

Evaluating the Quality of Coffee Product on Marketing Performance of Ethiopian Commodity Exchange (ECX) Hawassa Branch

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Abstract

Ethiopia is the birthplace and is the largest producer of Arabica coffee in Sub-Saharan Africa countries and it is ranked the fifth largest coffee producer in the world next to Brazil, Vietnam, Colombia, and Indonesia by contributing about 7 to 10% of total world coffee production. Coffee is the most important to the Ethiopian economy with about 15 million peoples has been directly or indirectly deriving their livelihoods from coffee product. Coffee is still Ethiopia's number one export item. It accounts for 45 to 50% of Ethiopia's total export earnings. A marketing system that coordinates better, that links faster, and that protects the interests of both sides of the trade. It is time for a marketing system that is transparent, efficient, and innovative, that will take Ethiopian agriculture into the new Millennium. Ethiopia, once a commercial trading hub in antiquity linking markets of East and West, can again claim a place in the global market arena. Coffee is the main cash and export crop in Southern Ethiopia as well as in the whole Ethiopia. ECX Hawassa branch is one of the 19th branches of, which carry out a new method of exchange and a safer one for all who trade on products. Though different researchers describe different factors on how and what impacts put on the quality of coffee products, however, no one describe clearly what factors are put effects on the Ethiopian, perhaps especially, the Hawassa branch ECX coffee quality product and market performance. The researcher, therefore, set objectives and planned schedule to investigate and in turn solve this vague issue as well as motivated to identify what and how factor particularly put effect on this issues. The researcher had designed and had used suitable and different methodologies and passed through it. The researcher used the responses of respondents sampled from 60 coffee suppliers which were sampled from 150 total suppliers. The researcher, finally come up with the result, of Less quality coffee and the decreasing the market performance which are mainly associated with poor adoption of improved technology, oldness of coffee trees and poor pruning and recycling system, climate, harvesting process like sorting, roasting, shipping were among the major problems. Adoption of improved technologies is one of the most promising ways to increase productivity and production in Ethiopia. the researcher, at last, provides different set of recommendations in how and when as well as by whom and for whom should have to be done at chapter five and he dedicatedly advised that the concerned body had to have applied so as to end up with the problems observed in coffee production, control the factors, and in turn provide good quality of coffee products as well as good market performance in the ECX Hawassa branch in particular and the country at general.

1. Introduction

1.1. Background of the Study

Ethiopia is the birthplace and is the largest producer of Arabica coffee in Sub-Saharan Africa countries and it is ranked the fifth largest coffee producer in the world next to Brazil, Vietnam, Colombia, and Indonesia by contributing about 7 to 10% of total world coffee production. Coffee is the most important to the Ethiopian economy with about 15 million peoples has been directly or indirectly deriving their livelihoods from coffee product. Coffee is still Ethiopia's number one export item. It accounts for 50 to 60% of Ethiopia's total export earnings. But, its share of total export earnings has gradually declined in recent years as a result of increased exports of other commodities such as gold, flowers, Khat, textiles, and leather products (MoT, 2012).

Now a day, we are in the time of Globalization where people's interests and awareness as well as technologies are constantly growing and changing and in turn anyone requiring a better quality product at

reasonable price. Since quality is fitness, conformance and absence of defect, the producing company should clearly identify factor affecting product quality in order to satisfy customers, to be competitive in the market and achieve its goal by offering required standard products (Kader, 1992 Cited on Patange Vidhut Chandra, 2013).

Quality is an important attribute of coffee and this attribute of coffee is currently becoming even more important than in the past as coffee is generally going through a worldwide surplus production crisis (Petit et al., 2007). Ethiopia is naturally endowed with suitable climate and an impressive selection of distinctive coffee profiles and has the potential to produce large amounts of 'differentiated high-quality green coffee'. But if the currently harvested Ethiopia's coffee qualities are considered they are quite averaged and need special attention to produce high quality coffee to be competitive in today's world market.

According to Omarsherif and Daniel (2017) Coffee is a shade loving tree that grows well under the large indigenous trees such as the *Cordia Abyssinia* and the Acacia species. It is grown in two regions of the country namely Oromia region and Southern Nations, Nationalities and People's Regions (SNNPRs). Ninety five percent of Ethiopia's coffee is produced by small holder farmers on less than two hectares of land while the remaining five percent is grown on modern commercial farms.

Ethiopians are heavy coffee drinkers ranked as one of the largest coffee consumers in Sub-Saharan Africa. Nearly half of Ethiopia's coffee production is locally consumed. Coffee in Ethiopia has both social and cultural value. It is mainly consumed during social events such as family gatherings, spiritual celebrations, and at times of mourning. An interesting new development in Ethiopian major cities regarding coffee consumption is the emergence of small road side stalls selling coffee to passer by customers. The small roadside stalls serve coffee in a traditional manner. They have emerged and flourished in Ethiopia's major towns, growing very popular among coffee consumers who are frustrated by the getting higher price of coffee and the poor quality of coffee served in cafes and coffee shops.

Ethiopian coffee farmers and traders claim that their coffee is organic, but their coffee is not certified by an international organic commodities certifying agency. Ethiopian commodity exchange (ECX) is working in ensuring the development of an efficient modern trading system which protects the rights and benefits of sellers, buyers, intermediaries, and the general public. Even if, Ethiopian coffee is in high demand in the international market and it is specifically valued for its special aroma and distinct flavor (MoT, 2012).

Coffee supplied and traded in the local market usually has a lower quality. Coffee on the local market is mainly coffee destined for export through the Ethiopian Commodities Exchange (ECX) market was rejected for failing to meet ECX's quality standards. In spite of the fact that coffee supplied to the local market has low quality, the price of coffee in the local market is usually higher than export prices. As a result of this price disparity, some coffee shops in most large cities have started mixing coffee with barley grain to get more profit.

Ethiopia exported an increased volume of coffee to the international market. However, the revenue generated from this large volume of coffee exports hasn't increased significantly as a result of reduced international market coffee prices. Hence, in response to the above problems and ultimately to develop the sector through transforming the agricultural market, the Ethiopian Government established the Ethiopia commodity Exchange (ECX) in 2006 the vision driving the ECX is to revolutionize Ethiopian agriculture through a dynamic, efficient, and orderly marketing system that serves all (ECX concept paper Cited by Victor (2010)).

Following the enactment of the new coffee proclamation in August 2008, the ECX started trading the agricultural commodities like coffee, sesame, and beans. The main reason for establishing ECX was to eliminate the huge number of middlemen involved in coffee distribution and to enable coffee farmers to benefit from prevailing market prices. The Ethiopia Commodity Exchange (ECX) is a new initiative for Ethiopia and the first of its kind in Africa commenced trading operations. Ethiopia needed a change from the traditional means of trading system to better support the needs of all those involved in the trading and production ,will provide a market place where buyers and sellers come together to trade and be assured of quality ,delivered and payment.

Now a day's ECX delivered the exchange include a trading floor in Addis Ababa, and it has 19 warehouse deliver location in major market towns in Ethiopia. Its warehouses provide Sampling, Grading, weighting and certifying service of the grain and coffee product coming to each warehouse using equipment provided and issuing Electronic Goods Received Note which matches ECX automated system. Before ECX was established agricultural markets in Ethiopia had been characterized by high costs and high risks of transacting, forcing much of Ethiopia into global isolation. With only one third of output reaching the market, commodity buyers and sellers tended to trade only with those they knew, to avoid the risk of being cheated or default (ECX Report Preview, 2006 Cited by Abdurezack (2010)).

Trade is done on the basis of visual inspection because there was no assurance of product quality or quantity. This in turn drove up market costs which leading to high consumer prices. A Marketing system that coordinates better, that links faster, and that protects the interests of both sides of the trade. It is time for a marketing system that is transparent, efficient, and innovative, that will take Ethiopian agriculture into the new Millennium (EACWSE: Traceability project, 2014). However, this study will be conducted to evaluate the

quality of coffee product on marketing performance of Ethiopian commodity exchange (ECX), in Hawassa branch.

1.2. Statement of the Problem

It is repeatedly stated that coffee is the most important export commodity crop for Ethiopia. It accounts 60% of the total foreign exchange earnings of the country. The total area covered by coffee plantation is estimated to be around 400,000 hectares (ha). Annual average production per ha has not so far exceeded 5-quintals in major coffee growing areas.

The overall annual natural production is estimated to be not more than 200,000 tons. About 95% of this coffee production comes from smallholder coffee farmers. Coffee occupies 0.4% of the land size of the country and 4% of the total cultivated areas. In SNNPRS, total area of coffee is 234,250 ha. Out of which 65% is garden coffee, 23% is semi forest, 10% is forest and 2% is plantation. The coffee potential woredas are about 50 and among them 7 are high coffee growing or potential area, 11 are medium and 32 are low. From the total coffee area about 70% are old coffee (MoT, 2012).

According to Geletu, (2006) Cited on Diriba-Shiferaw (2016) analyzed that the potential of coffee production in Ethiopia is very high as a result of altitude, sufficient rainfall, optimum temperature, suitable planting material as well as fertile soil. Furthermore, the country is of particular value to the world as it is the home or the origin of Coffee Arabica with best inherent quality and production potential. There are different views of expressing coffee quality. International cooperative alliance, defines that “the quality package of coffee comes from combination of the botanical variety, topographical conditions, weather conditions, and the care taken during growing, harvesting, storage, export preparation and transport”.

The production of coffee has not changed much since the 10th century. Nearly all of Ethiopia's coffee bean production is still by hand, from the planting of new trees to the final pickings, which are then sent to the big warehouse in Addis Ababa. However, in different countries around the world different researchers have studied several factors that affect the quality of coffee such as human and environmental factors. Even if, they stated several factors that affect the quality of coffee, but it's vary from countries to countries.

However, those researchers did not mention this in detail about what were the factors can affect specifically to the quality of Coffee product and its market performance among countries, perhaps especially in Ethiopia. So, this is the reason why this study aimed and tried to examine on what and how the factors affect the quality of coffee products and in turn on how it affect the coffee market performance in ECX, particularly in Hawassa Branch and determine its influence level.

1.3. Objectives of the Study

1.3.1. General Objectives

Generally, the overall purpose or of General objective this research or the study is to evaluate the quality of coffee product on marketing performance of Ethiopian commodity exchange (EXC) Hawassa branch.

1.3.2. Specific objectives:

In Advance of the above general objectives, this study was scheduled in mind to come up or meet or addressed for the following specific objectives. These are:

- To identify the environmental and human factors that influences the quality of coffee;
- To examine the marketing performance of the ECX;
- To examine the relationship between environmental factors with coffee quality and marketing performance of ECX;
- To examine the relationship between human factors versus coffee quality and market performance of ECX;
- Assess the market value price and profitability and in turn determine the market performance of Coffee product of at ECX Hawasa Branch.

1.4. Research Questions

- What were the environmental and human factors that influencing the quality of coffee?
- What was the marketing performance of ECX?
- Was there any significant relationship between the environmental factors and marketing performance?
- What was being the relationship between factors of quality and market performance?
- What was the existed condition of the market value price and in turn how to determine the marketing performance of ECX Hawassa Branch?

1.5. Significance of the Study

The most and essential importance or significance of this study was it used as partial fulfilment for graduation for the researcher. The other significance of the study is gives adequate information about the

research would be evaluated the quality of coffee product on marketing performance of Ethiopian commodity exchange (ECX), in Hawassa branch. The significances' of this study are viewed from two dimensions: theoretical contributions and practical implications.

Theoretically, the study would be filled an important gap in the literature that is factors affecting the quality of coffee. Therefore, the findings of this study would be added to the existing body of the literature and can serve as a starting point on which future studies can be built. On the practical side, this study can help cooperatives sector (both governmental and private owner) to identify the major factors that might be affected the coffee marketing performance of suppliers and in turn buyers of cooperative unions. Such information should help the management of organization to formulating appropriate marketing strategies and to increase profitability of coffee market to with local as well as international market by increasing their service and it also helps to identify the factors that influence the market performance of coffee product in the study area.

It can also serve as a source document for those who would like to pursue further investigation on the coffee investment of the region and also serve as background information for all others, who seek to do further related research.

1.6. Scope of the Study

Coffee market is a very wide trade that demands deep investigations, so this research would be conducted in purposively selected and evaluating the quality of coffee product on marketing performance in ECX SNNPRS, Hawassa city branch. Conceptual frame work comprised are environmental factors (Altitude, Amount of rain fall, Temperature, Weather condition), and human factors (Traditional production system, Cleanliness of coffee extract, Lack of warehouse (storage), Lack of care during growing, lack of transportation lack of Grading & quality assurance).

In terms of area or geographical scope, the study had carried out on the selected case study site which is Hawassa city.

1.7. Limitations of the Study

Someone, on one hand, may expect better results if the research was assessed the market performance of all ECX Branches found in the region and in the country, but couldn't be this because of it bound by time limitation; On the other hand, since because of this study was faced with financial constraints and lack of human resources capacity. Therefore, the assessment was forced to be conducts only on ECX Hawassa branch, so that the researcher could come across a narrow assessments of market performance of coffee products.

In addition, the study was limited to descriptive assessment only on existed phenomenon. Because of this the quality of the research could be affected not to go beyond across large sample size and in turn bigger analysis. So, the researcher had recommended other researchers should have to draw sample of respondents on more number of agricultural commodities at their future researches.

1.8. Organization of the Study

The study constituted by main chapters. The **first** chapter contains the introduction part that includes the background of the study, statement of the problems, objectives of the study, and research questions of the study, significance of the study, and scope of the study, limitation of the study and organization of the study. Chapter two incorporate review literature and its sub contents such as Market, Marketing, Evolution of modern marketing, Marketing system, Marketing development, Marketing management, Marketing performance and Methods of evaluating marketing performance, and the review of theoretical background on market performance by a review of previous studies particularly empirical literature related to the brief history of coffee, etc. Chapter Three tend to discuss, generally, about research Methodology and its sub contents (such as: description of study area, Research design and Target population of the study, sample size and sampling techniques, methods of data collection, methods of data analysis, etc. The empirical results with descriptive statistics were presented and analyzed in the fourth chapter. The last chapter is conclusion and recommendation in which the researcher summarizes finding, forwarding comments, suggestion and recommendations to the organization.

2. Literature Review

2.1. Introduction

In the part of the study the basic concepts of markets, marketing, evolution of modern marketing, marketing system, market development, marketing management, performance measure of marketing, efficiency of marketing, approaches of the study of product marketing problems, frame work for evolution of marketing system. The literature review finally discussed the relevant theories Which includes coffee producing and processing in Ethiopia commodity exchange in Ethiopia, a review of the market performance framework and, then the relationship coffee quality and market performance.

2.2. Definition and Concepts

2.2.1. Market

Market may be defined as “a particular group of people, an institution, a mechanism for facilitating exchange, Solomon (2007). The market concept has also been linked to the degree of communication among buyers and sellers and the degree of substitutability among goods. The concept of perfect market, for example, is an abstraction used by economists as a benchmark for evaluating the performance of market situations that deviate from its specifications (John and Sathan, 1988; cited in Solomon (2007)).

Market is an area in which one or more sellers of given products /services and their close substitutes exchange with and compete for the patronage of a group of buyers. Originally the term *market* stood for the place where buyers and sellers are gathered to exchange their goods, such as village square. A market is a point, or a place or sphere within which price-making force operates and in which exchanges of little tend to be accompanied by the actual movement of goods affected (Backman and Davidson, 1962 Cited on Dawit (2010)).

The concept of exchange and relationships lead to the concept of market. It is the set of actual and potential buyers of product (Kotler and Armstrong, 2003 Cited on Duane (2010)). Conceptually, however, a market can be visualized as a process in which ownership of goods is transferred from seller to buyer who may be final consumers of intermediaries. Therefore, market involves sales locations, sellers, buyers and transactions.

2.2.2. Marketing

The definition of marketing can be grouped in to two major categories; classical (narrow) definitions and modern (broad) definitions. In classical terms, marketing is defined as “the performance of business activities from producer to consumer or user of the process in a society by which the demand structure for economic goods and services is anticipated (enlarged) and satisfied through the conception, promotion, and physical distribution of such goods and services”. These classical definitions of marketing are oriented toward the physical movement of economic goods and services.

The breadth of marketing was officially recognized by the American Marketing Association (AMA) in 1985 when it replaced the classical definition it had approved in 1960 with the following: “Marketing is the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, services to create exchange that satisfy individual and organizational objectives” (Joel & Barry, 1990).

There is no universally accepted definition of marketing, indicating the variety of options, which exist concerning the subject (Barker, 1989 Cited on Kevin (1993)). Terpstra (1972) cited in Barker (1989 Cited on Alemayoh (2014)) offers a very broad definition of marketing as “the collection of activities under taken by the firm to relate profitability to market”.

Marketing is a societal process by which individuals and groups obtain what they need and want through creating, offering and freely exchanging products and services and value with others (Kotler, 2003 Cited on Duane (2010)). Rodger (1971) cited in Barker (1989) which is Cited on Kevin (1993) offers a definition of marketing “*Marketing is the primary management function, which organizes and direct the aggregate business activities involved in converting consumer purchasing into effective demand for a specific as to achieve company –set profit or other objectives*”.

The American marketing Association (AMA) offers the following definition: Marketing is the process of planning production, pricing, promotion, and distribution of ideas, goods and services to create exchanges that satisfy individual and organizational goals.

The definition of Marketing as a process by which individual and group obtain what they need and want by creating and exchange products and values with others involves work. Marketing means different things to differ people: to the house wife it means shopping for food to the farmer it means the sale of his produce; the fertilizer distributor it means the selling to the farmer (Abbot & Makeham, 1981). According to Kotler and Armstrong (2003) Cited on Duane (2010) marketing is managing markets to bring about profitable exchange relationships by creating value and satisfying needs and wants.

Marketing is essentially a process like farming, manufacturing, mining or construction (Backman and Davidson, 1962 Cited on Dawit (2010)). as such basically functional in character and may, therefore, be defined as the performance of all activities necessary ability, effecting transfer of ownership of the products, providing for their physical distribution, and facilitating the entire marketing concept, as philosophy of business, which states that customer’s want satisfaction, is the economic and social justification for a firms existence. Consequently all firms’ activities must be devoted to finding out what the customers want, and then satisfying those wants while still making a profit over the long run.

2.2.3. Evolution of Modern Marketing

The modern marketing concept has evolved over a period of more than a century the role and significance of marketing is primarily a function of the stage of economic development in a country. In a primitive society based on agriculture and handcrafts, exchange is very limited and marketing is more or less non-existent.

In early stage of industrialization also, marketing does not pose a serious problem because of the excess of demand over supply. The main function of marketing in this stage is the movement of goods from the point of production to the point of consumption. In the third stage when production takes place on a mass scale, production exceeds demand and mass production need mass distribution, marketing starts assuming an important role in the enterprise. In this stage, the main focus of marketing is on selling and distribution.

It is in an affluent economy where customer is highly sophisticated and his wants take a specific shape, marketing orientation takes place (Agarwal, 2004 Cited on Demeke (2007)). According to Agarwal (2004) Cited on Demeke (2007)) the evolution of modern Marketing stages is summarized as follows:

1. Production –orientation: In a pre-individual society as well as industrializing society. Demand of most goods exceeds supply firms are mostly production-oriented, and the main function of marketing in the movement of goods from the point of production to the point of consumption.

2. Sales –orientation: The concept of production over demand characterized the great depression of the thirties.

3. Marketing –orientation: more and more companies are now putting increasingly greater emphasis on marketing. It characterized by the integration of all marketing activities in the marketing division, close coordination between marketing and other function, particularly manufacturing, industrial engineering and credit management.

4. Marketing company stage: At this stage, companies plan from market backward to the factory. Manufacturing and all other activities are guided by the market place.

5. Social responsibility nature orientation: Business enterprises will in future be more concerned with social responsibility in performing their marketing activities, in the response to growing consumerism and threat of government information (Agarwal, 2004 Cited on Demeke (2007)).

Marketing can be studied from distinct stand points. The simplest and probably most important, aspects identities are, on the one hand, marketing policy, which is concerned with macro aggregate issues such as market structure, the nature and level of competition, the forms management, which is related largely to issues confronting individual businesses.

2.2.4. Marketing System

The concept of marketing system includes both the physical distribution of economic input and products and the mechanism of process or coordinating production and distribution (Andargachew, 1990 Cited in (Ayelech, 2011)). Branson and Norvel (1983) Cited in Mengesha (2016)) define the marketing system in the term of what is otherwise known as marketing channel. In broad terms, marketing system may be defined as the totality of product channels, market participants and business activities involved in the physical and economic transfer of goods and services from producer to consumers. Market system operates through a set of intermediaries performing useful commercial functions in chain formations all the way from the producer to the final consumers (Islam et al., 2001 Cited in Tesfanesh (2016)).

2.2.5. Marketing Development

Market development is a business development, where it is helping companies achieve their revenue and benefit goals quickly and cost effectively and it is done through developing new markets, growing current markets and the like. Business development is about fresh thinking, creative solutions and measurable results (MDG Report, 2013).

Market development process is process for developing sales –new business and new markets. This process is effective for developing all types of business, and delivers business growth via: New products or services to existing customers, existing products or services to new customers, or new products or services to new customers (Chapman et al., 2009).

The basic idea behind market development is instead of strengthening just 1 or 2 suppliers: It multiplying the impact of the project by helping many. Major areas of market development interventions are: Training and technical assistance, marketing, information, technology clusters and networks: subcontracting chains and cross-cutting interventions (Westley, 2001 Cited in Yemisrach (2010)).

2.2.6. Marketing Management

Kotler (2003) Cited on Duane (2010)) a broader definition as “Marketing management is the analysis, planning, implementation, and control of programs designed to bring about desired or mutual gain. First, includes heavily on adaptation and coordination of product, price, promotion, and place for achieving effective response”.

Marketing management is the art and science of choosing target markets, getting, keeping and increasing customers through creating, delivering and communication superior customer value (Kotler, 2003 Cited on Duane (2010)).

2.2.7. Marketing Performance

Marketing performance is defined as the way in which markets and marketing contribute to various aspects of economic performance. Performance criteria could be divided into two categories, namely those related to economic efficiency and other performance objectives. The former group includes technical efficiency, operational efficiency and exchange efficiency, while the latter group includes innovation, inter-sector resource transfer, equity, employment, and co-ordination efficiency (Scarborough and Kydd, 1992 Cited in [Alem \(2008\)](#)).

Performance expectations are based on a company's strategic goals, the standard that are met or exceed by leading markets. Standards may be established on the base of the company's vision for the future, Historical company data and forecasts for future performance, or by consistent with its mission and objectives. Typically marketing managers are concerned with overall performance in five key areas as they apply to design and implement of the marketing mix: profitability, productivity, liquidity, and leverage (Scarborough and Kydd, 1992 Cited in [Alem \(2008\)](#)).

2.2.8. Methods of Evaluating Marketing Performance

Marketing performance can be evaluated by analysis of costs and margin of marketing agent in different channels and market integration. A commonly used measure of system performance is the marketing margin or price speed (Getachew, 2002 cited in [Obetta \(2015\)](#)).

2.2.9. Marketing Cost and Margins

2.2.9.1. Marketing Costs

Refers to those costs, which are incurred to perform various marketing activities in the shipment of goods from produce to consumers. Marketing cost includes: handling cost (packing and unpacking, loading and unloading, putting inshore and taking out again), transport cost, product loss(particularly for perishable fruits and vegetables), storage costs, processing costs, capital costs, (interest on loan), market fees, commissions and unofficial payments ([Heltberg and Tarp, 2001 Cited in Muhammed, 2011](#)).

2.2.9.2. Marketing Margin

A marketing margin is the percentage of the final weighted average selling price taken by each stage of the marketing chain. The total marketing margin is the difference between that the consumer pays and what the producer receives for the product.

In other words it is the difference between retail price and farm prices ([Cramers and Jensen, 1982 Cited in Amare and Dawit \(2013\)](#)). A wide margin means usually high prices to consumers, and low price to produces. The total marketing margin may be subdivided into different components: all cost of marketing service and profit margins or net returns.

The marketing margin in an imperfect market is likely to be higher than in a competitive market because of the expected abnormal profit. But marketing margin can also be high, even in competitive market due to high real market cost ([Wolday, 1994 Cited in Muhammed \(2011\)](#)).

There three methods used in estimating marketing margin ([Abbot & Makeham, 1981](#)): (a) following specific lots of consignment through the marketing system and assessing the cost involved at each of the different stages (time lag); (b) submission of average gross purchase by number unit transacted of each type of marketing agency; and (c) comparison of prices at different levels of marketing over the same period of (concurrent method).

2.2.10. Market conduct and Performance

Market conduct and performance in atomistic industries provide standards against which to measure behaviour in other types of industry. The atomistic category includes both perfect competition (also known as pure competition) and monopolistic competition. In perfect competition, a large number of small sellers supply a homogeneous product to a common buying market. In this situation no individual seller can perceptibly influence the market price at which he sells but must accept a market price that is impersonally determined by the total supply of the product offered by all sellers and the total demand for the product of all buyers.

The large number of sellers precludes the possibility of a common agreement among them, and each must therefore act independently. At any going market price, each seller tends to adjust his output to match the quantity that will yield him the largest aggregate profit, assuming that the market price will not change as a result. But the collective effect of such adjustments by all sellers will cause the total supply in the market to change significantly, so that the market price falls or rises. Theoretically, the process will go on until a market price is reached at which the total output that sellers wish to produce is equal to the total output that all buyers wish to purchase.

This way of reaching a provisional equilibrium price is what the Scottish economist and philosopher Adam Smith described when he wrote of prices being determined by "the invisible hand" of the market. If the provisional equilibrium price is high enough to allow the established sellers profits in excess of a normal interest return on investment, then added sellers will be drawn to enter the industry, and supply will

increase until a final equilibrium price is reached that is equal to the minimal average cost of production (including an interest return) of all sellers. Conversely, if the provisional equilibrium price is so low that established sellers incur losses, some will withdraw from the industry, causing supply to decline until the same sort of long-run equilibrium price is reached.

2.3. A Brief History Coffee in Ethiopia

Many believed that Ethiopia is the birthplace of coffee and the only native coffee trees in the world. The first grew in ancient "Abyssinia," which is now present day Ethiopia. These trees blossomed in an area called "Kaffa" and the trees were called "Kafa," which may as well be the root word for coffee. In the tenth century, coffee was considered a food.

According to (Kader, 1992 Cited on Patange Vidyut Chandra, 2013) that Ethiopian nomadic mountain peoples gathered the coffee beans from the trees that grew in the Oromia region, ground them up and mixed them with animal fat, and forming small balls that they carried as food on peoples. In some nation of Oromia region ate the beans as porridge or drank a wine created from the fermented crushed coffee beans. By the 13th century, coffee's restorative powers were well known in the Islamic world.

Coffee was considered a potent medicine, as well as a religious potion that helped keep people wake during prayers. Pilgrims of Islam spread the coffee throughout the Middle East and by the end of the 15th century; coffee houses had replaced mosques as favoured meeting places. With the spread of Ethiopian from Africa, to the Middle East, India, Europe, and the Americas, are making it one of the most popular bends of coffee in the world. Even great coffee business like Maxwell House and Folgers "lust" for this type of bend of coffee.

2.4. Coffee Growing Suitable Condition in Ethiopia

2.4.1. Altitude

In Ethiopia, coffee is grown at various altitudes ranging from 550-2750 meters above sea level. However, the bulk of Coffee Arabica is produced in the Eastern, Southern and Western parts of the country with altitudes ranging between 1300-1800 meters.

2.4.2. Rainfall

The annual rainfall in the coffee growing regions of the country varies between 1500 and 2500 mm. However in the Eastern part of the country, the rainfall decreases to 1000 mm per annum where it is supplemented with irrigation.

It is not only the rainfall amount which contributes to higher production, but also its distribution over eight months. Rainfall distribution in be Southern and Eastern part of the country is bimodal and the Western part is mono modal. This distribution pattern enables the country to harvest coffee at different times of the year which makes the supply of fresh coffee possible all year round.

2.4.3. Temperature

Coffee Arabica grows best in a temperate, shady environment in the forests of the Ethiopian highlands. The ideal temperature for Coffee Arabica is considered to be 15c-25c. This temperature prevails in most coffee growing areas of Ethiopia.

2.4.4. Planting Material

Because the country is the source of Coffee Arabica, there is a wide variety of characteristics to be found: disease resistance, high yield, and high quality. This is nature's gift to Ethiopia in particular and to the world in general.

2.4.5. Soils

The soil in the Southern and Western part of the coffee growing regions of Ethiopia is of volcanic origin with the high nutrient holding capacity of clay minerals. All the coffee growing regions have fertile, friable loamy soil with more than 1.5m of depth. The top soil is predominantly dark brownish in color with a slightly sour PH. One peculiar thing about the soil is that its fertility is maintained by organic recycling. Enough organic material is added to the soil through litter fall, pruning and root residue from the perennial coffee trees.

Furthermore, the small coffee farmers, who are the major producers, use organic fertilizers to supplement the natural fertility of the soil. Moreover, as close to 50% of the natural production is consumed locally, representing the highest national consumption in any producing country, local consumers insist on top quality and would never accept the use of chemical inputs. Most buyers know that the bulk of coffee produced in Ethiopia qualifies itself as organic.

2.5. Coffee Type and Characteristics in Ethiopia

According to MoT (2012) in Ethiopia has different types coffee species grown around the on county. Such as;

- **Yirgacheffee coffee** is internationally known and recognized as Yergachaffee Brand Name. Grown coffee and has intense flavour known as flora. Has fine acidity and rich body. Many rosters are attracted to its fine and flavour and are willing to pay a premium price for it.
- **Harar Coffee** is a Medium sized bean with greenish-Yellow colour, Medium acidity and full body, and a distinctive mocha flavour. Internationally known and recognized as Harar Trade Brand Name and highest premium coffee in the world. Medium-sized bean, greenish-greyish in colour. Due to balanced tests and good flavour called sweet coffee, has fine acidity and good body. It is always blended for specialist coffee.
- **Limmu coffee** is Spicy and winy flavour and attracts many rosters specially Europe and USA, has good acidity and body, Washed Limmu is one of premium coffee, medium sized bean and greenish bluish in colour mostly round in shape.
- **Djimma coffee** Altitude is Heavy bodied cup with winy after taste Can be prepared as washed sun dried.
- **Mizan Tepi** coffee is Low acidity but better body, there are commercially important which is used for special blend.
- **Bebeka coffee** is low acidity but better body, there are commercially important which is used for special blend.
- **Lekempti coffee** is Medium-to-bold bean and known for its fruity taste, has greenish- brownish in colour with good acidity and body. There are many roasters who put his flavour in their blends, but it can also sell as an original gourmet or special origin flavour.

2.6. Ethiopian Coffee Production Systems

With in Ethiopia a variety of coffee production systems can be found in the country. In the Kaffa region (from which the coffee derives its name) coffee is still collected in natural forests. These coffee forests form an important part of the remains forest blocks found in Ethiopia. In several highland areas the production of forest coffee is a major household activity supplying between 20 and 50% of all household income; this livelihood activity is supplemented by subsistence agricultural production and collection of other forest products (*MoA, 2013 Cited on Lisa (2013)*).

The presence of wild coffee and its economic importance for the local community has contributed to the conservation of the coffee genetic resources and the forest biodiversity. Nonetheless, due to a variety of reasons, including immigration and opening up of lands for commercial estates, the conservation of these forests is not assured. In different areas the coffee forests are considerably fragmented In order to assure that the wild coffee genetic resources are not lost, recently three coffee gene reserves have been established; these will be managed through a community-based participatory forest management approach (*Gatzweiler, 2005*).

I. Forest coffee system: Collection of natural stands of coffee in open access areas of little disturbed rainforest.

II. Semi-coffee forest system-Limited management interventions in plots with customary individual access rights, using natural regeneration of coffee plants, complemented with wild coffee seedlings from the forest. Due to the stimulation of coffee the overall species richness is lower in these production systems than in the less disturbed forest coffee systems (*Senbeta and Denich, 2006 Cited on Solomon (2007)*).

III. Garden coffee systems with more intensive management-coffee plants are mostly regenerated from selected wild seedlings or with nursery-raised cultivars. The original forest species mostly are limited to shade trees and in addition a variety of other crops, such as fruit trees, tubers, spices and false banana (*Enset ventricosum*) are grown (*Teketay & Tegineh, 1991*).

IV. Smallholder and estate plantations: In general, the forest and semi-forest systems include a high number of tree species; the number of over storey trees is generally higher than any other comparable coffee production system in the world. The productivity of the coffee in these systems is generally low, mainly due to the low intensity coffee management and limited interference in forest cover.

Some observers indicated that Ethiopia's annual production of coffee is between 140,000 and 180,000 tons annually about 44% of the coffee produced in Ethiopia is exported to other countries (Italy, United Kingdom, Netherlands, Djibouti, Germany, Japan, Saudi Arabia, France, and the United States). The Ethiopian government, eager to increase its currency reserves, suppresses the domestic consumption of coffee by controlling the coffee sales within the country. It's also, restricts the transfer of coffee from coffee producing areas to other parts of the country. This practice has made the price of coffee two or three times higher for Ethiopians than the price of the exported coffee.

2.7. Coffee Marketing in Ethiopia

Coffee is sold to local collectors (Sebsabis), local traders (Akrabis) or cooperatives that aggregate and sell to the central auctions in Addis Ababa and Dire Dawa. The decision regarding who to sell coffee to is determined by price, ease of delivery or collection, transportation costs and honesty of the buyers. The

purchasers that offer relatively high prices are preferred to those that offer low prices. Similarly, buyers that pay in advance are preferred to those that pay on delivery (Teketay & Tegineh, 1991).

2.8. Factors Affecting the Quality of Coffee

Coffee seems deceptively simple to prepare. Simply soak ground coffee beans in hot water and, boil; you have coffee – or something that approximates it. However, coffee is remarkably delicate and particular, both as a plant and as a beverage. Coffee from the same farm can taste dramatically different from one year to the next, and coffees harvested the same year from two nearby farms can have very different qualities. According to Geletu (2014) stated that there are different factors affecting the quality of coffee are follows:

2.8.1. Species and Cultivar

There are dozens of species under the genus name *Coffea*, but only three of them that are routinely grown for the purposes of making our favorite beverage, coffee: Arabica, Robusta and Liberica. Nearly all coffee available from specialty roasters is Arabica, though some add high-quality Robusta beans to certain espresso blends. Dozens of cultivars (cultivated varieties) exist within the Arabica species, and each has its own qualities and characteristics. While soil, climate and other factors influence the manifestation of those inherent qualities, the cultivar determines what will be possible in the cup with a given coffee.

2.8.2. Climate

Coffee plants demand the perfect balance of sunlight, rain and temperature to produce the highest-quality beans. The particular climate of a region controls the length of the growing season as well as whether the trees flower, set fruit and ripen at the optimal times. Even small variations in temperature and rainfall can make a big difference in the quality of the harvest a reality that has become more evident as coffee importers increasingly source coffee from specific regions and farms rather than from coffee mills, which often combine beans from numerous areas into larger lots and thereby obscure the distinctive flavors that differentiate one coffee from another.

2.8.3. Shade

Shade-grown coffee is growing in popularity for a number of reasons, not the least of which is that it tastes better than coffee grown in full sun. Cloudy skies, forest canopy and tall mountains all provide shade that protects coffee plants from the harsh heat of the sun, which can burn leaves. The cooler temperatures allow the cherries to ripen more slowly, developing fuller flavor. Meanwhile, the diversity of plants in the shade canopy encourages a similarly diverse population of birds and insects, many of which protect coffee plants from pests that can damage the crops, encouraging a higher, better-quality yield.

2.8.4. Farming Standards

The best coffees almost invariably come from regions where coffee farmers have implemented farming practices and techniques that coax the best flavors from the bean. Proper fertilization, irrigation, pruning and care encourage the development of high-quality coffee.

2.8.5. Tree Age

Coffee trees get old and tired, so it's important for farmers to replenish their trees continuously. A tree doesn't produce coffee cherries until it is 4 years old and can't be harvested for another year. It is at its most productive—and yields the best coffee—between years 7 and 20. Farms that do a good job of tree management are rewarded with better harvests and higher-quality beans.

2.8.6. Harvesting

Coffee cherries reach peak ripeness at different times. Mechanical harvesters have no way to differentiate between ripe and unripe coffee cherries; they simply strip the trees of cherries and dump them all, ripe and unripe, into a big batch. Plantations that harvest by hand instead can pick and choose, only harvesting cherries that are perfectly ripe for the best flavor. Once coffee cherries are harvested, they must be processed immediately to avoid mold or rotting.

2.8.7. Processing

There are three main ways of processing coffee cherries, and each contributes very different qualities to the finished coffee.

I. Dry (or Natural) Processing:

Is the more traditional method, and is often used by smaller farms in rural areas. The coffee cherries are spread out to dry on rooftops or platforms in the sun for seven to ten days. During the drying phase, the cherries must be raked and turned regularly to prevent the development of mold, which would contribute “off”

flavors. Once the skin and fruit have become brittle, they are removed from the bean, usually by hand. Dry-processed coffees tend to have fuller body, thicker viscosity and more restrained acidity than wet-processed, or washed, coffees, and are more likely to taste earthy. They are also far more likely to exhibit wild, rich fruit flavors that are seldom found in washed coffees.

II. Wet-Processed (or Washed):

Coffee is more common in areas where water is plentiful. Coffee cherries are placed in vats of water to soften, usually overnight, and then run through a machine that removes most of the fruit from the seeds. The pulped beans are allowed to ferment in water vats to make it easier to mechanically remove any remaining fruit and mucilage before they are dried, either naturally or in a mechanical dryer. Wet-processed coffees generally have a cleaner profile with brighter acidity and light to medium body. If they're not handled carefully, though, there's a greater chance of mold developing on the beans while they are drying or, conversely, a risk of drying the beans too quickly. Both of these can lead to unsavory tastes in the cup.

III. Pulp Natural (Semi-Washed) Processing:

Is a hybrid method used in some regions? With pulp natural, the coffee cherries go through the first step of the washing process to remove the outer skin, but are allowed to dry with the fruit pulp clinging to the parchment layer covering the bean instead of immediately undergoing fermentation and washing. Pulp natural coffees tend to taste cleaner than dry-processed coffees but are perceived to have more body and muted acidity than fully washed coffees. They frequently exhibit sweetness, especially honey, brown sugar and caramel flavors, and a level of fruitiness that falls between that of wet- and dry-processed coffees.

2.8.8. Sorting

Coffee is sorted at several stages between harvesting and shipping, and each sort can improve the quality of the finished product. The coffee cherries are sorted immediately after harvest to remove unripe, misshapen or otherwise substandard berries. During wet processing, beans that float are removed and discarded, adding a second layer of sorting. Regardless of the processing method used, beans may be sorted again for size, shape and color before milling and packaging. Each sort removes coffee beans that don't meet particular standards, leaving only the highest-quality beans to make it into your cup.

2.8.9. Shipping/Storage

While green coffee beans don't stale as quickly as roasted coffee beans, they will lose flavor over time. The way they are stored before, during and after shipping can significantly affect cup quality. Traditional shipping in burlap bags, for example, exposes coffee beans to moisture, air and the odors of any products or substances nearby. For this reason, many importers prefer coffee shipped in alternative containers, such as multi-layer plastic Grain Pro bags, which protect the beans from moisture, odors and other outside factors that can affect the flavor.

Coffee stored in a warehouse for months or, in some cases, a year or more, will not be as flavorful as coffee that is fresh from harvest. It's still difficult for consumers to know when their coffee was harvested, but many roasters and green coffee bean suppliers are getting much more particular about and forthcoming with this information. Direct Trade, Fair Trade and events like the annual Cup of Excellence auctions make it easier to keep track of when and where coffees were harvested by rewarding growers of quality coffees with higher prices and encouraging greater transparency in coffee sourcing.

2.8.10. Roasting

Roasting affects coffee flavor profoundly. Heat causes chemical changes within the coffee bean, caramelizing the sugars and bringing out the flavors of the acids and other elements present. The same coffee will taste completely different at a light roast level than it does at a medium or dark roast level. In fact, roast makes such a difference that there are entire books devoted to proper roasting techniques, and many coffee roasters closely guard the precise roasting profiles for the beans they sell.

2.8.11. Roasting Date

Once coffee is roasted, its flavor changes dramatically and rapidly. Most coffees reach peak flavor between 4 and 7 days after roasting, though this varies somewhat from bean to bean and there is disagreement over the details. All specialty roasters whose coffee we carry print the roast date on the coffee they sell so that consumers themselves can judge freshness.

2.8.12. Coffee Quality

Quality is a trait difficult to define. According to any dictionary, it is an inherent or distinguishing characteristic. The International Organization for Standardization (ISO) describes quality as the ability of a set of inherent characteristics of product, system or process to fulfil requirement of customers and other

interested parties (ISO, 2000). These inherent characteristics can be called “attributes”. This definition varies along the production to consumer chain:

- **At the farmer level:** coffee quality is combination of production level, price and easiness of culture.
- **At the Exporter or Importer level:** coffee quality is linked to bean size, lack of defects, regularity of provisioning, tonnage available, physical characteristics and price
- **At the roaster level:** coffee qualities depend on moisture content, stability of the characteristics, origin, price, biochemical compounds and organoleptic quality. It should be noted that each consumer market or country may define its own organoleptic qualities.
- **At the consumer level:** coffee quality deal with price, taste and flavour, effect on health and alertness, geographical origin, environmental and sociological aspects (organic coffee, fair trade, etc) (Lorey et al., 2006 Cited on Mekonen (2009)).

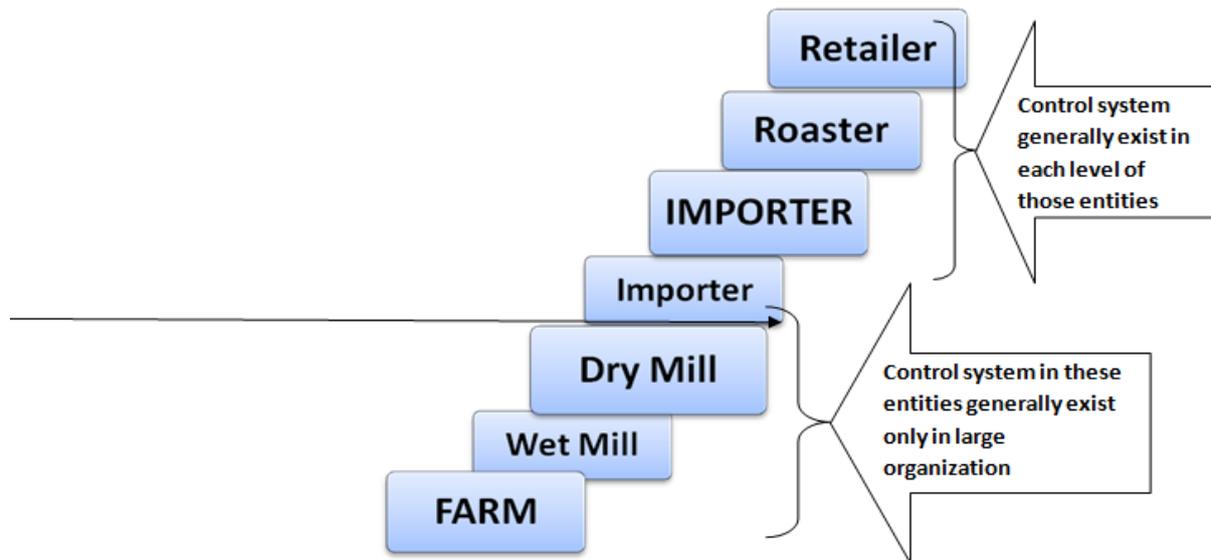


Figure-2.1.Process of quality controlling mechanisms.
Source: from the researcher literature review.

The above shown figure demonstrates the lack of control promotes commodities pricing and leaves small farmers and producers at a strong disadvantage, their businesses are not sustainable

2.8.13. Improvement of the Quality of Coffee

To improvement the quality of coffee produced in Ethiopia through quality awareness on the local level. This would be done by establishment of laboratories in the Western and Southern part of Ethiopia providing quality control services and training to farmers and traders. These techniques are

- Empower producers with knowledge over their product.
- **Securing** the earnings of national businesses involved in trading, processing and exporting coffee by increasing the proportion of coffee reaching export quality.
- To increase the percentage of coffee with potential for sale as a higher grade or specialty coffee by discouraging the mixing of different coffees and facilitating traceability.
- To speed up the export process by reducing the congestion at the main quality-testing laboratory in Addis Ababa. At times more than 400 trucks waited for days during peak season.

2.8.14. Coffee Quality Management System (QMS)

Coffee management begins in the coffee orchards and end in the preparation of a cup of coffee to be consumed each person in the production chain must do their part .In those at the source fail there is nothing more other up the chain do not recover on the other end the chain, the consumer though lack of education or adequate brewing equipment, can fail in this kitchen and produce a mediocre brew from a particular estate coffee, materially reducing the likelihood .We all need to be cognizant of coffee quality management and the higher price that producer can earn with a quality product .It can't avoided; we are play in coffee producers.

Making coffee sustainable for thousands of small farmers as a commodity , coffee is second only to petroleum and like petroleum, nearly all of the world coffee is sold in world –wide auction system that favors availability all else.

Coffee producer s need always to differentiate their product, so that they have the opportunity to stabilize prices by selling as much as possible outside of the commodities market. Since product differentiation is best

and most suitability achieved through quality. It is critical that coffee producer gain control of process to best maintain quality and consistency. Perhaps the most basic aspect of quality management in control of process .whether it is in the producing country or in the contributing country. Each step that is taken to produce a product must document a repeatable lead to commodities pricing; a buyer needing a consistent product each time he returns to be gain from particular coffee producer (IFAD 2002-2006).

2.8.15. Coffee Quality Assurance

The quality of a good cup of coffee, as experienced daily by millions of consumers is not a matter of chance. It is the result of a quality assurance program implemented by all the key players of the coffee production to consumer chain (Prodolliet, 2004 Cited on Francis (2011)). Quality as it is defined by ISO (2000) and Mekonen (2009) in its more practical definition, can be the ability of a product to satisfy consumer's expectation.

They mainly includes: Good sensory characteristics (e.g. aroma, flavour, body, acidity); Absence of off-flavours (e.g. mouldy, earthy, fermented, and chemical); Safety (absence of contaminants, like pesticides, mycotoxins) and Environmental aspect (e.g. organic product). Not all these quality characteristics are a matter of chance. They are the result of planned and systematic activities, prevented measures and precautions taken to ensure that the quality of coffee attained and maintained day after day. This is the meaning of quality assurance (Prodolliet, 2004 Cited on Francis (2011)).

The quality of coffee can be predetermined by the genotype, the climatic conditions and the soil characteristics of the area in which it is grown. As a whole, a quality assurance program has to be implemented by all the key players of the coffee production to consumer chain to achieve the common goal: quality and as a consequence, consumer satisfaction. Hence, quality assurance can be described from the level of a soluble coffee manufacturer, focusing on the main controls carried out from the reception of the raw material up to the release of the finished packed product.

2.8.16. Coffee Quality-Cost and Yield Versus Quality

If a coffee lacks the inherent quality to make it a best-seller capable of commanding premium prices, then most growers, and specifically estates, cannot tolerate low yields unless their input costs are low as well. Estates, especially when using irrigation, can optimize yields much more easily than can most smallholders. This can be done by planting high yielding and/or disease-free varieties, by increasing planting densities, or by applying larger amounts of inputs, especially fertilizer (although excessive use of fertilizer can result in thin, almost bitter liquors).

There is an element of truth though in the often heard lament that such actions at times reduce quality, especially when taken to excess (for example very dense plant populations necessitating very high fertilizer applications). But the bottom line return from higher yields of medium to sometimes average quality is, unfortunately, often better than that from lower yields of superior quality, even when higher prices are obtained. The market does not always like such comment but in recent years this has been particularly true, with many decent coffees selling, in real terms, at close to historical lows.

Estate managers can usually take these considerations into account and so make relatively well-informed decisions. But when smallholders replant it is sometimes perhaps more a case of being recommended to do so, rather than a well-informed choice on their part. Yet for many smallholders it is not an easy matter to maintain the level of inputs required by higher yielding hybrids. In times of trouble, such as when prices fall, they run into difficulty and may finally end up with neither yield nor quality. Respect for the old adage that 'low inputs equal low yields but also low and therefore sustainable cost' has in the past kept

2.8.17. Commodity Exchange in Ethiopia

The Ethiopia Commodity Exchange (ECX) is a new initiative for Ethiopia and the first of its kind in Africa. The vision of ECX is to revolutionize Ethiopia's tradition bound agriculture through creating a new marketplace that serves all market actors, from farmers to traders to processors to exporters to consumers.

The ECX is a unique partnership of market actors, the Members of the Exchange, and its main promoter, the Government of Ethiopia. ECX represents the future of Ethiopia, bringing integrity, security, and efficiency to the market. ECX creates opportunities for unparalleled growth in the commodity sector and linked industries, such as transport and logistics, banking and financial services, and others.

ECX assures all commodity market players the security they need in the market through providing a secure and reliable End-to-End system for handling, grading, and storing commodities, matching offers and bids for commodity transactions, and a risk-free payment and goods delivery system to settle transactions, while serving all fairly and efficiently. ECX creates trust and transparency through aggressive market data dissemination to all market actors, through clearly defined rules of trading, warehousing, payments and delivery and business conduct, and through an internal dispute settlement mechanism. ECX provides market integrity at three important levels: the integrity of the product itself, the integrity of the transaction, and the integrity of the market actors.

The Ethiopia Commodity Exchange (ECX) commenced trading operations in April 2008. ECX has invited membership of the agricultural and trade industry. The Ethiopian Commodity Exchange was started to

benefit and modernize the way Ethiopia was trading its most valuable assets, its commodities. Ethiopia needed a change from the traditional means of trading to better support the needs of all those involved in the trading and production.

Before ECX was established agricultural markets in Ethiopia had been characterized by high costs and high risks of transacting, forcing much of Ethiopia into global isolation. With only one third of output reaching the market, commodity buyers and sellers tended to trade only with those they knew, to avoid the risk of being cheated or default.

Trade is done on the basis of visual inspection because there was no assurance of product quality or quantity, this drove up market costs, leading to high consumer prices. For their part, small-scale farmers, who produce 95 percent of Ethiopia's output, came to market with little information and are at the mercy of merchants in the nearest and only market they, know, unable to negotiate better prices or reduce their market risk. ECX is developing a new method of exchange and a safer one for all who trade on it.

A marketing system that coordinates better, that links faster, and that protects the interests of both sides of the trade. It is time for a marketing system that is transparent, efficient, and innovative, that will take Ethiopian agriculture into the new Millennium. Ethiopia, once a commercial trading hub in antiquity linking markets of East and West, can again claim a place in the global market arena.

The Ethiopia Commodity Exchange, (ECX), is a marketplace, where buyers and sellers come together to trade, assured of quality, delivery and payment. The vision of ECX is to transform the Ethiopian economy by becoming a global commodity market of choice. ECX's mission is to connect all buyers and sellers in an efficient, reliable, and transparent market by harnessing innovation and technology, and based on continuous learning, fairness, and commitment to excellence.



Figure-2.2. Shows the head office building of ECX found in Addis Ababa.
Source: Research's Field Survey.

2.8.18. Conceptual Framework

The study mainly focuses on the following conceptual framework and to assesses factors influencing the quality of coffee product on marketing performance of Ethiopian commodity exchange (ECX), those factors/variables influencing the quality of coffee in Ethiopian Commodity Exchange in Hawassa branch. Some of them are presented as follows:

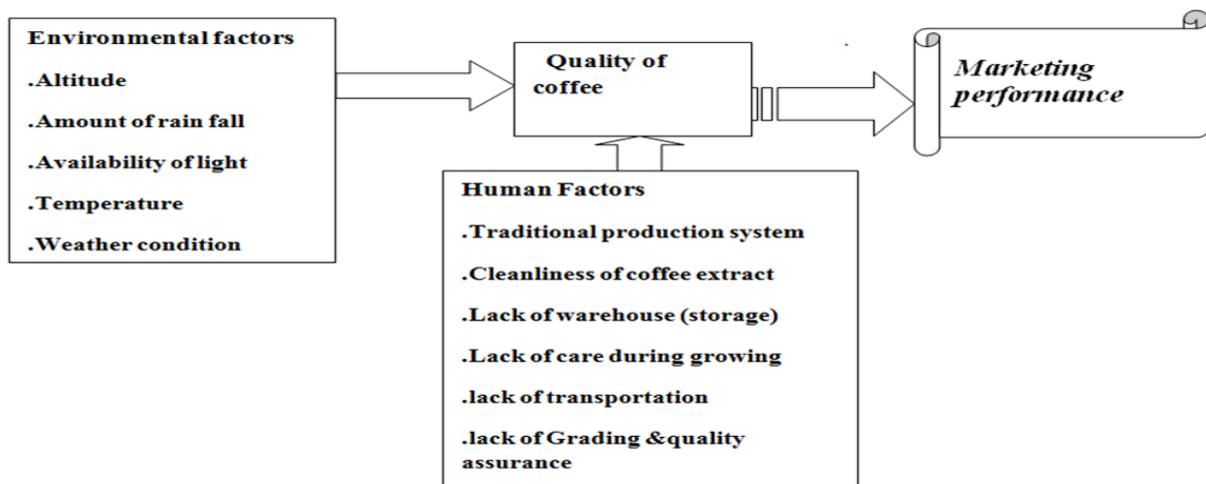


Figure-2.3. Show the Conceptual framework of the study.
Source: Research on framework and Literature review.

3. Research Methodology

3.1. Introduction

The research methodology consist five sections, which are description of the study area, sources and tools of data collection, sample design, data collection and data processing and analyzing of the study.

3.2. Conceptual Definitions of Terms, Phrases, or Variables

Market: is particular group of people, an institution, a mechanism for facilitating exchange, or Market is an area in which one or more sellers of given products /services and their close substitutes exchange with and complete for the patronage of a group of buyers.

Marketing: is the performance of business activities from producer to consumer or user of the process in a society by which the demand structure for economic goods and services is anticipated (enlarged) and satisfied through the conception, promotion, and physical distribution of such goods and services.

Marketing system: The totality of product channels, market participants and business activities involved in the physical and economic transfer of goods and services from producer to consumers.

Market development process: is process for developing sales –new business and new markets.

Marketing management: is the analysis, planning, implementation, and control of programs designed to bring about desired or mutual gain.

Marketing performance: way in which markets and marketing contribute to various aspects of economic performance.

Marketing costs: refers to those costs, which are incurred to perform various marketing activities in the shipment of goods from produce to consumers.

Marketing margin: is the percentage of the final weighted average selling price taken by each stage of the marketing chain.

Suppliers: a party that supplies goods and services.

3.3. Research Design

Research design is the blue print for fulfilling research objectives and answering research questions. In other words, it is a master plan specifying the methods and procedures for collecting and analyzing the needed information. It ensures that the study would be relevant to the problem and that it uses economical producers.

The research design of this study, therefore, was descriptive and/ explanatory research as far it was describing the existing situation or condition of ECX of the study area; it is exploratory as far as it was assessing or explore and evaluate the quality of coffee product on marketing performance in Ethiopian commodity exchange; in addition, it was Cross sectional as far it was study in this year only or a one year time span; and finally follows a case study approach as far it was assessing the existed situation of the investigation by exemplifying the Hawassa Branch ECX office Performance. This study also both quantitative and qualitative research type as far it was employed both types of data.

3.4. Research Methodology

This section constituted with the method of data collection mechanisms, sample determination, sampling technique and etc which this study had used to conduct the investigation.

3.4.1. Methods of Data Collection

According to Catherine (2007), data may be collected from either primary or secondary sources. Thus, in order to address the objectives of the research, the researcher on one hand used questionnaire, interview, and researcher's observation to collect data from different primary source of data. On the other hand, assessment of documents or reports of the sales value of the ECX for the past three years. Questionnaire were designed and administered to the selected of the suppliers for assessing their opinion or attitude on the quality of coffee related to the market performance provided.

Questionnaire (Both Structured and Unstructured) were designed and provided to the selected samples of suppliers for assessing their opinion or attitude on the quality coffee related to the market performance provided. In addition, a face-to-face interview (Contain Both Structured and Unstructured) was conducted during the study time with 5 quality assurance senior branch managers. Besides, personal observation of the researcher had applied around or in warehouse and laboratory offices which were found in the organization is.

Whereas; the secondary data were collected from reviewing relevant documents; such as: sales reports of the organization; books, journals, articles, published and unpublished documents, websites, and other reliable documents.

3.4.2. Target Population of the Study

The data were collected from individual Coffee supplier, which comes from the two regions of Oromia and SNNPS. According to data obtained from the branch there are 150 suppliers, which are providing coffee for the Branch.

3.4.3. Sample Size and Sampling Techniques

According to ECX (2016) annual report, the ECX has a total of 19th warehouse, which is found in all region of the market town in Ethiopia. However, the study purposively selects Hawassa branch. The coffee supplier and cooperatives union were taken as participants in the study through simple random sampling technique. From 150 suppliers the researcher selected 60 coffee suppliers based a formula provided by Yemane (2008) as follows:

$$n = \frac{N}{1+N(e)^2}$$

$$\frac{150}{1+150(0.1)^2} = 60 \quad \text{where:}$$

- n is the sample size 60;
- N is the population 150;
- e is the level of precision 0.5;
- Confidence level= 95%;

On the other hand the researchers were taken 60 suppliers and (5) management bodies in the study. Therefore, sample sizes of the study would be 65 total respondents for the research work.

3.4.4. Source of Data

In this study both Primary (opinions, answers and other suggestion of the interviewees) and secondary Source of data (Such as: reports, journals, books, and other documents related to market performance and coffee product) had used for this research findings, perhaps especially, in study area were used by the researcher.

3.4.5. Data Presentation Mechanism

Data collected for this investigation was summarized by numbers, percentages, photographs and maps and the suitable data presentation tools of this study were tables, pie charts, photographs, and bar graphs. The qualitative data was simply discussed and analyzed qualitatively in a way it presents the information appropriately.

3.4.6. Method of Data Analysis and Interpretation

After collecting data through the above instruments, it was important to organize, present and analyze in a systematic way. Based on this, both quantitative and qualitative methods of data analysis were used to describe the issues. Thus, the completed questionnaires were coded and the quantitative data were analyzed by using the optionally either by tables, excel chart, pie-charts, bar graphs or either via Statistical Package for Social Sciences (SPSS) Version-20 computer software. Respondents were requested to rate their quantitative responses on a 5 point Likert scale where 1= strongly disagree/ significantly worse/ very poor, 2 = disagree/ worse/ poor, 3 = make no difference, 4 = agree/ improved/ good, and 5= strongly agree/ significantly improved/ very good.

3.4.7. Ethical Considerations

The researcher would be tell his subjects the full detail of the purpose of investigation and the importance as a result of the genuine information they provide for the successfulness of the study. In addition, researcher has to inform the subjects that they have the right to remain anonymous for providing any information. Researcher also has to get official letters from the research department in order to formally approach the college officials via whom researcher seek the right information from the prospective teachers. Moreover, researcher also has to behave ethically and morally in a way that the subjects trust as a result of which he expect to get genuine information. Finally, researcher has to use and bound to the ethical considerations and let them informed consent signed to ensure anonymity and sec

4. Results and Discussions

4.1. Introduction

Mainly this section presented the general data gathered or had gotten from the respondents, findings of the research as well as the interpretation of the researcher on the data responded by respondents and findings. This means this section presented the responses of respondents to the open and closed ended-survey questionnaires prepared to assess the quality of coffee product and or the coffee market performance. Finally, the findings from such mechanisms also analyzed and described by are integrating and comparing with those from interviews and observation.

4.2. Demographic Data of Respondents

As shown in the above Table 4.1, 48(80%) of the respondents were male, while 12(20%) of the respondents were females. This implied that as far as most of the ECX suppliers are males, they thus can have a Chance to

involve themselves in the production and collecting of coffee products in person than females because of the opportunity they endowed from past cultural outlooks. So, the information they provided could be reliable as far as they can have a chance to be involved in productivity of coffee.

Table-4.1. Demographic Distribution of the respondents.

| Variables | Description of respondents | Frequency | Percentage (%) |
|-----------|----------------------------|-----------|----------------|
| 1.Sex | Intervals | | |
| | a.Male | 48 | 80 |
| | b. Female | 12 | 20 |
| | Total | 60 | 100 |
| 2.Age | 18-25 | 12 | 20 |
| | 26-35 | 27 | 45 |
| | 36-45 | 13 | 21.6 |
| | Above 46 | 8 | 13.3 |
| | Total | 60 | 100 |

Source: Researcher's field survey, 2016.

As it is shown in the above Table 4.1: 12 (20%) of the respondents had an age between 18-20 years, 27(45%) of the respondent aged between 26-35 years, 13(21.6%) of the respondent aged between 36-45 years, while the rest 8(13.3%) of the respondent are aged above 46 years. This implies that majority of ECX Coffee suppliers are youngster and working age. So that, as far as they are involved actively in the production and knowledgeable enough as well as informed about the coffee product quality and marketing, then the information they had bear was very liable than the other parts of the respondents.

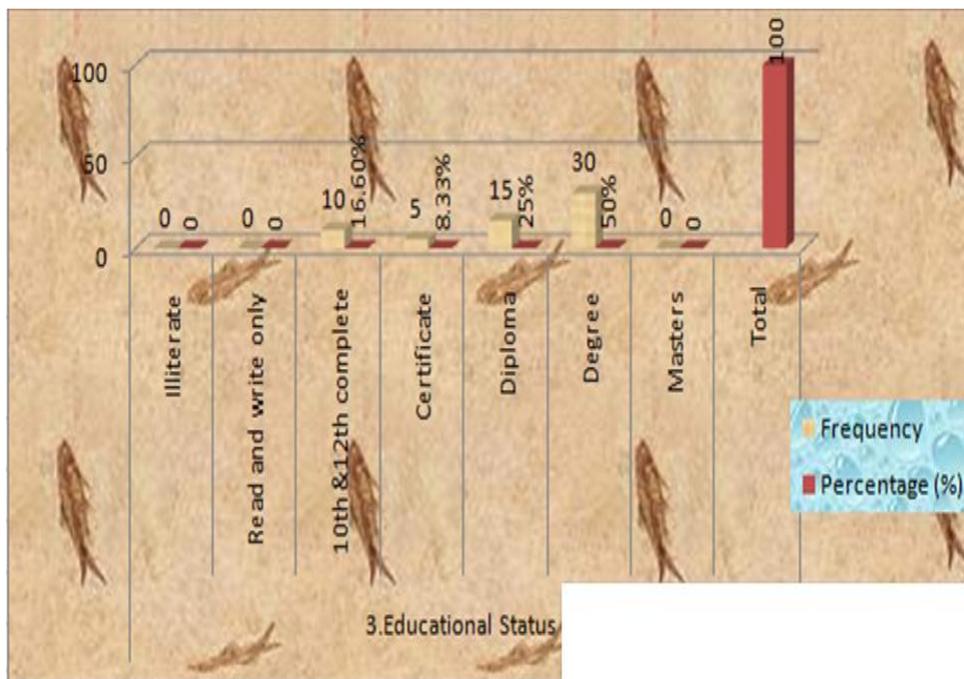


Figure-4.1. Shows the Educational status of Respondents.

Source: Research's Field Survey, 2016.

As shown the above Table 4.2, the educational status of the respondents are none of them Illiterate and Read and write only. 10(16.6%) were 10 and 12 complete, 5 (8.33%) of the respondent certificate holder, 15(25%) of the respondent are Diploma holder while 30(50%) of the respondents are first degree holder. Most of the respondents or the almost 50% of the respondents were degree holders. So, this implied that the information which these respondents provide for the study was, definitely speaking reliable information.

Table-4.2. Shows the work experience and marital status of the respondents.

| Variables | Description of respondents | | |
|-----------------------|----------------------------|-----------|-------------|
| | Intervals | Frequency | Percent (%) |
| 4. Work of experience | Below 1 year | 6 | 10 |
| | 1-2 years | 3 | 5 |
| | 3-5 | 9 | 15 |
| | 6-10 | 24 | 40 |
| | 11 and above | 18 | 30 |
| | Total | 60 | 100 |
| 5. Marital status | Married | 48 | 80 |
| | Unmarried | 12 | 20 |
| | Divorced | 0 | 0 |
| | Total | 60 | 100 |

Source: Researcher's field survey, 2016.

As shown in the above Table 4.2, 6(10%) of the respondents had below 1 year work experience; 3(5%) of the respondents had 1-2 years work experience; 9(15%) of the respondents had 3-5 years work experiences; 24(40%) of the respondents also had 6-10 years; and the rest 18(30%) of the respondents had 11 and above years of work experience. So, this implies the coffee supplier of ECX almost majority of them are more experienced and because of that the responses they were provided could be considered as valid enough as far as they had high experience it is known that they know well about the coffee product and the coffee market at all.

Regarding the marital status of the respondents shown above; 48(80%) of them are married while 12(20%) of them are unmarried, but no one divorced. This indicate that majority of the respondent are married and thus they had have a chance to enjoy coffee products as a means of recreation at house every day like all Ethiopians culturally doing this. So, the answer they provided would be much reliable as far as they know it via buying and drinking it.

4.3. Data Presentation

4.3.1. Factors Affecting the Quality of Coffee

4.3.1. Factors Related to Rainfall and Temperature and Altitude

Table-4.3. Shows about factors which affect coffee quality product, especially related to rainfall and temperature and altitude.

| No | Item | SAG | AG | UD | DAG | SDAG | Remark |
|-----------------------|--|----------------|---------|---------|-----------|---------------|--------|
| | | Fr, Pr | Fr, Pr | Fr, Pr | Fr, Pr | Fr, Pr | |
| 1. | Is the amount of rainfall favorable for the growth coffee in this region? | 3(5) | 4(6.67) | 5(8.33) | 20(33.33) | 28(46.67) | |
| 2. | Do you believe a sufficient rainfall increase coffee product and its quality? | 3(5) | 2(3.3) | 4(6.6) | 16(26.6) | 35(58.3) | |
| 3. | Is the rainfall decreases that affect the quality of coffee | 4(6.6) | 5(6.6) | 2(3.3) | 20(33.3) | 29(48.3) | |
| 4. | Is the moderate amount of temperature (15-20c°) essential for coffee growth and quality? | 2(3.3) | 5(8.3) | 6(10) | 30(50) | 15(25) | |
| 5. | Do you believe humidity will have an effect on the coffee quality? | 4(6.6) | 7(11.6) | 3(5) | 34(56.6) | 12(20) | |
| 6. | Is the altitude from 550-2720m above sea level favorable for the growth and quality of coffee? | 2(3.3) | 3(5) | 6(10) | 29(48.3) | 20(33.3) | |
| Mean (Average) | | 3(4.97) | | | | 25(39) | |

Source: Researcher's field survey, 2016.

Fr=frequency, Pr=percentage, SDAG=Strongly Disagree DAG=Disagree UD=Undecided AG=Agree, SAG=strongly agree.

As it is indicated in the above Table 4.3; majority or 25 (39%) of the total respondents responded as the amount of rainfall, temperature, humidity and altitude were the natural factors that had been affecting on the coffee quality and market performance; whereas, few or 3 (4.9%) of the total respondents were respond as they didn't agree that natural factors affecting the quality of coffee.

So, standing from these responses of respondents the researcher concludes that the above natural factors had been affecting the coffee product quality and in turn on coffee market value.

AS shown in the above Table 4.3 question-3, respondents were asked whether or not the amount of rainfall availability at SNNPRS affect the quality the coffee product and in turn put effect on the market performance; Among 60 respondents, 3(5%) replied strongly disagree, 4(6.6%) replied disagree, 5(8.3%) replied undecided 20(33.3%) replied agree and 28(46.6%) replied strongly agree. Among these the majority (46.6%) of the respondent replied strongly agree. This, in other words, means the amount of rainfall available at the described region (SNNPRS) was very favorable or could positively affect for good coffee growth and in turn contributes on good coffee quality product.

As shown in the above table question-4; respondents asked about whether or not sufficient rainfall increases coffee quality, 3(5%) of the total respondents replied strongly disagree, 2(3.3%) of the total respondents answered disagree, 4(6.6%) of the respondents replied undecided, 16(26.6%) of the respondents replied agree, and 35(58.3%) of respondents replied strongly agree. From this data we can understand that majority (of which (35 (58.3%)) of the respondents replied as they strongly agree to the sufficient amount of rainfall positively affect the quality of coffee and in turn increase its market performance.

Regarding to respondents response on whether or not moderate amount of temperature (15-20c°) essential for coffee growth and quality; they indicated their level of agreement and disagreement as follows, 2(3.3%) replied strongly disagree, 5(8.3%) answered disagree, 6(10%) answered undecided, 30(50%) answered agree, and 15(25%) replied as they strongly agree. Standing from their responses the researcher can conclude that more than 50 percent of the respondent replied that agree so that moderate amount of temperature is favorable for coffee growth and to harvest quality coffee.

Regarding to the question which respondents asked whether or not less (small) amount of rain would affect the quality of coffee; they, then, responded as: 4(6.6%) of respondents answered as they strongly disagree; 5(6.6%) of the respondents answered as they disagree; 2(3.3%) of the respondents answered as they agree; 20(33.3%) of the respondents replied undecided; and the remain 29(48.3%) of the respondents replied strongly agree.

This implied that 48.3% or majority of the respondents showed as they strongly agree. This in turn shows that small amount of rainfall decrease productivity and it also decrease the quality coffee product.

From the above table respondents were asked about whether or not humidity would affect the quality of coffee product and in turn on its market performance; they indicated their level of agreement and disagreement as follows.

Among 60 total respondents 4(6.6%) of the respondents answered as they strongly disagree, 7(11.6%) of them respond as they disagree, 3(5%) of the respondents replied undecided, 34 (56.6%) of the respondents answered as they agree, and the remained 12 (20%) of respondents as they strongly agree. From the above responses of respondents we can understand that majority or 56.6% of the respondents respond as they agree that humidity can affect coffee quality. So, as a researcher I can conclude that lack of humidity can affect coffee quality and market price at all.

Lastly, respondents, as shown in the above table, were asked about whether or not altitude as one factor affecting coffee quality they indicated their level of agreement and disagreement as follows. Among 60 respondents, 2(3.3%) of the respondents replied as they strongly disagree, 3(5%) respond as they replied disagree, 6(10%) respondents as they replied undecided, 29(48.3%) of respondents replied as they agree, and the remaining 20(33.3%) replied as they strongly agree.

From the above data we can understand that majority of the respondents (48%) replied as they agreed on altitude as one factor could affect the coffee growth, perhaps especially in increasing its quality.

4.3.2. Human Factors:

4.4.2.1. Factors Related to Traditional Coffee Production System

Table-4.4. Shows the Factors Related to Traditional Production System.

| No | Item | SAG | AG | UD | DAG | SDAG |
|----|---|--------|--------|--------|----------|----------|
| | Factors related to traditional production system | Fr, Pr | Fr, Pr | Fr, Pr | Fr, Pr | Fr, Pr |
| 1 | Is coffee processing increase, or decrease the quality of coffee? | 1(1.6) | 4(6.6) | 0(0) | 10(16.6) | 45(75) |
| 2 | Does your organization use motorized small scale coffee washing Stations? | 2(3.3) | 2(3.3) | 2(3.3) | 12(20) | 40(66.6) |
| 3 | Does the Experience in coffee farming and processing is a determining factor in coffee quality improvement. | 3(5) | 4(6.6) | 2(3.3) | 10(16.6) | 41(68.3) |
| 4 | Do you agree traditional shipping loses the quality of coffee? | 1(1.6) | 2(3.3) | 6(10) | 9(15) | 42(70) |
| 5 | Does increase quality of coffee using raised drying beds? | 2(3.3) | 3(5) | 0(0) | 8(13.3) | 47(78.3) |

Source: Researcher's field survey, 2016.

Fr=frequency, Pr=percentage, MN=Mean, SDAG=Strongly Disagree DAG=Disagree UD=Undecided AG=Agree, SAG=strongly agree.

As indicated in the above Table 4.4, the researcher gather data regarding factors related to traditional production system provided with five items constitute all questions regarding on traditional production system market performance and coffee quality.

From the above Table 4.4 Item 1, respondents were asked whether or not coffee processing decrease the quality of coffee and in turn affect the market performance it would have, they indicated their level of agreement and disagreement as follows.

Among the 60 respondents: 1(1.6%) of the respondents replied as they strongly disagree, 4(6.6%) of the respondents replied disagree, 0(0%) of the respondents replied undecided, 10(16.6%) of the respondents replied agree and the remaining 45(75%) of the respondents replied s they strongly agree on the coffee processing can make decrease on quality of the coffee. This implied that 75 percent of the respondents could respond the way of coffee processing affect coffee quality and in turn decreases its market performance. This, thus, can show us agricultural professionals and community should do their jobs necessary to proof good quality coffee processes and in turn proofing on resulting on good coffee market performance for.

As shown the data from the above Table 4.4: Item-2, respondents (coffee suppliers) were asked question whether or not coffee washing Stations affect quality of the coffee product on market performance; they, thus, respond as follows. From the total 60 respondents, 2(3.3%) of them replied strongly disagree, 2(3.3%) replied disagree, 2(3.3%) replied undecided, 12(20%) replied agree and 40(66%) replied strongly agree.

This implied that majority (40 percent) of the respondents or suppliers believe that ways of washing process have impact on the coffee quality and so that they use modern motorized washing instruments and have their own washing stations. From the responses of respondents the researcher can conclude that the way which suppliers or coffee producers who directly provide coffee products to the market should have use good washing mechanisms in order to provide quality coffee.

Regarding to the question which respondents were asked about whether or not experience on coffee farming and processing is a determining factor in coffee quality improvement; among the total 60 respondents 3(5%) of respondents replied strongly disagree, 4(6.6%) replied disagree, 2(3.3%) replied undecided, 10(16.6%) replied agree and 41(68.3%) replied strongly agree. This implies that, 68.3 percent of 68 percent of the respondents has experience of coffee farming and processing.

The other traditional factor on which respondents were asked about whether or not traditional shipping or transporting coffee product could minimize or reduce the quality of coffee; they, then, responded as follows. Among the total 60 respondents, 1(1.6%) replied strongly disagree, 2(3.3%) replied disagree, 6(10%) replied undecided, 9(15%) replied agree and, 42(70%) replied strongly agree. This implies that majority (of which 70 percent among the total) of respondents' respond as the traditional shipping or traditional transportation system could reduce the quality of coffee.

Lastly, from the above Table 4.4 respondents were asked about whether or not coffee usage raised dry beds, they responded as follows. Among the total 60, 2(3.3%) were strongly disagree, 3(5%) of the respondents replied disagree, 0(0%) of the respondents replied undecided 8(13.3%) replied agree and, the remaining 47(78.3%) of the total respondents replied strongly agree. This in turn implied that majority or 78.3 percent of the respondents were assure using raised beds increase the quality of coffee by responding as they strongly agreed and accepted. This in turn implied that preparing good coffee bed usage had have an impact on determine the coffee quality product.

4.3.3. Factors Related to Lack of Warehouse

Table-4.5. Shows the factors related to Lack of warehouse (storage).

| No | Item | SAG | AG | UD | DAG | SDAG |
|----|---|--------|--------|--------|----------|----------|
| | Factors related to Lack of warehouse (storage) | Fr, Pr | Fr, Pr | Fr, Pr | Fr, Pr | Fr, Pr |
| 1. | Is lack of cleanliness of the warehouse will definitely have an impact on the coffee taste? | 2(3.3) | 2(3.3) | 4(6.6) | 6(10) | 46(76.6) |
| 2. | Do you agree using different containers for different coffee Qualities to keep the quality of coffee? | 3(5) | 6(10) | 2(3.3) | 37(61.6) | 12(20) |
| 3. | Is coffee product needs special warehouse store before taking to market? | 4(6.6) | 2(3.3) | 1(1.6) | 17(28.3) | 36 |
| 4. | Do you believe storing coffee in separate storage, rather than together with other commodities? | 0(0) | 5(8.3) | 0(0) | 9(15) | 46(76.6) |
| 5. | Does your organization use clean and separate coffee store floor? | 0(0) | 1(1.6) | 0(0) | 11(18.3) | 48 |

Source: Researcher's field survey, 2016.

Fr=frequency, Pr=percentage, MN=Mean, SDAG=Strongly Disagree DAG=Disagree UD=Undecided AG=Agree, SAG=strongly agree.

As shown in the above Table 4.5, consists five items factors related to Lack of warehouse (storage) and the respondent agreement level on those items were shown as in the above Table 4.6 described. Regarding to the item number-1 respondents were asked whether or not lack of cleanness of the warehouse and the impact on the coffee taste; among the total 60 respondents: 2(3.3%) replied strongly disagree, 2(3.3%) replied disagree,

4(6.6%) replied undecided, 6(10%) replied agree, and 46(76.6%) strongly agree. This concludes that, 76.6 percent of the respondents showed their degree of agreement on the lack of cleanliness of the warehouse and the impact on the coffee taste.

As shown in the above Table 4.5, item-2 respondents were asked whether or not using different containers for different coffee can affect the coffee quality they responded as: 3(5%) of the respondents replied strongly disagree, 6(10%) of the respondents respond as they disagree, 2(3.3%) replied undecided, 37(61.6%) of the respondents replied agree and the remaining 12(20%) strongly agree. It implies that the majority of respondents, 61.6 percent, has different container for different coffee products.

As shown in the above Table 4.6, coffee product needs special warehouse to store before taking to market, they responded that, 4(6.6%) replied strongly disagree, 2(3.3%) replied disagree, 1(1.6%) replied undecided, 17(28.3%) replied agree and 36(60%) strongly agree. It implies that, 60 percent of the respondents strongly agreed and accepted coffee product needed special warehouse that make concrete floor rather than other products.

Regarding to the usage of clean and separate coffee store floor, they responded that, 0(0%) replied strongly disagree, 1(1.6%) replied disagree, 0(0%) replied undecided, 11(18.3%) replied agree, and 48(80%) replied strongly agree. It implies that, 98% percent of respondents answered as they strongly agreed and agreed. This in turn implied that coffee product stored separately from other commodity products can make a difference on the coffee quality product and coffee market performance.

4.3.4. Factors Related to Lack of Transportation

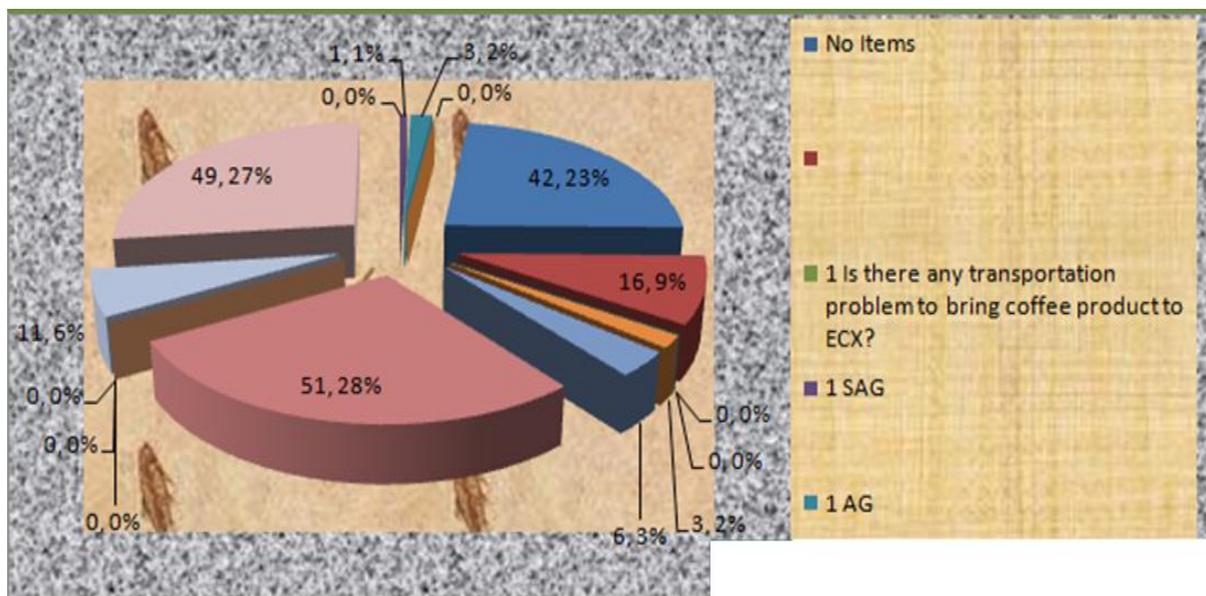


Figure-4.2. Shows the factors related to lack of transportation.

Source: Researcher's Field survey.

Fr=frequency, Pr=percentage, MN=Mean, SDAG=Strongly Disagree DAG=Disagree UD=Undecided AG=Agree, SAG=strongly agree.

As shown in the above Figure 4.2 consisted three questions related to the problem of Lack of transportation. Respondents were asked about whether or not lack of transportation affects coffee quality and its market performance, they responded as follows. Among the total 60 respondents 1(1.6%) replied strongly disagree, 3(5%) replied disagree, no one replied undecided, 42(70%) replied agree and 16(26.6%) replied strongly agree. It implies that, 97 percent of respondents respond as they agreed and strongly agreed. This in turn showed that lack of transportation can affect the quality of coffee product and in turn coffee market performance.

Regarding to quality of coffee decrease due to the harvesters use traditional means of transportation they, responded that, no one replied strongly disagree or disagree, 3(5%) undecided, 6(10%) agree, and 51(85%) strongly agree. This implied that majority (95%) of the respondents or the supplier showed their level of agreement traditional means of transportation affect coffee quality. Regarding to using modern transportation system relates to quality of product, they responded that no one replied strongly disagree, or disagree, or undecided, 11(18.3%) replied agree (%) and 49(81.6%) replied strongly agree. This implied that majority (99.9%) of respondents were agreed and accepted modern transportation increase the quality of coffee.

4.3.5. Factors Related to Lack of Grading, Quality Assurance and Marketing Performance

Table-4.6. Factors related to lack of Grading & quality assurance & Marketing performance.

| No | Item | SAG | | AG | | UD | | DAG | | SDAG | |
|----|---|-----|------|----|------|----|-----|-----|------|------|------|
| | | Fr | Pr | Fr | Pr | Fr | Pr | Fr | Pr | Fr | Pr |
| 1 | Do you believe the improvement of coffee quality can increase value added gained to the farmers. | 0 | 0 | 4 | 6.6 | 6 | 10 | 32 | 53.3 | 18 | 30 |
| 2 | Does a current coffee processing method increase the quality? | 2 | 3.3 | 2 | 3.3 | 6 | 10 | 30 | 50 | 16 | 26.6 |
| 3 | Do you agree sorting can improve the quality of coffee when harvesting and shipping? | 3 | 5 | 4 | 6.6 | 0 | 0 | 13 | 21.6 | 40 | 66 |
| 4 | Do you agree to buy coffee you should be check its quality? 1. Through observation and judgment 2. by checking with laboratory and sample tasting 3. No means of checking 4. Others | 0 | 0 | 0 | | 0 | 0 | 15 | 25 | 45 | 75 |
| | | | | | | 0 | 0 | 10 | 16.6 | 50 | 83.3 |
| | | | | | | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | Do you believe the quality of coffee related to market performance? | 2 | 3.3 | 6 | 10 | 0 | 0 | 11 | 18.3 | 41 | 68.3 |
| 6 | Lack of market information | 12 | 20 | 25 | 41.6 | 3 | 5 | 10 | 16.6 | 10 | 16.6 |
| 7 | Lack of market access | 14 | 23.3 | 30 | 50 | 5 | 8.3 | 6 | 10 | 3 | 5 |
| 8 | Lack of continuous product improvement | 2 | 3.3 | 2 | 3.3 | 0 | 0 | 12 | 20 | 44 | 73.3 |

Source: Researcher's field survey, 2016.

Fr=frequency, Pr=percentage, MN=Mean, SDAG=Strongly Disagree DAG=Disagree UD=Undecided AG=Agree, SAG=strongly agree.

As indicated in both the above Table 4.6 and the above Figure 4.3, respondents were asked about whether or not factors related to lack of Grading, quality assurance & Marketing performance they show their level of agreement as follows. Among the total 60 respondents, no one (0%) of the respondents replied strongly disagree, 4(6.6%) of the respondents replied disagree, 6(10%) of the respondents replied undecided. From these data we can see that majority or 50 (83.3%) of the respondents respond as they agree and strongly agree. This implied that the improvement of coffee quality can increase the value added gained to the farmers.

Regarding to the question which respondents were asked about whether or not current coffee processing method increase the quality of coffee product they answered as follows. Among the total 60 respondents, 2(3.3%) of them respond strongly disagree 2(3.3%) of them respond disagree 6(10%) of the respondents respond undecided, 30(50%) of them respond agree and the remaining 16(26.6%) respond as they strongly agree. This implies that majority or 46 (76.6%) of respondents agreed and strongly agreed on the current coffee processing increases the quality of coffee product and in turn on the coffee market performance.

Regarding to the question which respondents were asked about whether or not sorting can improve the quality of coffee when harvesting and shipping, they indicate the level of agreements and disagreement as follows: among 60 respondents, 3(5%) replied strongly disagree, 4(6.6%) replied disagree, no one replied undecided, 13(21.6%) replied agree and 40(66.6%) replied strongly agree. It implies that 53 (88.2%) of the respondents sorting can improve the quality of when harvesting and shipping.

As shown the above Table 4.6 and Figure 4.3, regarding to check up coffee quality they response through observation and judgment, they responded that, no one replied strongly disagree, disagree, and undecided, but 15(25%) agree and 45(75%) strongly agree and by checking with laboratory and sample tasting they replied that, none of the replied strongly disagree, replied disagree, replied undecided, but out of 60 respondents, 10(16.6%) agree and 50(83.3%) strongly agree. This implies that, 60 (100%) of the respondents respond as the quality of coffee could be checked by using laboratory as well as by the observation of the coffee bean.

Regarding to quality of coffee related to market performance, among the total 60 respondents, 2(3.3%) of them replied strongly disagree, 6(10%) of them replied disagree, none of them replied undecided, 11(18.3%) of them replied agree and, the remaining 41(68.3%) replied strongly agree. It implied that majority or 52 (86.6%) of the respondents the quality of coffee related to the market performance.

Regarding to the question asked about whether or not there was lack of transportation access they responded that, 12(20%) of the total respondent replied strongly disagree, 25(41.6%) of the total respondent replied disagree, 3(5%) of the total respondent replied undecided, 10(16.6%) of the total respondent replied agree and the remaining 10(16.6%) replied strongly agree. So, according to the responses of the respondents from the above Table 4.6 and Figure 4.3, majority of the respondents or 37 (61.6%) of the respondents replied as they disagree and strongly disagree and this in turn implied that there is access to transportation.

Finally, the other issue which respondents were asked is related to market access, and thus, they responded as follows. Among the total 60 respondents: 14(23.3%) of them respond as they strongly disagree, 30(50%) of them respond as they disagree, 5(8.3%) of them respond as they undecided, 6(10%) of them respond

as they, and the remaining 3(5%) of the respondents respond as they strongly agree. This implied that majority or 44 (73.3%) of the respondents respond as they have accesses timely and accurate market information. This result on the supplier's makes skill gap to access the currently local and international market information.

Regarding to Lack of continuous product improvement, they responded that, 2(3.3%) of the respondents respond as they strongly disagree, 2(3.3%) of them respond as they disagree, no one of them respond undecided, 12(20%) of them respond as they agree and the remaining 44(73.3%) of them respond as they strongly agree. This implied that majority or 56 (93.3%) of respondents respond as there is lack of continuous product improvement.

4.4. Data Presentation of the Past Three Year's Experience on Market Price Performance of ECX Hawassa Branch (Gathered from Secondary Data):

4.4.1. Piece Value of Coffee Product of Hawassa Branch on 2013:

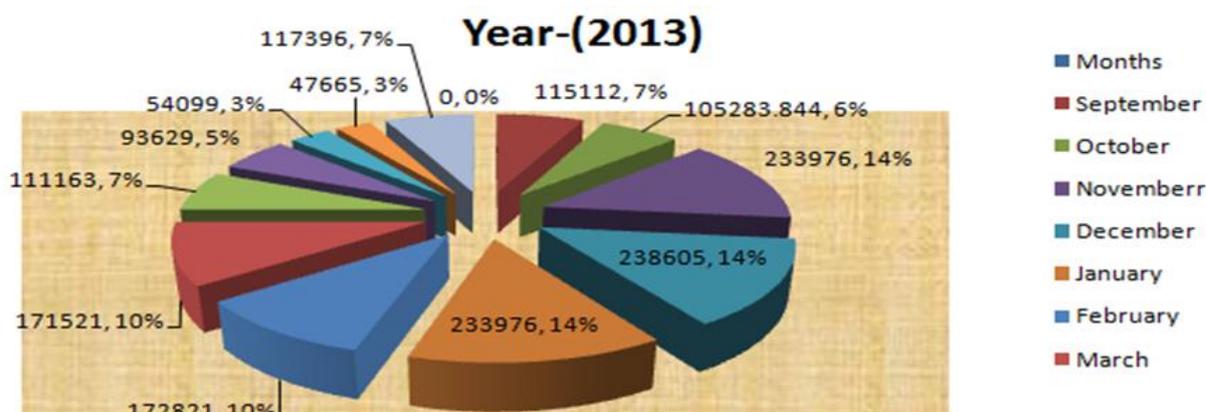


Figure-4.4. shows the sales and price value fo coffee in each months of 2013.
Source: Research's Field Survey, 2016.

As it is showed on the above Figure 4.4 the market data of ECX Hawassa branch described that the market value or price of the coffee is at first months it remain stagnant but after later months it increases (September-5%, October-7%, January-7%, February-10%, and march-10%, etc).

This shows that, as far as there was a market system improvement, advancement in technology, transportation facility the coffee price also improves the same as it is shown on the primary data gather from respondents. So, the factors described in previous sections were determinant and very real to contribute on the coffee quality products and in turn on the coffee market performance.

4.4.2. Peice value of coffee product of Hawassa Branch on 2014:

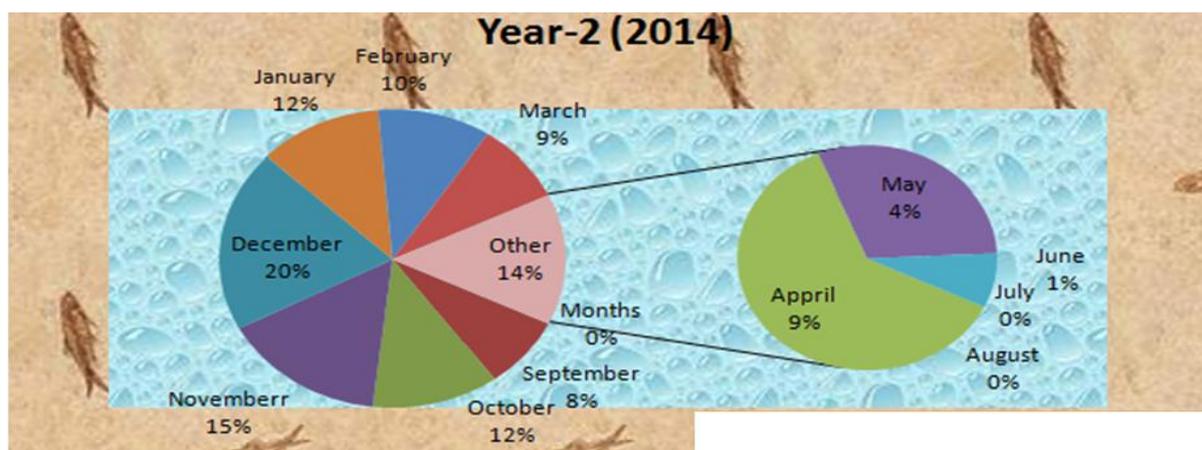


Figure-4.5. shows the sales and price value of Coffee in each month of 2014.
Source: Researcher's Field Survey, 2016.

As it is showed on the above Figure 4.4 the market data of ECX Hawassa branch showed that the market value or price of the coffee is came increasing the whole months though it fluctuates in among some months. This in turn describe that the market performance of the coffee product is applicable time to time (which is September-8%, October-12%, November-15%, January-10%, February12%, etc) like it is described in previous section by the respondents in the primary data.

This shows that, as far as there was a market system improvement, advancement in technology, transportation facility the coffee price also improves the same as it is shown on the primary data gather from respondents. So, the factors described in previous sections were determinant and very real to contribute on the coffee quality products and in turn on the coffee market performance. And because of the positive effect of the factors described above the coffee price was continued increasing from month to month.

4.4.3. Price Value of Coffee Product of Hawassa Branch on 2015:

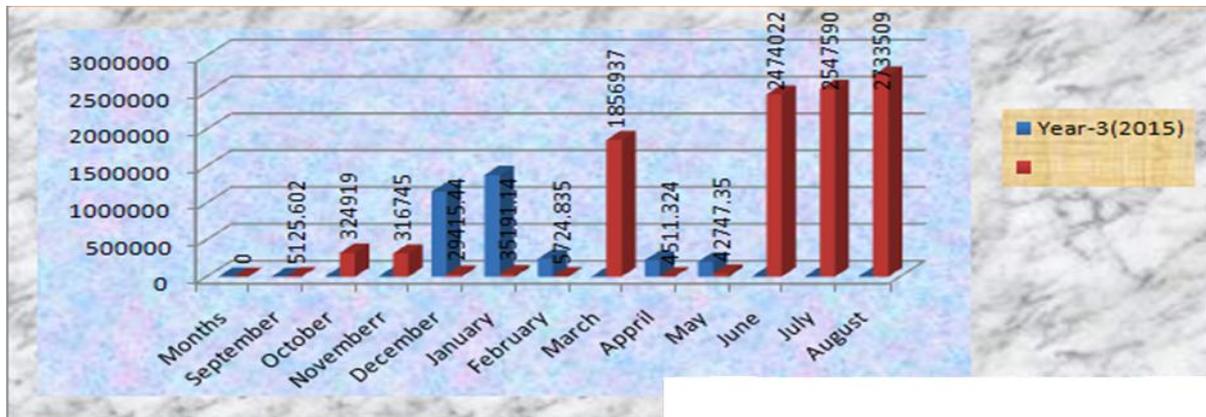


Figure-4.6. shows the sales and price value of Coffee in each months of 2015.
Source: Researcher's Field Survey, 2016.

As it is showed on the above Figure 4.6 the market data of ECX Hawassa branch demonstrated that the market value the coffee was increasing though it was put in only weight the amount of weight sold is showed increasing from month to month like the previous 2 years.

This shows that, as far as there was a market system improvement, advancement in technology, transportation facility the coffee price also improves the same as it is shown on the primary data gather from respondents. So, the factors described in previous sections were determinant and very real to contribute on the coffee quality products and in turn on the coffee market performance.

4.5. Analysis and Interpretation of Semi-Structured Interview Data

This section is aimed at investigating the attitudes of the branch managers towards the factors of coffee quality product and marketing performance. To this end basic questions regarding the profile of ECX and when it was found, problems before and after ECX established coffee suppliers (traders) faced, ECX and the modern marketing system, how ECX give service to their customers, factors affect coffee quality, How to improve coffee marketing, new marketing system and benefit coffee supplier, addressing service for all suppliers and finally suggestion those problems.

The interview was started with personal details of respondents such as sex, age, years of experience, educational qualification and position. With respect to the sex of respondents, four male and three female interviewees were participated. Regarding the work position of interviewees in the ECX, all of them were from managerial position and with respect to educational qualification all were degree holders were participated in the semi-structured interview.

The interview was constituted ten semi-structured questions and their response are narrated and interpreted one by one as under. Regarding to the foundation of ECX, as they explain, after enactment of the new coffee proclamation in August 2008, the ECX started trading the agricultural commodities like coffee, sesame, and beans. The main reason for establishing ECX was to eliminate the huge number of middlemen involved in coffee distribution and to enable coffee farmers to benefit from prevailing market prices. Before ECX was established agricultural markets in Ethiopia had been characterized by high costs and high risks of transacting, forcing much of Ethiopia into global isolation. With only one third of output reaching the market, commodity buyers and sellers tended to trade only with those they knew, to avoid the risk of being cheated or default. Trade is done on the basis of visual inspection because there was no assurance of product quality or quantity, this drove up market costs, leading to high consumer prices. Regarding the modern marketing system and ECX, they responded that, the Ethiopian Commodity Exchange was started to benefit and modernize the way Ethiopia was trading its most valuable assets, its commodities. Ethiopia needed a change from the traditional means of trading to better support the needs of all those involved in the trading and production.

Regarding to service to their customers, they responded that, Now a day's, ECX delivered the exchange include a trading floor in Addis Ababa, and it has 19 warehouse deliver location in major market towns in Ethiopia. Its warehouses provide Sampling, Grading, weighing and certifying service of the grain and coffee

product coming to each warehouse using equipment provided and issuing Electronic Goods Received Note which matches ECX automated system.

Regarding the factors affecting coffee quality, they respond that Coffee quality is a complex characteristic which depends on a series of factors such as the species or variety (genetic factors), environmental conditions (ecological factors), agronomical practices (cultivation factors), processing systems (post harvest factors), storage conditions, industrial processing, preparation of the beverage and taste of the consumer .Coffee quality is of critical importance to the coffee industry.

Regarding improvement coffee product and the market system, they respond that human being and are a key factor in determination of the end quality of a coffee. Furthermore, inadequate systems of harvesting, processing, storage and transportation are responsible for the wide spread failure to maintain the inherent quality of coffee produced in Ethiopia.

Regarding new marketing system and benefit coffee supplier, they respond that the Ethiopian commodity exchange (ECX) is a commodity exchange and modern trading system that protect the rights and benefits of seller , buyers, intermediaries and the general public.

Respondents were asked to suggest possible solutions to cope up with the cited problems in their suppliers. Accordingly, they suggested the solution that all stakeholders, the issue must be lifted at national level to make all stakeholders aware about the problems so that the issue can be perceived as a common enemy. This strategy can be realized by increasing communication to all stakeholders by various forms of media, such as seminars, workshops, meetings, and publications in mass media mass.

5. Summary, Conclusion and Recommendations

5.1. Summary

This chapter has been devoted to discuss the major findings, conclusion and recommendations based on the analysis and interpretation of the data which the study was undertaken with the prime objective of assessing as well as evaluating the coffee product on the marketing performance. Coffee product is an economically important commodity which is contributing the highest of all export revenues in Ethiopia. Coffee being the major cash crop of the SNNPRS, as well as Oromiya region and serves as a major means of income for the livelihood of coffee farming families

Despite the favorable climatic conditions, variety of local coffee types for quality Improvement and, its poor quality due to traditional and poor pre and post harvest practices which are still used by majority of the coffee farmers. Coffee quality is a complex characteristic which depends on a series of factors such as Environmental factors and human factors (farming practice), processing systems (pre-harvest and post harvest factors), Storage conditions, preparation of the beverage and taste/preference of the consumer.

Because of these things the research started to study on identifying the real factors affecting the quality of coffee product and in turn on market performance of coffee products and setting different objectives and in turn pass via investigating on it. The researcher used different methodologies, applied them, and came up with different results as described in the above chapter.

The researcher, at finally concluded the investigation with the following conclusions and recommendations. The researcher by standing from the findings he came with this research, advised that the concerned body should have to follow on the personal recommendations and in turn came up with increasing coffee quality product and its market performance.

5.2. Conclusion

Suppliers and Cooperative unions is expected to play crucial role in the rural part of the country to speed up coffee productivity through marketing performance of agricultural input and outputs for the coffee grower. Agricultural cooperatives and individual suppliers are organized to render by provide services such as sharing Information, and giving credit services and facilitate the accessibility of the market.

This study attempted to identify factors affecting marketing performance of coffee product and the relationship between those variables and the performance of suppliers. To accomplish this study both primary and secondary sources that combine qualitative and quantitative data were used. Therefore, based on the determined factors the aim of the study was to propose the recommendations for the better improvement of the supplier's performance.

The study tried to investigated factors that would be influenced the marketing performance of the ECX and the existing relationship between the dependent and independent variables on this study and the research output showed that all variables have positive and statistically significant effect on the performance of the coffee market.

Hence, the study comes up with the following conclusion; the demographic factors of the study were found that there is a positive relation between independent and dependent variable which is performance of suppliers in terms of member's transaction. More precisely, the study argues that supplier should give due attention to Environmental and human (farming) factors, that affect the quality of coffee product. To generalizing shortly from the presented data, the researcher can understands that the factors who were asked from the respondents, gather and analyzed above were the real or the existed factors as expected and

hypothesized at the beginning of this investigation in chapter one. There are different results that the researcher at final came up, as it is described above in the data presentations. Such as:

1. Natural factors like:

- Altitude as one factor could affect the coffee growth, perhaps especially in increasing its quality;
- The amount of rainfall available at the described region (SNNPRS) was very favourable or could positively affect for good coffee growth and in turn contributes on good coffee quality product;
- Sufficient amount of rainfall positively affect the quality of coffee and in turn increase its market performance;
- moderate amount of temperature is favourable for coffee growth and to harvest quality coffee;
- That small amount of rainfall decrease productivity and it also decrease the quality coffee product;
- Lack of humidity can affect coffee quality and market price;
- Natural factors had been affecting the coffee product quality and in turn on coffee market value;

2. Human factors like:

- agricultural professionals and community should do their jobs necessary to proof good quality coffee processes and in turn proofing on resulting on good coffee market performance for;
- good washing mechanisms in order to provide quality coffee;
- Experience of coffee farming and processing has good result on good quality coffee product;
- Traditional shipping or traditional transportation system could reduce the quality of coffee
- Using raised bed using can raised quality of coffee product;

3. Lack of excess transportation like:

- lack of Grading, quality assurance & Marketing performance;
- The current good coffee processing system increases the quality of coffee product and in turn on the coffee market performance;
- The presence of good harvesting and shipping system;
- The system of quality check by using laboratory as well as by the observation of the coffee bean;
- The current accessibility of timely transporting system;
- Lack of continuous product improvement; etc increases the quality of coffee product and in turn on the coffee market performance

4. Lack of having warehouse: and

- 5. Lack of good Grading, Quality assurance and Marketing performance,** were the factors studied and being found real one in putting effect on the quality of coffee product and in turn market performance of Coffee in Ethiopia, perhaps especially in Hawassa Branch.

5.3. Recommendations

The researcher as described above finally came up what were the real factors which can put effect on quality of coffee products and in turn market performance. As we it is described above coffee product is the back bone of our country Ethiopia. it is also the main income generating of farmers or suppliers described on this investigation in the region.

On the basis of finding and conclusion reached in this study, to enhance the performance of suppliers in coffee marketing the researcher believes that giving due attention and an in-depth analysis of the following recommendations can reduce the poor market performance of coffee product in the region particularly and the country at all.

The researcher, therefore, would like to forward to all the concerned body (could be the supplier themselves, members, concerned government stakeholder, non-government organization and other stakeholders) who strive to improve supplier performance in marketing should apply the following recommendations. These are:

❖ **Controlling Natural factors like. Such as:**

- Selecting altitude based coffee type and tried to adopt it there in growing coffee as much as possible suitable it and help supplier to adhere on it;
- Studying The amount of rainfall available to the extent the specific type of coffee product needed and following through it;
- Choose regions, areas, or other specific places with Sufficient amount of rainfall to cultivate and produce coffee product;
- Choose moderate amount of temperature for coffee growth and to harvest quality coffee;
- Avoid areas with lack of rainfall and Lack of humidity for coffee production;

❖ **Manage and correct towards the human factors which likely affect coffee product. Such as:**

- Trained and employee professionals who have agricultural and community production skills;
- Adhering good washing mechanisms while coffee washing is needed;

- Experience of coffee farming and processing has good result on good quality coffee product;
 - Avoid traditional shipping or traditional transportation systems while transporting coffee to the market or vice verbally adhere towards using modern transporting system;
 - Applying the technique of raised bed using sorting and drying mechanism while drying and packing coffee product;
- ❖ **Improve the accessibility of transportation system like:**
- Provide efficient Grading, quality assurance & Marketing performance system ;
 - Continue with the current good coffee processing system;
 - Always adhere with good harvesting and shipping system available now;
 - Improve system of quality check by using laboratory as well as by the observation of the coffee bean;
 - Strengthening and continued the current timely accessible transporting system;
- ❖ Provide sufficient warehouse; and
- ❖ Finally create good Grading, Quality assurance and Marketing performance;
- ❖ Government should avoid other factors Problem of market which would not solved only by the participants or the suppliers, perhaps especially not stated by the researcher here if applicable;
- ❖ Finally, overall recommendation, the study has suggested present that, all stakeholders, the issue must be lifted at national level to make all stakeholders aware about the problems so that the issue can be perceived as a common enemy. This strategy can be realized by increasing communication to all stakeholders by various forms of media, such as seminars, workshops, meetings, and publications in mass media mass.

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Appendixes -A

My name is Asfaw Takele and the objective of this questionnaire is to get data on the factors affecting coffee quality on market performance of ECX. Your cooperation to provide data will be needed to accomplish this research paper on the above elaborated title, the relevant information that you will provide to the exact answers plays a crucial role in achievement of this work. Hence, you are kindly requested to answer each question honestly and accurately. The information you provide will be kept with secret. Your name not expected to write your name on this questionnaire.

The General Instructions: Please go through each question patiently and genuine answer by making a tick – the box and table provided where you want to indicate you can choose only one answer.

Part one: Demographic characteristics of the respondents

1. Would you indicate your sex? 1 .Male 2.Female
2. Would you indicate your age?

| | | | | | | | |
|-------|--------------------------|-------|--------------------------|-------|--------------------------|----------|--------------------------|
| 18-25 | <input type="checkbox"/> | 26-35 | <input type="checkbox"/> | 36-45 | <input type="checkbox"/> | above 45 | <input type="checkbox"/> |
|-------|--------------------------|-------|--------------------------|-------|--------------------------|----------|--------------------------|
3. Would you indicate you're of work experience years?

| | | | | | | | | | |
|-------------|--------------------------|-----------|--------------------------|-----------|--------------------------|------------|--------------------------|-------------|--------------------------|
| Below 1year | <input type="checkbox"/> | 1-2 years | <input type="checkbox"/> | 3-5 years | <input type="checkbox"/> | 6-10 years | <input type="checkbox"/> | 5. 11 above | <input type="checkbox"/> |
|-------------|--------------------------|-----------|--------------------------|-----------|--------------------------|------------|--------------------------|-------------|--------------------------|
4. Would you indicate your educational level? Illiterate Read and write only

10th & 12th complete 2. Certificate 3. Diploma 4. Degree 5. Master

Part II: information on quality of coffee product on marketing performance facing ECX.

1. Please, indicate your level of agreement whether the following factors are affecting the market performance of your business or not? (Use rating Likert–Scale of five point. 1.strongly disagree 2.disagree 3.undecided 4.agree 5.strongly agree& put √ mark in the place provided)

| No | Factors affecting coffee quality | Strongly Disagree | Disagree | Undecided | Agree | Strongly Agree |
|-----|--|-------------------|----------|-----------|-------|----------------|
| 1. | 2.Environmental factors 2.1.Amount of rain fall Is the amount of rainfall favorable for the growth coffee in this region | | | | | |
| 2. | Do you believe a sufficient rainfall increase coffee product and its quality? | | | | | |
| 3. | Is the rainfall decreases that affect the quality of coffee? | | | | | |
| 4. | 2.2.Temperature Is the moderate amount of temperature (15-20c°) essential for coffee growth and quality? | | | | | |
| 5. | Do you believe temperature and humidity will have an effect on the coffee quality? | | | | | |
| 6. | Is a variation in temperature can make a big difference in the coffee quality | | | | | |
| 7. | 2Altitude Is the altitude from 550-2720m above sea level favorable for the growth and quality of coffee? | | | | | |
| 8. | 3.Human Factors 3.1.Traditional production system | | | | | |
| 9. | Is coffee processing increase or decrease the quality of coffee? | | | | | |
| 10. | Does your organization use motorized small scale coffee washing Stations? | | | | | |
| 11. | Does the Experience in coffee farming and processing is a determining factor in coffee quality improvement. | | | | | |
| 12. | Do you agree traditional shipping loses the quality of coffee? | | | | | |
| 13. | Does increase quality of coffee using raised drying beds? | | | | | |
| 14. | 3.2.Lack of warehouse (storage) | | | | | |
| 15. | Is lack of cleanliness of the warehouse will definitely have an impact on the coffee taste? | | | | | |
| 16. | Do you agree using different containers for different coffee Qualities to keep the quality of coffee? | | | | | |
| 17. | Does your organization buy coffee directly from farmers through agents? | | | | | |
| 18. | Is coffee product needs special warehouse store before taking to market? | | | | | |
| 19. | Do you believe storing coffee in separate storage, rather than together with other commodities? | | | | | |
| 20. | Does your organization use clean and separate coffee store floor? | | | | | |
| 21. | 3.3.lack of transportation | | | | | |
| 22. | Is there any transportation problem to bring coffee product to ECX? | | | | | |
| 23. | Is quality of coffee decrease due to the harvesters use traditional means of transportation? | | | | | |
| 24. | Do you agree using modern transportation system relates to quality of product? | | | | | |
| 25. | lack of Grading & quality assurance | | | | | |
| 26. | Do you believe the improvement of coffee quality can increase value added gained by the farmers. | | | | | |
| 27. | Does a current coffee processing method increase the quality? | | | | | |
| 28. | Do you agree sorting can improve the quality of coffee | | | | | |

| | | | | | | |
|-----|--|--|--|--|--|--|
| | when harvesting and shipping? | | | | | |
| 29. | Do you agree to buy coffee you should be check its quality? 1. Through observation and judgment 2. by checking with laboratory and sample tasting 3. No means of checking 4. Others_____ | | | | | |
| 30. | 4. Marketing performance | | | | | |
| 31. | Do you believe the quality of coffee related to market performance? | | | | | |
| 32. | Lack of market information | | | | | |
| 33. | Lack of market access | | | | | |
| 34. | Lack of continuous product improvement | | | | | |
| 35. | Do you agree using different containers for different coffee Qualities to keep the quality of coffee? | | | | | |

What do you suggest about the solution to overcome these problems?

Thank you again and again for taking your valuable time to respond the question!!!

Appendix- B

Semi Structured Interview for ECX managers and operator.

Part I: Background Information

Name of the person: _____

Name of the organization: _____

Position level of education: _____

Gender: Male Female

Part II: General Questions

1. What means, ECX and when it was found?

2. What problems coffee harvesters (traders) faced before the establishment of ECX?

3. Does ECX the market system brought change in the modern market?

4. What service ECX give for their customers?

5. In your opinion, what factors affect coffee quality?

6. Please suggest methods for improving coffee marketing.

7. Does the new system benefit coffee supplier?

8. Do you think ECX fully addressed the need of coffee suppliers?

9. What do you suggest as a solution to those problems?

10. What Is the ECX vision?
