

# Structures, Opportunities and Impacts of FDI in Agricultural Sector in Ethiopia

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## Abstract

*Foreign Direct Investment (FDI) is one of the most striking features of the global economy today. Realizing the importance of FDI in the economy, the Government of Ethiopia has implemented structural reform programs and trade liberalization to attract more FDI. The purpose of this study was to examine the trends and structure of FDI in agricultural sector and at the same time to explore the impacts of FDI in agricultural export sector in the country. The study mainly used secondary data that are collected from Ethiopia Investment Authority (EIA) between 1993 and 2010. Descriptive and econometrics model were used to analyze the collected data. Accordingly, the number of approved FDI in agricultural sector increased from 3 in 1993 to 136 per year in 2010. But during the study period the implementation rate of FDI project has declined from 33 percent in 1993 to 2 percent in 2010. Around 35 percent of the FDI in agricultural sector involved in animal and animal related products. Further, the study revealed that FDI provides 1.2 million employment opportunities and 80 billion birr capital investments. The origin of FDI in the sector was dominated by the Middle East citizens who take 31.9 percent of total approved projects. The Two Stage Least Square (2SLS) estimation model revealed that when a unit percentage increases in FDI investment in the agricultural sector, it increases the agricultural export quantity by 0.20 percent. The low implementation rate of agricultural FDI project, absence of special incentive for the agricultural sector and poor coordination are the main challenges of FDI in agricultural sector in Ethiopia. More provision of infrastructure, regulation and incentive to FDI modernize agriculture sector in the country.*

**Key words:** *Foreign Direct Investment, Agriculture and Ethiopia*

## 1. Introduction

Foreign Direct Investment (FDI<sup>1</sup>) is one of the most striking features of the global economy today. Global Foreign Direct Investment (FDI) has reached the all-time maximum level of US\$ 1,833 billion in 2007. In developing countries, FDI inflows reached its highest level ever (\$500 billion) – a 21% increase over 2006 (Weissleder L., 2009). Such a high flow

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<sup>1</sup> Foreign Direct Investment (FDI) is investment of foreign assets into domestic structures, equipment, and organizations

of FDI has a great advantage in achieving economic growth in the host countries. Especially in the developing country, FDI provides various opportunities to change the trends and structure of the host country. The contribution of FDI to the development of a country are widely recognized as filling the gap between desired investments and domestically mobilized saving, increasing tax revenue and improving management and technology, as well as labor skill in host countries. Given the low domestic savings rate, coupled with the general lack of access to international capital markets, both official assistance and FDI are of great importance to Sub-Saharan African (SSA). It has reported that development assistance to Sub-Saharan Africa declined from US\$17 billion in 1990 to US\$ 10 billion. Given this, FDI is the most important alternative source of foreign capital for these African countries (Astatike and Hirut, 2005). FDI also has the added dimensions that it may serve to transfer technology to the host country, as well as to offer avenues for job creation in areas of which unemployment often remains high(Bennett, 2005).

The Governments in developed and developing countries have exerted great efforts to attract FDI in their domestic economies. They expected benefits of FDI, such as an increase in the supply of capital and promotion of technology spillover will accelerate the development of domestic firms and raise the welfare of the entire country. In this regard, FDI is particularly important for developing countries since it provides access to resource that would otherwise be unavailable to these countries. Due to these benefits of FDI, many developing countries are now actively seeking foreign investment by taking measures like economic and political reform design to improve their investment environment. Further, the changing stance towards FDI has also given rise to a proliferation of investment promotion agencies, special economic zones and other targeted mechanisms by which African countries aspire to attract foreign investors (OECD, 2005).

This study seeks to answer the following two questions; what are the trends, structure and opportunity of agricultural FDI in Ethiopia? And what is the impact of FDI in agricultural export in the country? The paper has nine sections. The first section deals with basic introduction. The second section presents the general and specific objectives of the study. Third section deals with conceptual framework that shows the impacts and opportunities of FDI in agricultural sector. Section four and five presents research methodology i.e type, source of data and method of data analysis employed in the study, and FDI policy in the country during the reform period respectively. Section six presents the trends and structure of FDI in agricultural sector in Ethiopia. The seventh section shows the opportunities of FDI in agricultural sector in terms of capital investment and employment opportunity in the country. This section deals with the financial flow and employment opportunity available for agricultural sector through FDI. Section eight presents the analysis of the impacts of FDI in agricultural export in Ethiopia. The last section deals with the conclusion and recommendation of the study.

## 2. Objective of the study

The general objective of the study was to explore the impacts and opportunities of FDI in agricultural in Ethiopia. The research has the following specific objectives:

- To explore the trends of FDI in agricultural sector in Ethiopia
- To examine the structure and opportunity of FDI in agricultural sector in Ethiopia
- To analyze the impacts of FDI in agricultural in the country
- To identify the major challenges of FDI in the agricultural sector in Ethiopia

## 3. Conceptual framework: Impacts and Opportunities of FDI in Agricultural Sector

There are several economic and political factors that can either enhance or detract from foreign investment opportunities in the agriculture and food sector. Factors that have a positive influence on investment includes the size of the host country market, per capital GDP, GDP growth, cultural similarities between the home and host country, natural resource availability, a favorable exchange rate, and the labor productivity of the sector. Government regulations such as high corporate taxes and foreign ownership restrictions will have a negative impact on the level of FDI in a sector. The level of economic and political risk in a country is also an important factor when foreign firms are deciding on the location of their foreign investment. Most countries work to promote the FDI by facilitating the policy and legal environment in the way that promote the flow of foreign invertors. Because, the high flow of FDI plays a significant role in increasing productivity by offsetting the investment and technology gap in the host country (Namizinga N. 2007)

Since early 1990 many developing countries, which rely on agricultural sector, exerted all their efforts in attracting FDI in their respective countries. They introduced a wide range of trade and political reform to create a suitable environment for the development of FDI in their country. The most known measures taken by these countries are the liberalization and privatization policy and signing various multinational and bilateral agreements which build the confidence of foreign investor in their country. Between 2005 and 2007 the overall FDI inflows in Africa grew by nearly 80% from US\$29 billion to US\$53 billion, their highest level so far, despite the global financial crises (UNCTAD, 2008). Regarding the agribusiness sector (agricultural plus food processing sector) the FDI inflows into the developing countries have nearly doubled between 2000 and 2006 increasing from US\$ 5 billion in 2000 up to US\$ 9.1 billion in 2006 (Weissleder, L.,2009).

The increments of foreign financial flows of foreign investors provide various opportunities for host country. Few of these opportunities are new technologies, knowledge and international market. Such situation paves the way for the increase in the productivity and total production of agricultural sector in the country. Growth in

agriculture and its productivity are considered essential in achieving sustainable growth and significant reduction in poverty in developing countries. Both developmental and agricultural economists view productivity growth in the agricultural sector as critical if agricultural output is to increase at a sufficient rapid rate to tackle poverty (Namizinga N. 2007).

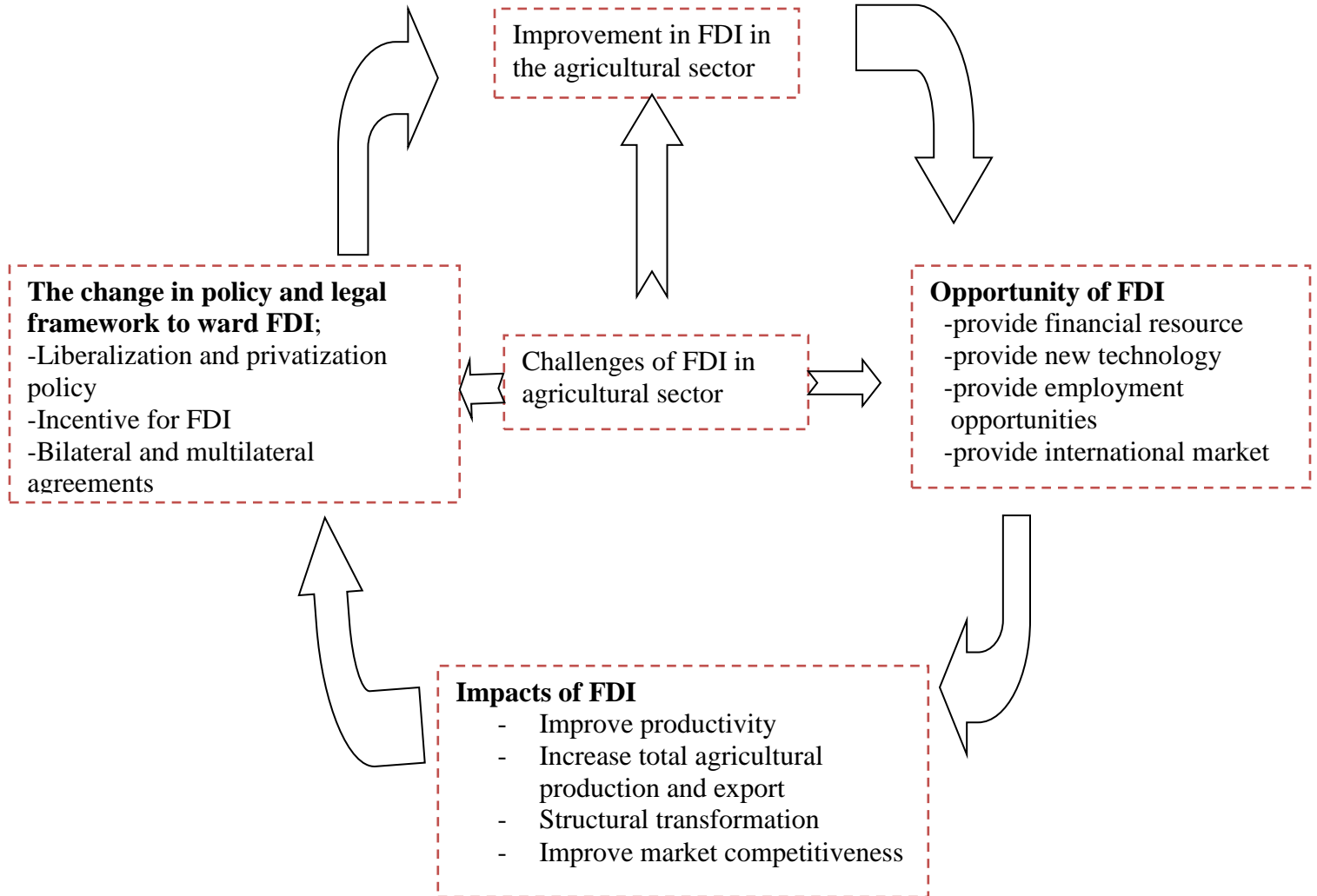
In addition, it enables the agricultural sector to achieve structural transformation and to be more competent in the international market. All these changes in the agricultural sector enhance the export earning of the country which increase the foreign reserve capacity. The improvement in the export earning from agriculture enables most developing country to import more technology to change the structure of the agricultural sector in the country. For instance, in Ethiopia the export earning from agriculture enables the government to import huge amount of better seed and fertilizer to increase the productivity and production of the sector in the country (Bijsterbosch, M. and M. Kolasa. 2009).

Few researchers have tried to observe the impacts of FDI in the agricultural sector. Among them is Elibarik M. (2007). In his study Elibarik stated that the flows of FDI into agriculture in Tanzania are important for three main reasons: First, the agricultural sector plays an important role in Tanzania economy and has the potential to advance the country's objective of growth and poverty reduction. Second, since over 80 percent of the population in Tanzania lives in the rural areas, agriculture is the basis of their survival. Therefore, any strategies designed to address poverty must be practical to improve agricultural productivity and farm income. While growth is the single most important factors affecting poverty reduction, FDI flow into the sector is thus center in achieving the goal. Third, FDI also provide employment opportunities that can reduce both urban and rural poverty.

Some economic analysts observe foreign investment as an important source of the required capital, technology, and knowledge for poor countries. On the other hand, other points out that one of the drawbacks of multinational companies was it crowd out local companies as well as introducing practices of imperfect competition. This implies that the effects of FDI for host countries are controversial.

But all these opportunities and impacts of FDI cannot come up without any challenge, especially in agricultural sector. The agricultural sector in most developing countries was characterized by lack of infrastructure which hinders the development of FDI. In addition, unable to provide necessary land on time is highly contribute to poor performance of FDI in the agricultural sector. The other important thing is the decline in the price of agricultural products in the international market before five years force many

investors to look for non agricultural activity in the host country. But recently this situation is changing and many FDI investors are involving in the sector with pleasure.



**Figure 1: The impacts and opportunity of FDI in the agricultural sector**

*Source: Developed by Author, 2011*

#### 4. Research Methodology

The study mainly relies on secondary data that was collected from Ethiopia Investment agency. The study used both time serious and cross section data that cover the period between 1992 and 2008. In addition to secondary data, primary data has also been used to support the argument in the study. Unstructured questioner was developed for selected office experts from Ministry of Agriculture and Rural Development and Ethiopia Investment Agency. Both descriptive and econometric methods were applied to analyze the data. In the descriptive analysis, the simple ratio, percentage and graph were employed to analyze the

data. In the case of econometric analysis, expecting non-linear relation between dependent and independent variables, the study used double log (Log-log) model. The Two Stage Least Square (2SLS) method was also used to estimate this model. The main purpose of the estimation is to get the impact of FDI on the quantity of agricultural export in the country. There are explanatory and dependent variables in the model. The dependent variable is the quantity of agricultural export and the explanatory variable is capital investment in agricultural sector by foreigners.

Expecting the other factors that may also affect export, the study included other controlled variables such as agricultural production, weather condition, availability of credit and other dummy variables which show the change in the policy. In order to solve endogeneity problems, the study applied 2SLS which consider the simultaneity of the explanatory variables. Here the endogenous variables are the quantity of export and the total agricultural production. The following equation provide the model used in this study to observe the impact of FDI in export. All model estimation tests such as correlation test was applied in the study.

$$\text{exp} = f(\text{FDI}, \text{Agr}, \text{Weath}) \text{-----} (1)$$

$$\text{Agr} = f(\text{Credi}, \text{Dummy-inst}, \text{Dummy-poli}) \text{-----} (2)$$

Where

Exp = the quantity of export

FDI= the foreign capital investment in agricultural sector

Agr= agricultural production

Weath = the change in the weather

Credi= the amount of available credit

Dummy-inst= dummy variable that represent economic and political instability

Dummy-poli= dummy variable that indicate the wide range policy reform in the country

Both quantity of export and agricultural production are endogenous variables but the rest variables are exogenous variables. Measurements of each variable are available in section 7. Due to lack of information, other variables such as infrastructure, international market and agricultural diversification that may affect both export and agricultural production were not included in this study.

## 5. Recent development of FDI policy in Ethiopia

In the last three decades, Ethiopia has undergone major socio-economic and political transformations ranging from a feudal system to socialist and more recently an open market-based economy and democracy (UNCTDA, 2008). The government in all regimes in Ethiopia realized the very importance of FDI in the country. Due to this fact many efforts has been exerted to increase the number of FDI in different sector. The

government in the Monarchy regime (from 1963-1974) has provided incentives for foreign investors who involved in agricultural sector in the country. Unlike the Monarchy, the Derege regime has invited foreign investors to involve in the economy though joint venture started in 1983 to increase FDI. But due to misguided nationalized policy measures, the Military regime failed to attract more FDI in agriculture and other sectors in the country. Before 1991, the low foreign investment in the national economy in general and the agricultural sector in particular hindered the capital accumulation and technology transfer into the economy.

Realizing the bottleneck of foreign investment in the agricultural sector, the Federal Government of Ethiopia introduced new FDI policy framework. Since 1992, the government has designed various policies and reforms activities, and implemented to attract the FDI in the country. In addition to the involvement of FDI in the country, various macroeconomic reforms<sup>2</sup> activities are taking place to improve the investment environment for the foreign investors. In line with market-oriented economic policy, the investment regime has also been liberalized through a series of Government proclamations. Investment code has been revised repeatedly to ensure a wide coverage in the sectors and activities that foreign investors are allowed to participate in the country. It has been amended several times in order to meet the demands of both domestic and foreign investors (Selemon M., 2008).

The first Proclamation on Investment (Proclamation No. 15/1992) was enacted on May 25, 1992 which had been in force for four years and replaced by Proclamation No. 37/1996. On April 22, 1999 another Proclamation amending Proclamation 37/1996 was issued. The laws currently in force and regulating investments are:

- Investment Proclamation<sup>3</sup> No. 280/2002;
- Investment (Amendment) Proclamation No. 84/2003; and
- Investment (Amendment) Proclamation No. 146/2008

The investment proclamation which has been amended over the past few years provides various incentives for foreign investor in the agricultural sector. Such incentive includes free repatriation of capitals; □ duty free importation of goods and vehicles related to the investment; tax holidays up to seven years; □ Opening and operating foreign currency accounts; owning immovable property for the purpose of the investment; Loss carry

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<sup>2</sup> The macroeconomic reforms include: the liberalization of trade policy; privatization of public sector enterprises; financial sector reforms; and deregulation of prices and exchange rate controls. Non-tariff barriers have been eliminated. Import tariffs have been progressively reduced from a maximum rate of 200 per cent before the reforms to a current maximum rate of 35 per cent.

<sup>3</sup> The proclamation presents the areas open to FDI; the financial limits and requirements for FDIs; the monitoring and reporting requirements; and the financial incentives that are available.

forward; □No expropriation or nationalization of investments except for public purpose in which case due compensation would be effected; □Enjoyment of domestic investor status if a foreign national prefers to be treated as such. Foreign companies should obtain an approval from Ethiopian Investment Authority or regional investment authorities to invest in Ethiopia. In relation to this, Ethiopia has signed international law that gives investment guarantees<sup>4</sup> for foreign investors<sup>5</sup>. Many institutions<sup>6</sup> were established at the federal and regional level to facilitate the foreign investment in the agricultural sector. To encourage export-oriented FDI, foreign enterprises that export at least 75% of their output are not required to meet the minimum capital requirement. Nevertheless, the investment code does not indicate the initial investment is whether in cash or in kind (UNCTAD, 2008).

The major incentives given to foreign direct investors include exemption from payment of export custom duties, income tax holidays from 2 to 7 years depending on the region and the sector of the investment, all imported capital goods and spare parts worth up to 15% of the value of the capital good are exempted from import tariffs and custom duties. In addition, the foreign investors can carry forward their initial operating losses and apply any depreciation methods for their financial statement. Besides, all foreign investors are exempted from profit tax for two years. This exemption is extended to 5 years for those investors who are exporting at least 50% of their product and supply 75% of their product as input for exporters. With regards to investment guarantees, the investment code provides guarantee for repatriation of capital, interest payments on foreign loans, profit, dividends, asset sell proceeds and technology transfer payments.

But all policy changes gave equal opportunity of FDI in all sectors. There was no special proclamation or regulation to enhance the FDI in the agricultural sector. Such situation enables all investors to involve in service and industrial sector around the capital city or main city. It is hard to invest without much incentive in the areas where infrastructure is very poor.

## **6. The Trends and Structure of FDI in Agricultural Sector**

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<sup>4</sup> Investment guarantees for FDIs include full repatriation of capital and profits encompassing not only profits, dividends and interest payments on foreign loans but also on asset sale proceeds and technology transfer payments. There is also a guarantee against expropriation, except in major cases of public interest when full market value compensation will be paid promptly.

<sup>5</sup> Ethiopia has signed the World Bank's convention on the settlement of Investment Disputes and Nationals of other States, which provides for the international arbitration of disputes with foreign investors. MIGA (Multilateral Investment Guarantee Agency) guarantee programme will become operational as soon as pending claims for compensation left over from the period of the previous military Government have been resolved.

<sup>6</sup> The principal Government agency responsible for most aspects of FDI in Ethiopia is the EIA which has the lead remit for promoting, coordinating, managing and monitoring all types of inward investment including joint-ventures. EIA reports to the Board of Investment (BOI) chaired by the Prime Minister.



Higher number of FDI in the agriculture would improve the major characteristics of the sector for speedy economic development of the country. This section deals with the trends and structure of FDI in agricultural sector in Ethiopia during the study period (1993-2010). The trends of FDI in agricultural sector indicate the change in number of the FDI in the sector over the given years. On the other side the structure of FDI refers to the different category of FDI investment in the agricultural sector. For instance: the type of agricultural investment, the regional and urban-rural distribution of FDI in agricultural sector and the origin of FDI in the sector.

### 6.1 Trends of FDI in Agricultural Sector

Exploring the trends of FDI over a certain period of time is one way of looking at the change of FDI in any country. Thus, the total number of licensed FDI projects in 1993 was 3. In this year only one FDI project started implementation while the other 2 approved investment projects did not start implementation or operation. In 1996, after three years, the total number of licensed foreign investment in agriculture was 5 and it shows an increment as compared to 1993. In this year 2 licensed FDI projects started operation while the other 3 projects failed to go to implementation. The number of licensed FDI projects in 2000 in agricultural sector reached 8. As compared to 1996, the number of licensed FDI projects in the agricultural sector in 2000 increased by 60 percent. In the same year out of the total licensed FDI projects, 5 projects started operation/implementation.

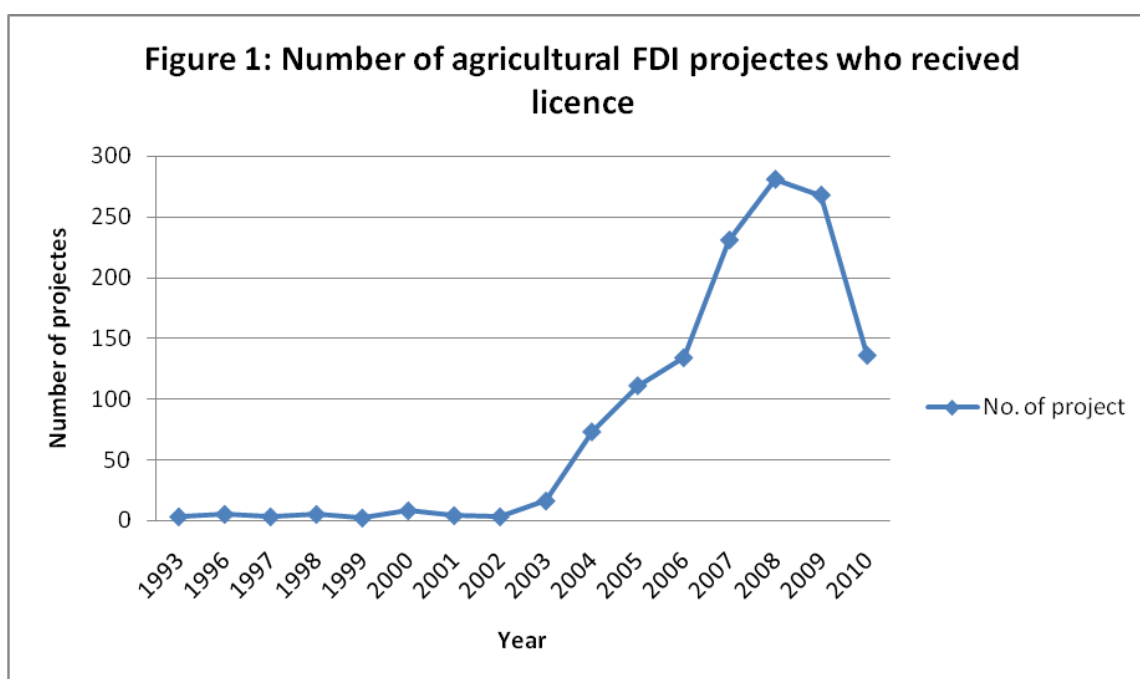
**Table 1: Trends of agricultural FDI implemented and operational and pre-implemented between 1993 and 2010**

year	Implemented and operational		Pre-implemented		Total number of project Number
	Number	% share	Number	% share	
1993	1	33	2	67	3
1996	2	40	3	60	5
1997	3	100	0	0	3
1998	4	80	0	20	5
1999	2	100	0	0	2
2000	5	63	3	37	8
2001	5	100	0	0	5
2002	2	67	1	33	3
2003	13	81	3	19	16
2004	42	55	31	45	73

2005	27	24	84	76	111
2006	18	13	116	87	134
2007	21	9	210	91	231
2008	19	7	262	93	281
2009	15	6	253	94	268
2010	2	2	134	98	136

Source: EIA, 2010

The percentage of implemented investment increased from 40 percent in 1996 to 63 percent in 2000. The total number of licensed FDI project in agriculture sector between 2005 and 2010 reached 111 and 136 respectively. The percentage of implemented projects in 2010 was only 2 which were the lowest as compared to the rest. During the study periods the percentage of implemented projects declined from 33 percent in 1993 to 2 percent at the end of the study year i.e. 2010. The percentage shares of FDI projects which started implementation/operation declined by 31 percent during the last seventeen years. In the study period, the number of FDI who received license increased by 3600 percent. In the same period, the number of implemented FDI projects increased only by 2600 percent. The higher number of FDI project approved to agricultural sector was 281 in 2008 and the higher number of projects which started operation was a total number of 42 in 2004.



Source: EIA, 2010

From the above analysis, we can see the steady growth of FDI during the study period. According to Wessleder (2009) there are three main reasons that can account for the significant change in the development of the FDI inflows. The first one is a significant change in the exchange rate of the main investors, leading to a depreciation of the Ethiopian Birr compared with the currency of the investors. The second reason, especially against the background of the world food crises, is the grabbing of natural resources to secure the food demand in the investor's country. The investment climate of Ethiopia can be seen as the third reason.

Despite the higher flow of FDI, the number of implemented projects has shown a noticeable decrease from 281 to 136 in 2008 and 2010 respectively due to mainly the global financial crisis and the overshooting inflation and the corresponding shortage of hard currency in country. Poor infrastructure, financial constraints, absence of coordination between federal and regional governments and on time provision of land can be mentioned as the major factors for poor performance of FDI in agricultural sector in the country.

## **6.2 Structure of FDI in Agricultural Sector**

The number of FDI in agricultural sector varies within the sub-sectors. In this section the study looks at the sub sectoral distribution of FDI in the agricultural sector. This study divides the FDI in the agricultural sector in to 10 categories which includes Animal-Raising, Fattening, Milk & Meat Processing; Cash crops farming and processing- Coffee, Cotton, Sugarcane, Vanilla, Tobacco; Food grains production and processing- Cereals, Pulses, Oilseeds; floriculture- flowers farming; Forestry & Forest products Processing- Gum, Charcoal, Rubber, Ornamental Foliage, Aloe Vera, Alfalfas, Wood; Jatropha Plantation & Bio Fuel Production; Mixed farming and other.

As indicated in Table 2 below the agricultural FDI project approved during the study period was dominated by animal-raising, fattening, dairy and meat processing sub sector, which accounted to 457 ( 35.6% ) of the total projects approved during the period under reference. This is of course a broad categorization as all sorts of animal-raising like Cattle, Pigs, Rabbits, Ostrich, Poultry as well as milk and meat processing are included under this category. Mixed farming took the second largest dominant subsector which accounted 232 (18%) of the approved projects during the same period. The third largest share refers to food grains production and processing sub-sector which accounted to 186 (14.5%) of the total approved projects. This category includes production and processing of cereals, pulses and oilseeds. Floriculture/ Flower production and fruits and vegetable production and processing took the next largest share in that order and accounted to 160 (12.47%) and 151 (11.8%) of the total approved projects respectively.

**Table 2: The type and percentage of FDI in agriculture sub sector wise**

Ser. No.	Sub-sector	No. of Projects Approved	% of Total
1	Animal- Raising ,Fattening, Milk & Meat Processing	457.00	35.62
2	Cash crops farming and processing- Coffee, Cotton, Sugarcane, Vanilla, Tobacco	48.00	3.74
3	Food grains production and processing- Cereals, Pulses, Oilseeds	186.00	14.50
4	Floriculture- flowers farming	160.00	12.47
5	Forestry & Forest products Processing- Gum, Charcoal, Rubber, Ornamental Foliage, Aloe Vera, Alfalfas, Wood.	13.00	1.01
6	Jatropha Plantation & Bio Fuel Production	10.00	0.78
7	Mixed farming	232.00	18.08
8	Improved seeds production, Cleaning and Processing	8.00	0.62
9	Vegetables and Fruits Farming and Processing	151.00	11.77
10	Other <sup>7</sup>	18	1.4
	Total	1283.00	100.00

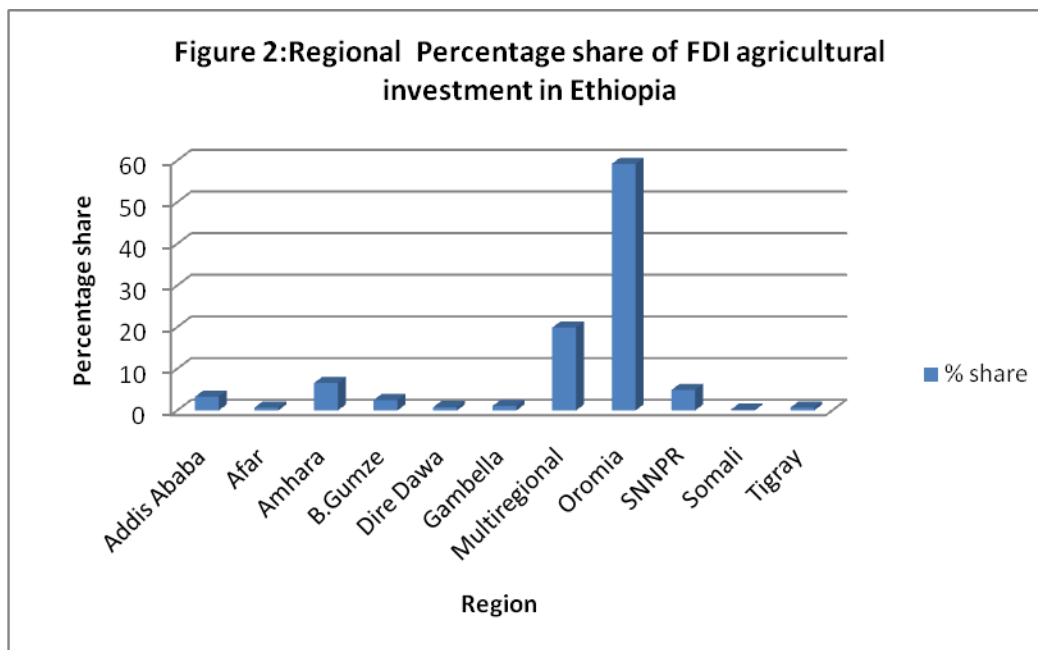
Source: EIA, 2010

The sub sector distribution of FDI depends on the demand for international market. The higher demand for animal and animal products attracted more FDI to involve in this sub sector. In the same way, the other sub sector like mixed farming system which involves both crop production and animal fattening demand was also significantly increased in the international market. In general the above distribution of FDI in sub sector wise was highly influenced by the demand for international market than local market. Most of FDI in host country are either to provide production for local market or international market. In the Ethiopian case, the involvement of the FDI in sub sector wise is based on the change in the international market. The higher FDI involvement in these sub sectors would facilitate the moderation process of the sub sector as well as the agricultural sector by providing new technology and financial resource. Creating more favorable environment will make the room for FDI to involve in any sector in the country according to the change in the international market. Further, such situation expands the local economy and at the same time it increases the country foreign reserve.

### 6.3 Regional Distribution of FDI in Agricultural Sector

<sup>7</sup> Other includes- apiculture- honey and honey related products processing, fish farming & processing , legal hunting and slaughter house

Following the downfall of Derge Regime a new federal system of government and decentralized administration were introduced in the country. As a result the EPRDF set down the country into nations and nationality based on ethnic, linguistic and other relevant cultural criteria. Accordingly, nine regional states of government and two city administration were formed in accordance with proclamation No. 71/1992. During the study period (1993-2010) a total number of 1,283 agricultural FDI projects were approved in the country. It is important to see the distribution of these approved projects in regional wise. When we see the regional distribution of FDI projects, Oromia National Regional State accounts for 759 numbers of projects which was 59 percent of the total project. Subsequently, Amhara National Regional State accounts for 7% of the total project. The less number of FDI in agricultural sector recorded in Somalia and Afar regions. Of the remaining projects 255 (20%) are multiregional projects. This refers to the FDI which operates more than two regions in the country. The share of the remaining regions such as Dire Dawa, Gambella and Tigray were only one per cent of the total approved projects (see figure 2).



Source: EIA, 2010

The figure indicates the unbalanced distribution of FDI in agricultural sector in the country. The availability of infrastructure, nature and quality of land influenced the distribution of FDI in region wise. The various incentive packages designed by the government could not change such kind of unbalanced distribution of agricultural investment. Such situation aggravates the existed regional inequality which may hamper the future sustainable development of the country. In these regard the government must work aggressively on infrastructural development in emerging regions. Designing

incentive packages only may not be the solution to regional FDI variation in the agricultural sector.

#### 6.4 Origin of FDI in Agricultural Sector

The origin of the FDI in any country is highly influenced by various factors. Most of the time in the case of developing country influenced by the colonial legacy in each country or the country trade agreement with other countries: regional trade or investment agreement. In this regard it is interesting to see the source of FDI in Ethiopia. FDI in agricultural sector has been coming from different countries. Table 3 reveals that most of the FDI approved in agriculture sector came out from Middle East. During the study period the total number of 409 Middle East citizens received license to involve in agricultural investment which is 31.9 percent of the total project. North America and Europe took the second and third position with 236 and 235 approved projects respectively. The higher demand for agricultural sector in the Middle East and the Ethiopian geographical settlement attract the Middle East and make them to be the first investors in agricultural sector in Ethiopia. In the same way, the financial crisis in North America and Europe as well as the diversified ecological situation except infrastructural constraint forced and attract many investors to invest in agricultural sector in Ethiopia.

Few people relate such high level of FDI investment patters with land grapping. Ethiopia suffered by drought and food insecurity while the country has abundant uncultivated land. Due to the prevailed poor agricultural and economic situation many people died because of lack of food. Agricultural sector in Ethiopia is more characterized by lack of technology and low domestic private sector involvement. At the same time our export sector dominated by single agricultural commodity (coffee). Now, the question is how long to keep such kind of economic structure in the county? There must be sectoral structural transformation through modern commercial farm in the county. One means of modernizing agricultural sector is allowing FDI to involve in the economy with well formulated investment framework (regulatory framework).

**Table 3: The number of percentage share of FDI in agriculture by the origins of their country**

SN	Origen of Investment	Number of investor	Percentage share
1	Europe	235	18.3
2	North America	236	18.4
3	Asia	173	13.5
4	Middle East	409	31.9
5	Africa	214	16.7
6	other	18	1.4

	total	1283	100
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Source: EIA, 2010

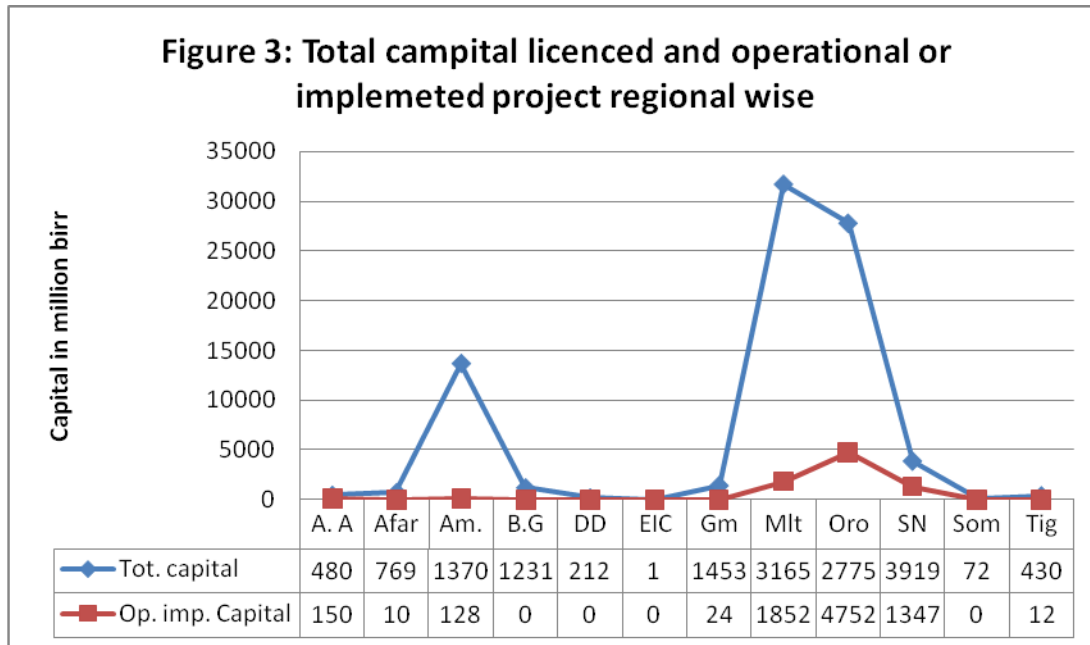
The other reason is the opportunity that comes to the country due to the change in the world demand for the agricultural product. As long as agriculture is our comparative advantage, it is good to transform the economy to industrial sector by mobilizing resource from agricultural sector. In the current industrial structure of Ethiopia, which is more dependent on the imported material, it is impossible to be competitive in the international market. Before industrial revolution, most country achieved green revolution (agricultural development) which enables them to modernize their industrial sector.

## **7. Opportunities of FDI in Agricultural Sector**

In the preceding sections, the study presented the trends and structure of FDI in the agricultural sector in Ethiopia. The reform measure taken by the current reformist government provide ample opportunities for the development of agricultural sector through expansion of FDI in the sector. In this section, the opportunities of FDI for the agricultural sector in Ethiopia would be discussed. Though, there are many opportunities that came through FDI, due to lack of data, the paper focused only on foreign capital inflow (financial resource) and employment opportunities of FDI in agricultural sector.

### **7.1 Foreign Capital Inflow**

One of the opportunities of FDI in the agriculture sector is providing financial resource for the development of the sector. As mentioned in section 5.1, a total of 1283 FDI projects were approved in agricultural sector. The planned total investment was 81 billion birr which was expected to flow into the country. A thorough observation in the data shows that the regional share of a agricultural FDI capital inflow goes in line with the flow of the number of the projects. It can be seen from Figure 3, 34, 17 and 5 percent of the capital inflow goes to Oromia, Amhara and SNPR respectively. The largest share i.e. 39 % is multinational. The remaining regions have a share of less than one percent except that of Gambella (2%) and Addis Ababa (1%). This implies that inflow of capital has concentrated in two regions and the capacity of all the other regions in attracting agricultural FDI projects, mainly that of Afar and Somali regions, was found extremely low. The low number of investment mainly contribute for low capital inflow in these regions.



Source: EIA, 2010

Despite the available foreign financial resource and low implementation of approved FDI in agricultural sector, the sector received only 11 percent of the potential foreign capital inflow. That means the actual financial flow to the sector was only 9 billion birr. The major reason is the low implementation of FDI in agriculture sector.

## 7.2 Employment Opportunity

In terms of employment opportunities, the approved FDI projects in agriculture in the reference period are expected to create a total of 962 thousand employment opportunities in the sector. Out of these employment opportunities, 342 thousand were permanent employment and the remaining 620 thousand were temporary employment opportunities. As we can see from Table 4 the multi regional FDI project has created the largest employment opportunity (55%) for the country. However, in terms of regional distribution of the employment opportunities created by regional FDI projects, Oromia took the highest share (23.6% of the total) and next Amhara and SNNPR took 7.6% and 5.6% share respectively. The share of other regions in terms of employment opportunities created were 1,283 by Agricultural FDI projects.



**Table 4: Total number of employment opportunities created by the agricultural FDI by project status between 1993 and 2010 in thousand**

Region	Project licensed			Project operational or implemented			% share of project Employment.
	Permanent	Temporary	Total	Permanent	Temporary	Total	
Addis Ababa	4.6	7.1	11.7	0.9	0.122	1.1	9.4
Afar	5.8	15.9	16.5	0.04	0.150	0.2	1.2
Amhara	29.8	43.6	73.5	1.1	6.592	7.7	10.5
B.Gumze	2.2	6.6	8.8	0	0	0	0
Dire Dawa	3.1	0.3	0.6	0	0	0	0
Gambella	1.2	14.3	15.6	0.1	0	0.1	6.4
Multi regional	188.3	351.7	540.0	1.7	163.1	164.8	30.0
Oromia	101.5	125.2	226.7	16.9	39.6	56.6	24.9
SNNPR	10.6	43.3	53.9	1.4	12.0	13.5	25.0
Somali	1.4	0.5	1.9	0	0	0	0
Tigray	1.4	11.4	12.8	0.4	0	0.4	3.1
Total	342.2	620.4	962.7	22.8	221.7	244.6	25.4

*Source: EIA, 2010*

In terms of actual number of employment opportunities, out of the approved employment opportunity projects, the agricultural sector took 25 percent of the potential employment opportunity. In other word only 245 thousand employment opportunities were created. The actual number of permanent and temporary employment opportunities was 22 thousand and 221 thousand during the study period respectively. In terms of potential and actual employment opportunities, the number of temporary employment is much higher than the permanent employment opportunity. In Regional level, the higher actual employment opportunity of FDI in agricultural sector was higher in multiregional followed by SNNRS (25%) and Oromia National Regional State (24.9%)

## **8. Impacts of FDI on agricultural export**

Large number of FDI in the agricultural sector increases agricultural production which directly affects the export of the agricultural product. Most of the time the FDI involves in the export oriented products. Various studies such as W.H. Furtan and J.J. Holzman (2004) and Timothy Biller (2004) have been undertaken in an attempt to illustrate the impacts of FDI in agricultural export. Accordingly, in this section the researcher tries to analyze the impacts of FDI in agricultural sector in Ethiopia.

Except the quantity of agricultural export, all variables are explanatory or independent variables. The quantity of agricultural export is dependent variable. Due to the endogeneity problem, the study was employed Two Stage Least Square (2SLS) estimation.

FDI is measured by taking the foreign capital investment which started operation since 1993. The export sector is measured by the quantity of exported agricultural product. The researcher decided to use the export quantity than the export revenue. Because most of the time the export revenue fluctuate due to the international market price which data are not available. Other control variables also included in the analysis. The control variable includes dummy variables that measure the reform program, the weather condition and war. The other control (independent) variables are: the value of agricultural production, the revenue of agricultural revenue and policy change

To promote exports, the government has initiated a number of measures including the establishment of an export promotion agency, introduction of a duty drawback scheme and elimination of foreign exchange surrender requirements. Exporters can now retain up to ten percent of their foreign exchange receipts in foreign currency deposit accounts and sell the rest to any local bank or foreign exchange bureaus at freely negotiated rates over an extended conversion period until four weeks. In addition, foreign investors in the export sector are allowed to buy foreign exchange for remittances.

**Table 5: Statistical Summary of Variables**

S. N	Variable	observation	mean	Standard deviation	Minimum	maximum
1	Dummy- instability	16	0.25	0.4472	0	1
2	Agricultural export quantity '000' MT	16	421	173	227	762
4	Agricultural Production. '000' MT	16	35	9	23	55
6	Dummy-Policy change	16	0.43	0.512	0	1
7	Availability credit	16	17	15	3	56
8	Dummy-weather	16	0.18	0.403	0	1
9	FDI-capital '000birr	16	8272	9775	208	24900

Source: computed from data collected from EIA , 2010

Table 5 shows the statistical summary of the observations. During the survey year the average agricultural export quantity was 0.4 million Metric Tone (MT). The minimum agricultural export was 0.23 billion Metric Tone (MT) and Maximum was 0.76 billion Metric Tone (MT). In the same period the mean quantity of agricultural production was 0.3 million metric quintals. The minimum agricultural production was 0.23 million metric quintals and maximum was 0.55 million metric quintals. The other variable included in this estimation was the amount of capital investment for FDI in operation. The minimum and the maximum number of FDI capital started operation in agriculture are birr 2.0 billion and 24.9 billion respectively.

The estimation result showed that a unit percentage change in FDI investment in agricultural sector increase export quantity by 0.21 percent. In the same way, a unit percentage change in agricultural production increases quantity export by 1.25 percent. Table 6 illustrate the total agricultural production affected by other factors like political and economic instability, the change in economic policy and availability of credit in the country.

**Table 6: Estimated outcome of the impacts of FDI in agricultural export**

S.N	Variable	Coefficient	Stand error	Z
Agricultural quantity export				
1	FDI investment	0.20655177	0.0145651	14.18
2	Agricultural product	1.250641	0.0446468	28.01
3	Dummy Weather	-0.1419482	0.0240893	-5.89
4	Constant	0.389338	0.4875413	0.80
Agricultural production				
1	Dummy- instability	-0.056527	0.0094775	-5.97
2	Dummy- policy change	0.0321858	0.0085058	3.78
3	Available credit	0.30659	0.0045151	67.90
4	Constant	7.542764	0.042691	176.68

*Source: Estimated by author from data collected from EIA, 2010*

## 9. Summary, Conclusions and Recommendations

During the last few years the number of FDI in developing country was increased remarkably. FDI provides various opportunities. These are financial resource, new technology, knowledge and provide international market opportunity. Realising these opportunities, the Ethiopian government has undertaken reform programs in order to encourage FDI in the country. The findings of the study revealed that the total number of licensed FDI projects in agricultural sector increased from 3 to 136 in 2010. Out of the total investment projects licensed only 2 projects started operation in 2010. The higher implementation rate of FDI projects was 55 percent in 2004. The maximum number of FDI (281) in agricultural investment was approved in 2008. Subsectoral wise, FDI projects approved in agricultural sector during the study period was dominated by animal-raising; fattening, dairy and meat processing subsector which accounted for 457 (35.6%). Mixed farming took the second largest dominant sub sector share which accounted for 232 (18%) of the approved projects.

Out of the total licensed investment projects Oromia National Regional State accounted for 59 percent. Amhara National Regional state took the next place which accounted 7% of the total project. In terms of origin of FDI in agricultural sector, the Middle East citizens took 31.9 percent of the total project. North America and Europe took the second and third position 236 and 235 number of approved project respectively. During the study period the potential capital investment was 81 billion birr. But the actual investment started operation was on 11 percent of the potential foreign capital inflow. In

the same way the actual number of employment opportunities created by FDI in agricultural sector was 244 thousand. The estimation result also revealed that while a unit increases in the FDI in agricultural sector, the agricultural export increased by 0.21 percent. Therefore more FDI in agriculture increase agricultural export in the country.

The FDI flow in the agricultural sector in Ethiopia has shown a change in terms of size and capital investment. Although, the government prepared regulatory framework to increase the number of FDI, the benefits of the sector is not entirely satisfactory. The domino effect of lower implementation rate of investment is lower capital flow and employment opportunity in the economy. Further, the regional variation of FDI in the sector aggravates the regional inequality existed in the country. The government must work more on the infrastructural development beyond the provision of various incentive packages. In addition, in order to exploit the sector properly, the government must select the comparative advantage of the country and encourages FDI to involve. Just opening all sectors for FDI without a detail and thorough study may bring coordination failure in the subsectors.

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