1%)	0 (86.69%)	0 (61.5%)	0 (87.5%)	0 (91%)	0 (92%)	1 (90.6%)	0 (85.4%)
Mean difference	3.8		0.03		0.1		0.02	
t-value (St. Error)	36.7 (0.1)*		0.76 (0.04); NS		0.26 (0.04); NS		0.58 (0.04); NS	
Employment generation								
Mean	4.1	1.37	4.02	0.7	3.98	0.37	4.17	2.01
Mode (%)	4 (83.8%)	2 (51.4%)	4 (59.5%)	1 (65%)	4 (65%)	0 (63%)	4 (90.6%)	2 (80.2%)
Mean difference	2.74		3.36		3.6		2.16	
t-value (St. Error)	30.9 (0.09)*		51.4 (0.06)*		41.3 (0.09)*		26.68 (0.08)*	
Decent income from employment								
Mean	4.1	0.99	4.1	0.3	3.92	0.41	4.13	1.88
Mode (%)	4 (83.8%)	0 (62%)	4 (68.5%)	0 (68.5%)	4 (70%)	0 (59%)	4 (80.2%)	2 (85.4%)
Mean difference	3.1		3.8		3.5		2.25	
t-value (St. Error)	22.5 (0.14)*		71.7 (0.05)*		44.7 (0.08)*		31.9 (0.07)*	
Community development								
Mean	4.49	0.49	4.34	0.26	3.95	0.34	4.11	1.36
Mode (%)	4 (97.1%)	0 (53.5%)	4 (66.5%)	0 (73.5%)	4 (69%)	0 (66%)	4 (97.9%)	1 (90.6%)
Mean difference	4.0		4.07		3.6		2.75	
t-value (St. Error)	52.6(0.08)*		102.3 (0.04)*		44.97 (0.08)*		45.96 (0.06)*	
Increase food availability								
Mean	3.89	0.27	3.9	0.7	0.06	0.05	0.24	0.23
Mode (%)	4 (79.6%)	0 (86.6%)	4 (75.5%)	1 (67%)	0 (94%)	0 (95%)	1 (68.7%)	0 (82.3%)
Mean difference	3.6		3.25		0.01		0.01	
t-value (St. Error)	36.8(0.09)*		67 (0.05)*		0.3 (0.03); NS		0.59 (0.02); NS	
Vegetation clearing								
Mean	4	4.07	4	4.1	4.01	3.9	4.14	4.1
Mode (%)	4 (78.8%)	4 (91.5%)	4 (69.5%)	4 (88%)	4 (69%)	4 (86%)	4 (95.8%)	4 (97.9%)
Mean difference	0.06		0.01		0.11		0.04	
t-value (St. Error)	1.04 (0.06); NS		0.23 (0.04); NS		1.6 (0.07); NS		0.54 (0.06); NS	

Source: Survey data; *P<0.01

On the other hand, the majority (69–94%) of the local people in Abobo (Gambella) and Dangur (Benshanguel Gumuz) districts had very low expectations that the large-scale farms would increase the domestic availability of food supplies due to the cultivation of non-food crops by companies. On the other hand, in Oromia and Gambella Regional States, where Karuturi had a plan to cultivate a food crop (e.g. maize) traditionally consumed by the local indigenous people, the majority (75–87%) had very high expectations that food grain, as promised during pre-engagement meetings, would be available at reasonable prices. Across the four case studies in the three regional states, the majority of the local people (69–96%) commonly anticipated a negative impact of large-scale farms on the environment through the destruction of forests and vegetation.

3.4.3.3 Experiences of the local people from large-scale farming

The disturbing, but not surprising, result was the perceived divergence between earlier expectations and the outcomes actually experienced by the local people from large-scale farming. As presented in Table 3.7, significant divergence ($p<0.001$) is observed between mean perceived expectations and experiences on most outcome variables across the four case studies. Exceptions are observed with regard to technology spillover and increased food supply to the local people from large-scale farms. For these outcome variables, the local people had very low expectations *a priori* and their actual experiences to date are consistent with the expectations they had set. Similarly, local people had anticipated clearing of vegetation by companies and their experiences to date were consistent with their earlier expectations. The mean difference between expectation and actual experience for this variable is not statistically significant, meaning that large-scale farms did contribute as expected, according to the locals, in terms of the destruction of forest and vegetation. Detailed discussion about the impacts of large-scale farming on local environment based on data generated from satellite images and soil data is presented in Chapter 5. Here, it suffices to note the consistent results of the perceived experiences of the local people about the negative environmental impacts of large-scale farming with the quantitative results presented in Chapter 5.

Community members indicated that they had very high expectations of the large-scale farm projects which, it was argued, would result in significant contribution to employment generation and investment in community development. However, employment is highly insecure and seasonal,[36] and wage rates are comparatively low,[37] which limits the contributions made to local livelihoods. In lowland areas, such as in Gambella, the engagement of local people in employment is very limited due to their lack of experience in previous farming activities. In these areas, migrants benefitted from wage employment more than the local people in the highlands. Wages paid are very low and contrary to the expectations of decent incomes that would contribute significantly to household's well-being. For instance, the wage rate paid to daily labourers by Karuturi in Oromia was ETB 7 per day during the first three years of operation. In late 2011, it was increased to ETB 12, which is still significantly lower than the initial promise of ETB 25–30 daily wage rates. The company appears to have had substantial leverage when it came to determining wage rates in Bako due to huge landlessness in the district, which is estimated at 7%. This was partly the result of displacement of farmland and grazing land for project development. In Gambella, the same company paid wages as low as ETB 10 per day for school boys who were engaged in weeding Karuturi's maize plantation and for women who watered the oil palm nursery site at Ilia village. With most labourers being poor and government inspectors noticeably absent, casual labourers have limited bargaining capacity to raise their wage rates.

The local indigenous people in the three regional states had expectations that they would be engaged in technical and supervision tasks. In reality, they predominantly participated in non-technical employment. Many of them were engaged as security guards and plantation workers, despite having the potential to perform more skilled duties. In Gambella and Benshanguel Gumuz Regional States, the engagement of indigenous people in wage employment is very limited, far from their initial expectations, due to the lack of farming experience. In those regions, migrants from highland areas benefitted from the wage employment generated. This is discussed in detail in the next section. Some of the jobs (e.g. tractor operation) that can be performed if skills

[36] Casual workers numbering 200-300 work for two to three months a year. There are 13 security guards working on the farm; 7 supervisors; 9 tractor drivers/helpers and 5 case operators.
[37] For example, the company pays ETB 800–1,200 per month for tractor operators while the going rate in Bako Tibe District ranges between ETB 2,000–3,000 a month. Jakaranda, a domestic investor, pays ETB 20 per day for the services of a daily labourer, while Karuturi pays only ETB 12 a day.

training is provided to local people were taken up by Indian expatriates. Data from the Bako Tibe District revenue office showed that, in 2010–2011, 30–44 Indian expatriates were engaged in Karuturi's on-farm activity in Oromia region. In 2012, it was noted that 13 Indian expatriates were working as tractor operators and field supervisors. Similarly, in Benshanguel Gumuz Regional State there were 21 Indian expatriates engaged in farm employment, which was cut to two in 2013 when the company reduced its farm operations.

Apart from the limited engagement of local people in the much anticipated employment, as mentioned by the wageworkers and key informants, jobs are mostly menial and seasonal in nature, proper hiring and firing procedures are absent, and formal binding contracts between the employees and the companies are completely absent in all cases. With the absence of formal contracts, wage payments are often late and sometimes refused, and wageworkers are fired for unfounded reasons, as happened in Oromia, when Karuturi fired 14 employees in 2012. Furthermore, labour conditions are reported to be demanding and there are also reports of mistreatment by supervisors. Most notably, a number of women were reported to have been abused by Indian supervisors. Two women who were interviewed on 26 March 2012 in Bako reported that they were fired without receiving their wages due to their rejection of sexual advances by an Indian supervisor. They also reported that another woman who used to serve as a housemaid was raped and subsequently fired by an Indian supervisor. Subsequently, she became pregnant and end up being dependent on her family. It was alleged that the Indian who abused her travelled back to India before the woman received any justice. Nevertheless, there were no reports of such abuses from the case studies in Gambella and Benshanguel Gumuz Regional States. In general, the local people have generally lost out from the land transfer with little employment benefits and wage employment far from initial expectations.

Studies on the contributions of large-scale farming in respect of employment generation and poverty reduction are mixed. Lipton (1977) and De Schutter (2011) acknowledged that supporting the productivity of smallholder family-operated farming generates more employment and contributes to poverty reduction more than large-scale mechanized farming does. On the other hand, Cramer *et al.* (2008) in Mozambique and Maertens & Swinnen (2009) in Senegal indicated the positive welfare effects of plantation agriculture for the poor who have limited

access to land. Cramer *et al.* (2008) further pointed out that job insecurity among rural wageworkers in Mozambique is common and the welfare improving impact of rural employment is significant when the number of days that the poor are engaged in employment increases. In Ethiopia, at least in the four cases considered, plantation agriculture did not live up to the expectations of local people when it comes to generating much-needed employment with decent incomes and there is no job security; thus, its welfare impact is insignificant.

Likewise, other expectations have been huge but seldom realized. Very high expectations about community development activities of different types were held by the local people in the three regional states. For example, besides the 9-km feeder road that Karuturi constructed for its own benefit in Bako Tibe District, other promises, such as giving local people access to drinking water from the company's boreholes and their electricity supply, were not realized in Oromia Regional State.[38] Similarly, S&P in Benshanguel Gumuz Regional State promised to upgrade the primary school in Kota village to a high school, to construct and furnish a delivery ward and to supply village electricity. But, besides launching a school feeding scheme to raise school enrolment, and constructing an unfurnished labour ward, the company did not fulfill the other promises. In Gambella Regional State, contrary to the huge community expectations about local development by large-scale farms, no meaningful contribution was made by Basen or Karuturi farms. The mean difference between expectations and actual experiences about the benefits of large-scale farms to communal activities was significant and a major source of dissatisfaction among local people.

The local people had also received guarantees from company representatives that access to key livelihood resources (e.g. water points) would not be blocked by the companies. For example, in Oromia Regional State, communities used to get drinking water for their livestock from the nearby Aboko River, adjacent to their grazing land, and they were assured that they would have continued access to the watering points.[39] However, the company reneged on these promises and completely blocked access, which meant that peasants had to travel an additional three hours to

[38] The company had dug some 20 boreholes for irrigation purposes. Some were even dug on farmers' plots without their consent but peasants are refused access to water from these boreholes.
[39] The company also uses the Aboko River for dry-season irrigation, with a generator that has a discharge capacity of 142 liters/second for six hours a day. This has decreased the availability of water from the river, which is naturally shallow.

the Gibe River to find water for their cattle.[40] The experience in Bako shows that when land is transferred, it is not only farmland that is lost but also related resources like water, which is fundamental for peasants' livelihoods. Alienation of water resources as a result of Large-scale Land Acquisition (LSLA) from the community is described as 'water grabbing' by Bues & Theesfeld (2012, p. 278) for central Ethiopia and as the 'water factor' by Woodhouse (2012, p. 787) for Sub-Saharan Africa.

As mentioned earlier, the land concessions of Karuturi in Bako were formerly used by the local people for grazing and cultivation of *teff* and Niger seed. Although community members were promised that they would receive maize stock from the company for animal feed, this has never materialized. With the loss of huge tracts of land used for grazing animals and production of food crops, the impact on peasants' livelihood is clearly discernible. Even though the entire concession of Karuturi has not yet been cultivated, the local people are increasingly constrained in their ability to access grazing land and to cultivate additional plots for important subsistence crops, such as *teff* and Niger seed. This has led to a reduction in agricultural output.

In Benshanguel Gumuz Regional State, most of the population depend on rain-fed agriculture based on a shifting-cultivation system. They produce crops such as sorghum, sesame, maize and pumpkin, and complement their livelihoods by gathering wild foods, hunting, charcoal-making, domestic honey production, traditional gold mining, and handicrafts (INBAR 2010). Land acquired by S&P Energy Solution was previously used for crop production through a shifting cultivation system, and was a source of forest-based livelihoods. With the loss of key livelihood resources, fallow periods are shortened and access to a forest-based income and food sources significantly decreased due to the land clearing by the company. In Gambella Regional State, the land clearing by Karuturi at Ilia village damaged access to the nearby forest, which was the source of different non-timber forest products of the indigenous Anuak people. This was also contrary to the earlier promises that the leasehold of Karuturi would not overlap with the area needed to sustain the forest-based livelihood of the Anuak people.

[40] This negatively impacted on the farming practices of households as farmers only plough for a few hours now because they have to take their oxen to search for drinking water faraway.

The local people in the three regional states also complained about the loss of indigenous tree species that used to provide food, incomes, and shade during community gatherings and cultural festivities. The communities' firmly-held earlier fears that clearing of vegetation cover by large-scale farms will undermine livelihood options, destroy cultural identity and exacerbate worsening of micro-climate of surrounding environment became a reality within just a few years of the start of land development in all four cases. A Monitoring and Evaluation report by the Ministry of Agriculture on agricultural investment projects for Benshanguel Gumuz Regional State indicated that investors that acquired land for large-scale farming, including S&P, had failed to generate sufficient employment, showed little regard for natural resources management, demonstrated sluggish implementation performances and rarely paid land rents to the districts (MoA 2011a). Potential environmental damage should be mitigated before a project commences, but, often, an Environmental Impact Assessment (EIA) is prepared as a rhetorical device to justify projects without adequate enforcing mechanisms. In many of the projects, as I have confirmed by looking at the EIA documents submitted to the AILAA, it is prepared after they have started operation. This practice is discussed in detail in Chapter 6.

3.4.3.4 Emerging agrarian struggles against large-scale farming

The last question I tried to answer here is what are the responses of the local people when their hopes are dashed and outcomes are contrary to earlier expectations? Dissatisfied with the outcomes of large-scale farming, the local people who are living around the large-scale farms showed various forms of resistance in a bid to 'roll back' the land transferred to the investors. These include abduction of expatriates working for the farms, looting of the property of the companies, setting farms on fire and formal requests about their rights to government officials.

Although organized agrarian struggles are less common, sporadic conflicts between the local people and investors are common. For example, a group of community members in Bako Tibe District had a violent altercation with Indian tractor operators in 2011, which led to the hospitalization of two Indians. The case was taken to the district court but later thrown out due to lack of evidence. The company managers of Karuturi in Oromia frequently report the looting of their properties and grain harvests by community members. The District Justice Office also confirmed that there had been theft and abduction cases filed by the company against local

people, with security guards working at the farm cited as witnesses. A chief officer working for the District Justice Office interviewed on 21 March 2012 confirmed that there were frequent conflicts between community members and the company, largely due to a failure to fulfil promises. A key informant interviewed on 20 March 2012 in Bako Tibe District explained that the District Administration had received a copy of a letter from Karuturi on 30 March 2010, which was directly addressed to the late Prime Minister Melese Zenawi, complaining about the difficult and life-threatening experiences that Indian employees had encountered at different times from the local people.

Two unsuccessful organized efforts by the local people in Bako Tibe District against Karuturi Farm were carried out: (1) Members of 11 mutual aid groups in the community contributed ETB 200 (US$ 10.43) each and sent a five-member delegation to Abadula Gemeda, former President of Oromia Regional State, to relay their dissatisfaction with the project. The representatives were denied an audience with the President. The four FGDs composed of five elderly farmers each, conducted at Goromitti and Oda Gibe villages on 3 April 2012, Chittu village on 4 April 2012 and Worabile village on 6 April 2012, unanimously explained that the local people elected representatives to request their land rights. To the dismay of the local people, their formal requests to the District Administration were ignored by the government. In addition, as explained by the FGDs, individuals who resisted the land transfer to the company have been detained and released with warnings of serious imprisonment if they repeat similar actions in the future. They were labelled as ‘community agitators’ and ‘anti-development activists’ by the government. (2) More than 400 farmers in the district signed a petition and submitted it to the District Administration asking for compensation for the lost land, but never received any response. Despite the various forms of organized and unorganized struggles by local people, Karuturi in Bako Tibe District continued to receive support and protection from the government and anyone who is against such investment is labelled as ‘anti-development’ and faces a stern reaction from the local authorities. This was largely the reason for the sporadic conflicts between local people and the company, rather than continuing to adopt an organized form of agrarian struggle to claim land rights.

The District government argues that the farmers in Bako Tibe District who claim to have lost their land to Karuturi have no statutory land rights and cannot claim compensation payments. But this claim is not correct, since there are a number of farmers with statutory land rights who have lost their farmlands without compensation. A woman who was interviewed on 7 April 2012 at Goromitti village said that Karuturi has constructed an airplane runway on part of her plot of land for which she has a land ownership certificate, but she never received any compensation. Similarly, the company has dug boreholes on land held by farmers with land certificates; these farmers, too, did not receive any compensation as per the provisions stipulated in the Constitution.

Likewise, the local community in Gambella Regional State did not welcome the Karuturi Company as they believed that its arrival signalled a threat of dispossession from their ancestral lands and livelihood sources. The company was in conflict with villagers in Palbol *kebele* due to the construction of diversion canals to take water from the Baro River. Due to the diversion, the community members lost their farmlands. Similarly, community members in Lar village elected a four-member representative committee and presented their dissatisfaction with Karuturi to the district authorities, but did not get any response. In 2012, the members contributed money and sent their representatives to the regional government to present their concern to the Head of the State. Again, they did not get any response to their complaints. In a related account at Godera district of Gambella Regional State, an Indian company called Verdanta Harvest Plc, which leased 5000 ha of land to be used as a tea plantation, faced stiff resistance from local people. Dissatisfied with the transfer of land covered with indigenous forest to the Indian company, the local people set farm buildings on fire on 26 October 2013, resulting in a complete destruction of the investment (*The Reporter* 2013). In a similar account, six Pakistani nationals who were working for Saudi Star Agricultural Development Project in Abobo District of Gambella Regional State and a local police officer were killed on 28 April 2012 (Solidarity Movement for a New Ethiopia [SMNE] 2012). Saudi Star is owned by an Ethiopian-born Saudi multi-billionaire, Sheik Mohammed Alamoudi, who is producing rice on 10,000 ha of land leased from the government.

However, there were mixed responses from local people with regards to Basen Farm in Abobo District of Gambella Regional State. While the local indigenous Anuak ethnic group living around the farm made clear their discontent and repulsion for the company, the highland immigrants who arrived in the area from 1984 onwards, welcomed the farm. The Anuak ethnic group claimed that their ancestral land is being taken away in the name of development with very little benefit accruing to them. By contrast, the settlers viewed the arrival of Basen as an opportunity to balance the long-standing conflict they have had with the indigenous people, in which they have been considered as intruders. Another reason for the settlers to welcome Basen Farm is that their major livelihood is farming. This means that the immigrants are preferred by the investor over the indigenous Anuak, who are considered as less efficient in performing wage employment in farming.

In Benshanguel Gumuz Regional State, the Gumuz ethnic group living around S&P Farm responded to the unmet expectations from the farm in different ways. In an interview held on 28 April 2014, the company manager of S&P Farm explained that there was an unhealthy relationship with the local people. Lootings are common and a building used by company employees was set on fire by unknown agents; the company alleged that it was a deliberate act by local people. All these cases of organized and unorganized agrarian struggles against large-scale farming in Ethiopia show the poor relationship between the companies and the local people as a result of their dissatisfaction with the investments.

The subsequent chapters provide a more detailed analysis of the impacts of large-scale farming on local communities' employment, income, food security status and selected environmental variables in order to show the micro-level impacts of large-scale farming in Ethiopia. This is done by analysing empirical evidence generated from the four large-scale farms located in Oromia, Gambella and Benshanguel Gumuz Regional State.