

The Economic Impact of Underperformance Operation of Flower Investment Projects: The Case of Suryablossom Flower Industry

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Abstract

Karuturi global company is an Indian company that invests on rose flower investment in Kenya as well as in Ethiopia. The company ranks as one of the largest investors in the agricultural sectors especially on the floricultural investments. Karuturi has leased more than 300,000 hectare of land in Ethiopia, about one-tenth of the total amount of land that the government has made available to domestic and foreign investors. The Surya blossom flower industry was established by Karuturi global, it started its operation by leasing 376 hectare of the land and registered 531,150,000ETB capitals. This study aimed to analyze the economic impact of underperformance operation in Suryablossoms (Karuturi) flower industry on the surrounding community. In the study, the researcher used descriptive analysis and simple random sampling technique. The primary data are taken from the residents of that area with direct interview of 90 farmers who leave their land due to this investment project. On the basis of the findings, when the agricultural products forgone are valued in monetary unit the study used 700 ETB and 950 ETB average prices of Teff and peanut per Quintal respectively for the past six years. Depending on this average prices, if we consider both scenarios of agricultural product (Teff and Peanut), 811,043,512ETB are forgone for the past six years due to the establishment of Suryablossom flower industry. During 2007, 2008, 2009, 2010 the export forgone per week due to underperformance operation of this flower industry is 20,439,685.71ETB, 19,715,376.12ETB, 19,074,445.29ETB and 18,687,455.49ETB respectively. But after 2012 the Suryablossom flower industry stopped the export of cut flower. As a result the country has forgone 21,311,699.7 ETB per week for the past two years, which can be summed up to 2,067,234,871 ETB. It is therefore recommended that there should be close follow up and monitoring performance of the operator and guarantee for the government that cut flower industry operates as expected. In addition, it should transfer the land back to the pervious farmers of the

land and provide appropriate economic compensation during the transfer.

Keywords: Economic impact, underperformance in flower investment, Suryablossom

1. Introduction

1.1. Background of the Study

Horticulture is the study and science of plant cultivation including the process of preparing soil for the planting of seeds, tubers, or cuttings. Floriculture is an area of study under horticulture and it includes the production and making of floral crops (Wikipedia). In the year 1700, formal cut flower production became established in Netherlands with the developments of green houses. As transportation improved, cut flower production became increasingly concentrated near major metropolitan areas. The development of air transport and refrigerated trucks greatly accelerated the concentration of the cut flower industry and allowed it to move to areas with the best climates for optimum production cost (Wikipedia).

Globally the demand for and consumption of cut flower is increasing considerably, the investment on floriculture sector is characterized by high labor and land intensity, those factors are required high cost in developed country this create opportunity to most developing nations. Ethiopia is endowed with the conditions required for a successful flower industry i.e., flatland at high altitudes, a cool climate, low cost labor, and proximity to major markets, international airport near to the production areas. In Ethiopia flower production for commercial purposes started in the 1980's. The state-owned farms were the first flower farms of their kind, but as private flower farms started coming up in the 1990s, state farms started to decline, the pioneer in private sector were Meskel-Flower plc a local company established and began operation in 1993, this flower farm is located in Meki, 160 km s south of the capital city, Addis Ababa. Next to Meskel-Flower plc Ethio-Flora is the second private flower farm, which established in Battu, 98 kms south of Addis Ababa. Both farms are Ethiopian owned and produce summer flowers (field produced) such as alliums, and carnations for export to Europe markets. Initially, the farms recruited domestic expertise mainly former state owned flower farm employees. But Meskel Flower

recruited a production manager from Kenya. Both farms received support from the Europe, to employ consultants for a period from Kenya and the UK (Michiko and Mullu, 2010). In Ethiopia the flower investment has shown a very dramatic growth even surpassing most African nations that have an established operation long before Ethiopia start growing flowers. This was due to the fact that Ethiopia located in horn of Africa with geographical proximity to Middle East and Europe, provides the investor with parallel access to floricultural market, there is a favorable climate, land and labor in Ethiopia which help the country to expand this sector and use their comparative advantage. In addition to the above reasons for the faster growing of horticultural investment in Ethiopia there is investment incentives for investors who interested in the horticultural sector, due to those reasons that Ethiopia is implicitly witnessed by the alarming increasing number of local and foreign investors in this sectors.

Ethiopia is known the second largest flower export in Africa after Kenya and the fourth largest flower export in the world (Ethiopian horticultural agency), in Ethiopia flower are produced in modern farms around Addis Ababa and in rift valley. From these horticultural industries Suryablossoms plc, which is located in Southwest Shewa (around waliso), is the second largest flower investment industry in Ethiopia. This company was owned by Karuturi global ltd, the Indian multinational corporation that made its name in the global cut flower industry and recently acquired more than 300,000 ha in Ethiopia to produce flower for foreign markets, know this company was in massive declaration and much of Karuturis overseas operation was shut down & seized by creditors.

1.2. Statement of the Problem

In developing countries, diversification into high-value agricultural exports has become a key means of linking the developing nations to global product markets and the cut flower sector is playing a major role in linking economy of developing nation into global market. Most developing nations which have geographic advantage take this sector as a means to achieve rapid economic growth. Cut flowers are often taken by national governments and international development agencies like World Bank as alternatives to tropical crops like coffee,

bananas, and palm oil (Gudeta, 2012). Like other developing countries, few agricultural products dominate the major export items of Ethiopia such as coffee that earn very small amounts foreign exchange in the international market. This fact calls for export diversification. Due to this reason, the Ethiopian governments try to increase the kinds of export items and searching new markets for both the existing and new items and this lead to increase the importance of floricultural sector in Ethiopia (Assafa and Gosa, 2014). Technical Paper on the global competitiveness of the Kenya flower industry argued that a commercial horticulture sector needs government policies that provide an environment in which the sector can survive. It does not need direct intervention from the government in its activities rather government should recognize the need for a vigorous private sector as the engine of commercial growth. Similarly, the study conducted by Nicolas and Margaret (2004) stated that different factors can be forwarded to enhance the growth and success of horticultural exports. Those are a realistic exchange rate, stable policies, a good investment climate, competitive international transport connections, institutional, and social links with markets in Europe and continual experimentation with the market institutions to link farmers and exporters. According to the technical paper on the competitiveness of Kenya infrastructure, investment, institutional and innovational activities are the major areas in which the government should involve in order to promote the floricultural sector. In Ethiopia, the economic advantage of flower investment is increasing over time with different perceptions regarding the economic impact of this sector. According to the study conducted by Beza, 2012, the floricultural sector is the major sector, which enhances the economic development in terms of foreign exchange and employment creation. The Ethiopian government was unaware of the major opportunity offered by this industry and not provided specific support until the end of 2002 (Mullu,2007).After this time the government is providing different incentive to the floricultural sector and tries to capture the comparative advantage of this sector. Even if the Ethiopian government has created a very conducive environment for floricultural sector, many floricultural investments have failed and they are in rehabilitation process (Gebre, 2010).

The failure or the underperformance of floricultural investment was due to different reasons. Many studies state different causes for failure and underperformance of this sector in Ethiopia. For example, the study conducted by Gebere in 2010 had tried to describe underlying cause of business failure of floriculture investment in Ethiopia and he has stated: lack of management skill and experience, economic related problem such as inflation and exchange rate as the causes for the failure of floricultural investments. Birhanu (2006) also stated shortage of capital, poor banking system, cargo bottlenecks, shortage of chemicals and fertilizer and flower packing problem as the main problem of cut flower industry in Ethiopia. The other major causes of failure and underperformance operation in cut flower industry are the perishable nature of the cut flowers, the bureaucratic customs, and bank formalities in Ethiopia. Those problems hindering the quality and competitiveness of cut-flowers sectors in the international market and this lead to the failure and underperformance of this sector (Assefa and Gosa 2014). The cut flowers are sold in the world market where the market prices fluctuate following the action taken by internationally prominent flower suppliers (Mulu and Michiko 2010). This also has the capacity to hinder the growth of this sector. The failure and the underperformance of this sector have negative consequence on the economy of a country and on the surrounding community by minimizing the economic contribution of this sector. The creation of employment opportunity and foreign exchange are the major economic contributions of the cut flower sector (Hiame2012).

Due to the importance of this sector for the economy of the country, many studies have been conducted on the performance of Ethiopian flower industry. For example Telaye (2012), has tried to show the performance of Ethiopian cut flower industry. However, there are few studies have actually been conducted on problem of failed and underperformed flower investment projects. For example, Geberie, 2010, had tried to describe underlying cause of business failure of floriculture investment in Ethiopia. But the study does not investigate the economic impact of the underperformed flower investment on the surrounding community and at all no studies took places that determine the economic impact of underperformance operations of

Suryablossom flower industry on surrounding community but this study will try to analyze the economic impact of underperformed flower investment projects on surrounding community specifically the case of Surya Blossoms flower industry.

1.3 Objective of the Study

1.3.1. General Objective

The overall objective of the study is to analyze the economic impact of underperformance operation in Suryablossoms (Karuturi) flower industry on the surrounding community.

1.3.2. Specific Objectives

- To investigate agricultural production forgone (per year) due to the establishment of the project.
- To determine opportunity forgone In terms of export and job opportunity forgone due to the underperformance operation of this project.

2. Research Method

2.1 Source of the Data and Methodology

In order to achieve the objective of the study both primary and secondary data sources are used. The primary data are taken from the residents of that area with direct interview of 90 farmers who leave their land due to this investment project. Those farmers were selected from three kebeles by using the technique of simple random sampling technique. When this technique was, applied three (3) farmers are selected from Senqelle hale Mariam kebele, thirty eight (38) farmers are selected from Marubebeli kebele, and forty nine (49) farmers were selected from Worebubarrio kebele. In this case the number of farmers from each kebele is proportional to number of farmers those leave there lands for this industry. The secondary data are obtained from different published and unpublished materials including different researches and reports of various organizations such as Ethiopian horticultural producers and export association, Ethiopian horticultural development agencies and Oromiya Investment Bureau. Simple random sampling technique is applied and descriptive technique of presentation is employed by using tabular, graph presentation and percentage computation.

2.2 Significance of the Study

The flower industry have a great role in order to improve economic welfare of country it provided foreign currency and job opportunity for money uneducated labor forces. Under performances of this sector was lead to lo loss of the above advantage and it also leads to the increase of ideal resources. Hence, this study tries to investigate the economic impact of failure in Suryablossom flower industry on surrounding community, it is very crucial to conduct this study because it provides overall knowledge about the economic impact of underperformance in floricultural sector. It also indicate the path that the government should follow to take an action in ordered to provided remedy to the failed flower investment project's. It will also serve as an additional reference for further study on this sector.

2.3 Scope of the Study

This particular study focuses only on the situation of Suryablossom flower industry ,although the problem pertain to all over the country and only the economic impact of failed in this industry on surrounding community considered. The flower investment has a negative impact on environment but the study consider the underperformed flower investment project and there economic impact on the surrounding community and economy of a country.

2.4 Limitations of the Study

Two major constraints encounter the researcher while undertaking the study. The first one is categorized under the heading of lack of time, finance, as well as appropriate data. Because of these limitations, it would be hardly possible to collect primary data from the surrounding community of the Suryablossom flower industry. Although it is unquestionable that this is very important to determine the economic impact this flower industry on surrounding community, it is very difficult, as it requires a longer time and huge financial costs (mainly transportation cost).

Another limitation of this study is that lack of appropriate data from the respective kebeles and zones officials because of their bureaucratic processes of not want to reveal their fault.

3. Data Presentation and Analysis

3.1 Description of Suryablossom/Karuturi Flower Industry

Karuturi Global Ltd is owner of Suryablossom flower industry. This global company is an Indian company that invests on rose flower investment in Kenya as well as in Ethiopia, ranks as one of the largest investors in the agricultural sectors especially on the floricultural investments. Karuturi has leased more than 300,000 hectare in Ethiopia, about one-tenth of the total amount of land that the government has made available to domestic and foreign investors. The Surya blossom flower industry was established by Karuturi global company in Southwest Shewa, Woliso Woreda by taking permission from Southwest Shewa Investment Office in 1999 E.C. The industry has started its operation by leasing 376 hectare of the land and registered 531,150,000 Birr capitals.

3.2 Data Analysis

3.2.1 General Characteristics of Sample Respondents

Suryablossom/Karuturi flower industry has started its investment project by leasing 376-hectare land. Before the establishment of this industry, 451 farmers owned this land. Out of the total farmers, those leased their land due to this investment project; this study selects 90 farmers randomly.

On average, each household has 6 (see table 1) family sizes.

According to the survey result, 56.7 percent of total sample respondents have 1-5 family size, 56.67 percent of total respondents have 6-10 family and the remaining 4.44 percent have greater than ten (>10) family size.

Table 1: Average Age of the Respondents and Family Size

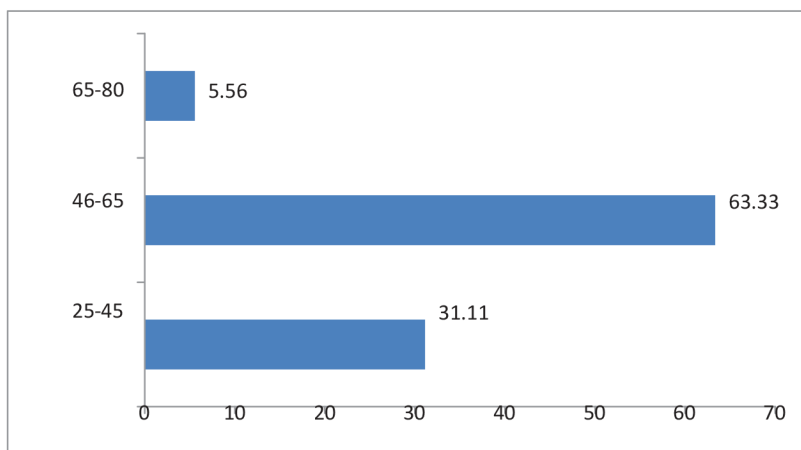
	Mean	Std v	Min	Max
Age	49	13	26	78
Family size	6	3	1	14

Source: own field survey, June, 2015

On average, the age of the sampled respondents of three kebeles is 49 years old. This may reveals that, most of the farmers of those

kebele are adult. According to the survey of the study most of the respondents are in the range of 46-65 years, about 63 percent of sample respondent are in this range, 31.11 percent of sample respondent are in the range of 25-45 years and 5.56 percent are in the range of 65-80 (see figure 1).

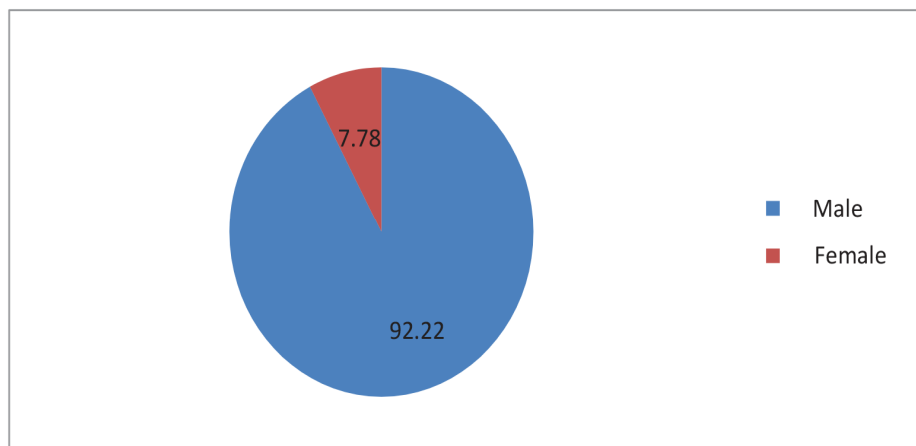
FIGURE 1: DISTRIBUTION OF SAMPLE RESPONDENTS BY AGE



Source: own field survey, March, 2015

Our survey result indicated that over 92 percent of the respondents are male-headed farmers and the remaining 8 percent are female-headed households (see Figure 2). Most of them are farmers those get this land by THADISO (the soldier during the Dergue regime get the land by this mechanism) this implied that they did not have another land without this land.

FIGURE 2: DISTRIBUTION OF SAMPLE RESPONDENTS BY SEX



Source: own field survey, March, 2015

3.3 Assessments for Economic Impact of Underperformance Operation in Suryablossm/karuturi Flower Industry

This company was established in 2007, by leasing 376 hectares of land for floricultural investment, but up to 2012, the size of the land used by this industry was only 48 hectares. After July 2012, the company stopped the production of cut flower and all 376 hectares are seat as idle resource.

The industry did not operate by their full potential and it did not provide the expected job opportunity for surroundings community and expected foreign exchange for the economy of a country. The company also did not provide the social service that they promise to provide when they take the land. In 2013, Southwest Shewa Investment Office took 220 hectare from the company as a punishment and reserved it in land bank. Currently the size of land under this company is 156 and the number of employer in this industry is 173. Even though 156 hectares are owned by it, 376 hectares of land is seat as ideal resource due to the problem related to underperformance operation of Suryablossm/Karuturi flower industry.

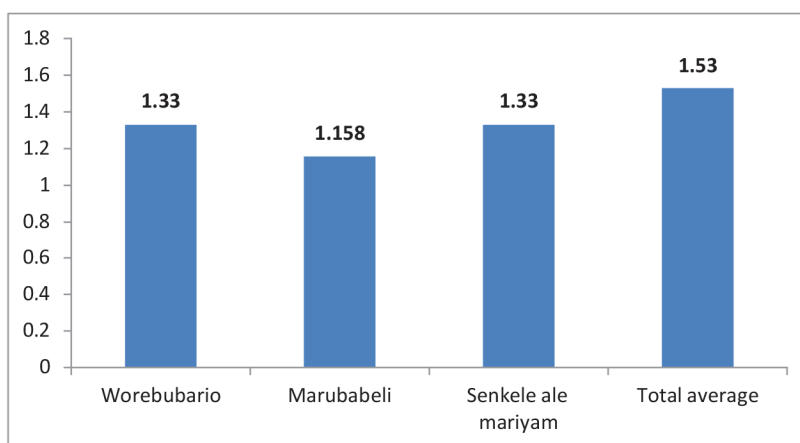
3.3.1 Agricultural Production Forgone per Year due to the Establishment of the Suryablosm Flower Industry

Even though large-scale investment in floricultural sectors play important developmental roles, including: creating employment and earning foreign exchange, empirical evidence from developing countries indicates raised concerns of a neo-colonial land grab that threatens smallholders and food security in developing countries. The same result observed from the farmers whose lands were leased by Suryablossom flower industry. Theoretically, in ordered to produce any product on a given land, we have to forgone another agricultural product that produced on that area. In the same manner, due to a large hectares of land was leased by Suryablossom/karuturi flower industry, many other agricultural products was forgone.

According to the data taken from Southwest Shewa Investment Office, 376 hectares of land leased from 451 farmers by Suryablosom flower industry in 2007. During the establishment of this

industry, ETB 14,868,368.5 was paid as compensation for total farmers of three kebeles of whom their land is leased by this flower industry. When they calculate this compensation, they assumed 1200kg of Teff and 500kg of peanut are produced per hectares in one year, and this compensation was only for 10 years. Depending on this, they calculate 100kg of Teff and 100kg of peanut by 350ETB and 550ETB respectively. Related to the above issue, 90 farmers selected randomly from three kebeles and were asked about their size of land leased by this flower industry, types of agricultural products that they produced from that land before the establishment of this industry and amount of production per year from that land in hectare.

FIGURE 3: AVERAGE LANDS OF SAMPLE RESPONDENTS



Source: own field survey, March, 2015

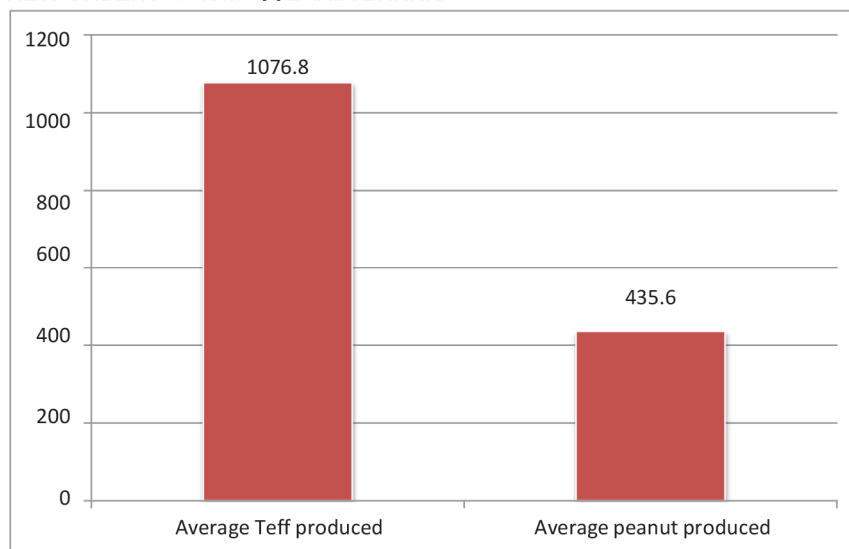
Figure 3 shows the average land owned by sample respondents; accordingly, sample respondents from Worebubarrio, Marubabeli and Senkele Hale mariyam, kebeles owned 1.33 hec, 1.158 hec, 1.33 hectare on average respectively. The total average land owned by sample respondents are 1.53.

A. Agricultural Product Forgone in Worebubarrio Kebele

Worebu Barrio kebele is one of those kebeles in which this industry was established and large portion of land leased from the farmers. According to the data taken from Worebu Barrio administration office, 261.596 hectares of land leased from 248 farmers by this flower industry. Depending on the above calculation, during the establishment of this industry, 10,712,368.49 ETB was paid for those

farmers as compensation. From those farmers, 49 farmers selected randomly and asked the size of their land leased by this flower industry, type of agricultural products they produced on that land, amount of agricultural products produced from that land before the establishment of this industry. According to their response, the mostly produced agricultural products in that area were Teff followed by peanut.

FIGURE 4 AVERAGE PEANUT AND TEFF PRODUCED BY SAMPLE RESPONDENT FROM WERABUBARRIO



Source: own field survey, March, 2015

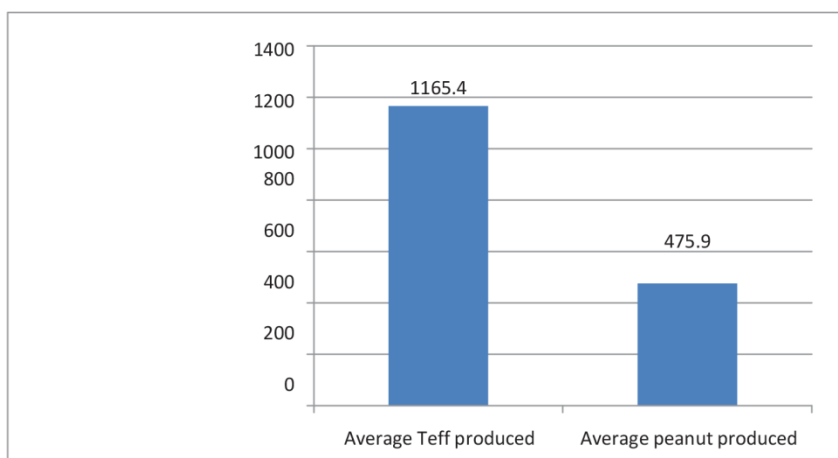
Figure 4, shows that the average agricultural product that produced by sample respondents from Werabu Barrio kebele by considering two scenarios. According to figure 4, on average, 435.6kg of peanut and 1076.8 kg of Teff produced each year per hectares by each sample respondent. Based on the data collected, 55.5hectares of land leased from 49 sample respondent farmers and from this land; 52,762.5 kg (See Table 2) of Teff produced each year before the establishment of this flower industry. Depending on the above data, on average, 950.68kg of Teff was produced per hectare of land and this implies that from 261.596 hectares of land leased by this flower industry, 248,694.08kg of Teff was forgone per year due to the establishment of this industry. Generally, 1,492,164.48kg (table 2) of Teff product had forgone for the past six years in this kebele. When we consider the second scenario the case of the year in which peanut are the only agricultural product produced by farmers of this kebele, from the total land of sample respondents leased by Suryablossom

flower industry, 21,343kg (see table 3) of peanut was produced each year before the establishment of this flower industry. Accordingly, on average, 384.56kg of peanut was produced per one hectare of land. This implies that from 261.596 hectares of land leased by this flower industry, 100,599.36kg of peanut was forgone per year due to the establishment of this industry. Generally, 603,596.16kg of peanut product had forgone for the past six years in this kebele due to the establishment of Suryablossom flower industry.

B. Agricultural Product Forgone in Marubebeli Kebele

Like Worebubarrio kebele, the farmers in Marubabelikebele provided the largest land for Suryablossom flower industry. According to the data taken from Marubabeli kebele administration offices, 110.404 hectares of land was leased by this flower industry from 187 farmers. In the same calculation 4000,000 ETB is paid for farmers as compensation. The same questions raised for these farmers like previous question and they replied as the mostly produced agricultural products produced in that area was Teff and peanut.

Figure 5 Average peanut and Teff Produced by Sample Respondent from Marubabeli Kebele



Source: own field survey, March, 2015

Figure 5 shows the average Peanut and Teff product produced by sample respondent of Marubabelikebele. According to this figure, on average 475.9kg of peanut and 1165.4 kg of Teff are produced each year by sample respondents from this kebele. If we consider the year in which Teff are the only agricultural product produced by sample

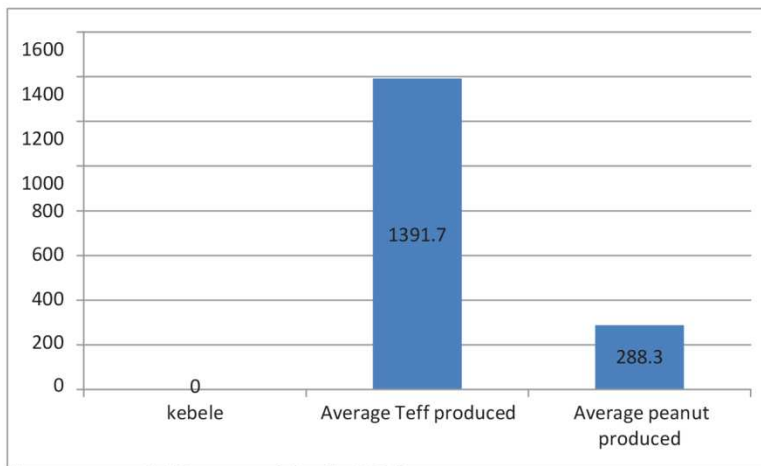
respondents, from 44 hectare of land leased by Suryablossom flower industry from 38 sample respondents, 44,286.5 kg (see table 4) of Teff was produced each year before the establishment of this flower industry.

According to the above data, on average 1006.5kg of Teff was produced per hectare of land, this implies that from 110.404 hectares of land leased by flower industry, 11, 1121.6 kg of Teff was forgone per year due to the establishment of this industry. Generally, 666,729.6kg of Teff product was forgone for the past six years in this kebele. When we consider the second scenario, the case of the year in which peanut are the only agricultural product produced by farmers of this kebele, from 44 hectare of land leased by Suryablossom flower industry from sample respondents; 18,083 kg of peanut was produced each year before the establishment of this flower industry. According to this data, on average 410.98kg of peanut was produced per hectares of land in one year, this implies from 110.404 hectares of land leased by this flower industry, 45,373.84kg of peanut was forgone per year due to the establishment of this industry. Generally, 272,243.04kg (see table 5) of peanut product was forgone for the past six years in this kebeles due to the establishment of Suryablossom flower industry.

C. Agricultural Product Forgone in Senkale Hle Meriamkebele

Senkale Hle Meriyem kebele farmers also provide their land for surya blossom flower industry the portion of land leased by this flower industry from this kebele was small when compared to the above two kebeles. The sizes of the land leased from this kebele were only 4 hectares and 16 farmers own these lands. In the same calculation as above 156,000 ETB was paid for those farmers as compensation. The same questions are provided for this farmer and they replied as agricultural products produced in that area was Teff followed by peanut.

Figure 6: Average Peanut and Teff Produced by Sample Respondents from Senqelle Hle Meriam Kebele



Source: own field survey, March, 2015

Figure 6, shows that the average peanut and Teff produced by sample respondents per year from Senqelle Hle Mariam kebele. According to this Figure, average peanut and Teff produced by each respondent are 288.3 kg and 288.3kg per hectares respectively. When we consider the year in which Teff are the only agricultural product produced by sample respondents, from 4 hectares of land leased, if we only do on 3 sample respondents; 4,175kg (see table 6)of Teff was produced each year before the establishment of this flower industry. Based on the above data on average 1043.75kg of Teff was produced per hectare of land, this implies from 16 hectares of land leased by this flower industry,16,700kg of Teff was forgone per year due to the establishment of this industry. Generally, 100,200kg of Teff product is forgone for the past six years in this kebele due to the establishment of Suryablosom flower industry.

When we consider the second scenario the case of the year in which peanut were the only agricultural product produced by farmers of this kebele. From total hectare of land of sample respondents leased by this industry, 865kg (see table 7) of peanut was produced each year before the establishment of this flower industry. Based on this data, on average 216.2kgof peanut was produced per hectare of land, this implies from 16 hectares of land leased by this flower industry from Senqelle Hle Mariam kebele 3,459.2kg of peanut was forgone per year

due to the establishment of this industry. Generally, 20,755.2 kg of peanut product was forgone for the past six years in this kebele.

Generally, when the agricultural products forgone are valued in monetary unit the study used 700 ETB and 950 ETB average prices of Teff and peanut per Quintal respectively for the past six years. Depending on these average prices, if we assume each Teff and peanut are produced in there different years because they are mutually exclusive, 527,121,952 ETB and 283,921,560 ETB of Teff and peanut are forgone respectively, for the past six years due to the establishment of Suryablossom flower industry.

3.3.2 Job Opportunity Forgone due to Underperformance Operation of Suryablossom/Karuturi Flower Industry

Employment in floricultural has been increasing in recent years. This attributes to the increased demand of workers to flower farms due to the vast production area .According to the study conducted by Beza in December 2011; the flower industry in Ethiopia has employed about 50,000 workers. When they get permission from Southwest Shewa Investment Office, the job opportunity proposed by the Suryablossom flower industry was to 3500 workers, from this 1500 are permanent, and 2000 are on temporary bases .After they started the operation the maximum actual job opportunity created by this industry was only1805.

Table 2 Job Opportunity Proposed and Maximum Actual Job Opportunity Created by Suryablossom Flower Industry

Job opportunity proposed		Maximum actual		job opportunity crated	
Permanent 1500	Temporal	Permanent		Temporal	
	2000	Male	Female	Male	Female
		342	513	285	665

Source: Southwest Shewa Zone Investment Office, March 2015

According to the data taken from the Suryablossom flower industry, the payment for workers is paid at the end of the weeks and the

new entrants entered to the farm at this time. After July 2012, the industry stopped the production of cut flower and due to this factor, many employees especially those perform the planting, harvesting, packing, pesticide, measuring, mixing, spraying, and waste disposal activities are faired or displaced from their job.

In ordered to determine the job opportunity forgone due to the underperformance operation of Suryablossom/Karuturi flower industry, first we have to determine the maximum job opportunity that can be created by this industry if they operated by their full performance. In this manner to determine the job opportunity forgone the paper uses the data that taken from Assella flower farm. This flower industry was located around Suryablossom flower industry 9 km far from this industry and started their operation in 2012 and they operated on 12.5 hectares.

According to data from this industry, the industry operates at its maximum potential and it uses all resource in an efficient manners. The production of cut flowers is performed on 12.5hectares and they created the job opportunity for 242 employees, those workers are involved on the activity of cut flower production such as: planting, harvesting, trimming, packing, pesticide, measuring, mixing and spraying etc.

Table 3 Actual Number of Employment Opportunity Created by Assela Flower Industry

Permanent			Temporal		
Male	Female	Total	Male	Female	Total
49	101	150	21	71	92

Source: Own field survey, March 2015

Based on the above, data the maximum job opportunity that can be created by Suryablossom flower industry if they operated by their maximum capacity was 7279. This means if the Suryablossom flower industry operates at their maximum potential and uses all resource in efficient manner just like Assela flower industry, they have the capacity to create the job opportunity for 7279 employers.

To analyze the data related to the job opportunity forgone, it can be better if we divided the periods into two periods, the period January 2007 – July 2012 and August 2012 – March 2015, because the industry operates by better performance during the first six years, they created a better job opportunity during this periods. After July 2012, the industry stop the production of cut flower and large numbers of workers displaced from their work or they stop their works.

Table 4: Actual Job Opportunity Created between January 2007 and July 2012 and the Maximum job Opportunity Created if the Industry operates by Full Performance

<i>Description</i>	Actual job opportunity created between 2007-2012 full performance			The maximum job opportunity created if the industry operates by full performance		
	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
<i>Permanent</i>	342	513	855	1474	3038	4512
<i>Temporal</i>	285	665	950	632	2135	2767
<i>Total</i>	627	1,178	1805	2106	5173	7279

Source: own field survey, March, 2015

Table 4, shows the actual job opportunity created by Surya Blossom flower industry when they produces cut flower the maximum job opportunity created by this industry are 1805. Out of which 52.6 percent are temporal workers and 47.37 percent workers are permanent workers. Many studies conducted on this area stated floricultural sector gives a better opportunity and advantages for female workers. The reality in Surya Blossom flower industry during the export of cut flower is also not different from this conclusion. In this industry from total number of workers 65.26 % are female. They work on both temporal and permanent basis, from total permanent

and temporal workers the female share are 60 percent and 70 percent respectively.

The Suryablossom flower industry had the capacity to create job opportunity for 7,279 surroundings community or for 2106 male and 5173 female workers. This data also shows that the female labor force has the high job opportunity in flower industry. According to some studies, the preference for women labor in production work is based on an argument that floriculture is similar to child care where women ensure the responsibility for entire process for growth. Generally between January 2007 and July 2012, Surya Blossom flower industry create job opportunity only for 1805 workers but if the industry operates at their maximum potential and uses all resource in efficient manner just like Assela flower industry, they have the capacity to create the job opportunity for 7279 employers. These shows 5,474 are the number of job opportunity forgone due to underperformance operation of this flower industry during this period.

Table 5: Actual Job Opportunity Created between August 2012& March 2015 and the Maximum Job Opportunity Created If the Industry was operated by Full Performance

Description	Actual job opportunity created between 2012 and 2015 performance			The maximum job opportunity created if the industry was operated by full performance		
	Female	Male	Total	Male	female	Total
Permanent	37	72	109	1474	3038	4512
Temporal	37	27	64	632	2135	2767
Total 7279	74	99	173	2106	5173	

Source: own field survey, March, 2015

The above table shows the actual job opportunity created by Surya Blossom flower industry from August 2012 up to March 2015.

According to this table the maximum job opportunity created by this industry during this periods are 173, from this number 37% are temporal workers and 63% workers are permanent workers. During this time the numbers of male workers are higher than the number of female workers and from total workers, 57.23 percent are male employer. This was due to the fact that at this time the industry was performing activities that require physical strength.

The data related to the maximum job opportunity created if the industry operates by full performance was described in the previous part; according to these data, 7279 workers got job if the industry operates by full performance. Based on this information 7,106 are the numbers of job opportunity forgone due to underperformance operation of this flower industry during this period (August 2012 up to March 2015).

3.3.3 The Amount of Export Forgone Due to the Underperformance Operation of Suryablosm Flower Industry

In spite of the high comparative advantage the country endowed with flower production, the industry had little contribution to the country export so far. But its performance in the last couple of years is very promising. Exporting flower from Ethiopia began around 2002. Both the quantity produced and the foreign exchange earned from the export of flower has been on the rise since then.

Table 6 Quantity of Flower Export

Year	2004/05	2005/06	2006/07	2007/08	2008/07	2009/10	2010/11
Quantity of flower							
In million stems	83	186.45	478.04	1,021.52	1,294.97	1,636.72	1,804.74
Growth rate		124.64%	156.39%	113.69%	26.77%	26.39%	10.26%

Source: Ethiopian Horticultural Development Agency (EHDA) February, 2015

The above table shows quantity of flower exported from 2004/05 up to 2010/11. Quantity of flower exported has been growing at an increasing rate until 2006/07. The highest growth of exported quantity was also exhibited during 2006/07. This is probably because of increased floriculture investment projects around 2004/05 in response to investment incentives. Afterwards, it continued to grow at a decreasing rate.

Table 7: Export and Production Profile of Surya Blossom Flower Industry

Year	Rose Harvested (stems) per weak	Rose Exported(stem s) per weak	Land used (hectares)
2007	384,492	326,597	15.25
2008	625,799	597,874	28.25
2009	861,680	837,923	39
2010	1,037,935	982,863	48
2011	1,046,272	1,032,700	48

Source: Suryablossom flower industry March, 2015

The above table shows the production and export profile of Suryablossom flower industry, according to this table the volume of flower exported varies with the land used in the production process. The gap between the harvested and export volume is one of the signals that indicates the presence of other factors, which influence the export volume. Regarding the land used, only the land covered by greenhouse is considered. In Ethiopia, it is difficult to trace the exact value of the price of flowers which are determined in world flower market by dominant exporters and it varies every day. Due to this, reasons the exact price of the flower stems exported by Surya blossom flower industry are determined in world flower market. Thus, the average estimate price 2.67ETB per stem is used by Surya blossom flower industry during their exporting period.

Generally, the above table shows flower stems exported and production profile of Suryablossom flower industry. The maximum amount of flower stem exported and harvested are during 20011 and at that time Suryablossom flower industry exported 1,032,700 flower stems per week and earned 2,761,930 ETB. This flower industry earned that foreign exchange by operating under their performance and the maximum size of land used is 48 hectares for this production. In order to determine the export forgone in terms of flower stem and foreign exchange we have to determine the maximum amount of total flower stem exported if the industry operates by their full performance or used all available resource efficiently and effectively. The industry has the capacity to operate on 371 hectares, five hectares is reduced from the total land leased by this industry because the industry can use this land for open space purpose such as for office and store house buildings.

If the industry operates on 371 hectares, they can export 7,981,910 flower stems per week and from this cut flower export by average estimate price, they can earn 21,311,699.7 ETB per week. Depend on this data during 2007,2008,2009,2010 years 872,013.99 ETB, 1,596,323.58 ETB,2,237,254.41ETB and 2,624,244.21ETB was earned respectively for four years from 2007 up to 2010. This result is obtained by operating under their performance. Based on this result we can determine the export forgone, during 2007, 2008, 2009, 2010 the export forgone per week due to underperformance operation of this flower industry are 20,439,685.71 ETB, 19,715,376.12ETB,19,074,445.29ETB and 18,687,455.49 Birr respectively. But after 2012 the Suryablossom flower industry stopped the export of cut flower, due to this reasons total land leased and available for cultivation of cut flower production are set as idle resources. As a result the country has forgone 21,311,699.7 ETB per week for the past two years, which can be summed up to 206,723,4871 ETB.

4. Conclusion

As it is the case in many developing countries, Ethiopian have a good investment potential and in this country, there are favorable climate, land, and labor, which help the country to get the attention of global

investors, especially investors those, focused on agricultural sector, has a great opportunity in Ethiopia. The Ethiopian government also discovers this opportunity and they prepare and implement different policies and strategies to capture this advantage. These investment policies help the country to substitute imports and to increase the foreign exchange through export. Few agricultural products that earn very small amounts in the international market dominate the major export items of Ethiopia. This fact calls for export diversification and lead to increase the importance of floricultural sector in Ethiopia.

The floricultural sectors is a highly labor intensive sector with huge labor absorbing capacity. Most of the daily farms that are performed on the farms such as planting, watering and spraying the plants with chemicals are performed by the unskilled labor. The sector also has job opportunities for women. Even though Ethiopia is endowed with various conditions that are suitable for the production of flower these is a necessary but not a sufficient conditions for competitiveness in the prevailing global market. There are a number of challenges that are impeding the success of the industry such as lack of skilled labor, lack of inputs and infrastructure, lack of proper market knowledge, lack of finance and research institutions are some of the problems faced by the industry affecting it competitiveness in the global market .

Due to favorable condition in this country for floricultural sector, many foreign investors are investing in this sector. From those investment projects Surya Blossom flower industry are one of them and the second largest flower investment project in Ethiopia. Surya Blossom flower industry was established by Karuturi global company in Southwest Shewa, Waliso Woreda by taking permission from southwest shewa investment office in 2007. This industry started their operation by leasing 376 hectares and registered 531,150,000 ETB capitals.

The study on Suryablossom flower industry also indicated underperformance operation of the floricultural sector reduce the economic contribution of the sector for the economy of the country and this have a great negative impact on the economy. The successes of floricultural sector in generating foreign exchange and creating job opportunity both at the national level and farm specific level are highly related to the capacity of investors to uses the resource in

effective and efficient manners. Using the average estimated price of 2.67 ETB, the total export earnings would have been 21,311,699.7 ETB per Week. This result obtained by operating under their performance. Based on this result we can determine the export forgone, during 2007, 2008, 2009, 2010 the export forgone per week due to underperformance operation of this flower industry is 20,439,685.71 ETB, 19,715,376.12 ETB, 19,074,445.29 ETB and 18,687,455.49 ETB respectively. In addition to this, a survey on Suryablossom flower industry indicate high agricultural product forgone due to the establishment of this flower, if we consider both scenarios of agricultural product (Teff and Peanut), 2,536,316,755 ETB are forgone for the past six years due to the establishment of Suryablossom flower industry. The study also investigated High job opportunity forgone due to underperformance operation of this flower industry.

Generally, underperformance operations of floricultural investment projects have a great impact on the economy of the country and on the economic wellbeing of surrounding community. Firstly, it failed to provide foreign exchange and secondly it failed to create job opportunity for the surroundings community.

5. Recommendations

Based on the above findings, the following recommendations are drawn to enhance the performance of floricultural sector or specifically to reduce the negative economic impact of underperformance operation of Suryablossom flower industry on the economy of the country and surrounding community.

➤ **There should be guarantee for the government that cut flower industry operates as expected:** According to the findings of the study, underperformance operation of this flower investment project has great negative impact on the economy of the country as well as on the economic wellbeing of the surrounding community. Therefore, the government should give a great attention to this investment project and provide the solution to this project. Currently, all of the land under this investment project is seat as idle resource and this land was not used for cut flower production for the past two years. Due to this reason, the government should take action

on this investment project. The 156 hectare of land is still on the hand of Suryablossom flower industry and set as idle resource. Some information's tell us the Suryablossom flower industry are not in the position of investing on this land because Karuturi global company, the owner of this investment projects is in financial collapse and their company's in all of the world are under crises. Therefore, the government should transfer this land to other investors.

➤ **Appropriate economic compensation:** In Ethiopia, the Southwest Shewa and other communities that were violently displaced from their lands without consultation to make way for Karuturi's farming operations have lost their livelihoods and been living in exile without proper compensation. Karuturi, however, has been unable to cultivate more than a small fraction of those lands and the study shows that the farms have stopped operations. Generally, from tax fraud to labor violations, Karuturi must pay for its crimes.

➤ **Government should transfer the land back to the pervious farmers of the land:** The other option which this study tries to recommended is government should transfer the land back to the pervious farmers of the land because most of the farmers are not satisfied by the compensation and this compensation are paid only for ten years. Currently they are in the problem; they face the shortage of land and their living standard is decline due to the establishment of this flower investment projects. Therefore in ordered to improve the economic wellbeing of the surrounding community, the government should transfer this land back to the farmers.

➤ **E stablishing more institutions** such as Ethiopian Horticulture producers Exports Association and Ethiopian Horticultural Development Agency, which act as a support system for the sector and aid its development.

➤ **Close follow up and monitoring of performance of the operators:** The collaboration between government and the private sector is also required for sector building. In the case of Suryablossom flower investment project, in the early stage of this investment project government played a developmental role by providing inputs and sharing costs (land, and transport coordination).The industry did not invest on all lands, due to this reasons the Southwest Shewa investment office took 220 hectares from this industry as a punishment reserved this land in land bank.

This study recommends that the government should transfer this land to other investors and Close follow up and monitoring of performance of the operators.

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