



ÜNİVERSİTEPARK Bülten | Bulletin

ISSN: 2147-351X | e-ISSN: 2564-8039 | www.unibulletin.com

ÜNİVERSİTEPARK Bülten | Bulletin • Volume 8 • Issue 1 • 2019

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To cite this article: Wolde, B. G., Tolossa, F. (2019). Local Development Effects of Largescale Agricultural Investments: A Case Study of Gimbo, Decha and Tella Woredas, Kaffa Zone, SNNPRS, Ethiopia. *Üniversitepark Bülten*, 8(1), 30-43.

To link to this article: <http://dx.doi.org/10.22521/unibulletin.2019.81.3>

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Local Development Effects of Largescale Agricultural Investments: A Case Study of Gimbo, Decha and Tella Woredas, Kaffa Zone, SNNPRS, Ethiopia

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Abstract

This study is concerned with the study of the local development effects of largescale agricultural investments. In this study largescale agricultural investments are taken as those agricultural activities which produce for commercial purposes holding a land area of more than 50 hectares. The study is limited to the effects on infrastructure; access to market by smallholder local farmers; productive assets; and vegetation cover. Geographically, this study is concerned with the largescale agricultural investments in Southern Nations, Nationalities and Peoples Regional State (SNNPRS), Ethiopia; specifically the Gimbo, Decha and Tello Woredas of Kaffa zone.

Keywords: Agricultural investments, case study of Gimbo, Ethiopia.



DOI: 10.22521/unibulletin.2019.81.3

UNIBULLETIN • ISSN 2147-351X • e-ISSN 2564-8039

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Introduction

Largescale agricultural investments have social, economic, and environmental effects. The social effects regard mainly the people living around largescale agricultural investments. These effects are manifested in terms of impacts on access to infrastructure: both physical infrastructures such as roads, electrical power, telecommunication services, and potable water; and social infrastructure such as schools and health centers (Behrman, Meinzen-Dick, & Quisumbing, 2011; Mosley, 2012; Shete, 2011).

There are different areas of economic effects of largescale agricultural investments. One of the economic effects concerns access to productive assets and access to product markets for smallholder farmers around the investment activities (Baumgartner, 2009; Behrman et al., 2011). While largescale agricultural investment activities have mostly positive effects on access to productive assets and techniques of the smallholder farmers around them; they reduce the access to markets with fair prices for the products of the smallholder farmers around them, especially if the market destinations of the products of the largescale investments are exclusively foreign (non-domestic).

Largescale agricultural investments also have a mostly negative effect on the natural environment. Such effects can include the clearing of forests to undertake such activities that results in deforestation. The other impact comes from the use of chemicals and machinery in largescale agricultural investments that result in water, air, and soil pollution (Behrman et al., 2011; Mosley, 2012).

With regard to the aforementioned effects of largescale Agricultural Investments, the magnitude and direction of the effect vary from context to context. This is due to several factors that condition the investment activities such as the legal framework; local, national and international economic situations; investment policies; and the types of the agricultural investment activities (Baumgartner, 2009; Behrman et al., 2011).

The relevance of any investment activity in general, and largescale agricultural investment activities in particular, has to be assessed in terms of the balance between their merits for and demerits on the local, regional, and national economy; access to services and infrastructure for the local communities; and the natural environment. So, these positive and negative effects need to be assessed and known for future actions (Shete, 2011).

Kaffa zone is one of the zonal administrations in Southern Nations, Nationalities and Peoples' Regional State (SNNPRS), Ethiopia. Due to its natural conduciveness, many largescale agricultural investments have been flourishing in the zone, especially in the past decade. However, the effects of these largescale agricultural investments on local development have not been studied. Therefore, the current study aims to assess the local development effects of these agricultural investments.

Research questions;

- This study addresses the following research questions:
- What effects do largescale agricultural investments have on infrastructure?
- How do largescale agricultural investments affect access to market of smallholder farmers?
- How do largescale agricultural investments affect the productive assets of smallholder farmers?

- What are the effects of largescale agricultural investments on vegetation cover?

Scope of the study

This study is concerned with the study of the local development effects of largescale agricultural investments. In this study largescale agricultural investments are taken as those agricultural activities which produce for commercial purposes holding a land area of more than 50 hectares. The study is limited to the effects on infrastructure; access to market by smallholder local farmers; productive assets; and vegetation cover.

Geographically, this study is concerned with the largescale agricultural investments in Southern Nations, Nationalities and Peoples Regional State (SNNPRS), Ethiopia; specifically the Gimbo, Decha and Tello Woredas of Kaffa zone.

Methodology

Research design

This research has mainly a cross-sectional research design. Cross-sectional research design was selected because there was only a one-time contact with respondents and visit to the area for the purpose of data collection.

Sources of data

This study involves both primary and secondary sources of data. The primary data sources include largescale agricultural investors, smallholder agricultural households around the largescale agricultural investments, local administrators, and workers of government offices related to the issues. The secondary sources of data include books, journal articles, policy documents, satellite images, and official records and other documents.

Sampling

The study population of this research is composed of the people around the largescale agricultural investments in the three selected woredas (districts) of Kaffa zone, the largescale agricultural investors, and the natural environment around largescale agricultural investments in the selected woredas. This study employed judgment sampling and simple random sampling techniques. Judgment sampling is used to select the largescale agricultural investments in the three woredas, independently for each. Then a sampling frame was prepared composing the population of the kebeles (smallest administrative unit in Ethiopia, similar to a ward or neighborhood) in which selected largescale agricultural investment is found. After this, the study subjects to be included in the sample of the study were selected through simple random sampling technique.

Sample selection was independent for each kebele, using separate sampling frame. Therefore, the sample of this study is composed of those households selected in respective kebeles independently, combined together. As questionnaire respondents, a total of 180 farmers (household heads) were selected from the three woredas. As such, 60 households were independently selected from each woreda.

Methods of data collection

The data for this research is collected using different instruments and methods of collecting primary and secondary data. The primary data were collected through questionnaire, semi-structured key informant interview, focused group discussion (FGD), and semi-structured observation and sample census. These different methods of collecting

primary data were used for the sake of triangulation and to apply the right method on specific issues in the research. The secondary data was collected through document review, desk research, and the review of published and unpublished materials.

Methods of data analysis

The data collected through the aforementioned methods were analyzed using different methods for analyzing quantitative and qualitative data. The quantitative data were analyzed through the use of frequency distributions, percentages and cross tabulations. The qualitative data was analyzed through descriptive methods in a manner that supports the reporting of the quantitative results.

Results and Discussion

Largescale Agricultural Investments and Local Development

Largescale agricultural investments can broadly be understood as those investment activities which are engaged in the production of agricultural products covering larger land acquisitions (Daba, 2013). A glance at the literature shows that such largescale agricultural investments have a variety of social, economic, and environmental impacts on the investors, local communities, and the environment in which they operate. Evidence from the reviews show that most impacts of largescale agricultural investments take the form of externalities of the activities of the investment activities, mostly positive ones.

Largescale agricultural investments have mostly positive effects on the expansion of infrastructure. The types of infrastructure expansions include construction of roads, expansion of access to electricity and telecommunication services, and improved access to portable water (Araya, 2013; Aabo & Kring, 2012; Casaburi, Glennerster, & Suri, 2012; Raoul, Grote, & Brüntrup, 2013). In addition, these largescale agricultural investment activities also contribute to the construction of schools and health centers (Dheressa, 2013; Gazizullin, 2010; PLAAS, 2014; Richards, 2013). However, the activities of the largescale agricultural investments may also have a negative effect on transportation facilities, especially in the destruction of roads due to frequent travel by heavily loaded trucks (Gazizullin, 2010).

The activities of largescale agricultural investments have a significant effect on access to market to the local communities. The first type of market effect is related with the creation of market linkages. According to Yassin (2014), the largescale agricultural investments create both backward linkages (involving demand for labor and other inputs for their activities from the local residents), and forward linkages (involving supply of outputs and product exchange with the local communities). Moreover, access to market by the local communities increases due to the expansion of roadways and other physical infrastructure that enhances the contact of the localities with outside areas (Baumgartner, von Braun, Abebaw, & Müller, 2013; Raoul et al., 2013; Richards, 2013; Yassin, 2014).

Largescale agricultural investment activities have the effect of transferring technology to remote locations where their operations are based. In other words, local smallholder agricultural households benefit from the activities of largescale agricultural investment activities through learning of improved production techniques and the use of modern agricultural equipment which they learn to use from the largescale agricultural investments; and the equipment acquired due to improved purchasing ability of the smallholder agriculturalists through increased income (Araya, 2013; Baumgartner et al., 2013; Dheressa, 2013; Raoul et al., 2013; PLAAS, 2014; Richards, 2013; Yassin, 2014).

For the most part, largescale agricultural activities are found to negatively affect the environment. These negative effects include deforestation due to the activities of largescale agricultural investments; loss of biodiversity; in addition to air and soil pollution due to the use of chemicals in various activities of largescale agricultural investments (Araya, 2013; de Schutter, 2011; Dheressa, 2013; Gazizullin, 2010; Shete & Rutten, 2013). Specific to the effect on vegetation cover, as noted by Rahmato (2011), there has always been loss of woodland, grass and other vegetation in the process land clearance by investment projects.

Largescale Agriculture in Ethiopia

The Ethiopian economy is an agriculture dominated economy in terms of both its contribution to the national GDP and its share of employment of the total population. The agricultural sector in Ethiopia is dominated by the smallholder agricultural production system. Ethiopian agriculture is characterized by traditional farming techniques which have been unable to transform the sector or the national economy for centuries (Araya, 2013; Baumgartner et al., 2013).

The current Ethiopian government has been following different strategies in order to transform the Ethiopian economy and the agricultural sector. Since the early 1990's, the government's rural development strategy has been focused on smallholders. Policies were biased towards small-scale agricultural production and the land tenure system put in place was considered to be "peasant-friendly" (Araya, 2013). However, beginning in the early 2000's, a policy shift has occurred. The government started to talk about capitalist farming and largescale foreign investors replacing peasant cultivation and the small entrepreneurial approaches, based on the logic that once the objective of accelerated agricultural development is achieved, the key actors in the sector's development will be relatively large-scale private investors and not the semi-subsistence small farmers (Baumgartner et al., 2013; Rahmato, 2011). Such a change in governmental policy focus became apparent as a number of investment-stimulating legal changes and proclamations were issued, especially in the scope of attracting foreign investors to the agricultural sector (Baumgartner et al., 2013; Daba, 2013; Rahmato, 2011).

Description of the Study Area

Kaffa zone is approximately 470 Kms from the capital of Ethiopia, Addis Ababa, in Southern Nations, Nationalities and Peoples' Regional State. The zone comprises nine woredas (districts). The main towns of the specific woredas that the study current was conducted are distanced from Bonga, the capital of Kafa zone, by 17 Kms for Gimbo Woreda, 25 Kms for Decha, and 45 Kms for Tello Woreda.

More than half of the population is under 20 years of age. As compared to the total area of the zone, urbanization is very low. In the rural area, which accounts for 95% of the population, life is still in primitive conditions. Public services such as schools, health facilities and other services are only at the initial stage. More than 70% of rural children do not attend any form of schooling. Most young girls and boys of urban area are school dropouts, and unemployment is subsequently very high.

Table 1. Illustration of Agricultural Investments in Three Woredas by Subsectors

sn	Agricultural Subsectors	Gimbo Woreda		Decha Woreda		Tello Woreda	
		Number	Land (ha)	Number	Land (ha)	Number	Land (ha)
1	Coffee	20	1878.73	5	427.44	2	67.00
2	Tea	1	3538.26	-	-	-	-
3	Cereals	-	-	1	350.00	-	-
4	Apple	-	-	-	-	1	80.68
5	Bee Keeping	1	34.68	1	30.00	-	-
6	General agriculture	1	201.35	-	-	-	-
7	Coffee & Spice	6	344.32	4	443.00	10	1060.92
8	Oil seeds & Cereals	-	-	1	150.00	-	-
9	Coffee & Cereals	1	22.02	1	66.70	-	-
10	Coffee, Spice, & Bee keeping	-	-	1	110.04	-	-
	Total	30	6019.36	14	1577.28	13	1208.60

Source: Kaffa zone Investment Office

As Table 1 shows, there are a total of 57 largescale agricultural investments in Gimbo, Decha, and Tello Woredas of Kaffa zone, operating with a total of 8805.24 hectares of land. In terms of the number of investment activities, Coffee is the dominant agricultural product of these investment activities, followed by the production of a mixture of coffee and spices. However, in terms of the amount of land covered relative to the number of investments in the subsector, tea production is leading. This is due to the existence of one of the largest tea plantations in Eastern Africa in the zone, the Wushwush Tea Plantation.

Table 2. Characteristics of Selected Large-Scale Agricultural Investments in Three Woredas

Largescale Agricultural Investment (LSAI) Name	Gimbo Woreda		Decha Woreda		Tello Woreda	
	Homeland Organic Coffee	Matapa Michit Coffee Plantation	Shecha Agro-Industry	Decha Agro-Industry	Bagerish Agro-Industry	Shada Coffee & Spices Plantation
Subsector of LSAI	Coffee	Coffee & Spices	Coffee & Spices	Coffee, Spices & Bee Keeping	Coffee & Spices	Coffee & Spices
Kebele where LSAI is	Yeyebitto	Michiti	Yeba	Shapa	Shupa	Shada
Special Area Name	Bitta Guenet	Girawa	Shecha Chaka	Shapa	Atati Chaka	Kukera
Land (in hectares)	400	97.84	188	110.14	114.52	86.95
Year of Investment Contract (G.C.)	2000	2001	2007	2007	2008	2008
Investment Project Status	Started Production	Started Production	Started Production	Started Production	Partial Production	Partial Production
Amount of Capital (Registered) [in ETB]	9,566,100	249,574	30,000,000	1,500,000	20,000,000	1,830,841
Amount of Capital (Invested) [in ETB]	20,000,000	763,621.33	10,818,000	908,000	10,000,000	5,800,000

Source: Kaffa zone Investment Office

As illustrated in Table 2, out of the six largescale agricultural investments selected for this research, one is engaged in the production of coffee; four are engaged in the production of coffee and spices, and one is engaged in a mixture of coffee production, the production of spices, and bee keeping. Activities of these largescale agricultural investments started since 2000, and cover a total land area of 997.45 hectares. The six largescale agricultural investments have a total of 63,146,515 ETB of registered capital and a total of 48,289,621.33 ETB of invested capital. Four out of the six largescale agricultural investment activities have already started production to the full potential, while the other two have commenced partial production.

Characteristics of the Respondents in the Study Sample

The study population is composed of 1,524 households that reside and make their livelihood around the kebeles in which the largescale agricultural investments in this study are found. From the study population, 180 households (11.8%) were randomly selected to constitute the sample respondents for this research. The respondents of this research are considered to be the heads of these households. Table 2 and the following discussion illustrate the characteristics of the sample respondents.

Table 3. Sociodemographic characteristics of sample respondents

Variable	Group	Frequency	Percentage
Gender	Male	129	71.7
	Female	51	28.3
	Total	180	100.0
Age (years)	<18	4	2.2
	18-30	33	18.3
	30-40	74	41.1
	40-50	42	23.4
	50-60	21	11.7
	>60	6	3.3
	Total	180	100.0
Religion	Orthodox	123	68.3
	Muslims	29	16.1
	Protestant	11	6.1
	Catholic	10	5.6
	Others	7	3.9
	Total	180	100.0
Ethnic Background	Kaffa	132	73.3
	Amhara	29	16.1
	Oromo	9	5.0
	Others	10	5.6
	Total	180	100.0

Variable	Group	Frequency	Percentage
Educational Status	Illiterate	54	30
	Read and write	24	13.3
	Grade 1-4	43	23.9
	Grade 5-8	32	17.8
	Grade 8-10	21	11.7
	High school/ prep.	4	2.2
	More than high school/ prep.	2	1.1
	Total	180	100.0
Marital Status	Not Married	19	10.6
	Married	134	74.4
	Divorced	7	3.9
	Widowed	11	6.1
	Separated	9	5.0
	Total	180	100.0
Household members	1	9	5.0
	2	17	9.4
	3-5	72	40.0
	6-8	68	37.8
	>8	14	7.8
	Total	180	100.0

Source: Survey, 2013

Effects of Largescale Agricultural Investments on Infrastructure

The effect of Largescale Agricultural Investments on infrastructure is discussed in terms of road construction, supply of electricity, access to potable water, and improvements in telecommunication services, and in terms of improvements in health and education services.

Table 4. Contribution of LSAs in road construction

Type	Amount	Type of contribution by the nearby LSAI
Dry season access road	56 km	Most contributed by the LSAs
All-season gravel road	16 km	Supply of construction materials
Bridge	4m x 5m	Supply of industrial materials

Source: survey, document analysis and interview with officials; 2012

As Table 4 shows, after the start of the LSAs operations, a total of 56 kms of dry season access roads has been constructed in the six kebeles where the LSAs are located. Of this, 35 kms of dry season roads were fully sponsored by the LSAs and they also contributed to the remaining dry season road construction, although there is no data on their specific contribution in the latter respect. With regard to the 16 kms of all-season gravel road

construction, the construction materials were supplied by two LSAs; the local communities contributed the labor; and the machinery, vehicles and construction professionals were provided by the zonal administration. On this road, a 4m x 5m bridge was constructed, and the LSAs contributed the industrial materials necessary for the bridge construction; with local materials and labor contributed by the local communities; and construction personnel supplied by the zonal administration. When we consider the reason for the LSAs contribution to the construction of these roads and the bridge, it directly relates to the accessibility of their investment areas; more specifically facilitating the supply of input to their investment and the subsequent transportation of their products to market.

After the commencement of largescale agricultural investments, two out of the six kebeles have gained access to electrical power. However, this was not because of the largescale agricultural investments, rather it is ascribed to the rural electrification program of the government. In another kebele, the investor brought a diesel electric generator with the primary aim of supplying electrical power for use in its agricultural production system. As a positive externality, the investor also allowed for electric lighting to be made available to households adjacent to the agricultural investment for a payment of 30 birr per month for a bulb. In another kebele, through the activities of a largescale agricultural investment, the community has been introduced to solar energy for electric power generation, and some affluent households have already started to use such technology. Regarding the solar energy issue, the contribution of the largescale agricultural investment remains non-material at mere introduction of the technology.

Four of the six kebeles have received improvements in mobile telephony network following the start of operations of the largescale agricultural investments. However, this improvement is actually due to the program of the Ethiopian Telecommunication Corporation, and has nothing to do with the activities of the largescale agricultural investments. However, the income generation impacts of the largescale agricultural investments may have indirectly affected the use of telecommunication services in such a way as to the affordance of apparatus purchases and user fees.

Concerning the issue of access to potable water, the Largescale Agricultural Investments have contributed to spring water development. In this regard, the largescale agricultural investors have covered the total expenses of five spring development activities in four of the kebeles, and contributed cement in three spring development activities of three kebeles.

Even though there was construction of two health centers around the kebeles in which the Largescale Agricultural Investments are found, there has not been any significant contribution from the Largescale Agricultural Investors in the construction of the health centers, except for a donation of a medium-sized refrigerator by one of the agricultural investors for a health center around its investment area.

With regard to the effect on education, the largescale agricultural investors have made only meager contributions to the construction and upgrading of classroom at two schools in Gimbo and Tello Woredas. However, according to the information acquired from interviews held with the school principals, the donation of books and other teaching-learning materials by three investors has been considerably helpful for five rural elementary schools. When we see the effects of the operations of the largescale agricultural investments on school attendance of the children in the households near those investments, there are both positive and negative consequences. On the plus side, with the improvement in household

incomes, children's access to educational materials has improved, and which most likely improves their academic achievement. On the negative side, as their parents are engaged in activities in the largescale agricultural investments, the children are obliged to cover their parents' burdens in and around their households, which has a negative effect on their school attendance (resulting in school absenteeism) and lack of parental follow-up in education. Sometimes even the children themselves are engaged in informal works in and around the largescale investments that keeps them out of the classroom.

Effects of Largescale Agricultural Investments on Access to Market

Thorough discussion was held through interviews with owners/managers of the largescale agricultural investment, and FGDs held with the local smallholder agriculturalists to elicit information about the market destination of their respective agricultural products. Accordingly, all the largescale agricultural investors produce for both domestic and foreign markets. On the other hand, most of the smallholder agriculturalists produce for local markets, with some exceptions who supply for domestic markets through the largescale agricultural investments. This shows that separate market destinations of the largescale agricultural producers and the smallholder producers has avoided the danger of unfair price competition by the largescale producers over the smallholder agrarians through any scramble for limited demand.

According to the information from the FGDs, the establishment of the largescale agricultural investments has fostered access to market for the products of the smallholder agricultural farmers in the local communities in three ways. First, the construction of infrastructure following the establishment of the largescale agricultural investments, especially road construction, has increased access to market for the products of the smallholder agrarians by reducing the burden of transportation of agricultural products to the local markets where they can be sold. Second, some of the largescale agricultural producers collect the products of the smallholder agrarians to be sold at national and international markets with prices far higher than those at the local markets. However, the products to be collected from the smallholder agrarians are produced with and processed to a higher standard. The third means of enhanced access to market concerns final demand linkage. In other words, there is an increase in the demand for the products of the smallholder agricultural products to be consumed by the workers of the largescale agricultural investments.

Effects of Largescale Agricultural Investments on Productive Assets

The effect of largescale agricultural investments on the productive assets of the smallholder agricultural producer farmers is seen in terms of the effect on equipment and animals for agricultural production (which is worth more than 200 ETB); production inputs such as fertilizers, improved/selected seeds and pesticides; and improved techniques of production in plowing, sowing, and harvesting. While the first two represent material assets of production, the third is a measure of non-material assets of production. For this purpose, only 157 households whose primary livelihood is agricultural production are taken as a valid sample.

Table 5. Number of households who experienced change in productive assets after establishment of LSAs

	No Change	Not attributable to LSAs	Partially attributable to LSAs	Totally attributable to LSAs
Equipment & animals for agricultural production (value > 200 ETB)	19	46	71	21
Production inputs (fertilizer, improved/ selected seeds, pesticides)	3	72	59	23
Improved techniques of production (plowing, sowing, harvesting)	-	41	54	62

Source: survey, 2012

As Table 5 shows, 19 (12.10%) from the total of 157 households did not acquire any equipment or animals for agricultural production. After the establishment of the largescale agricultural investments, 138 of the households (87.90%) acquired equipment and/or animals for agricultural production. Of this, the equipment/animals acquired by 46 (29.30%) of the households cannot be attributed to the largescale agricultural investments; while the acquirement by 71 households (45.22%) is partially attributable and for 21 households (13.38%) is totally attributable to the establishment of the largescale agricultural investment activities. This shows that the establishment of largescale agricultural investments has in some way contributed to the acquirement of production equipment and animals for 92 (58.60%) of the total agricultural households in the sample.

When the effect on agricultural production inputs such as fertilizer, improved/selected seeds, and pesticides is considered, three (1.91%) from the total of 157 agricultural households have experienced no change. 154 (98.09%) of the households have improved supply of these production inputs, out of which the improved condition of supply of such inputs for 72 (45.86%) households has no connection with the starting of operations of the largescale agricultural investments. While the improved supply of these agricultural inputs for 59 (37.58%) of the households is partially attributable to the commencement of activities of the largescale agricultural investments, the improvement for 23 (14.65%) households is totally attributable to the largescale agricultural investments. This means the largescale agricultural investments have in some way contributed to the improvement in supply of agricultural inputs for 82 (52.23%) of the total 157 smallholder agricultural households.

After the establishment of the largescale agricultural investment activities, all of the agricultural households have come to use some kind of improved/modern/scientific techniques of production. The use of improved techniques of production by 41 (26.11%) of the households can be attributed to factors other than the start of operations of the largescale agricultural investments. On the other hand, the use of improved techniques of production by 116 (73.89%) of the households is, in some way, attributable to the largescale agricultural investments. In this regard, while the use by 54 (34.40%) of the households is partially attributable, the use by 62 (39.49%) of the households is totally attributable to the operations of the largescale agricultural investments.

Effects of Largescale Agricultural Investments on Vegetation Cover

According to the information acquired from the interviews and the FGDs, the effect of largescale agricultural investments on vegetation cover takes both positive and negative forms depending on several factors. During the construction of facilities such as roads and other internal facilities of the largescale agricultural investments, there has always been destruction of forests of all types to a greater extent.

The effect of the farming activities on vegetation mainly depends on the type of plantation. In the case of cereal and oil seed production, there is a trend for forest clearing which destroys all types of natural forest trees. In cases when the plantation is for coffee production, traditional bee keeping, and production of spices; there is clearing of small plant species but forestation of large sized trees which are deemed necessary for shading coffee and spices, and for traditional bee hiving.

Even though there could be the danger of expansion of the largescale agricultural investments to legally protected forests, such tendency has been successfully deterred through cooperated supervision of the local and zonal authorities. Therefore, no destruction of protected forestry sites have been observed that are attributable to the activities of the largescale agricultural investments.

Conclusion

The findings of this study evidenced that largescale agricultural investments have had mostly positive socioeconomic effects. In terms of infrastructure, the largescale agricultural investment activities have positive contributed to the construction of roads; as well as a meager contribution for access to electricity; a medium contribution for access to potable water; an indirect contribution in the use of telecommunication services; and a positive but inadequate contribution in terms of health and education services for the local communities.

Regarding the effects on access to market for the agricultural products of the smallholder local farmers, the largescale agricultural activities have made a positive impact. On the one hand, as the LSAs produce for mostly national domestic and foreign international markets, they did not bring about unfair competition to the local market to the products of the smallholder agrarians. On the other hand, the LSAs have increased access to the products of local smallholder agrarians through the establishment of backward and forward linkages, and the construction of roads that have facilitated the transportation of agricultural products of the smallholder agricultural households. The largescale agricultural investment activities have also played a role of technology transfer by introducing modern techniques of production to the local traditional agrarians. In addition, directly or indirectly, the LSAs have facilitated the acquirement of material production assets by local smallholder agricultural households.

The effect of the largescale agricultural investment activities on vegetation cover is both positive and negative. On the one hand, the different activities of the largescale agricultural investments requires the clearing of forests. However, some types of largescale agricultural investments, such as coffee and spice plantations, require the preservation and even forestation of shade-giving trees. In this regard, the LSAs may also have a positive effect on the vegetation.

Recommendations

Even though the largescale agricultural investments in Kaffa zone are found to have mostly positive socioeconomic and environmental effects, enhancing those positive effects requires considerations from different stakeholders. These recommendations can be summarized as follows.

First, the process of land granting and licensing of the activities of the largescale agricultural investment activities needs to be more transparent. In this regard, sometimes how some largescale agricultural investments received permission to invest is unknown. Attached to this, there has to be involvement of the local communities in the process of granting land and allowing the investment activity. Such participation could go towards tackling problem of occasional friction which occurs between investors and local community members.

Second, according to the information from the interviews and FGDs, there is a gap between what the investors promise to do before they start the investment and what they then actually do. In order to avoid such gaps between the promises made and the actual practices of the investors concerning their contribution to local communities, there has to be some mechanism of monitoring the project plans against the actual practices of the largescale agricultural investors.

Equally important, there is some negligence on the part of the largescale agricultural investors regarding the social costs of their activities. Therefore, in order to avoid the possibility of “Tragedy of the Commons,” the investors themselves must act on the basis of social responsibility, or there needs to be some way devised to that end by the concerned government bodies.

Notes

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References

- Aabo, E., & Kring, T. (2012). *The Political Economy of Large-Scale Agricultural Land Acquisitions: Implications for Food Security and Livelihoods/Employment Creation in Rural Mozambique*. UNDP working paper. Regional Bureau for Africa.
- Araya, M. (2013). *Effects of Large-scale agricultural investments on smallholder farming in Sub-Saharan Africa (Case study: Ethiopia)*. Master's Thesis. Lund University. School of Economics and Management. Lund, Sweden.
- Baumgartner, P. (2009). *The Impact of large-scale agricultural investments (FDI) in food production on poverty reduction and commercialization of rural factor markets in East Africa*. University of Bonn, Department of Economic and Technological Change, Centre for Development Research.
- Baumgartner, P., von Braun, J., Abebaw, D., & Müller, M. (2013, April). *Impacts of Largescale Land Investments on Income, Prices, and Employment: Empirical Analyses in Ethiopia*. Draft paper prepared for the Annual World Bank Conference on Land and Poverty.
- Behrman, J. A, Meinzen-Dick, R. S., & Quisumbing, A. R. (2011). *The Gender Implications of Large-Scale Land Deals*. IFPRI Policy Brief 17. Washington, USA: International Food Policy Research Institute.

- Casaburi, L., Glennerster, R., & Suri, T. (2012). *Rural Roads and Intermediated Trade: Regression Discontinuity Evidence from Sierra Leone*. Retrieved from https://scholar.harvard.edu/files/lorenzocasaburi/files/casaburi_glennerster_suri_roads.pdf.
- Daba, O. T. (2013). *Effect of Large-Scale Agricultural Investment on Local Livelihoods: A Study of Bako-Tibe Karuturi Agro-Products Plc., Ethiopia*. Master's Thesis. Norwegian University of Life Sciences (UMB), Norway.
- De Schutter, O. (2011). How Not to Think of Land-Grabbing: Three Critiques of Large-Scale Investments in Farmland. *The Journal of Peasant Studies*, 38(2), 249-279. DOI: 10.1080/03066150.2011.559008
- Dheressa, D. K. (2013). *The Socio-Economic and Environmental Impacts of Large Scale (Agricultural) Land Acquisition on Local Livelihoods: A Case Study in Bako Tibe Woreda of Oromia Region, Ethiopia*. Master's Thesis. University of Oslo. Blindern, Norway.
- Gazizullin, I. (2010). *Social Impact of Large Scale Agro-Investments in the FSU: Lessons from Ukraine's Experience*. Working paper for the World Bank within the project Social Dimensions of Large-Scale Land Acquisition of Land Rights. Retrieved from <http://siteresources.worldbank.org/EXTARD/Resources/336681-1236436879081/5893311-1271205116054/gazizullinPaper.pdf>.
- Mosley, J. (2012). *Peace, Bread and Land: Agricultural Investments in Ethiopia and the Sudans*. Africa Programme. AFP Briefing Paper 2012/01. London: Chatham House.
- PLAAS. (2014). *Large-scale Commercial Agriculture in Africa: Lessons from the Past*. Policy Brief 65. Institute for Poverty, Land and Agrarian Studies. Future Agricultures.
- Rahmato, D. (2011). *Land to Investors: Large-Scale Land Transfers in Ethiopia*. Addis Ababa: Forum for Social Studies.
- Raoul, H., Grote, U., & Brüntrup, M. (2013, April). *Household Welfare Outcomes of Large-Scale Agricultural Investments: Insights from Sugarcane Outgrower Schemes and Estate Employment in Malawi*. Paper presented at the 2013 Annual World Bank Conference on Land and Poverty.
- Richards, M. (2013). *Social and Environmental Impacts of Agricultural Large-Scale Land Acquisitions in Africa—With a Focus on West and Central Africa*. Washington, DC : Rights and Resources Initiative.
- Shete, M. (2011, April). *Implications of land deals to livelihood security and natural resource management in Benshanguel Gumuz Regional State, Ethiopia*. Paper presented at the 2011 International Conference on Global Land Grabbing.
- Shete, M., & Rutten, M. (2013, April). *Impact of Large Scale Agricultural Investment on Income and Food Security in Oromiya Region, Ethiopia*. Paper presented at the 2013 Annual World Bank Conference on Land and Poverty.
- Yassin, A. (2014). *Transnational Large Scale Agricultural Firms in Gambella Regional State, Ethiopia: Local Potentials, Opportunities and Constraints for Market Linkage and Contractual Farming Schemes*. Early Career Fellowship Programme. Future Agricultures.