
Review Article

Review on Constraints of Fruit Marketing in Ethiopia

Haile Tamiru Urgessa

Department of Agricultural Economics, College of Agricultural Science, Bule Hora University, Bule Hora, Ethiopia

Email address:

haile_tamiru@yahoo.com

To cite this article:Haile Tamiru Urgessa. Review on Constraints of Fruit Marketing in Ethiopia. *American Journal of Theoretical and Applied Business*. Vol. 6, No. 1, 2020, pp. 6-12. doi: 10.11648/j.ajtab.20200601.12**Received:** March 19, 2020; **Accepted:** April 7, 2020; **Published:** May 12, 2020

Abstract: The review aims at reviewing the organizations, linkages and lines of movements of fruit products to understand the major constraints of marketing functions and opportunities to improve fruit production and marketing. Most of the fruits produced in Ethiopia are consumed locally and are produced by small holder farmers. The major constraints of marketing include lack of markets to absorb the production, low price for the products, large number of middlemen in the marketing system, lack of marketing institutions safeguarding farmers' interest and rights over their marketable produces, lack of coordination among producers to increase their bargaining power, poor product handling and packaging, imperfect pricing system, lack of transparency in market information system mainly in the export market. Informal transaction prevails in the export system. There is a lack of standard for quality control and hence lack of discriminatory pricing system that accounts for quality and grades of the products. Due to the fact that the main aim of this paper is to review the constraints of fruit marketing in Ethiopia and specifically to review factors affecting fruit supply in Ethiopia and to review the organization, linkage and lines of movement of fruit products and production inputs. The most crucial ones are Building their business capacity and overcoming their constraints and capacitating them to use market information are important.

Keywords: Constraints, Opportunities, Fruit Marketing, Ethiopia

1. Introduction

Background of the Review

As [9] pointed out worldwide production of fruit and vegetable crops has grown faster than that of cereal crops. Between 1960 and 2000, the area under horticultural crops worldwide has doubled. Among the main reason attributable to the growth, high return from horticulture as compared to cereals was the prim one. Per capita farm income from horticulture has been reported up to five times higher. Promotion of the production of, and trade in, fruit and vegetables has become one of the key objectives of developing countries [6]. Strategy for sub-Saharan Africa focuses on enhancing the income of small holders within the context of trade liberalization. Smallholder production and the marketing of fruits and vegetables is a key focus [6]. Most fruits are perennial trees and can live more than fifty years.

Accordingly permanent crops are long term crops that occupy the filed planted for a long period of time and largely harvested every year and do not have to be replanted for

several years after each harvest. These include tree crops such as coffee, Enset, Chat, oranges, Mangoes, Bananas, papaya, Avocados...etc. The trees that yield fruits like orange, Mangoes, Papayas, and others are known as fruit trees [1]. Ethiopia is agro-ecologically diverse and has a total area of 1.13 million square km suitable for fruit cultivation. Many parts of the country are suitable for growing temperate, sub-tropical or tropical fruits. For example, substantial areas in the south and south-western parts of the country receive sufficient rainfall to support fruits adapted to the respective climatic conditions.

In addition, there are many rivers and streams which could be used to grow various horticultural crops. Despite this potential, however, production-market chain of fruits has remained immature in Ethiopia [7] mainly due to traditional focus which was in favor of cereals. Serious lack of information and 'on and off' productions have also played their deterring role [11]. Realizing these gaps, lately however, the government of Ethiopia has launched enabling environment to encourage chain actors. As a result, the Ministry of Agriculture has elevated the

horticulture sub-sector from a small section to a level of agency [15, 7, 8].

More than 47 thousand hectares of land is under fruit crops in Ethiopia. Bananas contributed about 60.56% of the fruit crop area followed by Mangoes that contributed 12.61% of the area. Nearly 3.5 million quintals of fruits was produced in the country. Bananas, papaya, mangoes and orange took up 55.32%, 12.53%, 12.78% and 8.35% of the fruit production, respectively [3]. However, less than 2% of all the produce is exported [7]. These fruits are typically cultivated to supplement household income from their main crops. The few state farms with about 3,000 ha mainly grow tropical fruits (banana, avocado, mango, orange, and papaya) and are mainly located in the eastern Rift Valley [12].

Most of the fruits are produced in Ethiopia are consumed locally and are produced by small holder farmers. After harvest they are transport to rural market centers for local consumers or are bought at the farm by neighbors. Others are transported to bigger market centers where many producers utilize the open-Air markets that are patronized occasionally; once or twice a week. Limited post harvesting improvement is done for locally consumed fruits. However, fruit like banana, orange, lemon, pineapple and avocados exported to Europe and Middle East are graded and packaged appropriately [5].

In Ethiopia, the existing income generating capacity of fruits as compared to its immense potentials at the macro and micro level is not encouraging. Thus, from the total 3.5 million quintals of fruits produced in Ethiopia, only less than 2% is exported [7, 10]. According to [17], the production potential of fruits is not widely and evenly distributed across the various regions of the country. The cultivation is also seasonal and the supply is scanty and volatile even in areas where irrigation is possible. The knowledge gap on fruit production techniques and processing technologies is wide. Also, knowledge of domestic consumers of the benefits of fruits is confined to very few varieties of fruits. Hence, domestic demand, with the exception of few widely known tropical fruits, is generally small and, various studies show that people generally consume fruits and vegetables on a daily basis, without considering them as basic. These factors have adversely affected the growth and expansion of the fruit sub-sector in Ethiopia. Additionally [2] stated that a production of horticultural product is seasonal and price is inversely related to supply. During the peak supply period, the prices decline. The situation is worsened by the portability of the products and poor storage facilities. Along the market channel, 25 percent of the product is spoiled.

Development needs of fruit in general poorly addressed in Ethiopia. But these days efforts have been stepped up to improve and support the sector. With this line, the current Growth and Transformation Plan of Ethiopia (GTP) prioritizes intensive production and commercialization of horticulture as a sector for attention. Thus, the development policy initiates the need to accelerate and lucid the transformation of the sub-sector from the subsistence to business and market-oriented agriculture. But, the existing restraints of post-harvest and marketing infrastructures such

as: packaging, pre cooling, warehousing cold storage, pre-package and distribution have played their deterring role on trade and consumption of fruits in Ethiopia [12].

According to [14], lack of concerted public support, scanty information, poor understanding of how the market chain works; and lack of systematic documented knowledge are main threats that hampered the benefit of the sector. Thus comprehensive data collection along the chain is a must envisage the direction of input-output flows [5]. If these jeopardize are not well addressed right onwards, it is obvious the country's competitiveness would trail far behind the existing stage.

According to [13] among the Ethiopian regions; Amhara and Tigary are the least fruit and vegetable producer regions. For the past few decades most fruits are imported from other regions of the country. Currently, the government has given due emphasis on irrigation; and adoption of new agricultural technology as a result, the region has shown progress in fruit production and farmers are trying to supply fruits to the market but their contribution is insignificant in satisfying the existing fruit demand in the region. Due to the fact that the fruit production in the region is very low, identifying those factors that impede fruits production, productivity and market potentials in the region will enable to come up with valuable information to policy makers and other stakeholders. Toinvestigating the overall potential of fruit production and marketing in the region is essential for further development of the sector. Hence, the current Review aimed to assess the opportunities and challenges of fruit production and marketing in the region as well as its contribution for livelihood of the farmers.

Generally, many different concept was studied on variety topic that related with fruit marketing those on supply, demand, pricing, and production even on constraints of fruit marketing but there is no enough solution. In Ethiopia there was major constraints of fruit marketing include lack of markets to absorb the production, low price for the products, large number of middlemen in the marketing system, lack of marketing institutions safeguarding farmers' interest and rights over their marketable produces (e.g. cooperatives), lack of coordination among producers to increase their bargaining power, poor product handling and packaging, imperfect pricing system, lack of transparency in market information system mainly in the export market. Informal transaction prevails in the export system. Due to the fact that the target of this papers to review the constraints of fruit marketing in Ethiopia and specifically to review factors affecting fruit supply in Ethiopia and to review the organization, linkage and lines of movement of fruit products and production inputs

2. Literature of Review

2.1. Challenges and Opportunities' of Fruit Marketing in Ethiopia

2.1.1. Fruit Production

Many fruits can be produced in Ethiopia, as the climate, in

particular in the highlands, is favorable. In addition, current investments in irrigation schemes will further contribute to the development potential. The main fruit crop is the bananas, with 290,000 tons annually, followed by mango (70,000 tons), orange (49,000 tons), and papaya (43,000 tons). It is believed, however, that the potential fruit base is considerably higher. Due to absence of markets postharvest handling facilities and processing industries, a large part of the fruit may be left untouched or be sold for low prices during harvest season.

In the urban areas, in particular in Addis Ababa, fruit can be observed insufficient quantities at markets, but demand for fresh fruits is limited due to the fact that most consumers cannot afford them. Except for bananas, fruit is consumed by middle and higher income classes, which represent not more than 10% of the overall population.

Ethiopia has a variety of fruit crops grown in different agro ecological Zones by small farmers, mainly as a source of income as well as food. The production of fruit varies from cultivating a few plants in the backyards, for home consumption, to large-scale production for the domestic and home markets. According to [3] the areas under these crops (avocado, bananas, guava, lemons, mangoes, oranges, papayas and pineapples) were estimated to be 47987 hectares. Ethiopia has diverse agro ecology and many areas are suitable for growing temperate, subtropical or tropical fruits. Substantial areas receive sufficient rainfall and many lakes, rivers and streams could also be used to support fruit production.

In Ethiopia, fruits are produced by smallholders and by some state-owned farms. According to [10], about 99% of the area allocated to horticulture production is cultivated by smallholders, which produced 428,752 tons of fruits and 2,107,292 tons of vegetables. The total share of smallholders' produce during 2003 was 97% of the national supply. It is reported that in 2004 about 45,0392ha of land was used for vegetable and fruit production which is 0.05% of the total area under cultivation, while in 2003 the total production of vegetables and fruits was 24,526,712 qt. The production is concentrated in the lowland areas. Some of the respondents grow 1-4 different types of fruit trees while others have none. Papaya is relatively widely grown followed by mandarin, geisha and orange. Most of the households have few plants often grown for consumption although a limited amount is also sold. The production is based on gardening (for non-irrigated) and field level production under the irrigated system. About 52% of the fruit producers use irrigation, mainly in the Dire Dawa area.

2.1.2. Trends of Fruit Production for Past

Production of fresh fruits has shown modest growth. The principal types of fruits for which significant volumes are recorded are bananas, oranges and other citrus fruits (tangerines, clementine's, Satsuma, lemons, limes), mangoes, avocado, and papaya. In volume the domestic production is dominated by papayas (31% in 2003), mangoes (22%), followed by avocado and banana (11% each). There was different fruit are harvested when we compare each fruit with

each other in 1998 orange is high (51000) and banana is the second (18750), the same as true for 1999 seems 1998, in 2000 orange is high (51000) and also banana is the second (48919), in 2001 banana is high (51010) and orange is (51000), in 2002 banana is high (51550) and orange is second (51000) and in 2003 banana is high (51824) and orange is (51000), depending on this, more frequently orange and banana are interchangeable but there is many fruits were harvested [4].

2.1.3. Fruit Consumption

Consumers are those purchasing the products for consumption. Two types of consumers could be recognized: private consumers and institutions. The private consumers are employees, urban and rural dwellers who purchase and consume fruit products. The institutions include hospitals, college and other institutions. Private consumers purchase fruit products directly from producers, retailers and wholesalers. Cabbage; beetroots, carrots onions/shallot, potato and tomato are purchased by most of the consumers. Regarding fruits, orange, banana and mango are purchased by the largest number of consumers as compared to other type of fruits. The amount of consumers purchased depends of how frequent they visit the market, their income level, and the storage possibility/capacity of the household. The consumers purchase fruit two times on a week and on average purchase 2kg per week. The differences among the consumers in terms of frequency of purchasing are the quantities purchased. Those frequently visiting the market purchase smaller quantities (as low as 0.25kg) and it depends on the types of products [2].

Most of the fruits produced in Ethiopia are consumed locally and are produced by small holder farmers. After harvest they are transport to rural market centers for local consumers or are bought at the farm by neighbors. Others are transported to bigger market centers where many producers utilize the open-Air markets that are patronized occasionally, once or twice a week limited post harvesting improvement is done for locally consumed fruits and vegetables. However, fruit like banana, orange, lemon, pineapple and avocados exported to Europe and Middle East are graded and packaged appropriately [5].

Consumption Compared to other African country; Fruit and vegetables are not common items in the Ethiopian diet. In particular the fruit consumption, compared to other African countries, is low. Only one of every 5 Ethiopians eats fruits regularly. On average the Ethiopian diet consists of 1.3 kg of fruit per person per year while that ranges from 11.9 to 39 kg in the other African countries. Although the price per kg of fruit in Ethiopia is one of the highest in the researched African countries, the percentage of the food budget spent on fruits is the lowest. In contrary to fruits, vegetables are more common in the Ethiopian diet. However the quantity consumed per person is still one of the lowest compared to the other countries even though price per kilogram in Ethiopia is the lowest of all the countries. Depending on fruit consumption, the % of consuming was differencing one from other, Example when we take some of African those have little

difference such as Ethiopia, Uganda, Mozambique, guinea, Burundi, Malawi, Tanzania, Rwanda, Kenya and Ghana. So, guinea was high 75% Of consuming, Ethiopia was about 20%, Burundi 50%, Malawi 45%, mozambique 23%, Tanzania 72%, Rwanda 27%, keenya 46%, Ghana 62%, Uganda 22%.

2.2. Fruit Marketing

2.2.1. General Fruit Marketing

The Ethiopian size of the domestic market for fruit is limited as is also clear from the very low consumption data. Export of fruit and vegetables can be categorized into three types. First, export of relatively high value perishable produce to Europe. Second, the export of low value produce cultivated predominantly in Eastern Ethiopia around Dire Dawa, to regional markets (mostly Djibouti) and, third, some processed and fresh produce to Middle East countries (Greenhalgh and Havis, 2005).

The export of fresh fruit began to develop in the early 1970s. However, private sector efforts to export to Europe and Middle Eastern countries were thwarted by the Derg regime, and exports fell drastically after the 1974 revolution. Under the centrally planned economy of the Derg regime, exports were dominated by state-owned farms. In the late 1980s exports began to grow again, but failed to achieve levels reached prior to 1974. Since the collapse of the Derg regime in 1991, private sector operations have slowly entered the market. The Mengistu regime encouraged fruit and vegetable production. Fresh fruits, including citrus and bananas, as well as fresh and frozen vegetables, became important export items, but their profitability was marginal. The Ethiopian Fruit and Vegetable Marketing Enterprise (EFVME), which handled about 75 percent of Ethiopia's exports of fruits and vegetables in 1984-85, had to receive government subsidies because of losses (F&V Ethiopia, 1991).

Etfruit was the first state company to market to countries of the E. U. In the nation's capital, Addis Ababa, Etfruit has three main branches, twenty-one retail handling shops and thirty mobile shops strategically placed to render efficient service. The types of fruits delivered to domestic markets are oranges, mandarin, grapefruit, lemon, lime, mango, avocado, guava, banana, processed horticulture products such as tomato juice, orange marmalade, orange squash, and grapefruit squash and guava nectar. The major suppliers of fresh fruits and processed products are the Upper Awash Agro-Industry Enterprise the Horticulture Development Enterprise and Metehara Sugar Factory (Ethiopian Fruit & Vegetable Marketing Enterprise website, as on Jan 24, 2007).

2.2.2. Domestic Market

The size of the domestic market for fruit is very limited and not diverse. Fruits are hardly found at all and within the group of vegetables mostly potatoes, onions and tomatoes are sold. Fruits are transported to the local market by local transport, carts and donkeys. Regular trucks are used for transportation to Addis.

Main fruit markets in Addis Ababa are Piazza, Mercato and MesalumiaFahilberenda. These markets have all kind of

clients; wholesalers, retailers and consumers are sourcing their fruit at these markets. Approximately 50% of the supply originates from smallholder producers or farmers' cooperatives. Piazza and Mercato sell mostly vegetables and only a limited range of fruits (some banana and papaya). Some traders have their own shop and storage place. A lot of traders are selling their produce at the messy pathways of the market. Produce comes from all over the country, but mostly from the Rift valley. Fruit and vegetables are also sold at some supermarkets in Addis Ababa but to a very limited extent. The most modern supermarket, Bambi Supermarket, sells little vegetables but in a wide range. Availability of fruits is low, mostly apples are offered. The fruit juices at the shelves are all imported from countries as South Africa and the USA.

2.2.3. Foreign Market of Fruit

According to [13], in 2002 alone about 36 countries imported Ethiopian fruits and vegetables. About 74% of the quantity exported was imported by Djibouti. The revenue generated from the export was Birr 11,279,211 of which 59.529% was received from the export to Djibouti. Other major importers were Sudan (5.2% of the volume and 6.6% of the value), Yemen (3.8% of the volume and 3.7% of the value), India (2.3% of the volume and 2.01% of the value), Netherlands (1.6% of the volume and 9% of the value), Italy (1.8% of the volume and 4.8% of the value), etc. About 80% of the horticulture export was made through Dire Dawa. The Djibouti market is an important outlet for fruits and vegetables produced in the eastern, central and southern regions of Ethiopia.

According to [13] there are 10 types of vegetables and 10 types of fruits Ethiopia is exporting to Djibouti market. The major vegetables exported through this route are potatoes, onion, and tomatoes while the fruits are dominantly orange, banana, mango and mandarin. Smallholder farmers supply vegetables, mango and banana fruits while the state farms supply orange, mandarin and lemon. Some farmers who are using irrigation for production around Dire Dawa also supply fruits for the export market, through exporters.

The existence of railways, road transport and flights to Djibouti and Somali land has given comparative advantage for the vegetables and fruit marketing. Exporters label the sacks which are distributed to the supplying traders. No price negotiation is made up on receiving the sacks but up on submission of the product. The price of the product is determined based on the previous market but payment is affected only after the production is sold in Djibouti. Prices for fresh fruits and vegetables exported to Djibouti are fixed based on the agreement between the governments of two countries and the prices were determined based on cost and freight terms where transportation cost to Djibouti is covered by the exporters [13].

2.3. Constraint of Fruit Marketing

2.3.1. Markets And Market Access

Information about export markets is currently limited. In order to export successfully there are a number of key

requirements relating to markets, market evaluation, promotion, and quality management that must be addressed. There is a need to undertake market studies to determine the range of products in demand in the target markets; issues to be addressed include volumes, varieties, seasonality, quality requirements, and most importantly competitiveness of Ethiopia. Without continued access to relevant market information it will be very difficult for Ethiopia to compete. As the dominant exporter, Ethio horti share has been responsible for market development and provision of information to the farms – but a major criticism of this enterprise has been its failure to feed market information back to growers [16]. EHPEA recognizes the need to collect market information.

The major constraints of marketing include lack of markets to absorb the production, low price for the products, large number of middlemen in the marketing system, lack of marketing institutions safeguarding farmers' interest and rights over their marketable produces (e.g. cooperatives), lack of coordination among producers to increase their bargaining power, poor product handling and packaging, imperfect pricing system, lack of transparency in market information system mainly in the export market. Informal transaction prevails in the export system. Producers and local traders receive value for their products only after the exported product is sold. There is a lack of standard for quality control and hence lack of discriminatory pricing system that accounts for quality and grades of the products.

Marketing constraints faced by the traders: The major problem for many of the wholesalers is transportation to bring the fruits to the market. According to them to bring the fruits from the field to the market it takes 4 to 5 days. Some times when the trucks are delaying due to different reasons, except banana, all other types of fruits have the probability of either wilting or perish. In addition to this, price variability also yet another problem of the traders. From the peak period till the end of the harvest, price variation takes place two to three times. Moreover few wholesalers also faced a problem of cheating in the order, since most of the agreement and financial transaction have been made through phone and banks. In rare cases if trucks are broken before reaching the destination, the ordered fruit will be sold to other traders by the farmers.

2.3.2. Lack of Skilled Labor Resources and Technical Know-How

While Ethiopia is over-supplied with low-cost unskilled labor, there is a lack of skilled manpower with managerial abilities and in-depth horticultural knowledge. Several horticultural companies see this as a major constraint to production, and cut flower producers have gone as far as using expatriate labor to alleviate these difficulties. Further, the sub-sector lags behind that of most producing countries in its agronomic practices. In part, this is because both state farms and private sector operations do not have the capital to pay for the technology and expertise required. Further, there has been very little formal research to overcome problems of low

genetic potential, an absence of quality selection to overcome the lack of high-yielding and high-quality cultivars, inappropriate disease and insect pest control measures, and a lack of quality seed supply. The supply chain, including knowledge of production planning, post harvesting handling and processing practices. Low-level technology, knowledge of specifications and codes of practice, knowledge of markets and marketing and lack of promotion activities are additional limitations [16].

Production quality constraints: The major fruit production constraints include pests, drought, shortage of fertilizer, and price of fuel for pumping water for irrigation. Lack of desired seed variety was also stated. The opportunities for increasing horticulture production include the increase in market integration, the need for intensive production in response to increasing population pressure, farmers' awareness of the benefits, the current outreach program in relation to supportive government policy, attempts made in water harvesting, etc.

The constraints of fruit production quality could be viewed from the farmers' context, institutional factors, natural factors and infrastructure related factors.

1. Farmer related: fruit production is based on tradition, which is poorly supported by scientific recommendations. Although one can associate this constraint to institutional factors, it is apparent that inadequate farmer skills and knowledge of production and product management affects the supply. Farmers attempt to select varieties and practice traditional crop management practices. Farmers' know-how of product sorting, grading, packing and transporting is traditional, which severely affects the quality of fruit products supplied to the market. This skill gap should be addressed to improve the quality of marketable fruit products.
2. Institutional factors are related to the provision of improved fruit production technologies including supply of relevant varieties, agronomic practices and improved product management techniques.
3. Natural factors such as rainfall, water supply, flood and pests are often beyond the control of farmers and institutions. There is a shortage of irrigation water mainly in the lowland areas. Yet, contingency planning and forecasting of the events which may help to minimize the effect is not available perhaps due to traditional ways of production. Moreover, an appropriate management system including variety selection and diversification would reduce the effect of natural factors. Improving the institutional constraints discussed above will be instrumental for improving the management system.
4. Infrastructure such as rural roads and means of communication for efficient flow of goods and market information is a limiting factor. Most of the rural area is not accessible by vehicle. The products are transported to the road side by donkeys or by people. This requires longer time to reach the market and affects the quality of

the products. Moreover, there is no telephone or other fast communication systems to access market information that would assist decision making.

2.4. Opportunities for Increased Fruit Marketing

Fruit marketing has increasing opportunities for expansion. The opportunities stem from the production potential. These include:

1. Farmers may be motivated to expand fruit production by using traditional irrigation and using improved agricultural inputs;
2. NGOs could have been involved in the promotion of the poor, particularly women, in fruit production;
3. The government encourages private sector development which is instrumental for the commercial activities. The government also supports smallholders' market integration through the production of marketable agricultural commodities. The current government's Plan for Accelerated and Sustainable Development to End Poverty (PASDEP) sets intensification and commercialization of agriculture as a development path during the next five years. Provision of improved agricultural technologies, provision of extension packages and farmers' capacity building, etc. are major areas of support the government has planned to provide farmers. There are opportunities for expansion of fruit production in the areas of Increase in price of the product, Relatively high demand in the market, Possibility of using improved inputs and rent land, Having a pumping machine, Government support, Increased production skills, Availability of nearby water, Land suitability and Labor availability.

3. Conclusions

Given the large potential for fruit production in the country, their contribution to the total GDP has been extremely low for many reasons. The most cited reasons include lack of market oriented production which is too traditional and poorly supported by scientific recommendations, excessive margin mainly due to inefficient and costly transport, absence of fruit market information, inadequate government interventions and absence of market regulations and legislations and its marketing activity is principally attributed to poor actors skill. The major fruit marketing constraints identified in Ethiopia are low price to the producers, lack of transportation and road facility, and perishability nature of the product. Producers are in a disadvantageous position in terms of the price that they generate from fruit production i.e. even though the price of fruit is increasing from time to time; producer's margin is decreasing because most decision of marketing is done by the existing demand and supply. In addition due to lack of storage and processing facility, the fruit producers do not get the potential income from the fruit production. The perishable nature of the product also limits the marketability of the product and constraint expansion of fruit in the Ethiopia. As a result, fruit marketing needs due attention in any on-going or

future fruit development plan.

Personal Profile

Mr Haile Tamiru Urgessa was graduate by Masters of Science in Agricultural Economics from wollega University in 2016. And employed in Bule Hora University as a lecturer and still serving as instructor and head department of Agricultural Economics.

Acknowledgements

The authors wish to acknowledge the authors for providing a published different Article review publication to the first author during 2000s to carry out this Article at Bule Hora University, Oromia regional state, Southern Ethiopia. The critical review and comments offered by Dr. Zelalem Ayana and Mr. Dadi Feyisa were acknowledged. The assistance given from by Mr. Bayisa Bussa and Tedele Geneti to collect the literature from different source is acknowledge.

References

- [1] Adugna etal, (2009). Analysis of fruit and vegetable market chains. Approval sheet, p 16.
- [2] BezabihEmana and Hadera Gebremedhin, (2007). Constraints and Opportunities of Horticulture.
- [3] CSA (Central Statistical Authority), 2009. Area and Production of Major Crops. Sample Enumeration Survey. Addis Ababa, Ethiopia.
- [4] FAO. (2003). The Market for Non Traditional Agricultural Exports Commodities and Trade Division, Food and Agriculture Organization. Rome.
- [5] Greenhalgh P. and Havis E., Natural Resources Institute, March 2005, Feasibility Study on Assistance to the Export Horticulture Sector in Ethiopia, United Kingdom.
- [6] IFAD (International Fund for Agricultural Development), 2003. Promoting Market Access for the Rural Poor in Order to Achieve the Millennium Development Goals. Discussion Paper for the Twenty-Fifth Anniversary Session of IFAD's Governing Council. Rome, Italy.
- [7] Joonsten, F., (2007). Development Strategy for Export Oriented Horticulture in Ethiopia.
- [8] KahsayBerhe, YigzawDessalegn, YisheakBaredo, WorkuTeka, Hoestra, Dirk; and AzageTegegne, (2008). Smallholder Based Fruit Seedling Supply System for Sustainable Fruit Production in Ethiopia: Lessons from IPMS Experience, ILRI. Addis Ababa, Ethiopia.
- [9] Lumpkin, T. A., K., Weinberger and S. Moore, (2005). Increasing Income through Fruits and Vegetable Production: Opportunities and Challenges. Marrakech, Morocco. 10 p.
- [10] MoARD (Ministry of Agriculture and Rural Development), (2005). Vegetables and Fruits Production and Marketing Plan (Amharic Version), Ministry of Agriculture and Rural Development, Addis Ababa, Ethiopia.

- [11] Naamani, G., (2007). Developments in the Avocado World. California Avocado Society 2007: 71-76, Tel-Aviv, Israel.
- [12] SeifuGebremariam, (2003). Status of Commercial Fruit Production in Ethiopia, Addis Ababa Ethiopia.
- [13] Sisay H, (2004). Fresh Fruit and Vegetables: Production and Market Study. Ethiopian Export Promotion Agency. Product Development Market Research Directorate Ethiopia.
- [14] World Bank Group, (2006). Ethiopia: Developing Competitive Value Chain <http://siteresources.Worldbank.org/INTAFRSUMAFTPS/resources?afpsnote29F061017.pdf> Accessed on 17th, December. 2009.
- [15] World Bank, (2004). Poverty Reduction and Economic Management, Country Department for Ethiopia: Opportunities and Challenges for Developing High-value Agricultural exports in Ethiopia, Africa region, background report, April 9, 2004 <http://siteresources.worldbank.org/in/ethiopia/resources/prem/opp/and/challenges/high/value/exoprts.pdf> Accessed on 03rd April, 2004.
- [16] Yeshitela, TB. And T. Nessel, (2004). Characterization and Classification of Mango Ecotypes Grown in Eastern Hararghe (Ethiopia). Sarhad Journal of Agriculture, 19 (2): 179-180.
- [17] Yilma Tewodrose, (2009). United Nations Conference on Trade and Development.