ADDIS ABABA UNIVERSITY SCHOOL OF COMMERCE

VALUE CHAIN ANALYSIS OF WHITE HARICOT BEAN FROM FARMERS TO EXPORTERS

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF ARTS DEGREE IN LOGISTICS AND SUPPLY CHAIN MANAGEMENT

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June, 2017

Addis Ababa, Ethiopia.

ADDIS ABABA UNIVERSITY

SCHOOL OF COMMERCE

DEPARTMENT OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT

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June, 2017

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I hereby certify that I have read and evaluated this Thesis entitled " value chain analysis of white haricot bean farmer to exporters" Under my guidance, by Smrawit Gebeyehu. I recommend that it should be submitted as fulfilling the thesis requirement.

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As member of the Board of Examiners of the M.Sc. Thesis Open Defense Examination, I certify that I have read, evaluated the Thesis prepared by Samrawit Gebeyehu and examined the candidate. I recommended that the Thesis should be accepted as fulfilling the Thesis requirement for the degree master of arts in logistics and supply chain management.

_____ _____ _____

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External Examiner Signature Date

ACKNOWLEGEMENT

Above all I gratefully acknowledged the guidance and protections given me by the almighty God throughout my study. I am so grateful to my advisor Asst.Prof. Teklegiorgis Assefa for his support and thoroughness in advising and guiding this thesis. I would also like to thank all participants of the study. In this regard, sampled small-scale haricot bean farmers of melka adama Kebele in Oromia region, member of ECX, ministry of trade, ministry of agriculture and ECX organization who were willing to participate in the study as a respondent, deserve special recognition and gratitude for allotting their valuable time. Without their kind and active participation, this research would not have been realized.

I am also indebted to my family more than they know they provided me unflinching encouragement and support in various ways. My thanks also go to school of commerce, for supporting my work on this thesis financially and for giving me this chance. I am indebted to the works and authors that I used in this research and to several anonymous referees whose works added value to this thesis in one way or another.

ABSTRACT

Value chain analysis describes the activities within and around an organization, and relates them to an analysis of the competitive strength of the organization. Therefore, it evaluates which value each particular activity adds to the organizations products or services. White haricot beans are a grain crop mainly produced in Ethiopia for export purpose. It grows in most of the agro-ecology zones of low and mid altitude areas of the country. The objective of this study was to analyze the white haricot bean value chain from farmers to exporters and thoroughly describe the relationship along this chain that comprises of the each actor that has an active role in delivery of the product to final consumers at a reasonable price and to their convenience. The study were used descriptive analysis. In this study non-probability and probability sampling methods used, specifically purposive sampling and simple random sampling technique deployed as a sampling technique since the list of target population is known. A total of 87 farmers 70 sample white haricot bean producers were randomly selected from the Melka Adama kebeles. They were 86 customers or member of white haricot bean at ECX thus 71 were selected and provided with questionnaire in such a ways that they could understand it and able to answer to the level of their knowledge. However; questioners gathered from 62 member of ECX. Structure and semi-structure interview also gathered from east shoa zone around Adama farmers. The export analysis were depending on the data obtained from the different respective organizations like ministry of trade, ECX, and Ministry of Agriculture. The data entry and analysis was conducted by using SPSS version 20. It was concluded that vertical and horizontal linkages between the actors were more or less performing well in their value adding practice. The findings of the study revealed that there was no meaningful vertical integration between exporters, wholesalers, farmers and ECX company at all. The study recommended for Strengthening the new white haricot bean trading system through excessive public awareness programs have to be done by all stakeholders to market actors to enhance participation in the ECX market, strengthening a primary markets to improve product supply and improve warehouse access and other facilities in the major producing areas of the crop, especially in Oromia region because Oromia region takes the largest share of the production of white haricot bean compare to the other regions .

***Key words**: Value chain analysis, White haricot beans, actors.*

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AEMFI	Association of Ethiopia Micro Finance Institution
ECX	Ethiopian Commodity Exchange
GDP	Growth Domestic Product
CSA	Central Statistics Agency
ECEA	Ethiopian Commodity Exchange Authority
IFPRI	International Food Policy Research Institute
VCA	Value Chain Analysis
UNDP	United Nation Development Program
UNLO	United Nation International Labor Organization
PABRA	Pan Africa Bean Research Alliance
EPOSPEA	Ethiopian Pulses, Oil seeds and Spices Processors and Exporters Associations
FDI	Foreign Direct Investment
PIF	Policy and Investment Framework

CHAPTER ONE

1. INTRODUCTION

1.1 Background of the Study

Ethiopia is one of the poorest countries in the world with 85% of its population living in the rural parts of the country and employed in agriculture sector. The agriculture sector is very important in the Ethiopian economy that it accounts for roughly 46% of the country's Gross Domestic Product (GDP) and 90% of exports (MARD, 2010).

Agriculture is the core component and driver for Ethiopia's growth and long-term food security. Agriculture directly employs 80 percent of the total population, 43 percent of gross domestic product (GDP), and over 70 percent of export value (UNDP, 2013). Despite the considerable progress made in the sector, ensuring commercialized production remains one of the major challenges facing millions of people.

White haricot beans are a grain crop mainly produced in Ethiopia for export purpose. It grows in most of the agro-ecology zones of low and mid altitude areas of the country. A market demand for the white haricot beans both in the export market has become the main instrument for the growing trends in volume of production (Frehiwot,2010).

White haricot beans are among the most important grain legumes produced by small-scale farmers for both subsistence and cash, mainly in the lowlands and in the rift valley areas of Ethiopia. They are high in starch, protein, and dietary fiber, and are an excellent source of minerals and vitamins. Due to this fact the government has taken initiatives to modernize its export trade by linking with ECX market. Therefore, following this new development white haricot bean transaction has been started by ECX since April 24, 2008 (Frehiwot,2010).

White haricot bean exports account for about 41 percent of pulse production and exports from 2005 to 2012. Its contribution to national export earnings was 95.3 million USD in 2012. The value chain however, remains underdeveloped and producers and traders earn a low share of the FOB price. Due to its critical role for increasing food security, export earnings and employment creation for the national economy, the bean sector has received increasing policy attention from successive governments in Ethiopia (Bethelhem,2013).

The major exporting countries in the world includes: China, Myanmar, Canada, USA and Argentina and their corresponding market share was 26.7%, 18.4%, 10.9%, 10.4% and 9.4%, respectively. Ethiopia took the sixth position in the world white haricot bean export market with a market share of 2.4% (Gashahun,2015).

All stakeholders, ECX,ECEA and MoA (at regional, zonal and district levels) have exerted a lot of effort on establishing of primary markets at the vicinity of the farmers and awareness creation programs should be arranged to all market actors including farmers and related government institutions (Frehiwot, 2010).

Over the last two decades, the current government has made tremendous efforts to improve production and productivity, marketing and export. Towards this end, the government improved agricultural extension services, issued high yielding seeds, established agricultural marketing institutions, like the Ethiopian Commodity Exchange, initiated agricultural marketing center and information exchange systems at the national level. These efforts resulted in a considerable improvement in the white haricot bean production, productivity, and export volume and value, which will be discussed in the following sections(ECX,2015).

As indicated above, the pulse crops mainly the white haricot bean is the major source of hard currency for Ethiopia, which is sounded by challenges of different kinds. Its contribution to the increasing the household income and asset creation turns out to be the major rationale behind for conducting this study. Hence, analyzing this commodity from view point of production, value addition, quality and governance of the chain demands the use of value chain analysis as a vital tool of analysis.

1.2 Statement of the Problem

According to Gashahun(2015) world market prices for agricultural goods have been increasing. The reason for the increasing trend of agricultural world market prices is that global demand growth exceeds the growth in global supply, and this trend will continue in the foreseeable future. The global demand for food will continue to grow mainly for two reasons. One is the continued growth in world population; the other is the sustained growth in per capital incomes in developing and newly industrialized countries, with corresponding increase of per capital food consumption. This fact in turn has a positive impact on the export of high value agricultural commodities and creates international market opportunity. Shortage in one end of the world becomes an opportunity in the other end of the world, this leads to increase the production of agricultural commodities in the potential production areas. Consequently, this might accelerate economic growth. Therefore, the competitiveness of agricultural commodities in global market are imperative for exportable products.

Despite of the above facts, there are some factors studied by Bekele and Hailemariam (2007) that hinder the competitiveness of agricultural commodities which leads to decrease in quality and marketing margin are related to poor production and poor post-harvest value addition skill of farmers, poor market information flow in the value chain, low marketable surplus and poor quality products that do not meet market preferences.

Even though white haricot bean has important opportunity in the economy, the value chain of this crop is highly constrained by many problems which encompasses of inadequacy of improved white haricot bean seed multiplication and distribution, lack of awareness about the need to produce preferred quality of white haricot bean to world market and inadequacy of access to information by value chain actors. Additionally, lack of appropriate marketing infrastructure in the white haricot bean producing areas as well as in the main terminal market are also bottlenecks. On the other hand, based on the value chain analysis of haricot bean study conducted by Bethlehem (2013), Shaun (2010), Abebe.(2010) and Rubyogo (2011) appraised the fact that white haricot bean producing small-scale farmers are often constrained by inadequate supply of improved seeds, fertilizer, agrochemicals, market outlets, limited efforts in market linkage activities and credit institutions.

The major problems of the value chain are limited improved seed supply, poor extension service resulted in quality deterioration, price volatility, prevalence of white haricot bean diseases and rainfall scarcity, basically affecting productivity and quality of white haricot bean ultimately leading to low competitiveness and inability to offer premium price for quality in the ECX market. Moreover, white haricot bean producers are at very subsistence level of farming due to small land size allocation to white haricot beans (average land allocation less than 0.46 hectare), poor usage of chemical fertilizer for white haricot bean production, limited access to credit, poor market linkage are factors constraining white haricot bean sector. If these problems are fixed in the value chain, white haricot beans will become a highly attractive export commodity than red haricot beans in the Ethiopian market (Gashahun,2015).

Therefore this study conducted to clearly identify the hot spots in the poor value chain linkage among the actors and suggesting quick fix area of interventions which further be taken as a tool to narrow the gaps of the weakest link of the value chain and to overcome the problems of the value chain actors including performance of value chain, determinants of the productivity and identification of existing opportunities and identify constraints of white haricot bean.

1.3 Basic Research Questions

The following basic research questions were presented to find solution for the problem stated in the statement of the problem.

1. Who are the actors of white haricot bean value chain and what are their roles?
2. What does their relationship look like?

3. How are the benefits in value addition been distributed across the chain?
4. What are the roles of main actors are playing in value adding of white haricot bean?
5. What are the challenges that lag value chain of each actor from adding values?

1.4 Objective of the Study

1.4.1 General objective of the study

The overall objective of this study is to value chain analysis of white haricot bean value adding practice from farmers to exporters.

1.4. 2 Specific objective of the study

1. To identify each members that have direct involvement in white haricot bean value adding practices.
2. To analyze how these members are interlinked each other.
3. To map white haricot bean value chain and identify the respective roles of the actors.
4. To identify the constraints and opportunities of white haricot bean value chain in the study area.

1.5 Significance of the Study

Improved performance of value chain actors at each and every link of value chain promotes domestic, regional and international markets and builds access to value chain intervention. Hence, it is believed to contribute to the success of value chain at all stages. Estimation of value added across the chain and stimulating value chain of white haricot bean, promote interactions between various chain actors and ensure use of unexploited opportunities. Thus, combating value chain constraints in different circumstances can have multiple advantages. As primary beneficiaries white haricot bean producing farmers can gain much from increased farmer's margin, improve their existing farming practices and use of technologies, able to access information on the market prices of their produces. Furthermore, white haricot bean is an export crop and it can improve their income, alleviate poverty and help to promote commercialization of farm gate products. Thus, this study is likely to provide useful information for value chain intervention among different stakeholders in Ethiopia Commodity Exchange, which is needed to enhance the profitability of stakeholders.

1.6 Scope of the Study

The study focused on identifying the value chain actors and measuring the performances of actors through margin analysis of value added across the chain actors to understand the amount of value added in relation with their selling prices and identifying major bottleneck of white haricot bean yield in the study area were covered.

The geographic scope of study is also focused the member of ECX customers and farmer in Oromia region East Shoa zone around Adama. The region is selected based on the high level of production as compared to other regions.

1.7 Limitation of the Study

One of the limitation emanating from this study is the result of the study may have limitations to make generalizations and make them applicable to the country as a whole. However, it may be useful for areas with similar context with the study areas. It is difficult to access the recent data.

1.8 Definition of Terms

Value chain:-The value chain describes the full range of activities which are required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers, and final disposal after use.

Value chain analysis: -The examination of the all actors to find out what they are doing to increase the importance of the product passes through them and their practice to add extra value that enables the product demanded by the users (either ultimate or business)

1.9 Organization of the Study

This thesis is organized in five sections. The remaining part is organized as follows. The second section elaborates a review of some literatures which encompass theoretical, conceptual and empirical study with respect to the white haricot bean trading value chain. A brief description of the study area and a detailed explanation of the methodologies used for the study are presented in section three. The findings of the study and discussions are presented in section four. Finally section five presents the summary, conclusions and recommendation forwarded to improve the gaps in the value chain that are drawn from the study.

CHAPTER TWO

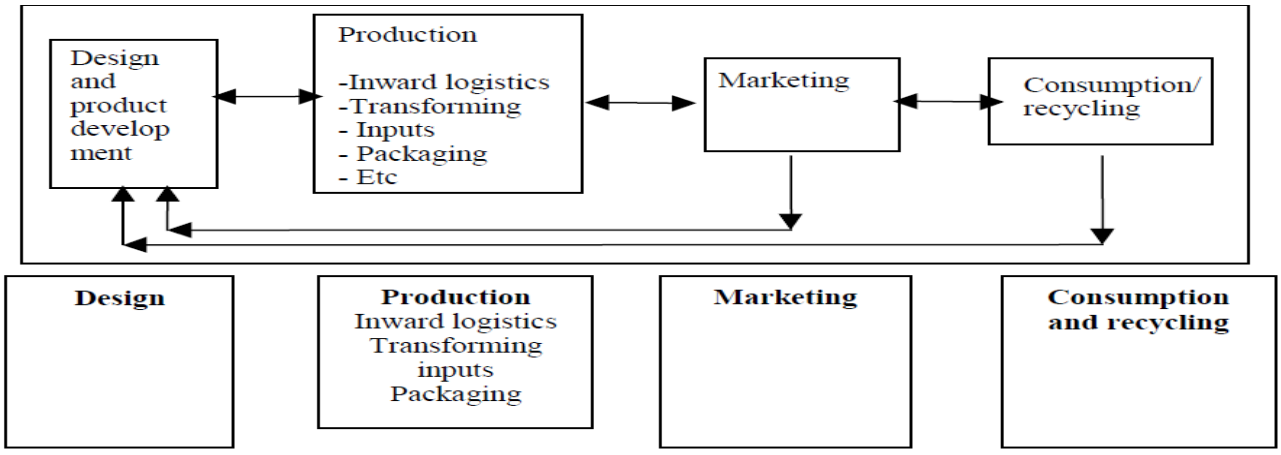
2. RELATED LITERATURESREVIEW

2.1 Definition and Concepts

Value chain:-A 'value chain' describes the full range of activities required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers and final disposal after use (Kaplinsky and Morris 2000).Considered in its general form, it takes the shape as described in Figure 2.1.As can be seen from this, production per seis only one of a number of value added links. Moreover, there are ranges of activities within each link of the chain. Although often depicted as a vertical chain, intra-chain linkages are most often of a two-way nature for example, specialized design agencies not only influence the nature of the production process and marketing, but are in turn influenced by the constraints in these downstream links in the chain (Kaplinsky and Morris 2000).

Value chain analysis:-Value chain analysis describes the activities within and around an organization, and relates them to an analysis of the competitive strength of the organization. Therefore, it evaluates which value each particular activity adds to the organizations products or services. This idea was built upon the insight that an organization is more than a random compilation of machinery, equipment, people and money. Only if these things are arranged into systems and systematic activates it will become possible to produce something for which customers are willing to pay a price. Porter argues that the ability to perform particular activities and to manage the linkages between these activities is a source of competitive advantage (Recklies, 2001).

Figure 2: 1Four links in a simple value chain



Source: Kaplinsky and Morris, 2000.

2.2 Value Added

According to Eskindir,(2015) Value added is created at different stages and by different actors throughout the value chain. Value added may be related to quality, costs, delivery times, delivery flexibility, innovativeness, etc. The size of value added is decided by the end-customer‘s willingness to pay. Opportunities for a company to add value depend on a number of factors, such as market characteristics (size and diversity of markets) and technological capabilities of the actors. Moreover, market information on product and process requirements is key to being able to produce the right value for the right market. In this respect finding value adding opportunities is not only related to the relaxation of market access constraints in existing markets but also to finding opportunities in new markets and in setting up new market channels to address these markets. Value added capture can be divided into five major categories (Kaplinsky,2000):

- trade rents (forthcoming from production scarcities or trade policies)
- technological rents (related to asymmetric command over technologies)
- organizational rents (related to management skills)
- relational rents (related to inter-firm networks, clusters and alliances)
- branding rents (derived from brand name prominence).

To capture these rents a number of conditions have to be met: availability of resources, including knowledge and capabilities of chain actors, the infrastructure to bring the products to a market and comparative advantage in that market, for example through specific value added or economies of scale. According to Kaplinsky (2000) access to high income yielding activities, with high added value, requires participation in global value chains aiming at markets demanding products with high added value.

2.3 Major Concepts Guiding Agricultural Value Chain Analysis

According to Gashahun,(2015) describe that There are four major key concepts guiding agricultural value chain analysis (Kaplinsky and Morris, 2000, anandayasekeram and Berhanu, 2009). These are effective demand, production, value chain governance and value chain upgrading.

2.3.1. Effective Demand

Agricultural value chain analysis views effective demand as the force that pulls goods and services through the vertical system. Hence, value chain analysis need to understand the dynamics of how demand is changing at both domestic and international markets, and the implications for value chain organization and performance. Value chain analysis also needs to examine barriers to the transmission of information in the changing nature of demand and incentives back to producers at various levels of the value chain (MSPA, 2010).

2.3.2 Production

In agricultural value chain analysis, a stage of production can be referred to as any operating stage capable of producing a saleable product serving as an input to the next stage in the chain or for final consumption or use. Typical value chain linkages include input supply, production, assembly, transport, storage, processing, wholesaling, retailing, and utilization, with exportation included as a major stage for products destined for international markets. A stage of production in a value chain performs a function that makes significant contribution to the effective operation of the value chain and in the process adds value (Anandajayasekeram and Berhanu, 2009).

Producing the required amount effectively is a necessary condition for responsible and sustainable relationships among chain actors. Thus, one of the aims of agricultural value chain analysis is to increase the quantity of agricultural production. Understanding the mechanisms of the agricultural production greatly help to design appropriate policy that bring more gain to farmers and the whole society at large. For a long time, sector analyses have been used to measure the different economic aspects of production. However, sector analyses have not been without weaknesses. In particular, sector analysis tends to be static and suffers from the weakness of its own bounded parameters. Such analysis struggles to deal with dynamic linkages between productive activities that go beyond that particular sector (Kaplinsky and Morris, 2000). By going beyond the traditional narrow focus on production, value chain analysis scrutinize interactions and synergies among actors. Thus, it overcomes several important limitations of traditional sector assessments.

2.3.3 Value Chain Governance

Governance refers to the role of coordination and associated roles of identifying dynamic profitable opportunities and distributing roles to key players (Kaplinsky and Morries, 2000). Governance ensures that interactions between actors while value chain reflect organization, rather than randomness. The governance of value chains emanate from the requirement to set product, process, and logistic standards, which then influence upstream or downstream chain actors and results in activities, roles and functions (Abraham, 2013). It is important to note that governance and coordination sometimes appear as synonymous or interchangeable terms. For instance, the research conducted by Williamson (1979; 1985) used the term governance to define the set of institutional arrangements in which a transaction is organized.

On the other hand, a work on Global Commodity Chains and the role of governance showed the vertical organization of activities (Gereffi*et al*. 2005). The application of contract or private, and ordering or governance leads naturally into the reconceptualization of the firm not as a production function (in the science of choice tradition) but as a governance structure (Williamson, 2002). According to Raikes,(2000), trust-based coordination is central for goods and services, whose characteristics change frequently, making a standardized quality determination for the purposes of industrial coordination difficult. This applies to the manufacturing industry as well as agri-food chains. It is possible to identify in one industry several coordination forms used by different firms where the choices rely on the trust existent between the firms. Value chains can be classified into two based on the governance structures: buyer-driven value chains, and producer-driven value chains, and producer-driven value chains (Kaplinisky and Morris, 2000).

Buyer driven chains are usually labor intensive industries, and so more important in international development and agriculture. In such industries, buyers undertake the lead coordination activities and influence product specifications. In producer-driven value chains which are more capital intensive, key producers in the chain, usually controlling key technologies, influence product specifications and play the lead role in coordinating the various links. Some chains may involve both producer and buyer driven governance yet in further work (Humphrey and Schmitz, 2002;

Gibbon and Ponte, 2005) it is argued that governance, in the sense of a clear dominance structure, is not necessary a constitutive element of value chains. Some value chains may exhibit no governance at all, or very thin governance. In most value chains, there may be multiple points of governance, involved in setting rules, monitoring performance and/or assisting producers. Chain governance should also be viewed in terms of 'richness' and 'reach', i.e., in terms of its depth and pervasiveness (Evans and Wurster, 2000). Richness or depth of value chain governance refers to the extent to which governance affects the core activities of individual actors in the chain. Reach or pervasiveness refers to how widely the governance is applied and whether or not competing bases of power exists. In the real world, value chains may be subject to multiplicity of governance structure, often laying down conflicting rules to the poor producers (MSPA, 2010).

2.3.4. Value Chain Upgrading

The concept of upgrading refers to several kinds of shifts that firms or groups of firms might undertake to improve their competitive position in global value chains. According to Humphrey and Schmitz (2002), there are four types of value chain upgrading. These are:

1. Product upgrading: Firms can upgrade by moving into more sophisticated product lines which can be defined in terms of increased unit values.

2. Process upgrading: Firms can upgrade processes by transforming inputs into outputs more efficiently through superior technology or reorganizing the production systems. Production would be a form of process upgrading.

3. Intra-chain upgrading: This involves several types of upgrading opportunities that exist within a particular value chain. Firms can acquire new functions in the chain, such as moving from production to design or marketing this type of upgrading sometimes called as functional upgrading. Firms can also move backward or forward to different stages in a value chain, such as moving from the production of finished goods to intermediates or raw materials (upgrading via vertical integration). In addition, firms can diversify their buyer-supplier linkages with in a value chain, for instance an apparel maker adding different kinds of lead firms such as an upscale retailer of brand-name client to expand or raise the price points of its orders (network upgrading).

4. Inter-chain upgrading: This occurs when firms apply the competence acquired in a particular function of a chain (e.g., competence in producing particular inputs, or in export marketing) to a new sector.

These various types of upgrading offer a framework that is not only relevant to the analysis of firms, but also to an understanding of how countries fashion development strategies to attempt to move themselves into relatively high value, sustainable niches in the global economy (Gary *et al*, 2001).

2.4 Mapping the Value Chains

Mapping a chain means creating a visual representation of the connections between businesses in value chains as well as other market players. It facilitates a clear understanding of the sequence of activities and the key actors and relationships involved in the value chain. This exercise is carried out in qualitative and quantitative terms through graphs presenting the various actors of the chain, their linkages and all operations of the chain from pre-production (supply of inputs) to industrial processing and marketing. When dealing with value chains where benefits are sought for the poor and the marginalized, it is also important to give special consideration to poverty, gender and environmental factors (UNLO, 2009).

Then during the value chain analysis, more information will be gathered and added to the map to make it more detailed. "There are many potential dimensions of a value chain which could be included in the mapping exercise. Therefore it is crucial to choose which dimensions are to be mapped, based on available resources, the scope and objectives of the value chain analysis and the mandate of the organization" (DFID, 2008).

The mapping diagrams are prepared through an iterative process which can be divided into two stages: the first step is drawn to indicate the structure and flow of the chain in logical clusters: the main actors and the activities carried out at the local level, their links to activities at other domestic or foreign locations, the supporting services and their interactions, the links to the final market, and some initial indications of size and importance. The second stage is quantifying the value chain. This involves adding detail to the basic maps drawn initially (structure and flow).

Depending on the level of detail needed for the research entry point, this exercise may focus on elements such as size and scale of main actors; production volume; number of jobs; sales and export destinations and concentration.

These activities carried out in the value chain will vary depending on the type of chain being analyzed (agricultural commodities, industrial products or services). However, it is advisable to identify not more than six or seven main activities between the start of the production process and sale to the final customer. It is important to differentiate the actual owners of the products. If they source out or sub-contract processes to other businesses, this business entity should be categorized as operational service providers.

Other factors to map out at this stage are the poverty ranking, the locations of the various actors (commune, district, province, country, etc.) and their legal status, the flows of products, money, information and services can be both tangible and intangible. The production volumes, the number of actors, the number of jobs will helps to picture the size of the various channels within the value chain. The dimension of the vulnerable segment of the population in the chain (including gender differentiation) and employment opportunities can also be portrayed. From the place where the product (service) originate and where does it go, the map captures the physical flow of the product or service and illustrates regional variations, such as the transaction costs related to transport. The value change through the value chain is useful factor in measuring the competitiveness of each operator within the chain (and of the chain as a whole). The simplest method of picturing this element is by computing value addition at each stage of the chain the value of output at market price minus the value of all intermediate inputs (materials or services) purchased from other firms.

2.5 World Haricot Bean Production

According to Frehiwot,(2010) World dry bean production generally has been trending upward during 1990‟s and 2000‟s reaching its peak production in 2003. During the past twenty years (1990 to 2009) the average growth rate of dry bean production was only 1%. In 2009 global production of haricot bean was 19.7 million tons it decreases by 3% from its previous year.

Unlikely the area harvested for haricot bean does not follow a uniform pattern under the specified period. The world average area harvested for haricot bean is 25.9 million hector.
In the past three years (2007 to 2009) the average world production of dry bean reaches 20.3 million thousand tons. In 2008 production year, the top dry bean producing countries are Brazil (17%), India (14.8%), Myanmar (12.3%), China (8.4%), USA (5.7%), Mexico (5.5%), Tanzania (4.2%), Uganda (2.2%), Argentina (1.7%) and Indonesia (1.6%). Ethiopia has got the fifteenth rank in volume of production with a percentage share of 1.2%. The top sixteen countries account for 82% of total world production.

The average global productivity of haricot bean was 7 quintals/hectare. In recent years (2007 to 2009), even though the harvested area and production of dry bean was declining; the global productivity has increased and reaches 7.8 quintals/hectare in 2009. Countries with high productivity are Canada (19.6), USA (19.5) and China (16.2).

2.6 Pulses Production and Marketing Status in Ethiopia

Pulse crops are important components of crop production in Ethiopia's small holder's agriculture, providing an economic advantage as an alternative source of protein, cash income, and food security In addition, they have been used for many years in crop rotation practices, since they have capacity to improve fertility status of the soil through biological nitrogen fixation (Derese, 2012).

The production of pulses in Ethiopia is highly rain dependent even if irrigation is available in the areas where pulses are cultivated, farmers usually do not use it for production purposes. And reliant on the small-scale farmers who produce relatively small quantities of pulses and sell them to local traders. These local traders are usually uncertified. Small-scale farmers usually need cash quickly after the harvest. Because of the lack of other marketing options they tend to sell to these traders. Twelve varieties of pulses are currently being cultivated in Ethiopia, which can be divided into "highland pulses" (chickpea, faba bean, field pea, grass pea, lentil, and lupine) and "low land pulses" (haricot bean, soya bean, cowpea, pigeon pea, and mung bean). Of these varieties, the biggest share of Ethiopia's pulses production includes fava (36%) and haricot beans (17%) (IFPRI, 2010).

The total land devoted to pulses in Ethiopia during 2011/12 cropping season (in the long rainy season, Meher) was 1,616,809.37 hectare, or 13.38 percent of the total cultivated area, with total production of 2,316,201.24 metric tons (mt).

Of this, 331,709.15 hectares were planted with haricot beans. The total production of haricot beans was 387,802.311 mt, with an average yield of 1.17 mt per hectare (CSA, 2012). Among the pulses haricot beans (*Phaseolus vulgaris L*), also known as common beans in Ethiopia are increasingly becoming an important crop to the Ethiopian national economy (commodity and employment) and to farmers as food and as cash income. Ethiopian farmers grow beans for two major consumption uses namely: canning and cooking types. The white haricot beans are grown for export canning industry and other types are mainly for households' food for national and regional markets. Each of these markets has been growing at a higher rate. For instance, between 2004 and 2010, the exported white haricot bean alone almost tripled from USD 18 million to 50 million (Pulse Export Promotion Agency, 2010) while other food bean types are also consumed or traded in local and regional markets. This tremendous shift came as a result of market led bean breeding adopted by the members of the Pan Africa Bean Research Alliance (PABRA) in early 2000s in response to the needs of the increasing differentiated bean grain market across the 28 PABRA member countries (PABRA, 2003).

Among the white canning type, the most preferred canning type seed are of oval shaped, with a sparkling white color and of upright growth habit to avoid damage by soil and of early maturity. The current popular varieties include *Awash 1, Mexican 142* and to a smaller extent *Awash Melka*(Ferris and Kaganzi, 2008). The *Mexican 142* variety is the oldest one introduced by the government more than 30 years ago. *Awash 1* and *Awash Melka*perform better in regards to yields and disease resistance. The supply of seeds for these two varieties, however, is limited. The planting period of white haricot beans should be set such that harvesting period falls during the dry season. The production period ranges from 85 to 120 days. White haricot beans usually are not intercropped. The yield of the white haricot beans is decreasing through time. The yield in ZiwayDugdaworeda, as reported by SNV, is only 1.2 mt/ha. The quality of the beans in the area also has become very poor. The main reason is that farmers usually use their own seeds for planting. The seeds, in most cases, are mixed with other haricot beans varieties.

2.7 Haricot Bean Types in Ethiopia

There is a wide range of haricot bean types grown in Ethiopia including white, mottled, red, and black varieties. The most commercial varieties are pure red and pure white colored beans and these are becoming the most commonly grown types with increasing market demand. Within the red bean types, the most favored and most commercially accepted varieties include Red Melka, a mottled medium sized red; Red Wolaita, a medium sized pure light red; and Nasser, a small pure dark red variety.

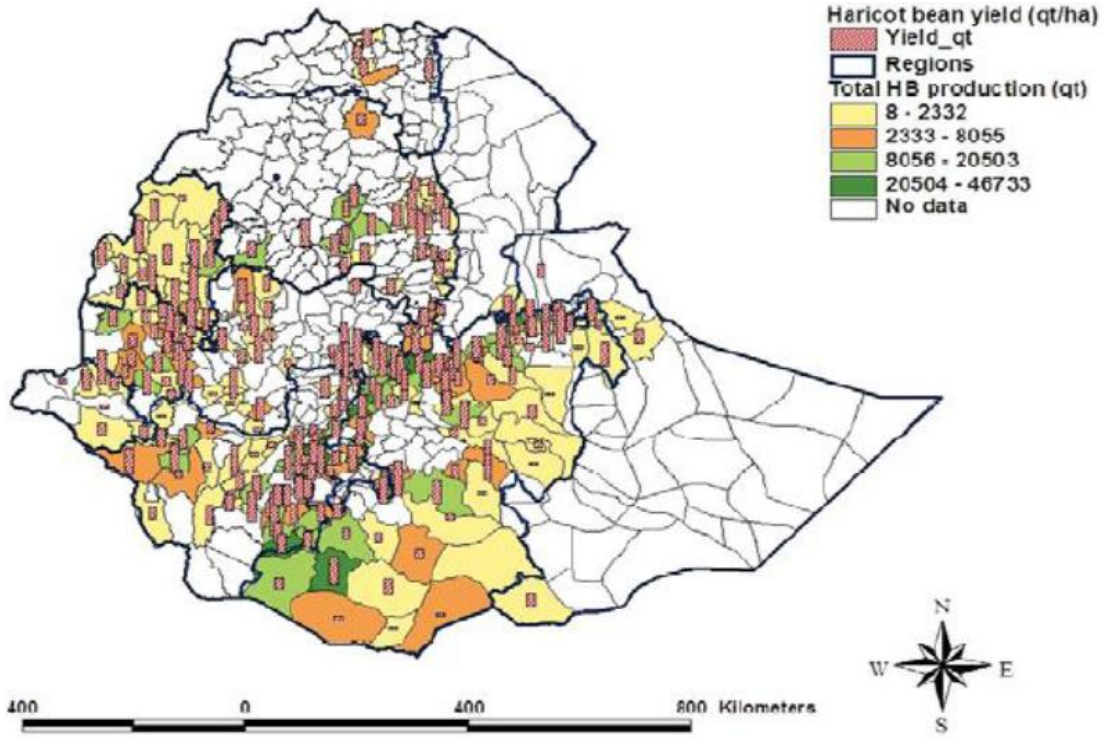
The white beans are often referred to as white pea beans, due to their small size and round shape; they are otherwise known as navy beans. White beans are popular in industrialized nations, such as the USA and UK, as they are used to prepare pre-cooked canned" baked beans.‟ The baked bean market is growing in many parts of the world, as it is low cost, nutritious snack food that is easy and quick to prepare. Although an important export crop, the white pea bean is not consumed by many Ethiopians. White beans are sold almost exclusively for the export markets; the leading white bean varieties include Awash 1, Awash Melka and Mexican 142.

2.8Ecology and Geographical Distribution

Haricot bean (dry bean) is produced in a range of crop systems and environments in regions as diverse as Latin America, Africa, the Middle East, China, Europe, the United States, and Canada. The leading bean producer and consumer is Latin America, where beans are a traditional, significant food, especially in Brazil, Mexico, the Andean Zone, Central America, and the Caribbean. In Africa, beans are grown mainly for subsistence, where the Great Lakes region has the highest per capita consumption in the world. Beans are a major source of dietary protein in Kenya, Tanzania, Malawi, Uganda, and Zambia. Haricot beans tolerate most environmental conditions in tropical and temperate zones, but do poorly in very wet tropics where rain causes disease and flower drop. Rain is undesirable when dry seeds are harvested. Frost kills plant. Excessive water will injure plants in a few hours, but some black-seeded beans will grow well in standing water. Beans grow best in well-drained, sandy loam, silt loam or clay loam soils, rich in organic content. Haricot beans are adapted to the low and mid altitude areas at an altitude 900-2100 msl (mean sea level) and optimum temperature of 24^{o}c and average rainfall 200-600 mm per annum.

Haricot beans are grown throughout Ethiopia and are an increasingly important commodity in the cropping systems of smallholder producers for food security and income. According to EARO, Low Land Pulses Research Strategy Document (2000), the central part of the country, mainly the Rift Valley and lake areas rank first in hectare (48 percent) and production (55 percent) of low land pulses in Ethiopia. This part is particularly important for the white pea beans that are desired for export markets. The southern part of the country: Sidama and GamoGofa accounts for about 25 percent of area under low land pulses. The major types of beans in this area are red and speckled types grown for food. However, red kidney beans are also exported to countries like Pakistan; even though the total volume is low relative to white pea beans. The eastern part constitutes mainly Harerghe highlands where low land pulses are dominant crops grown mainly for food. As in the southern part, farmers produce beans twice a year. Generally, colored food beans and small whites are grown in the eastern part. The western part including Wellega, Kefa and Illubabor, which accounts for 17.50 percent of land area occupied by low land pulses. The northwestern part includes Pawe and Chagnie area accounting for five percent of land area occupied by low land pulses. The northern part includes Sirinka, Kobo, Mekele and Adet areas accounting for less than five percent of the area under lowland pulses (RahmetoNegash, 2007).

Figure 2: 2Spatial distribution of Haricot beans production



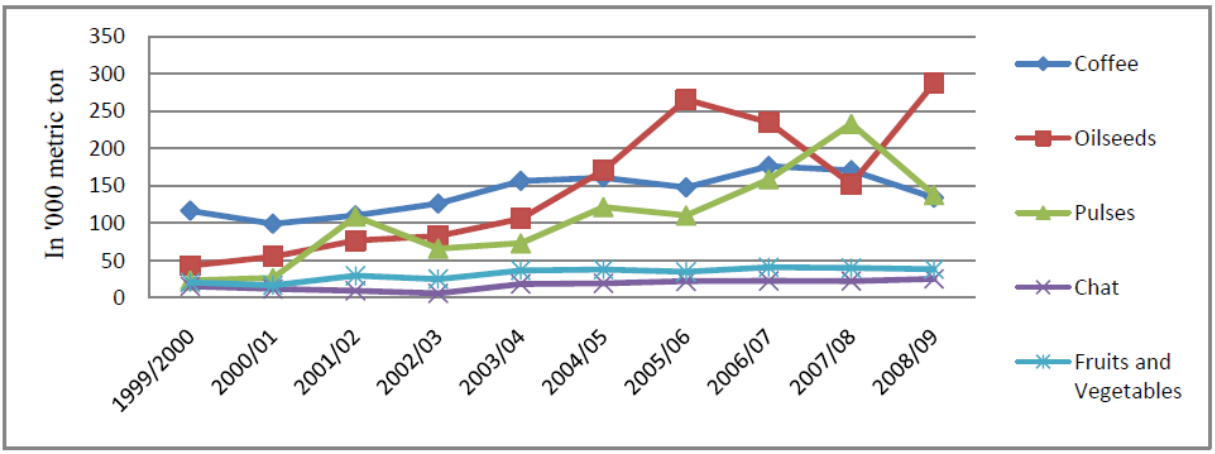
Source: Ferris S and Kaganzi E, 2008, ILRI

2.9 Economic Significance of Haricot Bean

Several varieties of haricot beans are consumed in SNNPR, Eastern Hararge, and Western Ethiopia usually mixed with other cereals. In recent years, the country's export earnings from haricot bean take the first rank from pulse category.

According to National Bank of Ethiopia 2008/09 Annual report, a total value 1.45 billion USD was earned from major export items such as coffee, pulses, oilseed, chat, leather products flowers and vegetables. Pulses are the third major agricultural commodity next to coffee and oil seeds in the export market of the country. It contributes 6.3% of the total export earnings. Export revenue earned from pulses dropped by 36.8% on accounts of 40.8% fall in the volume of production despite price increase in the international market. Generally pulses volume follows a positive trend starting 1999/2000 to 2007/08 but it sharply drops by 40 % in 2008/09.

Figure 2: 3Export Volume of major Commodities



Source: Computed based on NBE Annual Report

According to MoA export data, in 2009/10, 232 thousand tons of pulses was exported to 39 different countries and earning 138 million USD. Haricot bean is the first in export earnings from pulses category contributing 33% of this export earnings. Horse beans and chickpeas took the second and the third position having shares 26 and19 percent respectively.

2.10 Size of the Ethiopia Markets

The country's annual average production of haricot bean is 2,398 thousand quintals for the period 2003/04 to 2009/10; with an average growth rate of 17.4%. This suggests that in 2009/10 crop season of the total production 3,639 thousand quintals only 438 thousand quintals were supplied both for the domestic and international market. Ethiopia's the market demand is perhaps more comparable with India. In both of these countries, there is a wide range of traditional foods, based on a strong association with vegetarian diets. And their consumption pattern is almost similar. It is also possible intuitively to put the market size by beans type. Huge amount of red beans are consumed locally in spite of the fact that some volume of this bean type crosses the Kenya border illegally and very small amount, about 10 percent of total been exported legally. Therefore, it is possible to say that almost all of the country exported bean type is the white pea bean.

2.11 Marketing Constraints

2.11.1 Consumption Behavior of Ethiopian Farmers

The production natures of Ethiopian farmers are mainly subsistence. A farmer can have only on average less than a hector. As a result, 73.3 percent of the bean production is consumed at household level. Only 13.3% of the bean was supplied to the market.

2.11.2 Poor Coordination amongst Traders

Most of bean traders are not part of a formal trading organization. These traders are individuals, associations and cooperatives. They are informal traders. Consequently very poor business coordination amongst traders has been observed.

It was difficult for these informal traders to gather information and access opportunities in new area of the business. Moreover, these traders are seasonal bean traders and worked with other commodities such as maize, teff and coffee during the year. If traders were to be given support in terms of business skills development, they would wish such an intervention to apply across commodities.

2.11.3 Lack of Market information

There was little evidence that Ethiopian bean traders were involved in long term storage and speculative trading. At the same time as many traders argue that storage would have been highly profitable, the general lack of short and long term market information meant they had insufficient data to plan for future sales with confidence. Throughout the country bean producing area, farmers and traders have been unable to access regular market information. This has been considered to be a major problem in developing marketing plans and in price discovery. This lack of information has been increasing both transaction cost and resistance to risk taking. All market chain actors argue that a simple price and volume information system based on the key trading towns would make a considerable difference in their marketing decision making.

Recently, ECX has started transmitting real time price information through its electronic price tickers in major crop producing areas of the country, although the ECX plans to increase these to 200. The prices are also shown on the ECX website. In addition producers and bean traders have been using their mobile phone to exchange bean price information. Currently most of the price

ticker is not working and thus some measure action should be taken to facilitate the of dissemination price information throughout the country.

2.11.4 Price volatility

According to CSA data Average monthly producer price of haricot bean generally follows an increasing trend under the period 1994 to 2002 E.C. Similarly its average monthly retailer's price of haricot bean also exhibits a similar pattern except for the year 2002 E.C. In 2002 the retail price falls by 8%.

Recent shifts in prices and demand for beans has led to increase risk and volatility in both prices and volumes. The bean market data shows that bean prices had declined towards the end of the 2005 main selling season and this may have caused a fall in bean planting for the 2006 season by major producing countries. The lack of beans on the market in early 2006 had led to occurrence of an awfully high demand and to intense competition for the crop and this competition continues up to July 2008.

The overall variation on the producers and retailers price as measured by coefficient of variation (CV) indicate that the retailers price is highly volatile than that of producers price. From August 2008, the white bean price has led to decrease at the international and national market. Consequently, most traders have not stored beans in the current trading climate and they felt the extremely high market places could collapse at any time.

2.11.5 Incentives in the Export markets

The government of Ethiopia is keen to develop export opportunities to raise foreign exchange and foreign companies are being provided with attractive to invest in Ethiopia and several companies have recently built bean export plants in Nazareth. The government appears less keen to support the sales of red beans into northern Kenya though informal cross border trade. Recently the government established the mechanism to stop this trade activity. Rather than stopping this informal trading activity by the government, it is to find ways to formalize the process. Lack of support from officials creates considerable uncertainty in the market and is an

issue that could be resolved to the advantage of the farmer and trading community rather than being viewed as a potentially unlawful exercise.

2.11.6 Market promotion

Ethiopian Pulses, Oil seeds and Spices Processors and Exporters Association (EPOSPEA) and Ethiopian Embassies abroad has been engaged in market promotion of major export commodities. However, much more is expected from the Ministry of Foreign Affairs, through its Embassies located in different part of the world and the association in promoting the country's export earning products so as to expand the market share of the country agricultural products in the global market.

2.12 Empirical Studies

Understanding of the value chain is essential to creating development strategies effectively. Value chain is a useful concept to upgrade competitiveness in commodity development. It helps to identify aspects that are critical to improve chain performance and returns to chain actors. The framework allows governments aspiring to enhance their countries competitiveness or to pinpoint where their actions can have the most positive impact. The value chain approach considers both the added value of a product and an insight into the actors' roles and relations. The value chain approach analyses a product's development process from input supply through production and processing level, transport, trade and marketing, to consumption.

According to study conducted on value chain of white haricot bean in Rwanda, the bean value chain has intra-linkages between the micro level bean value chain actors (producers, collectors, processor and retailers) and inter linkages between the micro level actors and messo level actors such as input providers and financial service providers and macro level actors (government agencies and development agencies) (Dimat, 2012). The linkages are either horizontal or vertical and the strength or weaknesses of these linkages influence the operation of the chain. Despite the fact that, earlier work on agriculture concentrated mainly on improving the supply side of the respective value chains e.g. production conditions and output, recent studies have also paid attention to the demand side (Diao and Dorosch, 2007).

White haricot bean is the leading cash crop in the study area, therefore the total farm produce was expected to be supplied to market. A number of studies has been investigated about factors that mainly determine yield and marketable supply of agricultural commodities. Among these, Bezabih and Hadera (2007) state low level of improved agricultural technologies, risks associated with weather conditions, diseases and pests, as the main reasons for low productivity. Moreover, due to the increasing population pressure the land holding per household is declining leading to low level of allocation of land to white haricot bean production. The above researchers, Bezabih and Hadera (2007), further identified pest, drought and shortage of fertilizer as the major constraints of horticulture production in Eastern Ethiopia.

Wolday (1994) pointed out the major factors that influenced the marketable supply of teff, maize and wheat at AlabaSiraro district using cross sectional data and he investigated the relationship of farm level marketable supply of cereals to capture the influence of the independent variables on the marketable supply of food grain, he adopted multiple regression analysis with both dummy and continuous variables as explanatory variables. In his study, he found out that among the independent variable, access to market, size of output and family size had affected the marketable supply of food grain at the district. Similar study undertaken by Kinde (2007) indicated that, the major factors that affect farm level yield and marketed supply of sesame in Metema district by using cross-sectional data with dummy and continuous explanatory variables. In his study he implemented ordinary least square (OLS) to identify the relationship between the marketable supply of sesame and the hypothesized explanatory variables; hence his study acknowledged that amount of sesame productivity, use of modern inputs, number of language spoken by the household head, number of oxen owned, sesame area and time of selling of sesame influenced marketable supply of sesame positively.

Another related study by Rehima (2006) identified that the key factors that affecting marketable supply of red pepper at Alaba and Siltie districts of SNNPRS using cross-sectional data with both dummy and continuous independent variables. In her study, she employed Tobit model and came up with the finding that frequency of contacts with extension agents influenced marketable supply of pepper positively at the district. Recent studies are commonly using regression models to estimate the production function. Other studies conducted by Bethlehem, (2013) in Doba

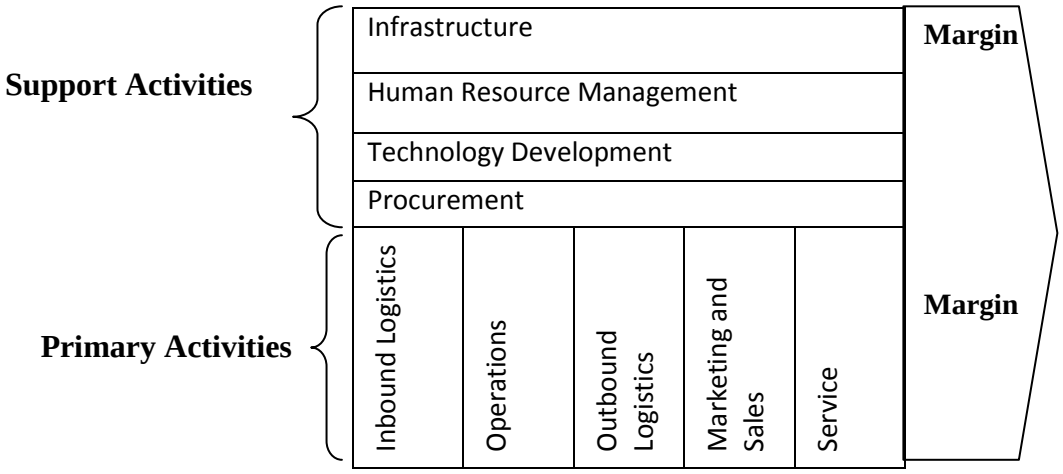
district shows that major production and marketing constraints in the value chain of haricot bean mentioned by the farmers were the prevalence of disease (honeydew), loss of yield due to shortage of rainfall, limited access to market information and credit, limited and delayed delivery of production inputs, higher fertilizer price, unfair weighing and lack of physical infrastructure (roads, transport facilities) and weak and ineffective extension support service. The production and marketing of vegetables in Fogera district, south Gondar Zone, is also reported to be affected by factors such as poor product handling, pest and disease, surface water shortage, limited production and marketing information support, unorganized input delivery and imperfect pricing system, absence of law enforcement on standards, lack of coordination among producers, market research and information and lack of improvement for other actors in the channel (Abay, 2007).

2.13 Conceptual Framework

The conceptual framework of white haricot bean views value chain as a network of horizontal and vertically integrated value chain actors that are jointly aimed toward providing products to a market. Based on Ruben (2007) the value chain of white haricot bean is characterized by its network of activities which depicts the input supply, production marketing and the finally export market. Thus, the actors and their role, the supporting institutions, with regard to enabling the operational activities, constraints and opportunities of the value chain actors in the study area has been studied. The term margin implies that organization realize a profit margin that depends on their ability to manage the linkages between all activities in the value chain .

Figure below depicts the conceptual framework of the study which reflects possible order of analysis of haricot bean value chain.

Figure 2: 4 Conceptual framework of the study



Source: Porters, 1985

CHAPTER THREE

3. RESEARCH METHODOLOGY

3.1 Research Approach

Both qualitative and quantitative research approaches were used in this study. The reason for selecting qualitative approach is the study involves qualitative data analysis. This study used quantitative research method, in order to gather adequate information which helps to measure the variables. In order to analyze the data researcher were use descriptive analysis method.

3.2 Research Design

In this study both quantitative and qualitative designs were employed. The semi-structured and structured interview also used to gather primary data from farmers and questionnaires also distributed to cooperative unions and exporters. Secondary data were used to Ministry of trade, Ministry of Agriculture, Ethiopian Commodity Exchange (ECX), Ethiopian pulses, oilseeds and spices processors exporters association and This methods were used to gather the required data.

3.3 Population and Sampling Technique

To select representative white haricot bean producing regions, the farmers of Melka Adama region was selected and also target sample to be presented with structured and semi-structured interview using probability proportional to size technique. A total of 87 farmers 70 sample white haricot bean producers were randomly selected from the Melka Adama kebeles.The researcher was selected using non probability, purposive sampling technique.

$n= N/1+N(e)^2$

$=87/1+87(0.05)^2$

$=$**70**

To address the customers, both buyers and sellers, of ECX, in close ended and open ended question; the questionnaires developed by the researcher and previous research. Simple random sampling technique was employed. Based on ECX members of cooperative union and exporters of haricot bean 86 members have been actively participating. 71 respondents were selected based on the following formula, out of the total 86 customers of the organization.

- $n=N/1+N(e)^2$

  $=86/1+86(0.05)^2$

=70.7≈ 71

- To select the 71respondents out of the total 86population online random number generator was used from www.psychicscience.org.

3.4 Data Types, Sources and Methods of Collection

Primary and secondary data were used to conduct this research. Primary data was collected using formal survey. Since the nature of the study demands involvement of numerous value chain actors engaged in white haricot bean value chain at different stages along the chain, the data is collected from input suppliers, small scale white haricot bean producers, and primary cooperatives participating in haricot bean marketing, cooperative unions, local assemblers, wholesalers and exporters. Hence, the information that were collected includes inputs, production, price aspects, yield (productivity), transportation, product handling, the marketing system and value addition by each actor. Secondary data also collected from different sources such as, Ethiopian Commodity Exchange Authority and non-governmental organizations operating in the study area. Besides, different and relevant published and unpublished reports, bulletins and websites also investigated to generate pertinent secondary data on white haricot bean production and marketing.

3.5 Method of Data Analysis

Both qualitative and quantitative methods of data analysis were used. The qualitative data were collected through questionnaire and interview. During analysis a number of tools employed. For instance; chain mapping and actor linkage matrix were used to identify the various actors and their function, and for mapping patterns of interaction between actors. Regarding the quantitative analysis, the white haricot been export was analyzed from the data gathered from ECX, Ministry of Trade, Ethiopian pulses, oilseeds and spices processors exporters association and National Bank of Ethiopia. Addressing all exporters not be easy and also addressing the majority was unquestionably relevant for the accuracy of the result so open ended survey was the prior choice, the data gathered using likert scale to be interpreted using simple descriptive statistics such as frequency, percentages . Statistical package for social science (SPSS) version 20 were employed to analyze the data. The analyzed data were presented using tables, graphs and charts.

3.6 Ethical consideration

In undertaking any research, there is an ethical responsibility to do the work honestly and with integrity (Adams et al, 2007:35). In light of this view, the researcher has treated any information obtained from any individual confidentially without disclosing the respondents identity, and the researcher is open minded as possible and express opinions as they are given. The literatures consulted in this study are acknowledged appropriately. In this study all research ethics was applied in all process of the research. When collecting data like interview and distributing questionnaire the researcher protected respondents or the institution security.

3.7 Validity and Reliability Test

Reliability analysis used to measure the consistency of items of a questionnaire. There are different methods of reliability test, for this study Cronbach‘s alpha was used to considered. Cronbach‘s alpha is also the most common measure of reliability.

Table 3. 1 Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.755	.747	18

The Cronbach alpha coefficient range from 0.70 to 0.79.As we can see that Cronbach‘s alpha is 0.755 which indicates of internal consistency is maintained. External validity deals with the problem of knowing whether a research’s findings can be generalized beyond that typical study. In this research, external validity has sought to be secured through the research questions being answered by several relevant and academic literatures and complementing case study.

CHAPTER FOUR

4. DATA PRESSENTATION ANALYSIS AND INTERPRETATION

4.1 Qualitative Analysis

4.1.1 Haricot Bean Value Chain Actors and Their Role

Value chain actors are categorizes under two important sections, these are direct and indirect actors. According to KIT et al. (2006), the direct actors are those involved in commercial activities in the chain (input suppliers, producers, traders, retailer1s, consumers) and indirect actors are those that provide financial or non-financial support services, such as credit agencies, business service providers, government, NGOs, cooperatives, researchers and extensionists.
In the study area, there are different actors involved along the haricot bean value chain, upstream from input supply to downstream exporters, playing different roles. The major actors participating in haricot bean value chain and their roles are discussed below.

Farmers: Farmers can sell their produce in the primary market; if the farmer has a potential, he can supply to the ECX market and also to the international market.

Primary Market: are market places established at weredas level of the potential producing regions. At the primary market only farmers can supply their produce and only primary cooperatives and suppliers can buy from the market. According to the information obtain from MoA in Oromia region totally 81 primary markets have been established and started the new trading system.

Primary Cooperatives: Primary Cooperatives are market actors who can buy from the primary market from member and nonmember farmers and can supply directly to their cooperative unions further more if they have a potential they can supply to the ECX market and also they can sell their produce directly to the international market.

Suppliers: Suppliers are market actors who can buy from the primary market and can only supply to the ECX market. According to MoA information in Oromia region 414 suppliers have

been registered and receive certificate to trade at the primary market and they have started the operation.

Ethiopia Commodity Exchange (ECX): The Ethiopia Commodity Exchange is a market place, where buyers and sellers come together to trade, assured of quality, delivery and payment. The suppliers of ECX market are potential farmers, suppliers, primary cooperatives and cooperative unions. On the other hand the buyers are food processors, exporters and international food aid organizations. ECX offers an integrated warehouse system from the receipt of commodities on the basis of industry accepted grades and standards for each traded commodity by type to the ultimate delivery. At the ECX warehouse, commodities are sampled, weighed and graded using state-of-the-art technology grading and weighing equipment.

ECX Inventory Management system guarantees the quality and quantity of the commodity throughout the pre-determined period of storage. Further, ECX warehouses are insured at maximum coverage to protect against loss and damage of deposits. There are warehouses in haricot bean surplus producing areas of the country such as Bure, Adama, Shashamene and Addis Ababa. According to the study conducted by ECEA to monitor the status of beans marketing system, producers and supplies in Amhara region are forced to supply their produce to Adama which is very far and they are paying high transportation cost; therefore its solution in short term is to supply to Addis Ababa warehouse and in the long term a warehouse and other facilities should be fulfilled in that region since the region is the third producer of the crop in volume of production.

International Market: In this market the supplier are potential farmers, primary cooperatives, cooperative unions, and exporters. The buyers‟ are international white pea bean buyers. The major destination countries for Ethiopian white pea beans are Middle East, Far East, European countries and some African countries.

Supportive actors: Value chain supporters or enablers provide support services and represent the common interests of the value chain operators. They remain outsiders to the regular business process and restrict themselves to temporarily facilitating a chain upgrading strategy. Typical

facilitation tasks include creating awareness, facilitating joint strategy building and action and the coordination of support activities (like training, credit, input supply, etc.).

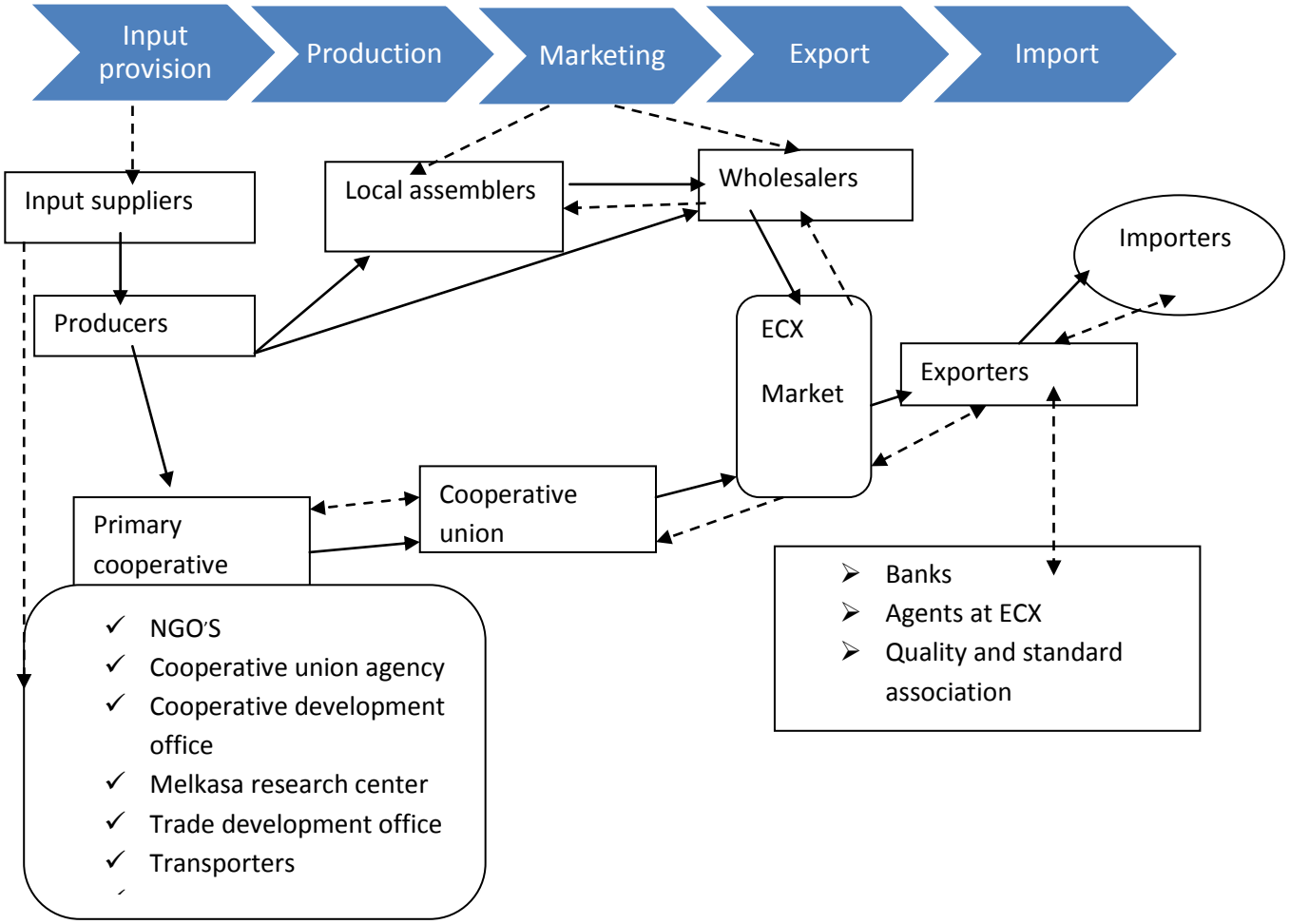
The main supporters of the white haricot bean value chain in the study area are district's Office of Agricultural and Rural Development (OoARD), International Development Enterprise (IDE) Meki catholic, BusaGunufa (SC.), WALCO, GRAD (USAID project), SNV, Melkasa and Adami Tulu research center, and Batu district Trade development office and cooperative development office. OoARD support though providing inputs and technical advice on white haricot bean production. Melkasa research center assists white haricot bean value chain through providing training to farmers, extension services and identifying and disseminating new varieties of white haricot bean.

Even though cooperative development office and trade development office is inefficient to support white haricot bean value chain, it aims to support through providing market information, strengthening available cooperatives, disseminating ECX contract and quality standards of white haricot bean, developed by ministry of trade and organizing new producers cooperatives.

4.1.2 Haricot Bean Value Chain Mapping

To analyze the specific activities through which actors can create a competitive advantage, it is useful for actors as a chain of value creating activities. Value chain mapping enables to visualize the flow of the product from conception to end consumer through various actors. According to McCormick and Schmitz (2001) it also helps to identify the different actors involved in the haricot bean value chain, and to understand their roles and linkages. Having this fact in mind, the current value chain map of haricot bean is depicted in figure below.. It also demonstrates that flow of haricot bean production inputs from input suppliers to producers as well as flow of the product from farmers through different value chain actors to the exporters. There is also information flow regarding the quality and price of haricot bean from cooperatives, OoARD to producers. Information on quality and price of exportable haricot bean flows to both sides from exporters to importers as well as importers to the exporters. Information on grade and price also flows from supporting actors like ECX to main value chain actors.

Figure 4.1 White haricot bean value Chain Actors map



Key

Flow of products

Two way flow of information

One way flow of information

Source: Own survey, 2017

4.1.3 Governance of Haricot Bean Value Chain

The dominant value chain actors play facilitation role. They play significant role in the flow of commodities and level of local market prices. In effect they govern the value chain and most other chain actors subscribe to the rules set in the marketing process. The study result indicates that the exporters and wholesalers assisted by the brokers are the key value chain governors.

The local market is heavily dependent on white haricot bean export price, and therefore the white haricot bean value chains are highly influenced by the export market price. In most cases, the business relations between the various operational actors are not free market exchange but it is uncoordinated at all marketing stages except at ECX floor. Due to the lack of a proper market information system and minimal bargaining power, farmers are forced to sell their product at the price offered by brokers assigned by local assemblers.

There is no strong vertical linkage between value chain actors, but there is horizontal linkage between wholesalers, cooperative unions and primary cooperatives, farmers with farmers and exporters with each other also. In some cases, there are complaints on ECX by suppliers regarding payment delay and primary cooperatives have also complaints on cooperative unions. On the other hand, poor quality coordination in the district was observed from the collected data. Overall, the governance of the white haricot bean value chain is export market driven with minimum trust between various actors. Wholesalers and exporters at ECX market are always complaining that the farmers are not providing quality product while farmers are blaming the wholesalers and local collectors for offering low prices. The exporters are complaining ECX because of inappropriate grading system, the exporters prefer the quality grading system to be set by the origin of production area because they have information that all white haricot bean produced in Ethiopia does not have naturally the same quality.

4.1.4 Interview Analysis of Haricot Bean Trading Activities by ECX

Based on the interview result towards the ECX relationship with farmers, the farmers should get their product in to the ECX warehouse near by their location either individually or in a group. The farmers sell their products through middlemen; those are searching for buyers to them. The company has implemented a system that helps the farmers and the buyers to know the current price of the product from the place where they are.

To deliver the products to the warehouse most of the farmers use their own means of transportation. The majority of the rural areas where the farmers bring their in to the warehouse aren‘t facilitated for modern transportation.

The farmers carry the product on the animal‘s back until it reaches warehouse based on the weather condition and the material they used to contain the product the quality of the haricot bean is being affected. In the auction center, the only bidders are these ECX members.

The buyer offer the highest price for a particular origin and grade, transfers the money through the ECX account to the clients account and transport the haricot bean from regional ECX warehouses to the export market. It is the responsibility of the buyer to cover all transportation, packing and repacking costs after he/she wins the bid. ECX members can bid for rejected and export standard. Selling export standard in the domestic market is prohibited in the regulations of ECX. ECX members can be exporters or intermediaries. Export standard of haricot bean sent to export market and the rejected products sold for domestic consumption. According to the result of interview held with ECX worker both parties should purchase seat from ECX to be a member. Each member should pay a seat about 100,000 birr in average to be subscribed. Based on the interview result the problems complain by the customers like the existence of adulteration of haricot bean (mixing the high quality with low standard) the warehouse workers were admitted. Even if it isn‘t possible to say the problem is happen to all identified as one region of haricot bean and has the given standard but by the misbehavior of some workers the problem happens. The illegal dealing of the suppliers and the standard controlling of the workers are one of the headaches of the company as well. The suppliers deal with the standard deliverers illegally to get high price from sales of their products.

4.1.5 Opportunity and Threats for All Value Chain Actors

4.1.5.1 Opportunities for All Value Chain Actors

Agribusiness, particularly the food sector, is rapidly consolidating and increasingly responding to the changing tastes and preferences of consumers and in turn consumers have higher incomes than ever before. They are focusing more on convenience, quality, variety, service, health and social consciousness (Anderson and Hanselka, 2009). They are also faced with the increasing value of (and demands on) their time. Anderson and Hanselka (2009) again believed that, in a nutshell, consumers are more value conscious than ever. This creates opportunities for producers to add value to their products.

Ethiopia is a lower cost producer of white haricot bean than the United States or Canada, which produce the bulk of white haricot beans worldwide. The country is also closer to its export markets than its main competitors, so has a cost and transport advantage. Another opportunity in white haricot bean value chain is the increased demand for the product in the international market which would be followed by better farm price for producers. As the price increases farmers will be interested to produce white haricot bens. Consequently farmers will have an incentive to expand their output. Moreover, Ethiopian government now has a policy that promotes investment in agro industry and market oriented agricultural production. This policy opens a wide access to foreign investor to enjoy the business of white haricot beans. Besides, establishment of Ethiopian commodity Exchange (ECX) is another important opportunity for the white haricot bean value chain development through regulating the quality, marketing activities and delivering daily international market price information via mobile phones.

4.1.5.2 Traits for All Value Chain Actors

The government policy of Ethiopia pushes the farmers to sell the quality of haricot bean to the export market to generate the foreign exchange for its ambitious goals and development agendas. The byproduct and lowest grade which doesn‘t fulfill the requirements of the standard of ECX and CLU also sells to domestic market. The cooperative unions and private farms which directly sell their products to export market have also their own influence on the operation of the member of ECX.

4.2 Quantitative Data Analysis

4.2.1 The Availability of ECX Warehouse in the Auction Centers is Adequate

Table 4.1 The availability of ECX warehouse in the auction centers is adequate

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	8	12.9	12.9	12.9
	Agree	23	37.1	37.1	50.0
	Disagree	28	45.2	45.2	95.2
	Strongly Disagree	3	4.8	4.8	100.0
	Total	62	100.0	100.0	

Source; Own survey,2017

The 12.9 % of the respondents strongly agreed on the availability of the ware house near to the auction center. 37.1% of the respondent agree the availability of warehouse near to the auction center. Out of the total (62) respondents as the above table shows 50% of the ECX customers are discomforted with the absence of ware house facility of the company near to the auction center. According to their response for the interview questions especially the exporters are in need of the service to reduce the transportation cost after they purchase the commodity to move for further processing to their locations. Based on the interview with the marketing chief strategies of the company it‘s possible to deduce that the haricot bean final price for the customers influenced by the transportation cost because of the location where warehouse is found (see also table 4.2).

ECX has two auction centers, one in Diredawa and the second is found in Addis Ababa, it doesn‘t mean that the auction center has the warehouse so it‘s clear that when the bidder wants to receive the commodity his/her must go to the warehouse where commodity is available. The transportation cost is one of the costs that determine the final price of the haricot bean. So the bidders complain the transportation cost effect caused by the unavailability of the warehouse near by their location.

4.2.2 Do you agree on short path of transportation to inspection and auction centers, Processing warehouses then to your location?

Table 4.2 Do you agree on short path of transportation to Inspection and Auction centers, processing warehouses then to your location?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	3	4.8	4.8	4.8
	Agree	13	21.0	21.0	25.8
	Neutral	9	14.5	14.5	40.3
	Disagree	24	38.7	38.7	79.0
	Strongly Disagree	13	21.0	21.0	100.0
	Total	62	100.0	100.0	

Source; Own survey,2017

In related to the country problem at large it is obvious that the trading movement is being hindered by inadequate transportation facility. Because of the ware house locations and the rule set by the company it is the buyers responsibility to bring the purchased commodity from where it is found (see table 4.1), the 4.8 % of the respondent strongly agreed on the short path of the transportation, the 21 % of the respondents are agreed on the short path of the transportation to move the item to their location. The 14.5 % of the respondents were neutral to the given questions. The 59.7 % of the respondents disagreed on the adequate transportations service facility to move their products from the points where the haricot bean originates (farmer) to the place where it is further processed for export.

Even if transportation and ware house location has indirect relationship and both have effect on the final price of haricot bean but transportation facility is beyond the ECX control but it is one of the factors that creates the customer dissonance. It has also an adverse effect on the smooth trading activities of the value chain at all.

4.2.3 The delay occurs by inspection centers is being centralized of commodity exchange Market

Table 4.3 The delay occurs by inspection centers is being centralized of commodity exchange market and inadequate to conform the standard performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	21	33.9	33.9	33.9
	Agree	32	51.6	51.6	85.5
	Neutral	3	4.8	4.8	90.3
	Disagree	5	8.1	8.1	98.4
	Strongly Disagree	1	1.6	1.6	100.0
	Total	62	100.0	100.0	

Source; Own survey,2017

Out of the total respondents of the questionnaire the 33.9% strongly agreed on the delay service delivery of the center, the 51.6 % of the total respondents agreed on the cause of the late service delivery. The 4.8 % of the respondents were neutral to the given questions. 9.7% of the respondent disagree on the delay occurs due to centralized of commodity exchange market. Most of the respondents agreed on every task being centralized to be performed by the company are the reason to delay. According to the data gathered by interview from ECX about grading the company has cupping services delivery centers in the 19 place where the 53 warehouse are found. So it shows either the company grading service facilities aren‘t enough to give the service or other primary grade checking companies should be established.

4.2.4 Inadequate to conform the standard performance.

Table 4.4 Inadequate to conform the standard performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	16	25.8	25.8	25.8
	Agree	19	30.6	30.6	56.5
	Neutral	7	11.3	11.3	67.7
	Disagree	9	14.5	14.5	82.3
	Strongly Disagree	11	17.7	17.7	100.0
	Total	62	100.0	100.0	

Source; Own survey,2017

The respondents were asked about inadequate to conform the standard performance of ECX. The above table describes 25.8% of the respondents strongly agree and 30.6% Say there is inadequate to conform standard performance. The 11.3 % of the respondents were neutral to the given questions. 32.2% of the respondent disagreed.

4.2.5 The suppliers manipulated the trading activities of the auction center by making Informal dealing with the exporters

Table 4.5 The Suppliers manipulate the trading activities of the auction center by making informal dealing with the exporters

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	38	61.3	61.3	61.3
	Agree	12	19.4	19.4	80.6
	Neutral	6	9.7	9.7	90.3
	Disagree	5	8.1	8.1	98.4
	Strongly Disagree	1	1.6	1.6	100.0
	Total	62	100.0	100.0	

Source; Own survey,2017

Based on the response of the customers the 61.3 % of the respondents were strongly agree on the availability illegal dealing of the buyers and sellers of the company exists, the rest 19.3 % of the respondents also confirmed there is the problem in the company. 9.7 % of the respondents are neutral to the question. The 8.1% and 1.6 % of the respondents were disagreeing and strongly disagree on the availability of the illegal dealing of both buyers and sellers. Some of the suppliers informally deal with exporters without recognition their act by ECX that can also greatly affect the performance of the company. Based on the 80.6 % of the respondents response it is possible to conclude that the problem existing in the company. Even if the exporters and sellers of the haricot bean are getting better service than the previous exchange system of the market they simply use the center as the place where they can simply get the clients and insured transaction that is legally binded by low, one party can‘t refuse to pay or deliver the commodity.

4.2.6 Do you agree on ECX policy dissecting tasks to be performed by different license for Revenue generating has negative impact on your business

Table 4.6 Do you agree on ECX policy dissecting tasks to be performed by different license for revenue generating has negative impact on your business?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	35	56.5	56.5	56.5
	Agree	8	12.9	12.9	69.4
	Neutral	6	9.7	9.7	79.0
	Disagree	10	16.1	16.1	95.2
	Strongly Disagree	3	4.8	4.8	100.0
	Total	62	100.0	100.0	

Source; Own survey,2017

According to Table 4.6 the 56.5% of the respondents strongly agreed on the negative impact of the dissecting task policy of ECX. The 12.9% of the respondent also agreed on the negative impact of the dissecting task policy of ECX as well. The 9.7% of the respondents refuse to be by one side. 16.1% and 4.8% of the respondent disagree and strongly disagree on dissecting task policy of ECX. The 69.4 % witnessed that the policy has a negative impact on their performance. This implies that the policy is vulnerable to long process along the value chain until the commodity reaches the final step this also has different taxation policy and its own licensing for the over all.

4.2.7 There are infrastructure constraints affecting your business growth and profitability (transport conditions, telephone service, electric supply, corruption, storage, etc.).

Table 4.7 There are infrastructure constraints affecting your business' growth and profitability such as telephone service, electric supply

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	49	79.0	79.0	79.0
	Agree	9	14.5	14.5	93.5
	Neutral	1	1.6	1.6	95.2
	Disagree	2	3.2	3.2	98.4
	Strongly Disagree	1	1.6	1.6	100.0
	Total	62	100.0	100.0	

Source; Own survey,2017

Infrastructure is the blood stream facility one country should have to smooth flow of trade. It has a positive impact on the benefit growth of the value chain actors if it is found adequately. Even if the country is found at many progresses towards infrastructure but still the actors since farmers to exporters believed it hasn't reach at its peak service level.

According to the above table 4.7 the 79% of the respondents strongly agreed on the constraints of the telephone networking service and electric power disruption. The 14.5% of the respondents also agreed on the availability of the problem and its impact on the performance. The 1.6% of the respondents also neither witnessed the existence of the problem nor denied. 3.2% and 1.6% of the respondent response disagree and strongly disagree on the constraints of the infrastructure. It is also possible to deduce the majority (93.5%) of the respondent witnessed the negative impact of infrastructure on their operation. According to the answer of the respondents the majority of them are disappointed by the service influence on their operation.

4.2.8 It is better to purchase and sell haricot bean through ECX process than making face to face transaction

Table 4.8 It is better to purchase and sell haricot bean through ECX process than making face to face transaction.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	11	17.7	17.7	17.7
	Agree	24	38.7	38.7	56.5
	Neutral	6	9.7	9.7	66.1
	Disagree	18	29.0	29.0	95.2
	Strongly Disagree	3	4.8	4.8	100.0
	Total	62	100.0	100.0	

Source; Own survey,2017

There was traditional method of transaction which the farmers and the buyers meet face to face for exchange; this method had its own negative impact on both final buyers and sellers of the clients. Since ECX established in 2008 the service took another form where both can perform their activities in trustworthy and short chain. so to measure either both parties are satisfied with service or not this questionnaire presented to them personally.

According to Table 4.8, 17.7 % of the respondents strongly agreed on the short process of the exchange service of the ECX. The 38.7 % of the respondents also agreed on the fast transaction service of the company to the buyers. 9.7 % of the respondents are neutral to the question.
The 29 % and 4.8 %of the respondents disagreed and strongly disagreed on exchanging through ECX. This shows that the exchange service of the company helps the buyers and sellers from long and complicated transaction process. This implies that ECX serve the customers in a way that both parties can rely on the transaction system the company follows.

4.2.9 Farmers cooperative unions, state farms and commercial farmers that export directly by passing the ECX marketing service/auction has an adverse effect on the buyers of ECX sellers

Table 4.9 Farmers' cooperatives unions, state farms and commercial farmers that export directly bypassing the ECX marketing service/auction has an adverse effect on the buyers of ECX sellers.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	25	40.3	40.3	40.3
	Agree	14	22.6	22.6	62.9
	Neutral	5	8.1	8.1	71.0
	Disagree	13	21.0	21.0	91.9
	Strongly Disagree	5	8.1	8.1	100.0
	Total	62	100.0	100.0	

Source; Own survey,2017

Based on Table 4.9 the 40.3 % of the respondents strongly agreed on the commercial farmer's cooperative unions negative impact on the performance of the ECX workers. The 22.6 % of the respondents agreed on the commercial farmer's cooperative union's negative impact on the performance of the ECX workers. 8.1 % of the respondents are neutral to the question.21% and 8.1% of the respondent response disagree and strongly disagree on farmers, cooperative unions, state farms and commercial farmers that export directly by passing the ECX positive impact on the performance. The majority (62.9 %) of the customers replied that the exchange of the coops can affect the performance of the company and the customers as well. This implies that the private companies and cooperative unions might have a long term effect on the company performance and customers of the company as well.

4.2.10 Transparency of the exchange process of the company to both parties(buyers and sellers)

Table 4.10 Transparency of the exchange process of the company to both parties (buyers and sellers)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	7	11.3	11.3	11.3
	Agree	10	16.1	16.1	27.4
	Neutral	3	4.8	4.8	32.3
	Disagree	37	59.7	59.7	91.9
	Strongly Disagree	5	8.1	8.1	100.0
	Total	62	100.0	100.0	

Source; Own survey,2017

Transparency is the main trust building means. Some of the ECX customers complain the trustworthiness of the company, so as to know either the problem exist in the company the customers are presented with this question.

According to Table 4.10 the 11.3 % of the respondents strongly agreed on the existence of the transparency problem in the company. The 16.1 % of the respondents of the company agreed on the existence of the problem as well. Majority (67.8%) of the customers out of the total respondents don‘t accept the lack of transparency in the company. This implies that even if the some of the customers doubt about the transparence of the company but the majorities trust the company is working without any transparency problems.

4.2.11 Do you agree on the fair membership subscription fee of the company

Table 4.11 Do you agree on the fair membership subscription fee of the company

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	5	8.1	8.1	8.1
	Agree	3	4.8	4.8	12.9
	Neutral	2	3.2	3.2	16.1
	Disagree	26	41.9	41.9	58.1
	Strongly Disagree	26	41.9	41.9	100.0
	Total	62	100.0	100.0	

Source; Own survey,2017

To be the buyers and sellers of commodities ECX has put criteria's among them first both parties should subscribe paying a membership fee in average around 100,000 birr. Either this subscription fee is fair to customers or not there is none can answer except themselves.

According to Table 4.11 the 8.1 % of the respondents strongly agreed on the fee. The 4.8 % agreed on the fair payment for membership as well. The 3.2 % of the respondents prefer silence than give their words towards the fairness of the payment. The majority 83.8% of the respondents disagreed on the fair membership subscription fee. This implies that the company will have reduced customers in the near future and become the absence of commodity exchange center of Ethiopia.

4.2.12 Inadequate haricot bean market financing, sufficient loan funds for marketing and investments in processing are factors that affecting the haricot bean market performance

Table 4.12 Inadequate haricot bean market financing, sufficient loan funds for marketing and investments in processing are factors that affecting the haricot bean market performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	27	43.5	43.5	43.5
	Agree	10	16.1	16.1	59.7
	Neutral	4	6.5	6.5	66.1
	Disagree	2	3.2	3.2	69.4
	Strongly Disagree	19	30.6	30.6	100.0
	Total	62	100.0	100.0	

Source; Own survey,2017

Based on Table 4.12, the 43.5 % of the respondents strongly agreed on the financial support of the banks and creditors, the 16.1 % of the respondents agreed on the availability of adequate service. 3.2% and 30.6% of the respondent were disagree and strongly disagree on adequate financial support by creditors or banks for the sector. This implies that if the sector does have adequate financial support, the exporters as well as the other actors performance on the value chain shall be expanded and has a positive impact on the production increment capacity of the country.

4.2.13 All shipping containers you are using to move haricot bean are free of holes and rust, with sounds seals, being dry and odorless

Table 4.13 All shipping containers you are using to move haricot bean are free of holes and rust, with sounds seals, being dry and odorless

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	13	21.0	21.0	21.0
	Agree	23	37.1	37.1	58.1
	Neutral	7	11.3	11.3	69.4
	Disagree	15	24.2	24.2	93.5
	Strongly Disagree	4	6.5	6.5	100.0
	Total	62	100.0	100.0	

Source; Own survey,2017

The reason to the problem occurred in the value chain couldn‘t only be one party problem, its error committing way to depend only on response of the customers about the performance of ECX, the respondents themselves must be examined to know how they handle the commodity.

The 21% of the customers replied they use free of holes and rust, with sound seals, being dry and odorless containers to move haricot beans. The 37.1 % of the respondents also witnessed they are using free of holes and rust, with sound seals, being dry and odorless containers to move haricot beans. Only the 11.3% of the respondents prefer silence to the given questions. The 24.2 % and 6.5% of the responds disagree and strongly disagree respectively. The majority of the respondents, the 58.1%, replied they are more cautious about the proper shipment of the haricot bean. Based on the overall response of the customers are giving the proper shipment care for their haricot bean.

4.2.14 All containers used in transportation of fresh cherries and wet parchment must be clean and free of husks and other materials known to be highly contaminated with mold

Table 4.14 All containers used in transportation of fresh cherries and wet parchment must be clean and free of husks and other materials known to be highly contaminated with mold

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	14	22.6	22.6	22.6
	Agree	20	32.3	32.3	54.8
	Neutral	2	3.2	3.2	58.1
	Disagree	23	37.1	37.1	95.2
	Strongly Disagree	3	4.8	4.8	100.0
	Total	62	100.0	100.0	

Source; Own survey,2017

The nature of containers is free from one to another so the question presented by this table is characterized by the fresh cheery and wet parchment. The wet and fresh cherries are cherries that are picked when their color is entirely changed to red colors this shows that the beans are ready to be ripened. At this time the cherries need extra caution they are very perishable if they shipped by the containers that had cherries previously perished by mold. So as to maintain the desirability of the cherries an utmost care is needed.

Based on Table 4.14. The 22.6 % of the respondents strongly agreed on the proper shipment care for cherries. The 32.3% of the respondents agree on the proper shipment. 3.2% of the respondent have no answer to the questions. 37.1% and 4.8% of the respondent response disagree and strongly disagree on fresh cherries and wet parchment clean to proper shipment. The majority, 54.9 %, of the respondent about the cleanness of container they used to move the cherries from one place to another where they are further processed replied they care about the container effect on the product. Based on the table 14 result it is possible to conclude that the majority of the respondents do give the proper shipment.

4.2.15 There is misbehavior by some of the workers of haricot bean quality inspection and auction center (illegally dealing with suppliers and exporters)

Table 4.15 There is misbehavior by some of the workers of haricot bean quality inspection and auction center (illegally dealing with suppliers and exporters)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	20	32.3	32.3	32.3
	Agree	15	24.2	24.2	56.5
	Neutral	6	9.7	9.7	66.1
	Disagree	15	24.2	24.2	90.3
	Strongly Disagree	6	9.7	9.7	100.0
	Total	62	100.0	100.0	

Source; Own survey,2017

In addition to other similar questions presented to the customers of the company this questions asked the respondents to know if both are asked about biased question which slides to one of them they can‘t willingly give their answer. Based on the above table the 32.3% of the respondents were strongly agreed on the availability of the misbehavior of the workers of the company. The 24.2 % of the respondents agreed on the availability of the illegal actions as well. The rest24.2 % and 9.7 % of the respondents were disagreed and strongly disagree on the availability of the illegal dealing. Based on the majority of the respondent‘s response i.e. 56.5 % it possible to conclude there is the availability of the problem in the company. This implies that the customers especially the new entrants to be the member of ECX will be refrained from being a member and will lose trust on the grading service quality of the center and buyers are charged much for the low grade and undesired quality.

4.2.16 Clean, dry and odor free bins are carefully inserted in to containers

Table 4.16: Clean, dry and odor free bins are carefully inserted in to containers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	18	29.0	29.0	29.0
	Agree	16	25.8	25.8	54.8
	Neutral	5	8.1	8.1	62.9
	Disagree	19	30.6	30.6	93.5
	Strongly Disagree	4	6.5	6.5	100.0
	Total	62	100.0	100.0	

Source; Own survey,2017

The haricot beans must be clean, properly dried until the wet gets out of them unless when it gets in the container it starts molding, creating bad scent and can pollute the entire shipped haricot bean together. The improper shipments have an impact on the cupping for grading service at last.

The 29 % and 25.8% of the respondent strongly agreed and agree on caution of properly. The 8.1% of the respondents didn‘t give their answer to the question. 30.6% and 6.5% of the respondents disagreed and strongly disagree on the proper shipment of the haricot bean. The 54.8 % of the respondents are concerned about the adverse effect of the improper shipment of the haricot bean on the final return. This implies that the majorities of the haricot bean traders are concerned and have a knowledge about the proper shipment handling of the product.

4.2.17 You are always checking the sacs are clean for storing and transporting dried haricot bean

Table 4.17: You are always checking the sacs are clean for storing and transporting dried haricot bean

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	20	32.3	32.3	32.3
	Agree	7	11.3	11.3	43.5
	Neutral	5	8.1	8.1	51.6
	Disagree	27	43.5	43.5	95.2
	Strongly Disagree	3	4.8	4.8	100.0
	Total	62	100.0	100.0	

Source; Own survey,2017

The 32.3% and 11.3% of the respondents strongly agree and agree on the questions with respect to the checking of the sack which the shippers used to move their products from one place to another. The 8.1 % of the respondents are refused to give their opinions. The majority 48.3 % of the respondents replied they simply move without concerning the final effect the sacs have on the product.

This implies that the quality of haricot bean might be affected by the buyers and sellers improper handling, so the buyers and sellers also responsible to the product quality and export value. So the concerned bodies should work hard to maintain the quality through proper training delivery about how they should clean and its bad effect on the quality of the product.

4.2.18 Containers stuffing are taking place under cover or in dry weather

Table 4.18: Containers stuffing are taking place under cover or in dry weather

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	20	32.3	32.3	32.3
	Agree	15	24.2	24.2	56.5
	Neutral	5	8.1	8.1	64.5
	Disagree	15	24.2	24.2	88.7
	Strongly Disagree	7	11.3	11.3	100.0
	Total	62	100.0	100.0	

Source; Own survey,2017

It is obvious that when one commodity shipment is taking place, it must be in conducive weather condition to protect the commodity from damage especially needs more caution so the customers are asked to know their concern towards shipment.

The32.3 % of the respondents strongly agreed on the proper container stuffing. The 24.2 % of the respondents also agreed on the proper stuffing of the containers as well. The 56.5 % of the respondents replied they properly handle the shipment of the haricot bean. The rest 11.3% and 24.2 % of the respondents were strongly agreed and disagreed respectively. This implies that they properly undertake the shipment, to get the high value from sales of their commodity and passes the CLU criteria for export purpose.

CHAPTER FIVE

5. SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary of the findings

- Out of a total number of **87** farmers **70** sample white haricot bean producers were randomly selected from the Melka Adama kebeles, but only **52** farmers were participated**.**
- Out of the total 71 respondents to distributed **62** questioners also return due to this 87% of the questioners was gathered.
- 50% of the ECX customers are discomforted with the absence of ware house facility of the company near to the auction center.
- The 59.7 % of the respondents disagreed on the adequate transportations service facility to move their products from the points where the haricot bean originates (farmer) to the place where it is further processed for export.
- 51.6 % of the total respondents agreed on the cause of the late service delivery is being centralized.
- 25.8% of the respondents strongly agree and 30.6% Say there is inadequate to conform standard performance.
- 80.6 % of the respondents response it is possible to conclude that the problem existing in the suppliers manipulated the trading activities of the auction center by making informal dealing with the exporters.
- 69.4 % witnessed that the ECX policy has a negative impact on their performance. This implies that the policy is vulnerable to long process along the value chain until the commodity reaches the final step this also has different taxation policy and its own licensing for the over all.
- The majority (93.5%) of the respondent witnessed the negative impact of infrastructure on their operation.
- ECX helps the buyers and sellers from long and complicated transaction process. This implies that ECX serve the customers in a way that both parties can rely on the transaction system the company follows.
- The majority (62.9 %) of the customers replied that the exchange of the coops can affect the performance of the company and the customers as well. This implies that the private companies and cooperative unions might have a long term effect on the company performance and customers of the company as well.

- 67.8% of the customers out of the total respondents don't accept the lack of transparency in the company. This implies that even if the some of the customers doubt about the transparence of the company but the majorities trust the company is working without any transparency problems.
- 83.8% of the respondents disagreed on the fair membership subscription fee. This implies that the company will have reduced customers in the near future and become the absence of commodity exchange center of Ethiopia.
- The sector does have adequate financial support, the exporters as well as the other actors performance on the value chain shall be expanded and has a positive impact on the production increment capacity of the country.
- It is possible to conclude that the majority of the respondents do give the proper shipment of white haricot bean.
- The majority of the respondent(56.5 %) agreed on there is the availability of misbehavior by some of the workers problem in the ECX company.

5.2. Conclusions

The specific objectives of this study are to map haricot bean value chain and identify role of the actors, to analyze determinants of white haricot bean yield and to identify constraints and opportunities of white haricot bean value chain at ECX members.

The data were collected from ECX members and farmers of east shoa zone melka Adama kebele. Out of a total number of 87 farmers 70 sample white haricot bean producers were randomly selected from the Melka Adama kebeles, but due to unwillingness of the farmers and shortage of time the author gathered the data from 52farmers,the data was collected using interview by preparing semi-structured and structured questionnaire.

Out of the total 71 respondents to distributed 62 questioners also return due to this 87% of the questioners gathered by the author. The analysis was made using descriptive statistics, value chain analysis and econometric model using SPSS software packages. The main findings of this research are summarized as follows.

Out of the total 62 respondent as the above table shows 50% of the ECX customers are discomforted with the absence of warehouse facility of the company near to the auction center. According to their response for the interview questions especially the exporters are in need of the service to reduce the transportation cost after they purchase the commodity to move for further processing to their locations.

The vertical linkages between farmers with wholesalers was observed to be weak. There was no transparency and mutual trust, most of the time farmers get biased price information from wholesalers through their brokers. The linkage between farmers with primary cooperatives was also weak, primary cooperatives was not performing based on their motto, the organizational structures of primary cooperatives is observed to be very weak and fragile, since they cannot consider themselves as a dependent social entity they are usually guided by cooperative unions, they used to operate by the commission obtained from the cooperative union and they are largely exploited in this regard.

Few farmers supply their produce to primary cooperatives but a large proportion was sold to wholesalers and local assemblers. Farmers get inputs from primary cooperatives and share little market information with them, so everyone can predict that there is a week vertical linkage between these actors. There was no meaningful vertical integration between exporters, wholesalers and farmers at all. Information sharing regarding quality of product and market aspects are already vanished between these actors due to the establishment of operation of ECX transaction system, it is true that the marketing cost which diminishes the margin of farmers was eliminated but farmers have no direct contact with exporters, and this in turn killed the opportunities of farmers and discouraged private companies to improve the production system at farm level by supporting farmers. There was no vertical linkage between actors at same level on storage system, especially wholesalers have shortage of expert at their storage place, improving quality and effective sharing and use of market information. There was no responsible body who is working for effective and efficient linkage between value chain actors.

Haricot bean exporters incur more costs as compared to other white haricot bean value chains actors of the study area. Decrease in productivity due to poor application of chemical fertilizers, smaller plots for cultivation of white haricot beans, Shortage of quality improved seed supply, poor extension service, shortage of credit service, lack of temporary collection centers in the

production area and prevalence of disease, pest and scarcity of rain fall were the main challenge faced by producers. Apparently, it is true that white haricot bean is not consumed in the study area, as a result priority was given to other haricot bean varieties, and consequently lack of appropriate extension service made the land allocation to white haricot bean to decreasing from time to time. White haricot bean traders in the study area also constrained by limited credit access, and delay in payment and drop off the produce at ECX floor. On the contrary, there were potential demand and agro ecological opportunities to practice and expand white haricot bean growing in the study area.

Generally, currently consumers in the western world has increased demand for pulse crops especially white haricot bean and this potential create great opportunity for farmers to grow and to export white haricot bean and generate foreign currency for the country. The other opportunities for the sectors are the establishment of ECX and support from different non-governmental organizations encourage the development of white haricot bean value chain.

5.3 Recommendations

ECX is one of the well-recognized institutes that implement modern method of exchange commodities. The company should have a system to control illegal dealing of the workers with suppliers and the illegal dealing of the buyers and sellers without recognition of the company. This could help reduce white haricot bean smuggling and contraband activities. On this line, ECX is able to participate in facilitating white haricot bean trading in Ethiopia while maintaining the existing inspection and auction centers, the suppliers or traders as well as exporters will have additional choice if other inspection centers are going to be opened in different location and owned by other licensed companies.

Enhancing production and productivity of the products through:- Farmer should get access & use modern agricultural technology, Provision of appropriate improved varieties adaptable to the specific areas, Improving the extension service and Educating farmers about post harvest handling system to meet the quality standards.

Despite growth in the bean markets there is little evidence of large scale bean farming in Ethiopia and virtually all beans are produced on stallholder's plots with minimal inputs and low productivity. So, the government should promote commercial farms.
Maintaining product quality through educating producers and traders to give due emphasis to quality of the product and to avoid blending of seeds having distinct qualities.

Strengthening the new white haricot bean trading system through:- Excessive public awareness programs have to be done by all stakeholders to market actors to enhance participation in the ECX market, Strengthening a primary markets to improve product supply and Improve warehouse access and other facilities in the major producing areas of the crop, especially in Oromia region because Oromia takes the largest share of the production of white haricot bean compare to the other regions .

Provide current market information to producers and traders. Even though ECX has started transmitting real time price information through its electronic price tickers in major producing areas of the country; currently most of the price ticker is not working and thus some measure action should be taken to facilitate the dissemination real time price information.

Provide credit access to farmers. Farmers are usually underprivileged to access credit services. As a result they are forced to sell their produce when the price is low. So farmers should get agricultural credits services to increase their bargaining power in the market. Encourage investments to work on value addition of the product.

Almost all beans are exported in its dry seed states. Exporters do not add value to the seed apart from cleaning. However white haricot bean can be processed and prepared in canned form that would generate a higher price in the international market. Therefore the government should encourage private sector to work on value addition through continuous education, technical assistance and various incentives skim.

Promoting Ethiopian white haricot beans to the international community: Especially to the major buyer of white bean so as to get a huge market advantage.

Foremost this research contributes to the identification of opportunities and challenges related to white haricot bean value chain analysis actors and strengthen previous researches on the area. There are number of other issues that call for in depth studies and further investigation. For example; SWOT (strength, weakness, opportunity and threat) analysis for technological, institutional and organizational innovation across the value chain. Also from the literature review, there is a lack of articles addressing the challenges and opportunities in value adding.

REFERENCES

AbebeShiferaw, 2010. Improving Elements of Haricot Bean Value Chain in Halaba District, Southern Ethiopia, Experience from Improving Productivity and Market Success (IPMS).

Abraham TegegnWoldesenbet, 2013. Value Chain Analysis of Vegetables: the Case of Harbo and KombolchaWoredasOromia Region, Ethiopia. M.Sc. Thesis Submitted to School of Agricultural Economics and Agribusiness, School of Graduate Studies, Haramaya University 30-79P.

AEMFI, 2010. Agricultural finance potential in Ethiopia: Constraints and opportunities for enhancing the system.

BekeleShiferaw and HailemariamTeklewold, 2007. Structure and functioning of chickpea markets in Ethiopia: Evidence based on analyses of value chains linking smallholders and markets. Improving Productivity and Market Success (IPMS) of Ethiopian Farmers Project Working Paper 6. ILRI (International Livestock Research Institute), Nairobi, Kenya. 63 pp.

BethelhemGemechu, 2013.value chain Analysis of Haricot bean. The case of Doba district, west hararghe zone, OromiaRegion.MSc Thesis, Haramaya University, Haramaya, Ethiopia.

Central Statistical Agency of Ethiopia National Statistics (CSA) 2015.Population Statistics. 2015.http://www.csa.gov.et/surveys (accessed may 1, 2015).

Central Statistical Agency of Ethiopia, (2012).Agricultural Sample Survey.Retrieved July 20–28, 2012.

David P. Anderson and Daniel Hanselka, 2009.Adding Value to Agricultural Products.

DereseMekonen, 2012. Canning Quality Evaluation of Haricot Bean (Phaselous Vulgaris L.)Varieties Grown in Ethiopia.MSc Thesis, Addis Ababa University, Addis Ababa, Ethiopia.
DFID, 2008. Making value chains work better for the poor.

E. Katungi, D. Horna, S. Gebeyehu and L. Sperling, 2011, Market access, intensification and productivity of common bean in Ethiopia: A microeconomic analysis. African Journal of Agricultural Research Vol. 6(2).

Eskindir alebachew,2015. Value chain analysis of Ethiopian coffee from farmers to exporters.M.Sc thesis submitted to school of commerce, school of graduate studies, Addis Ababa University.

Ethiopian Commodity Exchange(ECX) 2015, 2009-10 Production, supply and Future prospect,2015.http://www.ecea.gov.et

Evans, P. and T. Wurster, 2000.Blown to bits: How the new economies of information transform strategy.Harvard Business Scholl Press, Cambridge, Massachusetts, USA.

FAO (1987) World crop and livestock 1984-1985.Food and Agricultural Organization of the United Nations, Rome.

FAO,2015. Analysis of price incentives for haricot beans in Ethiopia for the time period 2005 - 2012,MAFAP,byTadesseKumaWorako (EDRI) with support and contributions from Alban Mas Aparisi and BarthelemyLanos from FAO : www.fao.org/in-action/mafap

FAO. 2015. Analysis of price incentives for haricot beans in Ethiopia. Technical notes series, MAFAP, by Workao T. K., MasAparisi A., Lanos B., Rome.

Ferris S and Kaganzi E. 2008.Evaluating marketing opportunities for haricot beans in Ethiopia.IPMS (Improving Productivity and Market Success) of Ethiopian Farmers Project Working Paper. ILRI (International Livestock Research Institute), Nairobi, Kenya.

FrehiwotMulugeta, 2010. Profile of Haricot bean production, supply, demand and marketing issues in Ethiopia, Ethiopia Commodity Exchange Authority (ECX).

Gary Gereffi, John Humphrey, Raphael Kaplinsky and Tim Sturgeon, 2001.Globalization, Value Chains and Development.

Gashahun kelemework,2015. White pea bean (phaseolus vulgaris l.) Value chain analysis: the case of adamitulujidokombolcha district, eastern shewa zone, oromia national regional state, Ethiopia, M.Sc thesis submitted to school of agricultural economics and agri-business, postgraduate program directorate. Haramayauniversity.

Gereffi G, Humphrey J and Sturgeon T. 2005.The governance of global value chains. Review of International Political Economy 12:1 February: 78-104.

Gibbon, P. and S. Ponte, 2005. Trading down? Africa, value chains and the global economy. DIIS, Copenhagen.

Humphrey, J. and H. Schmitz, 2004. How does insertion in global value chains affect upgrading in industrial clusters? Institute of Development Studies, Brighton.

International Food Policy Research Institute. (2010). Pulses Value Chain in Ethiopia: Constraints and Opportunities for Enhancing Exports. Working paper, July.

Kaplinsky, R. 2000. Globalization and Un equalization: What Can be Learned from Value Chain Analysis. Journal of Development Studies 73(2).

Kaplinsky, R. and M. Morris, 2001.A handbook of value chain analysis. Working paper prepared for the IDRC, Institute for Development Studies, Brighton, UK.

Kaplinsky, R., M. Morris and J. Readman. 2002. The Globalization of Product Markets and Immiserizing Growth: Lessons from the South African Furniture Industry. World Development 30(7).

Lorenzo GiovaniBellu, 2013. Value Chain Analysis for Policy making Methodological guidelines and country cases for quantitative approach. Advanced Draft under revision Restricted Circulation.

MSPA (Mauritius Sugar Producers' Association), 2010.Value-added products of sugarcane. http://www.mspa.mu/index.php?rubrique=15. Date accessed: July 29, 2015.

PABRA (Pan Africa Bean Research Alliance), 2003.Annual Report 2005, Kampala Uganda.
PIF, (Agricultural Sector Policy and Investment Framework) 2010.Annual report.

Raikes, P., M. Jensen, and S. Ponte, 2000. Global commodity chain analysis and the Frencfiliére approach: comparison and critique. Economy and Society, 29 (3): 390-418.

Shaun Ferris, Melissa Paschall and Don Seville, 2012. Dried Beans in Ethiopia: increasing food security through trade. New Business Models for Sustainable Trading Relationships.

TassewWoldehanna, AlebelBayrau, KindieGetnet and Tsegabirhan Woldegiorigis,2010. A study on the formulation of policy options and strategies to enhance the Participation of producers, traders and processors in the grain market of the Ethiopia commodity exchange, Final Research Report Submitted to Ethiopia Commodity Exchange Authority.

UNDP (United Nation Development Program), 2013.Annual Report in Ethiopia.

United Nations International Labor Organization (UNILO), 2009. Guide for Value Chain Analysis and upgrading available at http://www.valuechains.org/dyn/bds/docs/detail/545/6.
Williamson, O., 1979. Transaction-cost economics: The governance of contractual relations. Journal of Law and Economics, 22: 233-261.

Williamson, O., 1985. The Economic institutions of capitalism: Firms, Markets, Relational Contracting. The Free Press, New York.

Williamson, O., 2002. The theory of the firm as governance structure: From choice to contract. Brookfield, VT. Edward Elgar.

Wolday, Amha, 1994. Food Grain Marketing Development in Ethiopia after Reform 1990: A Case Study of AlabaSiraro. PhD Dissertation, VerlagKoster University, Germany, Berlin.

Appendices

Appendix 1

Addis Ababa University Faculty of Business and Economics School of commerce

Dear sir/madam

It is to inform you that, this questionnaire is aimed at getting your cordial response for the partial fulfillment of Masters of Art in Logistics and Supply chain Management in Addis Ababa University. To this end I kindly request that you complete the following short questionnaire regarding different bodies performance that are working jointly together with haricot been exporters. It should take no longer than 10 minutes of your time. Your response is of the utmost important to me. Please do not enter your name or contact details on the questionnaire. It remains anonymous. Kindly return the completed questionnaire to me in person. Your answer is based on the following scales, please thick on the boxes in front of the questions. The answer of your questions are represented by the following numbers

1. Strongly Agree 2. Agree 3.Neutral 4. Disagree 5. Strongly disagree

No	Respondent Response about ECX	1	2	3	4	5
1	The availability of ECX warehouse in the auction centers is adequate					
2	Do you agree on short path of transportation to inspection and auction centers, processing warehouses then to your location?					
3	The delay occurs by inspection centers is being centralized of commodity exchange market.					
4	Inadequate to conform the standard performance.					
5	The suppliers manipulated the trading activities of the auction center by making informal dealing with the exporters.					
6	Do you agree on ECX policy dissecting tasks to be performed by different license for revenue generating has negative impact on your business					
7	There are infrastructure constraints affecting your business growth and profitability (transport conditions, telephone service, electric supply, corruption, storage, etc).					
8	It is better to purchase and sell haricot bean through ECX process than making face to face transaction.					
9	Farmers cooperative unions, state farms and commercial farmers that export					

directly by passing the ECX marketing service/auction has an adverse effect on the buyers of ECX sellers.

10 Transparency of the exchange process of the company to both parties(buyers and sellers).

11 Do you agree on the fair membership subscription fee of the company

12 Inadequate haricot bean market financing, sufficient loan funds for marketing and investments in processing are factors that affecting the haricot bean market performance.

13 All shipping containers you are using to move haricot bean are free of holes and rust, with sounds seals, being dry and odorless.

14 All containers used in transportation of fresh cherries and wet parchment must be clean and free of husks and other materials known to be highly contaminated with mold.

15 There is misbehavior by some of the workers of haricot bean quality inspection and auction center (illegally dealing with suppliers and exporters)

16 Clean, dry and odor free bins are carefully inserted in to containers.

17 You are always checking the sacs are clean for storing and transporting dried haricot bean.

18 Containers stuffing are taking place under cover or in dry weather.

19. If you have anything you want to say about the Company write on the following lines?

_____

_____

_____

_____

_____

Appendix 2

Interview Questions

I. Farmers interview

1. How many times do you produce haricot bean in last production season?
2. What type of seeds of haricot bean do you use?
3. If you have ever encountered problems with the use of improved seeds, what are the problems?
4. What type of haricot bean production system do you adopt?
5. What is the source of labor used for haricot bean production?
6. Which variety of improved haricot bean seed do you prefer?
7. Why you prefer to use these varieties/variety?
8. How much quintal you harvest from this variety?
9. Have you ever encountered problems with the use of improved haricot bean seeds?
10. How is the trend of volume of haricot bean production during the past 5 years?
11. To whom you sold your product
12. How is the trend of price per quintal of sales of haricot bean during the last 5 years?
13. Do your haricot bean products have preferred qualities by buyers?
14. Do you consider quality requirement of your customers in your production process?
15. What was your source of information about quality requirement of your customers?
16. Have you added any value on your haricot bean products?
17. Do you have access to haricot bean market information in last year? from whom did you get the market information?
18. What type of information did you get? At what time interval do you get the information? Was the information valuable to you?
19. Did you know the market prices before you sold your white haricot bean product?
20. What are the haricot bean marketing constraints?

Appendix 3

II. Interview with ECX about major Standards and Certifications towards Haricot been

1. What does the ECX and farmers‘ relationship looks like?
2. What standards or certification requirements does your company follow to standardize different haricot been products/ is the standard the company delivers the last standard of export ?if not who give the last standard?
3. Who are the sellers, and the buyers that exchange in the auction center?
4. How do you collect the haricot been from farmers / who are the parties that acting between farmers and the ECX?
5. What are the criteria's to be member of the ECX ?
6. What do you plan to control adulteration of haricot been and misbehavior of the workers i.e. illegal dealing with customers?
7. What types of information technologies ECX apply recently to improve its contact with clients?
8. Do you think the technology currently used by ECX is enough to communicate with the sellers/buyers? If not, what is the reason not to apply other advanced communication tools?
9. Is your current equipment or machinery an impediment to growth? Explain. If so, what kind of equipment or machinery could improve your business?
10. Is the current level of your workers training and development adequate ? If so, what additional training do they need?
11. What functions do you subcontract/outsource towards improving the company competence?

Appendix 4

III. Ministry of Agriculture

1. What are your major contribution to farmers in the areas of input provision like seed training and different farm tools, quality improvements, and availability of the required service?
2. What improvement the farmers need to produce quality haricot been than the current production strategy they follow?
3. Who are farmer‘s most important suppliers of fertilizers and other inputs that help to produce the quality haricot been?
4. Have you ever purchased inputs jointly with other business for farmers? Explain.
5. What are the most important infrastructure constraints affecting the sector business‘ growth and profitability (road/transport conditions, telephone service, electric supply, crime/corruption, storage, etc.)? How effect do they have on the value of haricot been for farmers ?
6. What do you think is the greatest challenge your company facing towards haricot been?

Appendix 5

IV. Ministry of trade

1.Is the current haricot been export level increasing relatively to the previous export? What it looks like?
2.What do you think are the strengths of the office locally and/or impact it has on international market?
3.What incentives are provided for haricot been exporters to get the attractive income from sales of their commodities?
4.What efforts are being exerted to search the market that can offer the premium price for Ethiopian haricot been?
5.What are the techniques the office uses to promote Ethiopian haricot been quality to the world?