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CHAPTER 7: SUMMARY, CONCLUSION AND POLICY IMPLICATIONS

7.1 Summary

The Ethiopian government embarked on a shift in policy from smallholder-focused agriculture to more commercially oriented large-scale farming as it moved from the first- to the second poverty-reduction strategy programme formulated in 2002 and 2005, respectively. Large-scale farming was expected to contribute to the transformation of the economy and to the commercialization process of smallholder farming. This was to be achieved through technology spillover and inclusion of smallholder farmers in the value chain from production to consumption. Further, it was anticipated that it would address the country's food security problems, earn foreign currency, generate incomes from land rent fees and income tax, and create employment. Although land transfers to large-scale agricultural investment are primarily being seen in lowland areas – such as in Gambella and Benshanguel Gumuz regional states – where population densities are low, areas with high population density like Bako Tibe District have also attracted investors and large tracts of land have been transferred to large-scale farm developers.

Land is a key resource for peasants and agro-pastoralists in all the study sites. The land acquired by the Karuturi, S&P and Basen companies had been previously used by local people as a source of food and livelihoods. Land transfer for large-scale agricultural investment in Ethiopia, however, has been done hastily and without adequate and careful mapping of available land resources. The land identification process largely ignored previous land uses and the suitability of the land for the proposed type of farming. Livestock production, which is a key livelihood source for many agro-pastoralists, is negatively affected and land for the production of crops that are also important for food security has been transferred away from the local farmers. The fact that the local community does not have statutory land rights does not necessarily mean that the land is vacant, but since land belongs to the state under the Ethiopian law, the local people are easily dispossessed of their livelihood resources. This is especially problematic where land is owned customarily by local people, as in the lowlands of Gambella and Benshanguel Gumuz. Agricultural investment can be an important source of economic growth when tapped properly. However, with the current business model of mechanized, plantation-based large-scale farming adopted by all the study cases, there is very little contribution to the agricultural transformation of the country. Employment generated is very small and technology spillover to smallholder farmers and agro-pastoralists is effectively absent. Contributions in the form of building infrastructure such as roads, schools, health posts, etc. are absent. The results from most of the case studies indicate that food security has worsened and income levels are declining due to the investments. Competing claims over land and the land transfer processes brought conflict between investors and the local people. Sporadic conflicts occur because different levels of government back investors while local people have no recourse in law. While protests of various sorts have occurred in response to the land transfers, they have not brought significant changes to date. When local people do not have adequate support for the investments, the sustainability of the farms will be questionable. Experience from within Ethiopia reveals that farms (e.g. one farm owned by domestic investor in Benshanguel Gumuz and a second one owned by foreigner in Gambella) were set on fire by the local people and the government was not able to hold individuals accountable for the destruction. The sustainable operation of those farms was affected by the damage.

Further, it is important to note here that land transfer for large-scale plantations in Ethiopia attracted the attention of the media, human right groups and researchers due to the huge amount of land – stretching up to 100,000 ha – that the companies acquired, the magnitude of anticipated negative impacts on local people's livelihood and the environment, as well as the investors' ambition and promise to develop large amounts of land in just a few years and the huge expectations of the Ethiopian government that large-scale farming would be a tool of economic and agricultural transformation. However, against the expectations of the Ethiopian government about the contributions of large-scale farming to local economic development, and contrary to the ambitions and promises of the investors to turn the challenges of farming in the Ethiopian context towards opportunities of earning profit, the large-scale investment projects examined in this study have been poorly managed, had low productivity and thus harvested poor yield, and developed only a small proportion of the lands acquired. The apparent failure of notable investors like Karuturi, who attracted the attention of the media and human right groups,

signalled a number of key issues, including: the need for the Ethiopian government to assess the suitability of the lands for the specific type of crop. For example, Karuturi's concessions in Bako and Gambella are suitable for grazing animals and cultivating crops other than maize. Furthermore, the experience of the investor in terms of farming in challenging tropical environments must be examined. For example, the areas in Bako and Gambella have water-logging problems that require specialized farming experience. And, finally, the financial and technical capacity of the investor to develop huge tracts of land in the shortest time period must be looked into.

The impact of large-scale land acquisition on local level food security, on income levels, on selected environmental parameters and on the local economy in general can be summarized using the framework of Bardhan (2006, p. 1394). Bardhan identified four capacities of the poor – 'the poor as self-employed or wage workers, consumers, recipients of public services or users of common property resources' – to analyse the effect of globalization on rural poverty. Investment in large-scale farming is a result of the globalization process, and thus its impacts on various outcome variables can be summarized using this framework.

Smallholder farmers who produce agricultural commodities and who are net-sellers of their production (i.e. in their capacity as self-employed workers) may face stiff competition from large-scale farms that produce similar commodities which they then supply to the local market. For example, Karuturi's large-scale farm in Oromia supplied maize grain to the central market in Addis Ababa and the company's concession in Gambella exported its produce to foreign markets.⁶⁹ Thus, both cases had no a price dampening effect on local farmers who produce maize grain and who are net-sellers. While farmers in Bako-Oromia are net-sellers of maize, those in Gambella are net-consumers of maize as their production only complements their livelihoods based on agro-pastoralism, as in the case of the Nuer, or hunting and gathering, as in the case of the Anuak. In the case of Basen and S&P, the commodities produced by the companies were not similar to the agricultural commodities produced by the local farmers, and thus had no price dampening effect. On the other hand, the local people, in their capacity as wage workers, could

⁶⁹ Karuturi is reported to have exported about 30,000 tons of its 2012/13 maize production to the Sudan market before it collapsed completely in 2014.

have benefited substantially from the large-scale farms had they created meaningful wage employment. Nevertheless, as discussed in Chapter 4, employment generated from large-scale farms is seasonal and wage incomes are too small to have a meaningful impact on the life of the wageworkers (e.g. the case of Karuturi in Bako). In some of the cases, the benefits from the limited wage employment opportunities accrued to migrant workers from outside the local area and thus local people benefitted very little (e.g. Karuturi in Gambella, Basen in Gambella and S&P in Benshanguel Gumuz).

The local poor, in their capacity as consumers of the products of large-scale farms, could face different impacts. In this regard, Karuturi Farm allowed the Nuer in Makuey district to collect the flood-damaged maize grain for two consecutive years from its Jikawo farm site. Since the loss of grazing land and cultivation plots of the Nuer was compensated for by the maize grain harvested from Karuturi's Farm, the impact of the intervention on the food security status of the Nuer was not significant, despite initially negative signs. In the other farms studied, the local people did not benefit as consumers of the products of the large-scale farms either because the produce was sold outside the local area or the companies produced non-food commodities.

The impacts of large-scale farms can be also viewed by considering the local people in their capacity as users of common property resources. In this respect, the interventions in all the study regions brought a decline in the quality and quantity of different types of natural resources (discussed in Chapter 6). As a result, the interventions undermined the income and food security of the local people whose well-being depends on the use of different types of natural resources (discussed in Chapters 4 and 5).

Finally, the local people in their capacity as recipients of public services (e.g. health, education, different farm inputs, road infrastructure, water, etc.) could be affected either positively or negatively by the interventions of the large-scale farms. On the one hand, the large-scale farms may participate in different community development activities, and therefore may increase the quality and availability of public services. On the other hand, the large-scale farms may decrease the availability of public services through increased use of the services by the concentration of people arriving in the area as a result of the interventions. In the case studies examined here, with

the exception of S&P, no meaningful participation by large-scale farms was observed in the supply of different public services (Chapter 3). In the case of S&P, as a result of their school feeding programme, primary school enrollment rates had improved and the drop-out rate had declined in Kota village of Benshanguel-Gumuz Regional State.

While the Bardhan framework is important for summarizing the impact of large-scale land acquisition on the rural poor (i.e. impact at micro-level), to make the story complete, it is important to examine and summarize the contributions of the interventions at the macro-level. As discussed in Chapter 3, the micro-level impacts of large-scale land acquisition on local economic development, household food security, income levels and on the environment are disappointing. Some macro-economic benefits are, however, anticipated. In the case of Basen Farm, for example, local resources are expropriated for the supply of raw materials to the textile industry. Similarly, before the complete collapse of Karuturi Farm in Gambella Regional State, it brought in foreign currency to the national treasury by exporting 30,000 tons of maize to South Sudan. This raises a question about what resources are being expropriated and for whose benefit (i.e. *development for whom?*). Generally speaking, the local people are the losers, while the investors and the macro-economy are the winners from these types of investment.

7.2 Comparing Impacts of the Large-scale Farm Cases

Although large-scale farms generally brought hardship to the local population, variations in terms of magnitude of impacts are observed among them. The study had the proposition of examining impacts of large-scale farming by comparing case studies based on their geographical location and the type of crop commodities cultivated by the companies. This is because the magnitude of impacts of large-scale farms on the food security and income levels of the local people, and on the environment is expected to be influenced by the geographical location of different types of crop commodities (such as food crops, biofuel feedstock and crops for industrial raw materials). The following discussion provides a comparative perspective of the impacts of the large-scale farms based on the two parameters expected to bring differential impacts on the food security and income levels of the local people, and the environment is expected to bring differential impacts on the food security and income levels of the local people, and the environment.

7.2.1 Comparison based on geographical location of the large-scale farms

The case studies chosen for this study are from both the highland and lowland due to the aim to examine the differences in impacts of the investments on local level development – food security, income and environment. The highland and midland areas are densely populated in Ethiopia and mixed crop-livestock farming is the dominant livelihood activity. Land scarcity is a major bottleneck in agricultural production and threatens local food security in these parts of the country. In terms of level of infrastructure development and degree of integration to regional and central markets, these areas fare better than the lowland regions. The local people in the lowlands, on the other hand, practise agro-pastoralism, crop production based on shifting cultivation and recession farming, make a living through hunting and gathering, and engage in other livelihood activities such as fishing and small-scale mining. Land availability in these regions is relatively better than the situation in the highlands. However, the areas are characterized by poor infrastructure and climatic conditions that are hostile for living. Both regions are targeted for large-scale plantations and a sizable proportion of farmlands have been acquired by both domestic and foreign investors.

The analyses of data generated from investment projects in the highland and lowland areas exhibited different impact levels. The findings from the case study in Bako Tibe District (representing highland/midland regions) showed disappointing outcomes. Given the fact that land is scarce in the context of relatively densely populated areas, making land available for large-scale agricultural investment undermined local food security and income levels. Employment opportunities are not only limited, but wages are very low given that there is an abundant landless youth who could potentially work as wageworkers on the plantations.

In the lowland regions, the impacts of large-scale plantations on local level food security and incomes were insignificant despite a decline in both. This is related to the availability of land still accessible to local people (e.g. S&P in BGRS) and compensation, which came in the form of an economic trade-off – despite losing access to land, locals could collect maize grain damaged by heavy floods (e.g. the case of Karuturi in Gambella-Nuer). In the other two cases investigated in the lowland parts of the country (Karuturi in Gambella-Anuak case and Basen Farm), significant negative impacts as a result of the interventions on local level food security and income levels

were observed. The highland settlers in Abobo District of Gambella Regional State share common characteristics with the population in other highland/midland regions in the country. Mixed crop-livestock farming is the dominant livelihood system, and access to land is constrained by the intervention of Basen Farm. They are enclaved by the company (Figure 5.1) and additional access to land is limited due to their immigrant status, despite the fact that the large-scale farm has not fully developed the leasehold concession. Due to land shortage, the food security status and income levels of immigrants have worsened. In the case of Karuturi's intervention in Gambella, where the Anuak live, the impact of appropriation of land-based resources on the food security status and income levels was tremendous. Although Karuturi did not fully develop its entire concession in the Anuak's area, the clearing of important tree species that the Anuak depended on meant that the intervention had a negative effect on the food security and income levels of the Anuak.

Negative environmental effects in the form of depletion of organic matter, worsening of soil compaction, declining levels of soil micro-nutrients and clearing of indigenous trees are observed in both the highlands and in the lowlands. This is because all the farms studied have uniformity in their farming operations. They bulldozed indigenous trees, used mechanization that increased soil compaction, planted mono-crops that uniformly extract soil nutrients and are operated by individuals who have very little expertise in natural resource management.

The pace of land development by the companies in the highlands and lowlands went against the expectations of the government and the land-deal contracts. The sluggish performances of the agricultural investment projects had their own impact, either negatively or positively, on the local development of the regions. One can argue that if the agricultural projects were fully developed, the number of jobs created and the amount of revenue generated from corporate income tax that could be used to finance public development projects would have been sizeable. A counter argument is that had there been full development of the large-scale farms, the negative impacts of the projects would have been much greater than the magnitude of negative impacts currently observed. This is likely to be true both in the lowlands and in the highlands. The impacts of large-scale farming in some of the case studies in the lowlands (e.g. Karuturi in Gambella's Nuer case and S&P in BGRS) were insignificant but negative due to local people's

continued access to land-based resources in the areas acquired by the companies but not yet developed. When the companies fully develop their leasehold concessions, the negative impact of the interventions on local people's food security and income levels may well become significant.

7.2.2 Comparison based on type of crop commodity cultivated by large-scale farms The findings from the case studies revealed that there are differences in the magnitude of impacts among companies that cultivated different crop commodities. This is largely due to differences in the labour absorptive capacity of investment projects and the interaction of the crop commodities with the natural environment. For example, in Gambella Regional State, cotton production by Basen Farm generated better employment opportunities (up to 0.38 jobs per ha) with relatively decent wages compared to the production of food crops by Karuturi, despite the fact that those benefitting from the employment were migrants from the South.

On the other hand, production and harvesting of food crops (e.g. maize in Gambella, Oromia and BGRS) are mostly conducted through mechanization with very limited involvement of local people in wage labour. The only opportunity available for local people in terms of employment is bird watching and, in some limited cases, weeding the maize farm. Production of pongomia trees, on the other hand, engages a limited number of labourers in the period once the tree is established and the seed matures. Hanlon (2011) also reported the limited employment creation potential of biofuels in Mozambique. However, in terms of environmental impacts, production of maize and cotton proved to have adverse environmental impacts compared to the cultivation of pongomia trees and the intercropping of pigeons and maize by the S&P Company. Ellen and Kring (2012) reported that the local food security situation in Mozambique was improved when food crops produced by large-scale farms were supplied to the local markets. In the short-run, this was also observed in Ethiopia's Gambella Regional State. The negative food security impact of losing land for the production of maize by Karuturi in Gambella (i.e. in the Nuer case) was compensated for by the availability of flood-damaged maize grain for local consumption. Karuturi sold its maize harvest from its Ilia site (i.e. the Anuak case) to South Sudan with no meaningful contribution to local food security.

In sum, the negative socio-economic impacts of transferring land for large-scale agricultural investment through the alienation of the local people from land-based resources are worse in the areas where population density and land scarcity are high. Nevertheless, by looking at the trends and the impacts observed so far, it is also possible to argue that the negative impacts of large-scale land acquisition will be significant in the long-run in the lowland regions too. The negative impacts on local level food security and income levels are exacerbated by the limited engagement of local people in employment opportunities in particular and in the agricultural value chain in general, which would potentially compensate for the alienation from land-based resources.

7.3 Factors Determining Performance of Large-scale Farms

Although it is too early to conclude that large-scale farming has failed in the Ethiopian context, based on the extrapolation of early outcomes, one can argue that many of the interventions were not successful. It is, therefore, important to examine why the companies failed to live up to expectations. A number of interacting factors explain the poor performance of large-scale plantations in Ethiopia. The discussion below hinges on the key factors that determine outcomes of large-scale plantation and provides sound explanations based on the specific experiences drawn from the case studies.

7.3.1 Capacity and farming experience of the investor

With the emergence of a new phase of large-scale land acquisition, the literature on impact studies has focused on land acquired by foreign investors and little has been said about the impacts on the local economy by domestic investors. In several countries, including Ethiopia, the size of land destined to domestic capital is huge and it is equally important to assess its impacts. Against this background, this study included a large-scale farm owned by a domestic investor and analysed its impact on the local economy in order to shed light on any possible differences with foreign-owned agricultural investments. In Ethiopia, there is an entrenched government position that foreign investors have the needed finance, technical know-how and technology. They can develop farmlands of any sort in the shortest time period possible, increase the volume of agricultural production locally, contribute to the construction of infrastructure and generate foreign currency through exports. Their technical know-how can be transferred not only to

smallholder farmers, but also to other domestic investors operating around them, thereby enhancing agricultural productivity.

Contrary to these expectations, the pace of land development is disappointingly low for foreignowned farms compared to domestic ones. For instance, Karuturi and S&P farms developed only 7.2% and 3.7% of their leasehold concessions, respectively, while Basen Farm, a domestic investor, cultivated 35.7% of its acquisition. Again, the anticipation of the government that foreign-owned farms have few financial constraints and can develop what they acquired with little support from domestic banks was misplaced. In support of this argument is the fact that Karuturi received US\$ 6.64 million from Ethiopian banks but failed to repay its dues, while the domestic investor received US\$ 6.36 million and is paying back the loans to its creditors. As Table 3.1 shows, of the total US\$ 71.5 million loans provided to large-scale farming companies, close to 80% of the finance was given to foreign-owned farms. Records show that the amount of duty free machineries and chemicals imported by Karuturi and S&P farms were significantly high (Chapter 3) and yet the companies cultivated only a tiny proportion of their concessions.

The literature on the drivers of large-scale farmland acquisition mentioned the global financial meltdown as one of the factors that has resulted in an unprecedented rush for Africa's farmland. The financial crisis, in retrospect, hindered large-scale farms' access to loans from lending institutions. Thus, large-scale farms were incapable of financing the costs of developing huge tracts of land in just a few years. The AILAA estimated that, on average, developing a hectare of land for crop production requires close to ETB 30,000. As a result, investors like Karuturi and S&P drained their accounts in the process of opening new farmlands often covered by natural forests, bushes and savanna grassland. The costs to these companies of developing the huge tracts of land (50,000–100,000 ha) they acquired should not be underestimated. The loans that Karuturi received (Table 3.1) from Ethiopian commercial banks were simply too small compared to the financial capital needed to develop such huge amounts of land. Similar sentiments were expressed during my interview with the Manager of S&P Company, which was conducted in the company's compound at Kota village on 6 May 2014. Mr. M.V. Sira Reddy explained that despite the company investing close to US\$ 16 million, it was only able to develop a small proportion of the farmland it acquired. Explaining the challenges of land clearing, he mentioned

that developing a hectare of land requires clearing, on average, 70 big trees and scattered bamboos. He further noted that although the company requested loans from the Ethiopian banks, they were not approved by the government and the company was forced to reduce its operations due to a shortage of finance.

It is also important to mention the lack of farming experience of foreign investors in tropical agriculture like Ethiopia. For example, Karuturi outsourced its agricultural operation to Multiplex Bio-Tech Pvt. Ltd. This Bangalore-based Indian company is responsible for the selection of crops suitable for the agro-ecology and soil types for the Oromia and Gambella farm stations (Multiplex 2013). The land acquired by Karuturi in both regions has challenges of waterlogging and intermittently faces flooding problems. The crop chosen by the company for both its sites, maize, is not suitable for land with these kinds of challenges. As a result, the performance of the company was disappointing. In the case of S&P Farm, the company is a construction conglomerate and has never been engaged in agricultural activities in its history. While the Ethiopian government expected to see the entire concession fully developed within a three-year period, the company remains at the learning-by-doing stage, where it is trying different types of crops for suitability. Moreover, it has not recruited any professionals with experience of farming under Ethiopian conditions. By contrast, Basen Farm, which is owned by a domestic operator, has recruited a few Ethiopian agriculturalists with experience in Ethiopian agriculture, albeit that the professional mix is not ideal in terms of guiding the operation of the farm in a scientific way. The monitoring report conducted by the Ministry of Agriculture in Oromia, Gambella and BGRS also identified the absence of professionals with relevant training in agriculture in the majority of the large-scale farms (see MoA 2011c, 2012 and 2013). In the case of floriculture, however, evidence from Ethiopia showed that foreign-owned farms performed better than domestic-owned farms due to the technical and managerial capabilities of foreign operators in the flower sector (Stebek 2012).

The evidence from the three case studies indicated that the assumption held by the government that foreign-owned farms have the needed financial capital to develop huge land size in the shortest time period is incorrect. Compared to those investors of foreign origin, the domesticowned Basen Farm developed a relatively higher proportion of farmland and was operated by agriculturalists who have experience in Ethiopian agriculture, despite the company having similar financial constraints to its foreign counterparts, (as mentioned by the Farm Manager in an interview conducted at Abobo on 16 March 2013). The capacity and farming experience of the investors has thus influenced the performance of the large-scale farms.

7.3.2 Problems related to infrastructure, labour availability and markets

Ethiopia in general and under-developed regions such as Gambella and Benshanguel Gumuz in particular, have poor infrastructure in terms of roads, electricity, access to potable water, and health and education facilities. The availability this type of infrastructures is important for attracting well-qualified human resources. More importantly, road infrastructure is useful for enhancing the efficiency of input-output markets. Improved market efficiency is the transmitting mechanism for investment in road infrastructure to progress in economic development (Worku 2011). Poor road infrastructure increases input and output transportation costs (Dercon et al. 2009; Shiferaw et al. 2011) and results in fragmented markets (Tybout 2000). This has become one of the formidable challenges facing large-scale farms located in Gambella and Benshanguel Gumuz regional states. The Ministry of Agriculture monitoring report identified poor access to different types of infrastructure as one of a number of pressing problems for large-scale farms in Gambella and BGRS (MOA 2012 and 2013). The managers of the large-scale farms under review here mentioned the high costs of transportation for inputs and outputs as critical challenges to their performance. Basen Farm transports raw cotton to central Ethiopia where private ginneries are located. As a result of the poor road facilities, the costs of transportation are high and flatten the comparative advantage of producing cotton in Gambella. S&P Farm also faced problems in terms of the timely access to farm inputs (fertilizer and improved seeds) and getting good prices for its outputs due to high costs of transportation.

Similarly, poor access to health infrastructure and medicines means that large-scale farms struggle with labourers who are either frequently absent from the field or perform below their labour capacity due to health challenges. The areas where Basen, Karuturi and S&P operate in Gambella and BGRS are known to be infested with malaria and poisonous snakes. Lack of human capital, especially healthy and skilled labour that can guide farming operations in harsh climatic conditions is another crucial factor disturbing the smooth and successful operation of

large-scale farms in Ethiopia. Climate-related variability is colossal and weather extremes are common. Although availability of cheap labour is mentioned as an input that gives Ethiopia a comparative advantage in agricultural investment, agricultural farms operating in remote and under-developed regions like Gambella and BGRS are struggling with the lack of (unskilled and skilled) labour in the area. As mentioned, this is related to the harsh weather conditions and malaria infestations that make migrant labour less interested in working in those areas. At the same time, the negative preoccupations of employers about the local population in Gambella and BGRS regarding their abilities and work ethics contributed to the lack of interest to recruit from the local population, and thus increased the scarcity of labour. As a result, shortage of labour is a detrimental factor in terms of the successful performance of large-scale farms.

At Basen Farm, the Farm Manager explained that the company recruits wageworkers from the Wolaita Sodo area, covering the costs of transportation and accommodation. Due to competition for scarce labour, the unit cost of labour is very high given that labour is abundant in the country. This situation is exacerbated by the large-scale farms operating in the area competing for scarce labour. According to the Farm Manager, labour shortages meant that a number of mature cotton fields were not picked and, subsequently, damaged by the early on-set of rain in April in 2011. In BGRS, the Operations Manager of S&P Farm mentioned that labour scarcity is one of the bottlenecks for the farm's operation. They recruit wageworkers from the Gojjam area, but due to the presence of malaria and snake bites, labourers are not interested in working at the farm. The Grand Ethiopian Renaissance Dam Project being constructed in Guba District absorbs much of the labour available and the performance of S&P Farm, according to the Operations Manager, is severely affected due to the shortage and high costs of unskilled labour.

7.3.3 Institutional and land governance related factors

The poor performances and perhaps the negative impacts of large-scale plantation monocultures in Ethiopia in general and in the study cases in particular have to do with the land governance system established by the government. Firstly, the renewed interest in farmlands by public and private actors happened at a time when Ethiopia was not well-prepared in terms of identifying available resources for large-scale farming. As a result, the land identification process, the selection of investors and the awarding of land to investors was done hastily and failed to take into account local people's livelihoods and the suitability of land for specific crop commodity, and before putting relevant terms, conditions and provisions on the negotiation table to ensure that large-scale farming meets the expectations of the local people and the government. This haste was largely a result of the Ethiopian government's desire not to miss an opportunity with regards to what it viewed as inward investment in agriculture.

Ethiopia's land tenure system provides all rights to the government and is used to systematically ignore land-uses by local people through customary tenure regimes. Peasants and pastoralists who do not have land certificates are not recognized, and therefore are not eligible for compensation despite their use of the land through customary tenure regimes. The findings from this study show how this has undermined the local food security and income levels and thus increased conflicts and gained very little grassroots support. The lands identified by the AILAA include lands covered by savanna grassland, forests and bushes, and as the AILAA argues, these lands are unused or insufficiently productive.

There is a misconception that all these lands are suitable for crop farming and that establishing large-scale farming on these lands boosts food production. The results from Karuturi in Oromia and Gambella show that the suitability of the land for maize production was not well-studied, either by the AILAA or by the company. As observed during fieldwork, the leasehold concession of the company in both regions is frequently affected by water-logging problems, and so is suitable for crops other than maize. The local people in both regions knew from their experience that the lands are best suited to livestock production, rather than crop farming.

Therefore, the poor performance of the large-scale farms and the negative impacts of the interventions can be linked in part to the lack of an appropriate land-use plan instituted by the AILAA, a governmental structure entrusted with land governance issues. For their part, the investors who acquired lands from the government claim that the leasehold concessions are not of a uniform quality and thus are not suitable for crop production everywhere. Some are hilly and stony (e.g. Basen and S&P farms) and others are wetlands (e.g. Karuturi Farm). However, the land rental tax, the investors complained, is calculated based on the entire land size and on the assumption that the whole area of land is suitable for crop production. Further, the area of land transferred to the investors is based on a rough estimation rather than an actual measurement. A

key informant working in the Office of Agriculture in Guba District who was interviewed in 2010 mentioned that the rather crude method used to estimate the size of land to be transferred to investors was driving along the streets on motorcycles.

Appropriate land identification is only part of the land governance exercise. The identification of capable and committed investors and the awarding of land to the investor by incorporating relevant provisions in the land deal contracts are equally important for a positive performance and impact. In the Ethiopian context, there is a huge gap in terms of identifying the right investor. For example, S&P is a construction conglomerate with no prior experience in agriculture. Karuturi's farming experience was in cut-flower production, not in large-scale plantations in tropical environments. In all three case studies, the size of land transferred to the companies did not take into account the registered capital of the investors. This claim is consistent with the monitoring report by the Ministry of Agriculture (see MoA 2011c, 2012 and 2013).

In some cases, lands may have been acquired for speculative ends, to access loans from banks and to utilize investment incentives provided by the Ethiopian government. In this regard, it was alleged that Karuturi participated in the machinery and tractor rental business using the duty-free privilege provided for investors. Karuturi and Basen are alleged to have diverted loans to other ends than expanding their cultivation. Such problems could be rectified through close monitoring and support by the government. The AILAA neither has the needed capacity, nor has it established strong linkages and coordination with regional and district government organs to closely monitor and take appropriate corrective measures against those that default or to provide support to those in need of it.

During the negotiation process with investors, and as part of the land deal contract agreements, engagement of investors in community development activities and management and conservation of trees, soils, water bodies, etc. is given less focus. Unless the large-scale farms work in tandem with the local people, their sustainable operation will be unrealistic. This was garnered from the key informants interviews with the managers of Basen and Karuturi. That is to say, it is clear that as a business entity they work for profit rather than charity, and they have no plans to engage in

community development. This goes against the expectations of the Ethiopian government, despite the fact that community development was never made part of the negotiations and the signing of the land deals.

Poor linkages among different institutions such as the Ministry of Agriculture and, more specifically, AILAA, the Environmental Protection Authority, the Ethiopian Investment Authority, the Ethiopian Wildlife Authority, agricultural research centres and different regional, zonal and district government structures that have roles, mandates and responsibilities in agriculture and agricultural investment is another challenge to the performance of large-scale farms. Several supporting evidences can be mentioned here as a cursor for this claim.

(1) In the early 2000s, regional states were mandated to hand out farmlands of any magnitude to investors. Later, the mandate to transfer farms greater than 5,000 ha was taken up by the AILAA. Since there was no clear demarcation of the land under the mandate of regional states and the AILAA, there have been cases where the regions and the AILAA have transferred the same parcel of land to different investors, showing the poor linkage between regional and federal structures.

(2) The land identified and handed to Karuturi in Gambella overlaps partially with Gambella National Park. The land identification process by the AILAA did not involve the Ethiopian wildlife authority.

(3) Regional and district revenue offices are mandated to collect land rent, employees income and corporate income taxes. However, since the large-scale farms received lands from federal government, the companies have little linkage with regional and district governments. Equally, the local governments do not have much information about the large-scale farms and therefore do not regularly collect the much-needed fiscal revenue anticipated by the Ethiopian government or provide the large-scale farms with needed support. As the Manager of S&P Farm alleged, for instance, the farm has stronger linkages with the federal government than with the district administration. This was demonstrated by the lack of support they observed when their production was looted by unknown bodies. (4) Apart from providing investment incentive packages, such as the duty-free import of machineries, the Ethiopian revenue and customs authority has very little control over how imported machineries are used and there is no effective monitoring system. As presented above, Karuturi was allegedly involved in the machinery rental business. This happened because of a weak linkage and information sharing between district/regional administrators, district/regional revenue offices and the AILAA.

(5) The large-scale farms are observed to have weak linkages with federal and regional agricultural research centres as technologies generated by research centres were not adopted by the companies. All these issues affected the performance and outcome of large-scale farms in the study regions.

7.3.4 Socio-economic and natural context

Although previously mentioned in a number of sections, it is important to reiterate the role of socio-economic and natural factors. Compatibility of the interventions with local and social contexts is vital. Compatibility between the local context and the new agricultural investment interventions will facilitate the availability of labour from within the local population. For example, Basen Farm struggled to get wageworkers from outside Gambella since cotton farming is something new to the area. S&P Farm in Benshanguel and Karuturi in Gambella are also facing similar challenges since the local people are less familiar with intensive crop farming. Most importantly, the new investment by large-scale farms provides a chance to integrate local people into the value chain, from production to consumption. The livelihood portfolio of the local people in the lowland areas is dominated by shifting cultivation and agro-pastoralism, which are less compatible with plantation monoculture and thus the model gained very little support from local people. The objective of modernizing the agricultural sector could be achieved if the large-scale investments take into account the local contexts of communities that host investments. It is naive to anticipate technology adoption by smallholder farmers and agropastoralists when the interventions by large-scale farms remain different from their livelihood experiences.

Compatibility of large-scale agricultural investments with the natural environment is also important. In the cases examined for this study, investors gave little consideration to the suitability of lands for the crop commodities they produce. Water-logged/swamp areas may be compatible with fish farming and/or cultivation of paddy that loves water. Against the natural context, however, Karuturi cultivated maize in Gambella. The availability of savanna grassland in Gambella indicates that modern livestock farming might fit better to the natural context than opening up crop fields. The natural conditions in which S&P is operating may be more compatible with honeybee production while at the same time maintaining the natural forest than it is with introducing new crops that are not always suited to the area.

In sum, it is possible to argue that compatibility of the large-scale agricultural investments with the local/social and the natural contexts will enhance the performances of large-scale farms and render positive impacts to the local population as there will be a greater chance for horizontal and vertical integration of the local people with the global food system.

7.3.5 Misconceptions about large-scale land acquisition

The performances of the large-scale farms and their impacts on the local people are affected by misconceptions held by activists, investors and hosting governments. First, there is a widely-held misconception that all large-scale land acquisitions violate country laws and are 'land grabs' The proponents of this view are dubious about the positive contributions of large-scale land acquisitions, and thus campaign to stop it. Such campaigns have slowed down the development of large-scale farming in Ethiopia. Zoomers and Kaag (2014) discussed also this misconception.

Second, the Ethiopian government argues that those lands allocated for investment are insufficiently productive and so allocation of such lands for large-scale investment facilitates the agricultural modernization process. This is a false premise. The government is also under the misconception that livelihoods based on mobility and agro-pastoralism are unsustainable (Schoneveld 2013) and it vowed to change this by promoting large-scale plantation monoculture. The traditional way of life in the lowlands is, however, not necessarily 'unsustainable' and could become a sustainable way of life in its own right if appropriate government support, similar to the level of support provided to smallholder farmers in the highlands, is given. Further, land for biofuel feedstock production is allocated based on the misconception that biofuel crops need barren or less productive lands while the practice under the Ethiopian context (e.g. S&P Farm) showed that the best lands that can be used to produce foods. These misconceptions are used to

promote large-scale farming but had a negative impact on the food security and income levels of the local population.

Third, there is a widely held misconception by investors who assume that arable lands in the Ethiopian lowlands (Gambella and Benshanguel) are fertile and do not require extra farming inputs. The management of the farms I studied are not guided by appropriate soil testing, due to a misconception that macro- and micro-nutrients are adequate. This has undermined their productivity and overall performances. Some of the misconceptions about large-scale land acquisitions are also documented by Vhugen (2010).

In general, large-scale farms in Ethiopia have contributed little to fulfilling development expectations. This is partly because of misconceptions and unrealistic assumptions about the potential contributions of large-scale farming. For example: (i) there is unlikely to be any technology spillover from large-scale, mono-crop and mechanized farming to local people who cultivate crops under a system of shifting cultivation using hand and hoe, and who predominantly practice agro-pastoralism; (ii) it is a misconception to anticipate massive employment opportunities from large-scale capital-intensive mechanized farms. Experiences of foreign-owned, large-scale farms in South Africa indicate that such farms generate few jobs as they are highly capital intensive (Econenergy 2008); (iii) the expectation that large-scale farms will invest in social and physical infrastructure construction is unrealistic when there is no binding contractual agreement between the AILAA and the investor in this regard and given that investments are largely set-up for business motives; and (iv) it is unrealistic to assume that foreign investors have an enormous capital capacity and can easily develop the huge parcels of land that have been transferred to them. It is also unrealistic to expect them to be able to generate instant foreign currency, raw materials and revenue. Therefore, unrealistic and too high expectations about large-scale farming, along with misconceptions and a poor understanding of the obstacles to production in these regions have brought about poor performance by the farms and widened the gap between earlier expectations and ground results, and resulted in poor outcomes.

7.4 Conclusion

The findings of this study divulged that large-scale mechanized farming generally undermined local level food security and incomes, generated little employment opportunities for the local population, deteriorated the local environment, especially in terms of vegetation cover and soil quality, and contributed little to local economic development such as infrastructure construction, technology transfer, and generating fiscal revenue and foreign currency. It is therefore important to be critical at this point that the approach of large-scale mechanized farming contributes little to the economic and agricultural transformation of Ethiopia.

One of the contributions of this study is its effort to critically examine and extend the win-win argument advocated in the 'land grab' literature. While the argument that large-scale investment in agriculture will result in a win-win solution for both investing and hosting countries is theoretically attractive, there are practical shortfalls in the context of Ethiopia. The argument is based on the assumption that large tracts of idle land are available globally and that these can be used for agricultural investment and offer potential to recipient countries.

First, the notion of 'available land' is problematic. The identification of available or marginally productive land for large-scale investment is carried out in Ethiopia using remote sensing mechanisms without sufficient ground truthing. The livelihood system of the population in the lowland parts (e.g. Gambella and Benshanguel Gumuz) of Ethiopia are based on shifting cultivation and agro-pastoralism. These types of livelihood systems are not captured by remote sensing mechanisms unless the GIS maps are checked on the ground through detailed surveys. Abbink (2011) and Nalepa and Bauer (2012) also argued that pastoralists and agro-pastoralists, whose livelihoods are based on mobility and shifting cultivation, can be easily divested of their livelihood resources when land for investment is simply identified through remote sensing. The unused land narrative also refers to lands occupied by pastoralists that are assumed to be insufficiently productive but not necessarily 'empty' (Galaty 2012; Lavers 2012b) and which may have cultural and ecological significance or form part of pastoralists' seasonal herding system (Borras & Franco 2012). This holds true in all the case studies examined in this study. It also refers to land that crosses National Park boundaries or that supports the livelihood of nomadic pastoralists or semi-nomadic people (Nalepa 2013). For example, the land allocated to

Karuturi in Gambella partly overlaps with the Gambella National Park, which has never been gazetted. It can also include land that provides local people with a side-line economic activity, such as collecting honey, wood or other forest products (Abbink 2011), as in the case of the Gumuz and the Anuak in Benshanguel Gumuz and Gambella regional states, respectively.

Second, the Ethiopian government argues that livelihood systems based on extensive livestock production systems are unsustainable and insufficiently productive and therefore can be expropriated for large-scale agricultural investment with little socio-economic trade-off. The lands identified by the AILAA thus included lands that are not necessarily unused, but which are purported to be marginally productive. While efficiency could be enhanced by increasing the productivity of insufficiently productive lands, the outcomes from the transfer of these lands to large-scale agricultural investment in Ethiopia has proved counterproductive. For instance, the investment projects that replaced the mixed crop-livestock system of the local people in Bako Tibe District resulted in a loss-loss-win situation for the local economy. The value of agricultural production (crop and livestock production added together) generated when the land was farmed locally excelled that of the large-scale farm at the district level. By the same token, the income and food security status of local people declined after they had lost access to the land they had used through customary tenure regimes. The land transfer put the local people and the district economy under a loss-loss situation, but enabled the company to make financial gains, resulting in a loss-loss-win scenario. In Gambella, a similar trend is observed, especially in the Basen and Karuturi-Anuak cases.

The findings from this study proved that the win-win scenario didn't happen under the Ethiopian context. I, therefore, argue that the approach of large-scale mechanized farming failed to transform the agricultural sector of the country and to bring the needed economic gains for the local population. In support of this, Borras *et al.* (2013, p. 169) called the win-win argument a 'regulate to facilitate land deals' position, frequently held by mainstream economists. De Schutter (2011, p. 250) also argues that although inward investment may be well managed, it has 'high opportunity cost and less poverty-reducing impact' compared with situations where the land is put to an alternative use by the local farming community. He has argued that the World Bank's PRAI are simply instruments to 'destroy the peasantry responsibly' and he has suggested

promoting smallholder-focused agriculture that has pro-poor and poverty-reducing effects. He is supported by activist groups who warn that the development model of large-scale plantation agriculture displaces local people from their land, degrades the environment and undermines local food security (Via Campesina 2008; Mersha 2009; McLure 2009; Rice 2009; Fitzgerald 2010; Grojnowski 2010; Mihretie 2010). Their advice is to 'stop and rollback land grabbing' (Borras *et al.* 2013, p. 169). The analyses carried out based on two different land-uses demonstrate that the local economy in general and the food security and income levels of the local people in particular deteriorated when the land is used for large-scale farming, implying the failure of large-scale farming in terms of contributing to local economic development. Therefore, although land in Ethiopia is legally owned by the government, and farmers and pastoralists with customary land ownership right has no legal right and they can be expropriated anytime, it is imperative to take into account livelihood activities of the local people that are based on customary land-ownership before deciding to transfer land for investment.

The emerging literature contends that the type of business model adopted by large-scale farms determines the impact of large-scale farms on the local economy and the environment. Although all the four case studies selected as the object of this study adopted large-scale plantation monoculture as their business model, a cursory review of other forms of business models is useful for shedding light on future research activities. Smalley (2013) argued that contract farming, out-grower schemes and commercial farming increases the vertical and horizontal linkages of the large-scale farms with local farmers. While the experiences of out-growers scheme adopted by Ethiopia's state-run sugar estate showed negative outcomes (Wendimu *et al.* 2015), positive impacts were recorded in the case of Tanzania's out-grower scheme (Smalley *et al.* 2014). In this respect, more research may be needed to examine the impact of other business models in the Ethiopian context. In all the four cases examined, the integration of local people with the large-scale farms is effectively absent due to the type of business model adopted by the farms. Indeed, it rather aggravated conflicts. As already discussed in Chapter 3, for instance, conflicts between Karuturi at Bako and the local people have been common.

7.4.1 Implications for Ethiopia's political economy

Large-scale farms in Ethiopia are intentionally set up in lowland areas where (agro-) pastoralism and shifting cultivation are prevalent. The government believes that these ways of life are 'unsustainable' and 'backward' and need transforming. Evidence from this study suggests that large-scale farms have contributed little to fulfilling rural development objectives in these regions.

Further, it is argued here that the approach of leasing out farmland for large-scale agricultural investment is risky and that diligent verification of current land-use patterns by local communities should be undertaken. The results of this study can be taken as a prime example of the failure of the classic top-down and non-participatory development approach that has failed to appreciate the local situation. The 'farmer-first' development paradigm emerged as a critique of such a top-down agricultural development approach and the findings of this study echo the need to engage with local stakeholders before deciding to transfer land to large-scale investment projects. It is therefore important to thoroughly evaluate local people's previous land-use patterns and the Ethiopian government should recognize the de facto customary property rights of the local population.

It is also fair to reiterate the background discussion in Chapter 2 and weld it to the findings from the case studies. Ethiopia pursued a federal system and federated states are constitutionally empowered to determine their own development path since its adoption in 1994. The incumbent government argues that the system of federation, based on ethno-lingual lines, appreciates local realities and narrows the development gap prevailed between the centre and the periphery during previous periods of government. The government argues that the country had a centralized political economy in the past, and the lowland areas (the periphery) were not able to decide on their own state of affairs or, more importantly, their development agenda. It is argued, therefore, that the federal system changes this long-standing status quo and delivers equitable development amongst federated states. Contrary to the promises of the Constitution, land-based resources have been centrally managed by the federal government, through the AILAA, since 2008. A key informant who used to work as a senior land administration expert in Amhara Regional State, whom I met during the annual World Bank conference on 'Land and Poverty', held from 8-13 April 2013 in Washington D.C., mentioned that the AILAA is less capable of the administration of land for large-scale farming compared to, for instance, the Amhara region. But, the federal government instituted the AILAA to administer land for large-scale farming under the justification that the federated states had poor capacity to administer land for such ends. The aforementioned expert alleged that the transfer of the mandate to administer land from regional states to the AILAA is a breach of the Constitutional rights of the federated states and a centralization of power.

In support of his claim, one can look at the AILAA directives that prioritize the allocation of land for strategic crops (e.g. cotton, sugar cane, palm oil) that have national economic significance (MoARD 2010a), rather than regional or local significance. The preview of the case studies is also in line with the strategy, which does not necessarily benefit the local population or the local economy. For example, Basen's investment (cotton cultivation) makes an important contribution to the national rather than to the regional development in terms of providing raw material for the textile factories that have relied heavily on imported lint cotton. It is therefore possible to argue that the political economy of today's Ethiopia is also based on the expropriation of local resources for the benefit of national goals, as was the case during past government regimes. Therefore, the Ethiopian government should live up to the statements presented in the Constitution as related to providing regional states the autonomy to decide on their own development agenda through the allocation of lands for different investment projects.

7.4.2 Implications for the governance of large-scale farming in Ethiopia

Land governance generally deals with "the rules, processes and structures through which decisions are made about access to land and its use, the manner in which the decisions are implemented and enforced, the way that competing interests in land are managed" (Palmer *et al.* 2009, p.9). This definition includes relevant institutions and statutory and informal actors, such as state, civil society and private sectors that are responsible for the governance of land.

The decision to transfer land for large-scale farming in Ethiopia is largely centralized and topdown and it ignores traditional systems of land governance and undermines competing interests over land. Active engagement of the local people in the identification of land for large-scale farming and in the process of land transfer is rarely done in the Ethiopian context. Further, there are weak linkages among the different tiers of government that determine access to land for large-scale farming and its use. The government's capacity to enforce land-deal contracts is also weak. The AILAA has been shown to have limited capacity when it comes to the administration of large-scale farms, as is evident from the weak monitoring of large-scale farms and the lack of enforcement of different articles in the land-deal contracts.

The gaps observed in the governance of land for large-scale farming highlights the need for Ethiopia to take into account the following issues in its system of land governance. First, a one-size fits all type of tenure regime will not work for a country like Ethiopia, which has a diversity of culture, identity and systems of livelihood. The statutory land tenure regime that provides for compensation when local people are expropriated from their lands for large-scale farming and/or other public ends only works in those regions in the country where land certification is provided. This land-tenure regime seldom takes into account the situation of those lowland regions of Gambella and Benshanguel Gumuz or those highland areas where land is managed communally without legal title deeds. This suggests revisiting the land policy and recognizing other forms of tenure regimes in the country before deciding to transfer land for large-scale farming.

Second, the government should engage different actors (local people, civil society, etc.) in the process of land identification for large-scale farming and in managing conflicts at times of competing claims over land, rather than simply adopting largely top-down, coercive mechanisms.

Third, as evidenced to date, there has been poor monitoring of the performances of large-scale farms and enforcement of land-deal contracts, a lack of clear demarcation of lands identified for large-scale investments that are under the mandate of the regional governments and the AILAA, which has resulted in the double-transfer of parcels to different investors, and poor land-use planning that has often resulted in poor performances by large-scale farms. The government should, therefore, strengthen the linkages among government structures (e.g. regional, zonal and district land administration organs, regional, zonal and district agricultural bureau, AILAA, etc.) and improve the capacity of the AILAA, which are responsible to decide on access to land and land uses, to monitor performances of investment companies and to enforce contracts, and to provide the necessary support to investors that are engaged in large-scale farming.

Finally, the government should make a careful and close examination of the investors' financial and technical capacity before handing over land for large-scale farming and there should be a proper negotiation that include aspects of corporate social responsibility that can fulfil the expectations of the Ethiopian government.

7.4.3 Reflection on what Investors and Local Governments in Ethiopia should do Investment in agriculture could yield sustainable profit for investors when there is healthy and friendly engagement of the investor with the local population and the local governments. As has happened in Ethiopia, however, investors acquire farmland from the federal government and implement their projects without meaningful engagement with the local population and the local government. This is reflected in all of the case studies of this dissertation through different levels of conflicts between the local population and the investors. Conflicts negatively harm the sustainable operation of the investments and undermine positive gains from the projects. The benefits of the Principles for Responsible Investment in Agriculture and Food Systems (Committee on World Food Security (CFS) 2014) in terms of reducing the harms to the local population and the environment are clear, despite the fact that its adoption is left for the willingness of different stakeholder including business enterprises. For a sustainable financial gains, investors should take into account these principles when doing farming business in communities whose food security situation can be easily disrupted due to their operations. On the other hand, the local and regional governments in Ethiopia are simply serving as a conduit of decisions made by the federal government when it comes to land identification and allocation for large-scale farming, which is against their constitutional rights. They have very little leverage and sometimes little information about the investment activities happening in the local communities. They should therefore increase their stake in local level development by closely following up the investment activities implemented in the local communities, and should engage with the federal government so as to be part of the decisions that affect their communities.

7.4.4 Implications for the Land Acquisition Debate

Countries in SSA are similar in their level of economic development (e.g. level of infrastructure development, poverty levels, weak land governance schemes, poor quality of human capital, diverse and challenging agroecologies, etc.) that determine outcomes of large-scale farms. The results of this study could therefore have a broader significance for the 'land grab' literature

outside Ethiopia. In this regard, it can be argued that large-scale mechanized farming may generate very little positive outcomes to countries in SSA in terms of transforming the structures of their agricultural sector and overall economy.

The debate on large-scale land acquisition seems to view all countries in the developing South in the same way and it ignores differences in local realities/contexts, specific country laws and regulations and development expectations held by different stakeholders. In some cases, the transfer of land for large-scale farming is done by governments using the national legal machinery (e.g. in Ethiopia), and in other countries access to land is determined by local chiefs/kingdoms (e.g. in Kusawgu of Northern Ghana a biofuel company acquired land from a local chief) or by the market (e.g. in Zimbabwe and Uganda). The land acquisition process in the different countries in the South thus requires a piecemeal approach that takes into account both the actors that are responsible for land transfer and specific country laws. Land acquisition for large-scale farming may not be necessarily bad unless supported by empirical findings. As in this study, researchers dealing with impacts studies of large-scale farms should employ standard impact analysis methodologies, which will provide them the leverage to influence policymakers based on facts on the ground.

In Ethiopia, launching continuous policy dialogue and debate with the government using the empirical findings from this study is important. The debate on large-scale land acquisition in Ethiopia should circulate around changing the country's land-tenure system, which currently ignores diverse land tenure regimes in the country. For centuries, the local population in the lowland regions of the country – such as Afar, Gambella, Benshanguel Gumuz, Somalia and parts of Oromia – has believed that land belongs to them despite the Constitutional claim that all lands belong to the state. Ignoring century-held land ownership claims of the local people and abruptly expropriating land resources to large-scale farming using state laws and regulations is problematic.