Department of Logistics and Supply Chain Management

A Master Thesis

on

Opportunities of Coffee Value Chain Activities from Farmers to Local Roasting Companies: In the case of farmers Gomma woreda and selected local roasting Companies in Addis Ababa

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Declaration

I, the under signed, declare that this thesis entitled “Opportunities of coffee value chain activities from farmers to local roasting companies in the case of farmers in Jimma zone, Gomma woreda and some selected local roasting companies in Addis Ababa”, is my original work and to the best of my knowledge has not been presented for a degree by any other person, and that all the sources of material used for the thesis have been duly acknowledged.

Declared by: Name: Abnet Gelan

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ADDIS ABABA UNIVERSITY, SCHOOL OF COMMERCE DEPARTMENTS OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT

Opportunities of Coffee Value Chain Activities from Farmers to Local Roasting Company: In the case of farmers in Goma woreda and local roasting Companies in Addis Ababa

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Confirmation

This is to certify that this research work entitled " Opportunities of coffee value chain activities from farmers to local roasting companies in the case of farmers in Goma wereda and selected roasting Companies in Addis Ababa**"** is submitted in partial fulfillment of the requirements for the award of the Degree of Master of Arts in Logistics and Supply Chain Management to the College of Business and Economics, School of Commerce, Addis Ababa University, through the Department of Logistics and Supply Chain Management, done by Abnet Gelan is an authentic work carried out by him under my guidance.

Berhanu Denu (PhD) _____ _____

Name of Advisor Signature Date

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Acronyms and abbreviations

ACE-Alliance for Cup of Excellence

AGP II -the second Agricultural Growth and Plan

AM- Access to Market

COE-Cup of Excellence

COP-Chief of Party

CSA – Central Statistical Agency

DOA- District Office of Agriculture

EC- Ethiopian Calendar

ECX- Ethiopian Commodity Exchange

EU- European Union

FLRCR- Farmer and local roasting companies Relationship

FOB- Freight On Board

GP – Government Policy

HPR- Human and Physical Resource

ICO –International Coffee Organization

INFR- Infrastructure

LDC-Lou's Dreyfus company

LO- Logistics

NGO- Non- Government Organization

OCVCA- Opportunity coffee value chain activities

PRO- Productivities

ROVCA –Role of Other value chain actors

SNNPR- Southern Nation Nationality People's Region

TO.MO.CA.-Torrefazione Moderna Café

UNDP-United Nation Development Program

US- United State

USAID- United State Agent International Development

VCA- Value Chain Activities

ABSTRACT

Coffee has major impact on the world economy as the largest single commodity entering the international trade, after petroleum and petroleum products and it is being grown in more than 80 countries. The study was conducted to the opportunities of coffee value chain activities from farmers to local roasting companies in the case of farmers in Jima zone Gomma woreda and selected local roasting companies in Addis Ababa with a specific objective of to assess the coffee farmers and local roasting companies practice affect the coffee value chain in the study area, to identify the opportunities of coffee value chain in the study area, to determine the roles of others actors playing on value adding in coffee value chain on the study area and to identify the relationship between opportunities of coffee value chain and practice of coffee farmers. In order to attained these objectives, the study made use of primary and secondary data. The primary data were generated by questioner for one hundred twenty-one coffee farmers in Jimma zone Gomma woreda and interview for the selected roasting companies' officials. This was supplemented by secondary data collected from different published and unpublished sources. Descriptive statistics, correlation analysis methods were employed to analyze the data. This data analysis result show that there are challenges on farmers and local roasting companies' practices. Result from correlation analysis all independent variabilities have positive relationship with opportunity of coffee value chain activities of Jimma zone Gomma woreda, though the strength of relationship is somehow different from the dimensions involved and the study recommended that the improvement on the productivities, facilities, human & physical resource, accessibility of market, relationship and roles of other actors and flexibility of government policy will improve farmers and local roasting companies' practices and this will lead to give some good opportunities for coffee value chain activities. In addition to this the study will helps as a base for further related studies.

Key words: Opportunity, Coffee value chain, Farmers practices, Local roasting companies' practices

CHAPTER ONE

INTRODUCTION

This chapter contains the background of the study, statement of the problem, research questions, research objectives both general and specific objectives, significant of the study, scope of the study of the study under the topic of Opportunities of coffee value chain from farmers to local roasting companies in the case of farmers in Jimma zone Goma woreda and Selected roasting companies in Addis Ababa.

1.1 Background of the study

According to coffee barometer, 2018 & LDC Research, in 2018/19, Coffee farmers produced a record crop of almost 172 million 60 kg bags of this global production volume about 60% was Arabica, 40% was robusta and around 75% of global coffee production was exported. Some 10.5 million hectares were used for coffee production which was approximately 100 million people engaged in the production and processing of coffee. (coffee barometer, 2018 & LDC Research)

Coffee has major impact on the world economy as the largest single commodity entering the international trade, after petroleum and petroleum products and it is being grown in more than 80 countries. The reports of International Coffee Organization (ICO) details that coffee is supporting millions of small farmers and creates enormous employment opportunities in the rural areas. Agriculture remains to be the backbone of the Ethiopian economy contributing about 47% of GDP and providing employment to more than 80% of the rural population (World Bank, 2010).

According to data from the Central Statistical Agency (CSA, 2013), there are more than 4.22 million smallholder farmers involved in coffee production, and an additional 15 to 20 million people dependent on the industry, out of a population of an estimated 90 million. A large proportion of Ethiopian coffee is attributed to labor intensive smallholder agriculture, such that forest coffee accounts for about 10 per cent of the total coffee production, semi-forest coffee for about 30 per cent and garden coffee for about 50 per cent. The country gets its foreign exchange from exporting the agriculture product and

Coffee is the leading export product which generates a foreign exchange by exporting the product to the word. (Comtrade, September 2017). Commercializing smallholder agriculture is an indispensable pathway towards economic growth and development for most developing countries relying on the agricultural sector (Timmer, 1997).

The country coffee production comes from the regions of Oromia and Southern Regional State and the two regions contribute for about 99 % of the total coffee production (64% from Oromia, 35% from SNNP) and the remaining 1% comes from Gambela Regional State (FDRE-MOT, 2012). Coffee, Ethiopia's largest export crop is the backbone of the economy (Nicolas, 2007). Coffee has been the country's first or second ranked export earning commodity for the last five years, bringing in an average of 24 percent of Ethiopia's desperately needed foreign exchange earnings. (ICO, 2015)

A higher marketed surplus would help farmers to participate in a high value markets by increasing their level of income. Also, it would allow the country to increase its export volume.

In order to identify the Ethiopian coffee supply chain competitive advantage, coffee value chain analysis will carry out as products pass through all activities of the chain in sequence and at each activity the product gains some value (Porter, 1985). It was estimated that between 7.5 and 8 million households depend on coffee for a considerable share of their income and provides jobs for many more people in coffee-related activities of processing, transporting or marketing activities (Samuel and Eva 2008).

Ethiopia has got foreign currency from coffee export, through export the dry coffee, wet coffee as well as processed coffee product to the global market. To strength the coffee value chain there was some drawbacks when compared to other exporting countries and at the same time there are great variations on the amount of revenue generated per sack as well as per roasted products. This research was assessed the opportunities of coffee value chain from farmers in Jimma zone Gomma wored to some selected local roasting companies in Addis Ababa.

1.2 Statement of the Problem

Regardless of the importance of coffee for better income generation, local roasting companies as well as farmers in the Ethiopia continue to face a number of challenges related with Productivities practice, market related practice and other parties' roles. Even if some farmers are continuously encouraged to increase supply of coffee into the market, the low price offers forced farmers to stored their products waiting for a better price and in the reverse, the government's efforts to encourage exports, including regulations that coffee of export quality must be exported, 54 percent of Ethiopia's coffee production was consumed domestically (ICO, September 2017).

The coffee value chain actors, farmers and local roasting companies, have a challenge to process the raw coffee to get better price as well as compute in domestics and global market.

The coffee value chain, in the study area, usually do not play collective roles towards one another. Under such circumstances, a study was focus on production problems, processing problem, marketing problems, and roles and responsibilities of actors can play significant role towards the improvement of the existing system.

The research made by Bizualem et al. (2015) on analysis of marketed surplus of coffee in Jima focused only on factors affecting coffee market supply. However, the study on value chain analysis of coffee including factors affecting market outlet choice and the benefit share of different actors in the value chain will not undertake in the study area. So, this study was proposed to investigate the value chain activities of coffee produced in a specific area in Goma woreda of Jima Zone and local roasting companies with a view to uncover the weakest link of the chain, to find out and to bridge the information gap on the subject.

A review of literatures on the Ethiopian coffee value chain indicate that the sector has an enormous potential and opportunities for growth and rooms for significant improvements in its number of areas (International Coffee Council, 2015). Despite the progress made in the last two decades, the Ethiopian coffee value chain faces many challenges due to limited market outlets, limited efforts in market linkage activities and insufficient market information among actors (Dereje, 2007). Similarly, The Ethiopian coffee sector continues to face some inherent challenges that are not affected by the ECX: namely, weak

infrastructure and low productivity; and that also play an important role in the price relationships between markets (Gustafson and Hernandez, 2017). According to Karthikeyan (2015) value chain analysis extends traditional supply chain analysis by adding values to each stage of chain. This can result in which value at one stage seen as being at the expense of value at another. Over the past decades, the coffee industry has witnessed dramatic falls in the farmer share of retail price and (Girma Bayu, 2017) Role of non-government organizations which are engaged in coffee subsector positively affect coffee value chain performance in introducing new and innovative ideas that improve productivity of coffee, market linkage and quality of coffee produced. According (Alemayehu Asfaw, 2014) to improve the coffee value chain in Ethiopia and make the producers more benefited, developing strong link between the value chain actors in chain is very important. It is also important to increase coffee production, productivity, sales value and marketing by international level it needs standard quality level improvement is very important for the Ethiopian smallholder farmers, privet and public coffee producers output by using coffee production and marketing value chain governance.

The research and some International and government reports show that, the sector has had to endure various challenges, including the limited improvement in productivity, low returns for farmers, inconsistency in quality, poor agricultural practices, long supply chain and relationship among the value chain from farm to local roasting companies and the supply chain integration among the sectors and focusing the sector business on local market

Therefore, this study was to assess the opportunities of coffee value chain from farmer to local roasting company the case of To.Mo.Ca coffee, Tarara coffee and Moyee Coffee local roasting companies by focus on the partners that involved in the value chain from the farmer's stage up to local coffee roasted product to the global market by considering current practices of coffee value chain from farmers to local roasting companies by limit the overall performance of value chain of coffee and come up with specific workable solutions, roles and responsibilities of actors can play significant role towards the improvement of the existing system.

1.3. Research Question

1. How does the coffee farmers and local roasting companies' practices in the study area?

2. What are the opportunities of coffee value chain in the study area?
3. How does the role of value chain actors affect the coffee sectors practices in the study area?
4. How is the relationship between opportunities of coffee value chain and practice of coffee farmers?

1.4 Objectives of study

The study has the general and specific objectives that addressed below.

1.4.1 General objective of study

The general objective of this study is to assess the opportunities of coffee value chain from farmers to local roasting companies in the case farmers at Jimma zone gomma woreda and selected roasting companies in Addis Ababa.

1.4.2 Specific objective of the study

The specific objectives of the study are;

1. To assess the coffee farmers and local roasting companies' practices.
2. To identify the opportunities of coffee value chain in the study area.
3. To assess the roles of others actors in coffee sectors practices in the study area.
4. To identify the relationship between opportunities of coffee value chain and practice of coffee farmers.

1.5 Significance of the study

The study identifies and assess the coffee value chain from farmers to local roasting companies in the value chain, the processes involved and destination. It was also providing a general picture of the existing challenges, opportunities and entry points in the coffee value chain in the study areas. Moreover, the information provided a good lesson for the new local roasting companies on establishing process and allowing them to achieve greater effectiveness in their value adding activities. In addition, the study assisted in identifying policy interventions and/or institutional innovations to improve coffee production. This study could be a good idea for other studies on coffee value chain from farmers to domestic roasting companies.

1.6. Scope of the study

Even if the coffee value chain practices involves so many parties and it was affect the practices of all these actors directly or indirectly, but the study was only focuses on the opportunities of coffee value chain activities from farmers to local roasting companies,

Beside that the study was conducted only farmers in Jimma zone Gomma woreda and the selected local roasting companies i.e. TO.MO.CA Coffee PLC, Moyee Ethiopia and Tarara coffee in Addis Ababa.

Since the main player on coffee value chain in Ethiopia is farmers and the other value addition was practices on the local roasting companies. As a result, the scope of the study was limited within coffee value chain actors from farmers to local roasting companies in the case of farmers at Jima zone Gomma woreda and the selected local roasting companies in Addis Ababa i.e. of TO.MO.CA Coffee PLC, Moyee Ethiopia and Tarara coffee because of long year experience in the sector, potential engages in the volume processing and supply of roasted coffee to domestic as well as global markets, the three potential roasting companies purposefully was selected and the coffee farmers, which was found on geographic coverage of the study on the South-Western part of the country focusing on coffee cultivating Woreda of major areas namely Jimma Zone Gomma woreda. The sample woreda was selected purposefully based on the accessibility to the domestic market and volume of production.

Moreover, more emphasis was given to opportunities of coffee value chain activities in aspects of farmers practices in Jimma Zone Gomma Woreda and Selected local coffee roasting companies' practices in Addis Ababa which are in relation to Productivities, Logistics, Infrastructure, Human and Physical resource, Access to Market, Farmers and local roasting companies' relationship, Government Policy and Other Value Chain Actors roles

1.8. Limitation of the Study

The study was limited a specific local roasting companies as well as coffee producers in geographically and did not consider other variables that might help to make the study more representatives in terms of wider ranges of area and time horizon. The study was concerned

only assessing the coffee value chain from farmers in specifics geographical area to local roasting companies in the selected roasted companies in Addis Ababa. As a result, the impact of the value chain activities on the local roasting companies' productivity and profitability is not covered. As the study was done on sample basis in Oromia regions, Jima Zone, Gomma woreda, some percentage of farmers may not be addressed methodologically.

1.9. Definition of Terms

Value Chain: the full range of activities which are required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers, and final disposal after use (Kaplinsky and Morris, 2001**).**

Value chain analysis: - The activities within and around an organization, and relates them to an analysis of the competitive strength of the organization (Porter, 1985).

Coffee value chain: -are actors that are directly involved from cultivation, harvesting, acquisition roasting, grading to selling to business users/final consumers

Local roasting Company: - It is a domestic company which are a secondary processing in coffee value chain activities and a process of blending, roasting & packing a green coffee are very important operations that require a very good knowledge of the taste and preferences of final consumers that differ from country to country from time to time.

Roles of value chain Actors: - according the Bammann (2007), the value chain supporters which are the services provided by various actors who never directly deal with the product, but whose services add value to the product. In this study, Government body, financial institution, non-governmental organization and ECX was considered by the researcher as other value chain actors.

1.10. Organization of the research proposal study

The study was arranged as follows. The above chapter, Chapter one, deals about the background of the study, the research problem, General research question, specifying research question and the general and specific objective of the research, scope and limitations of the study. Chapter two discusses about purifying the idea with regard to

theoretical, empirical literature reviews and conceptual framework of opportunities of coffee value chain activities from farmer to local roasting companies. Chapter three focused on the research design and methodology and specification of data sampling, data collection and analysis tools and techniques. Data analysis and interpretation of the study presented in Chapter four and finally, chapter five emphasized on conclusion, recommendations and limitations of the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter briefly introduces and provides a systematic literature review on the works of various study in the area of coffee value chain from farmer to local roasting companies. It includes Concept, definition and important of value chain analysis, Ethiopian coffee value chain and concepts such as, coffee value chain from farmers to local roasting companies' perspective, empirical review related to the topic of the study, conceptual framework and research gaps.

2.1 Theoretical review of research Literature

2.1.1 Concept, Definition and Importance of Value Chain Analysis

Value chain mean a group of companies working together to satisfy market demands. It involves a chain of activities that are associated with adding value to a product through the production and distribution processes of each activity (Schmitz, 2005). An organization's competitive advantage is based on their product's value chain. The goal of the company is to deliver maximum value to the end user for the least possible total cost to the company, thereby maximizing profit (Porter, 1985). A value chain is the full range of activities required to bring a product from conception, through the different phases of production and transformation. A value chain is made up of a series of business actors from input suppliers, producers and processors, to exporters and buyers engaged in the activities required to bring agricultural product from its conception to its end use (Kaplinsky and Morris, 2001). Bammann (2007) has identified three important levels of value chain;

- ✓ **Value chain actors**: the chain of actors who directly deal with the products, i.e. produce, process, trade and own them.
- ✓ **Value chain supporters**: the services provided by various actors who never directly deal with the product, but whose services add value to the product.
- ✓ **Value chain influencers**: the regulatory framework, policies, infrastructures, etc.

The value chain concept entails the addition of value as the product progresses from input suppliers to producers and consumers. A value chain, therefore, incorporates productive

transformation and value addition at each stage of the value chain. At each stage in the value chain, the product changes hands through chain actors, transaction costs are incurred, and generally, some form of value is added. Value addition results from diverse activities including bulking, cleaning, grading, and packaging, transporting, storing and processing (Anandajayasekeram and Berhanu, 2009)

The idea of value chain was pioneered by Porter (1985). The five steps in the value chain give a company the ability to create value that exceeds the cost of providing the good or service to customers. Maximizing the activities in any one of the five steps allows a company to have a competitive advantage over competitors in its industry. The five steps or activities are: **inbound logistics; operations; outbound logistics; marketing and sales; and service**.

1.**Inbound logistics** include receiving, warehousing and inventory control.

2. **Operations** include value-creating activities that transform inputs into products.

3. **Outbound logistics** include activities required to get a finished product to a customer.

4. **Marketing and sales** are activities associated with getting a buyer to purchase a product.

5. **Service** activities include those that maintain and enhance a product's value, such as customer support.

Fredrick (2016) described the value chain as "the full range of activities that firms and workers do to bring a product from its conception to its end use and beyond". This includes activities such as design, production, marketing, distribution and support to the final consumer. The activities that comprise a value chain can be contained within a single firm or divided among different firms. Value chain activities can produce goods or services and can be contained within a single geographical location or spread over wider areas. In the context of developing countries, especially in Africa and in relation to commodities trading, the concept of value chain has expanded to include a stream of activities in global value chain networks that comprise "the full range of economic activities that are required to bring a product from its conception, through its design, its sourced raw materials and intermediate inputs, its marketing, its distribution and its support to the final consumer"

(Kaplinsky and Moris 2001). Simply put, a global value chain includes all of the people and activities involved in the production of a good or service and its supply and distribution activities at the global level. A global value chain is therefore similar to an industry-level value chain but encompasses operations at the global level.

A value chain describes the full range of activities required to bring a product or service through the different phases of production, including physical transformation, the input of various producer services and response to consumer demand (Kaplinsky & Morris, 2000).

2.1.2 Value chain and Supply chain

Value chains include the vertically linked interdependent processes that generate value for the consumer. In contrast, the term supply chain is used internationally to encompass every activity involved in producing and delivering a final product or service, from the supplier's supplier to the customer's customer. The primary focus of supply chains is thus on cost and efficiencies in supply, while value chains focus more on value creation, innovation, product development, and marketing. While both concepts describe the same network of companies that interact to deliver goods and services, the value chain is essentially about value.

Eventually, the value chain is very important because it is a very flexible strategy tool for looking at your business, your competitors and the respective places in the industry's value system. The value chain can be also used to diagnose and create competitive advantages on both cost and differentiation (Simister, 2011).

2.1.3 The Ethiopian coffee value chain

2.1.3.1 Production

The home of Coffee Arabica is Ethiopia, where it was found naturally in the forest and the Ethiopia Farmers gradually start its cultivation by domesticated the forest coffee. What they did was thinning the forest trees for light penetration and slashing weeds to facilitate their movement in collecting the crop and with time, they entered into coffee planting by using natural seedlings grown from the fruits that fell on to the ground especially in Illubabor, wellega, Jima, kafa and Limu areas. Then, because of its economic importance, coffee plantation expanded starting from about the 1940s onwards in the regions of Jimma,

Limu, Illubabor, wellega, sidama, yirgacheffe and Harar (Yilma, 2017). Coffee cultivation in Ethiopia can be divided into four different farming systems: forest, semi forest, garden, and plantation. Forest coffee is grown wild grows in the wild mainly in south-western Ethiopia. It grows under the shade of natural forest trees, and no one can claim exclusive ownership whereas semi-forest it also grows under forest shade in the same region but with limited human intervention and accounts for a third of total production. The most common type garden coffee is grown by smallholder farmers using a small plantings of coffee near a producer's home that may be intercropped with other crops or trees like cereals, fruits, and vegetables, mainly in the southern and eastern parts of the country and plantation coffee involves larger scale cultivation with modern methods and Agro-chemicals are usually used in this farming system. (ECX, 2015, Coffee Contracts). In Ethiopia, coffee production utilized an average of 0.12 hectares of land and about 5 million farmers for cultivation. (Central Statistical Agency, August 2017). Coffee is mostly grown in two Regional States of the country, namely Oromia and Southern Nations, Nationalities and People (SNNP). Ninety-five per cent of Ethiopia's coffee is produced by smallholder farmers on an average of less than 0.5 hectares of land while the remaining five per cent is grown on modern commercial farms.

Coffee producers in Ethiopia get a relatively small share of export prices compared to producers in other countries. Ethiopian producers only get about 59 percent of FOB price of coffee compared to 88 percent in Brazil, 95 percent in Vietnam, 74 percent in Colombia, and 76 percent for Honduras. However, all of these countries have significantly higher farmer sizes than Ethiopia, which likely accounts for at least part of this higher share for their producers due to more efficient marketing (Agrifin, 2015, Overview of the Global Coffee Sector Supply Chain).

2.1.3.2 Primary cooperatives

Most of the members are farmers and coffee cooperative are typically available in each woreda of the coffee production and geographically organized. Primary cooperatives are limited in capacity and do not generally access export markets directly.

2.1.3.3 Secondary cooperatives

These are capable and larger members' cooperatives consisting of a collection of primary cooperatives. They are engaged directly with export markets for most of Ethiopia's major brands.

2.1.3.4 Primary level coffee transaction centers

It is a place where coffee farmers and suppliers transact coffee. They are located near to the coffee farms. Currently there are about 979 primary coffee marketing centers in the country. (USAID, 2010)

2.1.3.5 Ethiopian Commodity Exchange (ECX)

It is the secondary level where coffee transacts in Ethiopia. Currently, ECX warehouses of are located in 8 different parts of the country - The centres are in Dire Dawa, Hawasa, Dilla, Sodo, Bonga, Jima, Bedele and Gimbi. The coffee transactions take place in Addis Ababa. The ECX provides a formal grade to all Ethiopian coffee. These parameters fall under two categories: raw value and cup quality value. Parameters and points assigned to each are shown below for washed (wet processed) coffee. (ECX, 2015, Coffee Contracts). Based on this scoring, washed coffee is assigned a grade from 1-5, and dry coffee is graded from 1 to 9. Coffees receiving the best grades (1-3) undergo a specialty assessment based on various cup characteristics including flavor, body, and aftertaste. In addition to this 1-5 grade, a regional designation is attached to coffee descriptions. Grades also determine whether or not the coffee is export quality in which case it must legally be exported rather than consumed domestically. (ECX, 2015)

2.1.3.5 Local Roasters

The local roasting companies is a secondary processing in coffee value chain practice and it is a major value-addition sector that can remove the need to import soluble and decaffeinated coffee along with roasting, grinding, extracts, concentrates, and coffee packaging and most of them have been focus on the international market by increased coffee value-addition can contribute to higher export earnings, as value-added coffee often receives a higher export price than green coffee and it is also true in the case of low-quality coffee. Increased value-addition could improve coffee quality for final consumers, it has its contribution on economic benefits for the country create an employment opportunity,

and ultimately increase tax revenues for the Ethiopian government (ECTA value-addition expert group, November 2018)

It is secondary processing of coffee value chain and an industrial process carried out by local roasters who roast, grind and package the coffee for retail sales either in the domestic market or for export. The local roasting companies was mainly challenged by low domestic demand for processed coffee owing to the tradition of home roasting and grinding the coffee (commercially packaged coffee is uncommon in Ethiopia and even hotels and restaurants usually buy fresh green beans and do their own roasting and grinding) and besides that, lack of technology capacity, there was also lack of skills and experience in coffee roasting techniques and in modern packaging another challenge, Despite these structural constraints, Ethiopia is witnessing a promising trend in the coffee roasting sector thanks to a myriad of private initiatives of small coffee roasters that are penetrating both the domestic and the international market. As a proof of this trend, it is encouraging to note that the Ethiopian Coffee Roasters Association (ECRA) is counting 61 members, representing the most important coffee roasting enterprises which are processing a relevant share of the coffee roasted in the country. (Inception report, June-December 2015)

In Addis Ababa, there are a growing number of roasters and cafes who buy through contracts with brokers at ECX. Domestic roasters face the challenge of finding high-quality coffee because of ECX's mandate that the best coffee be exported. The government policy on exporting of all quality coffee couldn't made the local roasting companies to be effectively serving the local markets as much as possible and also, they face high prices which sometimes exceed export prices. There are a few roasting establishments in Ethiopia and they mainly sell both roasted beans and ground coffee through groceries and supermarkets domestically but are also engaged in export market. According to the "Ethiopian Agro-Industry Strategy, Coffee subsector – November 2009, in 2007/08 a total of 231t of roasted coffee has been exported, which represented about 0.135 per cent of the total export volume for that year (171,000t). It has not been possible to assess the present roasting capacity in Ethiopia both for the domestic and the export market. It can be reasonably assumed that such capacity is still below 1 per cent of the total volume of exported green coffee.

The cost of the roasted coffee incorporates the cost of the green coffee, the expense of roasting it and the shrinkage cost caused by the roasting. The roasting expenses are classified into two main categories: direct labor and overhead. The overhead expense consists of the following: superintendence, power, lighting and heat, fuel and supplies, machinery and equipment repairs and maintenance, depreciation of machinery and equipment, building expense (exclusive of depreciation), depreciation of building, insurance, rent, and sun (Kester, R. B. 1918).

2.1.4 The Domestic Coffee Consumption in Ethiopia

Ethiopia is a leading country in terms of local consumption with 3.7 million bags in 2013/14, representing 71.6% of the total domestic consumption of Africa and 8% of all exporting countries (ICO, 2015). Coffee drinking is a deep part of Ethiopian culture, and a big part of the identity of the people there. From modern roasters and coffee houses in the capital of Addis Ababa, to the simplest pan roasted coffee ceremony in a small rural hamlet, Ethiopians of all classes and ethnicities enjoy coffee. As a result, a very large portion of national production ends up on the local market. Unlike the situation in many commercially productive countries, it is often possible to get a cup of top-quality coffee on the local market in Ethiopia. This gives the people who grow, buy, and sell coffee powerful insight into what makes for a delicious cup.

Coffee in Ethiopia has both social and cultural value and it is mainly consumed during social events such as family gatherings, spiritual celebrations, and at times of mourning and it indicate that large proportion of the coffee produced in Ethiopia (about 50% of country's production) is consumed domestically. It may have consumed coffee at village level by farmers or by other village members and the other is because of coffee grading inadequate to qualify as exportable, it can be sold to wholesalers. Nonetheless, wholesaling and distribution of coffee is thus unfortunately marred by poor quality control and such that different varieties are mixed, resulting in lack of homogeneity in the final product.

2.1.5 International coffee market

According to the research on (feed the future, 2017). The third level where Ethiopian coffee transacts is the international market. At this level, exporters sell coffee to foreign importers. In Ethiopia green coffee is only permitted to be exported by Ethiopian Nationals and

persons of Ethiopian descent. A single farmer or akrabi (a private processor and the private equivalent to a cooperative) is only allowed to sell their coffee through the Exchange. Only the four Coffee Cooperative Unions are allowed to bypass the exchange and sell directly to the buyer after having gone through extensive quality controls. Once the coffee is delivered to an ECX warehouse, the coffee is stripped of its provenance graded by government workers using the Q System and given a region and a marking grade. In general, the grade relates to quality. Warehouse officials are the only persons allowed to taste the coffee until it is bought and paid for. The details about each coffee are entered into a computer system, and shortly thereafter the coffee is offered on the ECX trading floor. The buyer knows the region of the coffee and the grade assigned by Q Grader officials. A price is agreed upon on the trading floor and the transaction is consummated when the buyer provides proof of sufficient funds. Once a deal has been finalized, the funds are transferred by the ECX from the buyer's account to the seller's within 48 hours. The value chain for cooperatives looks a little different as Ethiopia's cooperatives can bypass the ECX and sell directly to the buyers. However, the cooperatives and unions struggle with a lack of access to credit, poor negotiating skills, inadequate management in general and difficulties getting the coffee shipped off to the buyers.

2.1.6 Ethiopian coffee value chain actors and their linkages

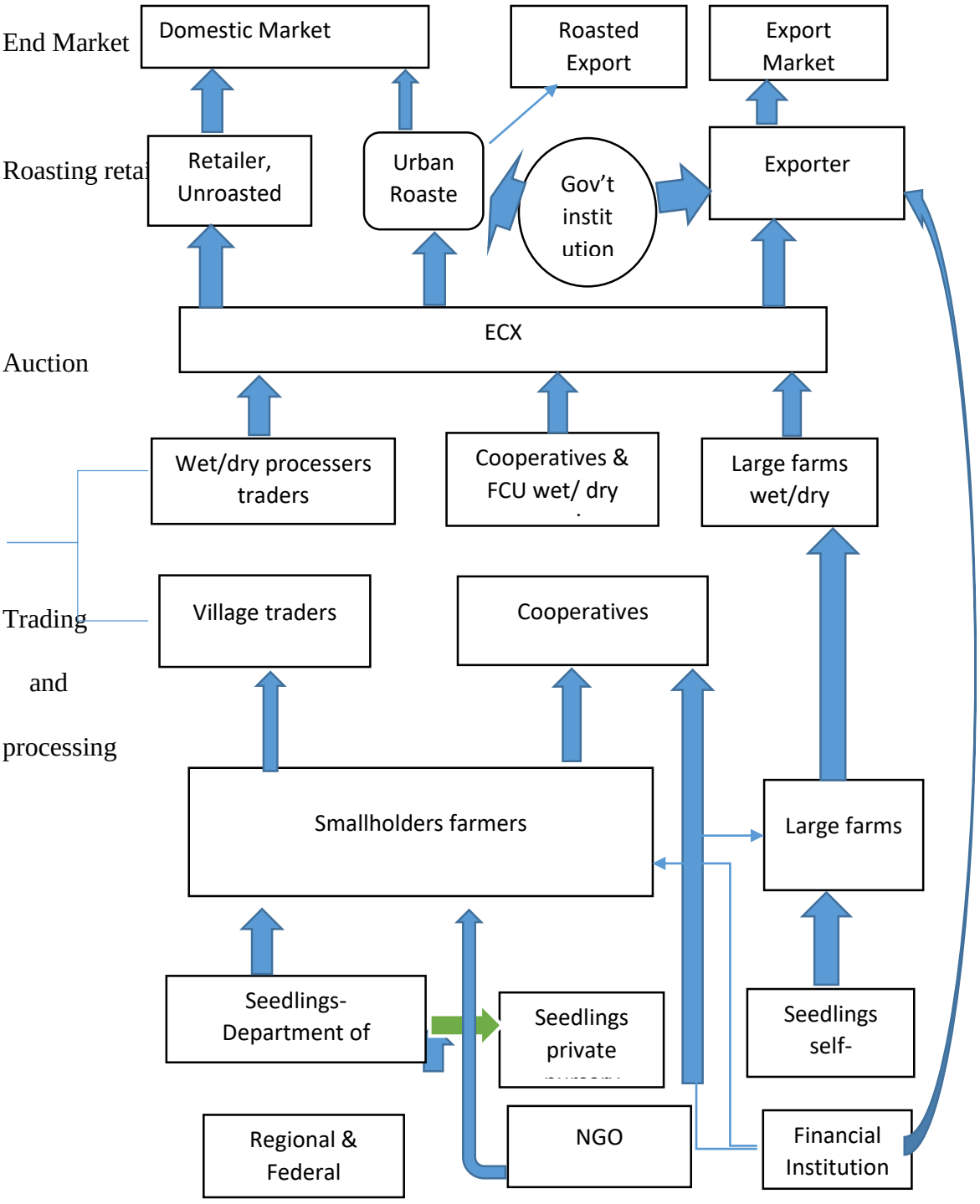

Figure 2.1 VCA of Ethiopian Coffee,

Source: Fintrac Inc. | Value Chain Analysis: Coffee (October 2017)

2.1.7 Other actors Contribution

2.1.7.1 Cup of Excellence of coffee

Considering the Ethiopian herald news dated December 8/2019, Ethiopian Coffee and Tea Authority, in collaboration with the Feed the Future Ethiopia value chain activity funded by USAIDS, was bringing Cup of Excellence to Ethiopia for the first time. Cup of Excellence is a prestigious competition and auction for high-quality coffees. It is aimed at discovering and showcasing exceptional coffees for the global market place.

Ethiopian herald news dated December 8/2019,Mehari Beyene,
(https://www.press.et/english/?p=16410#)

In this regard, The Ethiopian Herald had an interview with the executive director for Alliance for coffee Excellence Darrin Daniel, Alliance for coffee Excellence is a non-profit organization and It was established two decades back. The first competition program began our work in Brazil in 1999. The program is presenting competitive spirit for the top quality coffee among coffee-producing countries worldwide. The program is working with in 11 countries pertaining to the competition of Cup of Excellence and also the emphasis is on completion with international buyers as well. According to the Herald interview with officials, the intention of this program is taking on board desirable of high price smallholders farmers and also it creates excitement and occasions for higher level of appreciation. This program is set to change the price of coffee for the benefit of smallholder farmers and the program is a spotlight to encourage higher prices for the quality coffee beans. In this case, the Competition program came to Addis in April, 2020 for testing and selecting favorable coffee beans from all farmers throughout Ethiopia. The Cup of Excellence competition is open for all Large, small, estate, cooperative, union, private and public washing stations could come on board. All samples submitted to the competition need to produce traceability evidence. The program levels the playing field and does its best to support equal access and success for all farmers regardless of size and financial status. According to Darrin on the interview, the cup of Excellence competition benefits producers, roaster, exporters, coffee industry and host country at large. Quality coffee producers are the primary beneficiaries of the competition as they stand to earn significant incomes through an auction. Roasters and other major actors involved in the value chain

also benefit from the event as it brings much higher prices for their coffees and creates a new market opportunity. The event will attract global attention; provide Ethiopian coffee brands an opportunity to increase visibility among international media and other industry stakeholders. Source Ethiopian Herald Sunday (December 8/2019 By Mehari Beyene).

According to the competition result which was announced by Tea and coffee, Ethiopian coffee producer Nigussie Gemeda Mude was announced as the winner of the inaugural Cup of Excellence Ethiopia coffee competition with his Sidama sun-dried natural coffee, which scored 91.04 out of 100 possible points in the nationwide competition and beat out more than 1,400 entries from across the country. In addition to Nigussie's winning coffee, the Alliance for Coffee Excellence and Ethiopian Coffee and Tea Authority announced the top 28 winning coffees from the competition and all of which will be sold in an online auction on June 25 where more than 130 international buyers and coffee lovers. All three entries received the Presidential Award from the organizing body at the Alliance for Coffee Excellence.

2.1.7.2 Non- Government contribution for coffee value chain

According to the interview with Feed the Future Ethiopia value chain activity chief of party, Ian Chesterman on Herald news magazine, the activities of the Feed the Future Program in Ethiopia is channeled for value chain of the sub-sectors. The coffee value chain is one of the six value chains program support and have partnership with the coffee authority regarding with coffee value chain activities and the coffee value chain has a huge significance in Ethiopia in terms of the number of producers who are involved in the coffee beans sub-sector. This is a good position for foreign exchange.

The value chain activities are a USAID's funding project, we have the ability to support the smallholder farmers to change the volume of coffee in the long run with extension and implanting programs and also working with extension authority. As per COP of the project, a lot of activities focus on the marketing side that changing the value of coffee has a significant contribution and could create a quick impact in moving coffee forwarded as a commodity towards specialty coffee and in the understand of quality of coffee, a lot of smallholder farmers do not have the opportunity to understand the importance of having the potential of labor to buyers.

The COP of the project indicate on the interview, the project will plan to arrange training opportunities to train farmers to understand how to improve their production, how they process and how they influence their flavor. The farmers should also consider what sort of flavor is favored in the international market. Source: Ethiopian Herald Sunday, Mehari Beyene December, 8/2019 (https://www.press.et/english/?p=16410#).

2.2 Review of Empirical Studies

This section presents the assessment of research papers written in coffee value chain in general specific focus on coffee value chain. The following research papers which were conducted in Ethiopia are selected because of their similarity in the current study

Alemayehu Asfaw Amamo (2014) conducted research on coffee production and marketing in Ethiopia. The research indicated that developing strong link between the value chain actors in chain is very important, increase coffee production, productivity, sales value and marketing by international level it needs standard quality level improvement is very important for the Ethiopian smallholder farmers, Privet and public coffee producers output by using coffee production and market value chain governance and participatory methods identification and application is very important to selective commodities and interventions for market-oriented value chain development problem. This review recommends that value chain tools from production to final consumption in domestic and international market must analyze coffee production and marketing efficiency in Ethiopia.

According to Murphy and Dowding (2014) assessed coffee bean: a value chain and sustainability initiatives analysis. The paper examines Starbucks' corporate strategy of sustainable efforts in Ethiopia, particularly in the sustainable sourcing Arabica coffee, discusses the value chain of coffee, issues surrounding the coffee supply chain and the need for sustainable coffee production and start-buck' position and influence on the coffee trade, and the measures that Starbucks is taking to ensure sustainability efforts throughout the coffee supply chain. The review points out that large coffee producer has also adopted sustainability standards across each stage of the value chain.

Belay (2017) conducted a research study on constraints and opportunities in the coffee supply chain analysis from coffee farmers to exporters in the case of some selected districts of Illu Aba bor Administrative Zone, Oromia, Ethiopia. The study revealed that there is an

increasing coffee production supply in the country and many actors involved in the supply chain. But Ethiopia is very slow in expanding and diversifying (in quality and form) its coffee exports which is affected by world coffee price movements. The study also mentioned that, there are less transparent and efficient operations in coffee marketing and it sated coffee quality problems are due to handling from harvest to final point of sale. The study recommended trainings in low productivity areas will help farmers collect sufficient coffees to have leveraging negotiation power with collectors and traders, thereby capturing better prices along the value chain.

Beyench (2017) conducted a research on value chain analysis of coffee, in the Case of Yirgacheffe Coffee Farmers Cooperatives Union (YCFCU) and the study specified on the relationship between actors in the chain. The result of the findings indicated that, the different actors within the chain positively affect the coffee value chain of the union. Besides, the study revealed that roles of actors, marketing relation, competition issues, government Issue and market issue have a positive and significant effect on performance of value chain analysis of coffee. The relative importance of marketing relation is higher than other independent variables. Therefore, the implication is that actors should take an active role in managing all aspects of their performance of value chain analysis of coffee. Finally, the study recommended stakeholders that directly and indirectly participate along the coffee value chain should responsible for the integrated operations. the role of each actor along the value chain is essential for effective achievements of the chain activities. The government has to improve its policy about the cooperatives in general especially coffee cooperatives in particular since they took the lion share for foreign revenue of the country. The cooperatives have to hire experts in order to increase the quality of coffee beginning from production, the fast flow of information and knowledge between actors in the chain facilitates the day to day value adding activities therefore all actors have to usually exchange information and knowledge.

Birhanu, et al., (2013) also conducted study on Quality and Value Chain Analyses of Ethiopian Coffee. The study was argued that Ethiopia is not benefited from coffee production because of two reasons: quality deteriorates along the value chain and the value addition is almost negligible. It was reported that the profit flow back to Ethiopian poor

farmers from the end users is less than 10%. They recommended that actors in the value chain, government, and non-government organizations should divert their efforts toward reducing deteriorating quality in pre-harvesting and post-harvesting and promote value addition.

Agro-food value chains encompass activities that take place at the farm as well as in rural settlements and urban areas. They require input supplies (seeds, fertilizers, pesticides, etc.), agricultural machinery, irrigation equipment and manufacturing facilities, and continue with handling, storage, processing, packaging, and distribution activities. Other elements, such as power generation, logistics, etc., which form the chain environment, are also important factors affecting the performance of value chains (UNIDO, 2009).

Abraham (2013) conducted study on vegetables value chain in Habro and Kombolcha woredas of Oromia Region. The study was aimed at identifying vegetable value chain and examining the performance of actors in the chain; analyzing the determinants of vegetable supply to the market in the study area and identifying marketing channels and factors affecting outlet choice decisions of farm households. The study results also showed that vegetable producers are faced with lack of modern input supply and high postharvest losses. On marketing side, limited access to market, low price of product, lack of storage, lack of transport, low quality of product and lack of policy framework to control the illegal Ethio-Somalia trade route are the major problems. Therefore, farmers are forced to capture a lower share of profit margin. The results of multinomial logit model also indicated that the probability to choose the collector outlet was significantly affected by access to extension service, owning transport facility, membership to any cooperatives and post-harvest value addition compared to wholesale outlet. Therefore, policy aiming at increasing farmers' access to modern inputs, developing and improving infrastructure, gender consideration, cooperative development and improving extension system are recommended to accelerate the chain's development.

Another value chain study conducted on off-season vegetables by USAID (2011) in Nepal indicated that the subsector faces some challenges such as unavailability of quality planting materials, lack of knowledge among the producers of the proper usage of fertilizers and pesticides as well as poor soil fertility management, lack of irrigation facilities, labor

shortage, postharvest loss due the perishable nature of vegetables, limited access to reliable market information, unorganized market center, limited collection centers, and lack of proper packaging and transportation facilities. The study recommended short-term and long term infrastructural and institutional innovation to reduce the above challenges.

Dereje (2007) used value chain approach to study the competitiveness of Ethiopian coffee in the international market. The study indicates that Ethiopian farmers have low level of education, large family size with small farm land and get only 3% of the retail price in the German market. Thus, policy intervention was suggested to improve farmers' performance.

2.3 Conceptual framework

This study was shown a conceptual framework that investigate the opportunity and challenge of coffee vale chain from farmers to local roasting companies in the case of Jimma zone gomma woreda and selected local roasting companies in Addis Ababa. Considering both the theoretical and empirical studies and adapting from others study in coffee value chain a conceptual frame work in figure 2.4. As per the conceptual framework, the opportunities and challenge of coffee value chain activities is influenced by various variable like Productivities, Logistics, Infrastructure, Human & physical resource, Access to market, Relationship among actors, government policy and other actors' roles. The framework incorporated all the value chain activities from farmers' stage to local roasting companies' practices.

2.3.1 Definition of Variables

Relationship: Both farmers and local roasting companies should acknowledge the position of each actor in the chain, and respect that their interests are also legitimate. Different links in the chain should understand the need for cooperation rather than fighting against each other. Most of the traditional business should practices sellers and buyers will always have opposed interests on a high price and a low price, respectively and also they have a shared interest in satisfying the consumer. When the consumer is satisfied, the businesses of both the seller and the buyer will grow. For a value chain to be successful, everyone in the chain must benefit and must feel that they are being treated fairly and the fundamental success of the value chain would depend on the form of relationship among the value chain actors.

Vertical relationship reflects the quality of relationships among vertically linked coffee value chain actors up and down of the value chain. Due to efficient transaction along the chain the actors that are vertically related in the coffee value chain increase competitiveness of the entire industry. According to the study conducted by Belaynesh (2017), the researcher took the above term as a variables as vertical linkages including the volume and quality of information and services disseminated along the coffee value chain. On the other hand, in a value chain, horizontal relationship are longer-term cooperative arrangements among firms that involve interdependence, trust and resource pooling in order to jointly accomplish common goals. It can be both formal and informal among actors in value chain. Also it reduces transaction costs, create economies of scale, and contribute to the increased efficiency and competitiveness of an industry.

Productivities: The concept of productivities in coffee value chain actors is show the value chain actors successful in the business sector by considering the availability of raw materials and resource, efficiency in coffee production to get high turnover, accessibility of technical support and coffee production practice helps sustain in the sector. Productivities should help all the value chain actors to sustain in the coffee business. Therefore, the productivities practice of farmers and local roasting companies are directly affect the opportunity of coffee value chain activities.

Logistics: The logistics is the most important function of the coffee value chain practice for both farmers and local coffee roasting companies. Some logistics activities like Input purchase, transportation service both for raw materials and distribute coffee products to markets and proper place of both raw materials and coffee product. logistics practice has big contribution for value chain activities and it helps business operation to be un-interrupted. Therefore, the logistics current practices in both farmers and local coffee roasting companies are negatively relation with the opportunity of coffee value chain.

Infrastructure: infrastructure like water supply, electric power, Telephone and road accessibility facilities also influence the productivities of the farmers and local coffee roaster companies. If the study area has no infrastructural facilities, the operation of the coffee sector will be influenced. The accessibility of infrastructure is negatively related to the opportunity of coffee value chain activities.

Human and Physical resource: coffee production is labor intensive with minimal use of purchased inputs. This makes labor the most important input. Human resource is the most essential factor for the achievements of activities. The availability of skilled man power in the day to day operation of the farmers as well as the roasting companies would strength the opportunities of coffee value chain activities. In today's competitive environment if organizations need to survive in the business they have to focus on their human power. Therefore, the human and physical resource current practices are negatively relation with the opportunity of coffee value chain activities.

Access to market: It is a variable that show the availability of market to sell their product to the consumer. If the both farmers and local roasting companies is located in far distant from the market, both parties are poorly accessible to the market. The closer to the market the lesser would be the cost and time spent. Therefore, the farmers' and local roasting companies' practices in access to market is negatively related to opportunity of coffee value chain activities. A similar study was conducted by Beyenech (2017) in the coffee value chain both local and export market influenced the chain activities. For instance, if the demand for coffee in international market is increased the export amount of coffee will be increased this also impact the amount of coffee provided for local market.

Government policy: According to different research, coffee is the backbone of the Ethiopian economy and one of the major agriculture product which earn foreign currency for the country. To keep this and to facilitate and encourage the business for additional more generating a foreign currency, government design different policy and strategies to support agricultural activities. Government policy related to farmers and local coffee roasting business practices is one of them that affect the opportunities of value chain activities of each actor along the chain.

Role of value chain actor: Other businesses have important roles supporting the coffee value chain. Financial institution provide loans; governments establish laws and policies, and agricultural research organizations develop ways for farmers to more successfully participate in value chains, Non-governmental organization have an intervention that support and facilitate training and give technology support for innovation ideas for efficient and effective productivities mechanism and ECX have its own market facilitate strategy

for producers by grading the coffee quality to get appropriate market. In this concept the farmers and the local roasting companies is working with other actors in the value chain which facilitate and integrate the value chain activities which is facilitated credits, training, innovation ideas, market information that benefit farmers as well as local roasting companies to have contribution in the coffee value chain practice. Therefore, the Other actors in coffee value chain practices is negatively related to opportunity of coffee value chain activities.

Opportunities and Challenge: According to the dictionary definition the opportunity is defined as a chance, especially one that offers some kind of advantage. It also says that an opportunity is a combination of "favorable" circumstances or situations. A challenge is a barrier preventing forward motion and the circumstances arise and the situation make to feel constricted, lost, and unsure of something to happen. The current coffee business practices have many opportunities or challenge of coffee value chain activities to be sustain in the sector. The researcher took the opportunity and challenge of coffee value chain activities as a major study and considered as a dependent variable. Therefore, the opportunity of coffee value chain activities is a directly relationship with the above independent variables.

2.3.2 Conceptual Model

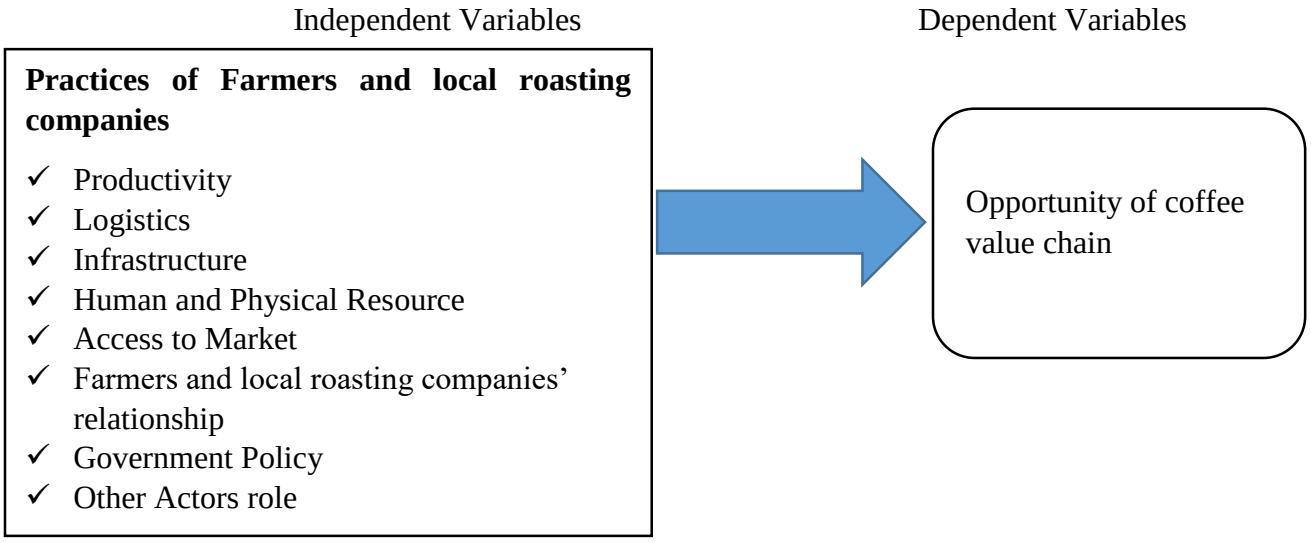

Figure 2.2 Conceptual Framework of the study

Source: Conceptual model Modify and adapted from (Beleynesh, 2017)

2.3.3 Literature gaps identified

In overall, the above reviewed articles and research papers have the following major gaps; failure to make specific conclusion regarding the opportunity of coffee value chain activities from farmers to local roasting companies practice production of coffee in the coffee value chain, unable to conduct the relationship, roles and factors that challenges and opportunities the coffee value chain of coffee from farms to local roasting companies, failure to study local roasting companies as a single actor in the value adding activities, poor sampling method, failure to justify sample size selection and lacking focus.

CHAPTER THREE

METHDOLOGY OF THE RESEARCH

This chapter explains the research methodology used to do the study and according to Kothari (2004), research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically.

This chapter describes the research design, data types and data sources, sampling and instrumentation as well as the data analysis and ethical considerations of the study.

3.1 Description of the Study area

This study was carried out in the country of Ethiopia and represented coffee producer and local roasting companies while Ethiopia is one of the famous and major producers of coffee in Africa. These study areas were to find out the major opportunities of coffee value chain from farmers to local roasting companies in Ethiopia.

Figure 3.1 Map of Goma woreda land usage

source: Goma Pilot Learning Wereda Diagnosis and Program Design (IPMS,2007)

Farmers from Jimma Zone in Gomma woreda. Gomma Woreda is one of the 17 Woredas in Jimma Zone known for predominantly growing coffee. It is located 403 km south west of Addis Ababa and about 50 km west of Jimma town and Gomma is the second most

densely populated Woreda in Jimma Zone with a size of 96,361.72 ha (94.4 km2) including the two coffee state farms which cover an area of 2704 ha (IPMS, 2007).

3.2 Research Design

The research design adopted by the researcher should answer the questions the study is seeking to answer or the objectives the researcher seeks to achieve by conducting the study (Mundia et al., 2015). The study examines the opportunities of coffee value chain from farmers to local roasting companies in study area. Thus, explanatory research designs were employed to conduct the study. The study was employed a qualitative and quantitative methods for the purpose of having a scope of information through interview, questioner and secondary data.

3.3 Population and Sampling Techniques

The target population was the total number of subjects targeted by the study or the group of elements to which the researcher wants to make inference (Mundia et al., 2015). In this study, the population elements were the farmers in Jimma Zone in Gomma woreda and roasting companies in Addis Ababa.

According to Jima zone, Goma woreda Agricultural district office annual report in year of 2011 E.C, there are 28,289 populations as a coffee producer in Goma Woreda, which has a total coffee production of 23000 ton produced by 28,263 Small scale producer, 24 cooperatives, one union and one private sector producers i.e Horizon plantation coffee producers within the Goma Woredas located Jima Zone. In Goma Woreda, a total of 37 kebeles available in the wereda and small scale producer was selected purposively because the volume of production and as indicated the total number of small scale coffee farmers in these study area were 28,263 farmers.

Moreover, the information from Ethiopian roasting companies' association, a total of 154 roasting companies available in Addis Ababa and in the case of the selected local roasting companies i.e. of TO.MO.CA Coffee PLC, Moyee Ethiopia and Tarara coffee because of long year experience in the sector, potential engagement in the volume processing and supply of roasted coffee to domestic as well as global markets, the three potential roasting companies purposefully was selected

. To.mo.ca is a coffee roasting companies which is a first company in coffee roasting business. Moyee coffee is one of the biggest International customers and have experience in exporting the roasting coffee for international market and Tarara coffee has one of the biggest market in local coffee market and the three coffee companies is a local roasting company and have a coffee business more than 5 years' experience in coffee sectors

3.4 Sampling techniques and sample size

A multi-stage sampling technique was adopted for the selection of Study area. Out of the 17 woreda in Jimma Zone, the researcher was selected Gomma woreda where coffee farmer population density, volume of coffee production and access to domestics' market. The data for this study were taken into account to get a representative sample of coffee farmers at Goma woreda using random sampling technique.

The purpose of sample size determination, the researcher was using Carvalho (1984). Malkortra and Peterson (2006) and Zikmund (2003) stated that, the larger the sampling size of a research, the more accurate the data generated. However, due to the current covide-19 pandemic situation and the nature of the population, sample determination method was developed by Carvalho (1984) which was preferred to be used by researcher as a method to determine a sample size

Table 3.1 Carvalho's Sample Size Determination

Population size	Small	Medium	Large
51-90	5	13	20
91-150	8	20	32
151-280	13	32	50
281-500	20	50	80
501-1200	32	80	125
1201-3200	50	125	200
3201-10000	80	200	315
10001-35000	125	315	500
35,001-150000	200	500	800

Source: Carvalho (1984)

As table 3.1 indicates that the total numbers of small scale coffee farmers in Jimma zone Gomma woreda are 28,263. Therefore, from the population 125 were considered as sample size of the study as per Carvalho's sample determination method. In addition to that, six key informant interview was employed for local roasting companies.

In addition to random sampling techniques the three selected (Tarara, To.Mo.Ca and Moyee) local coffee roasting companies were purposely selected based on year of experience. As a result, six key Informant Interview with companies' officials were conducted for the purpose of the study. Considering of value chain actors, the researcher was used a secondary data for the purpose of reference.

3.5 Data source, procedures and methods of Data Collection

The data was collected in both primary and secondary, preliminary information about the study area was obtained from Ethiopian Coffee roasting association and Gomma woreda district Office of agriculture (DOA) to generate important information for interview and questionnaire preparation for the formal survey and to determine the sample size.

In addition to secondary data, questioners and interview was administered for the coffee farmers at Gomma woreda and local roasting companies at Ababa Ethiopia respectively to generate primary data. The research data was collected from a total of 23,263 populations of farmers at Jimma zone Gomma woreda and out of which 125 coffee farmers identified in Gomma woreda. While, semi structured interview was conducted for six officials at the selected roasting companies and also secondary data was employed. It was only focused on opportunities of coffee value chain from farmers to local roasting companies.

Thus, respondents were asked to give their views related to opportunities of coffee value chain activities from farmers to local roasting companies. Moreover, data on productivities, logistics, infrastructure, access to market, human and physical resource, farmer and local roasting companies' relationship, roles of value chain actors and government policy of coffee value chain practice in Ethiopia was collected. Note that, this data set was generated through literature review, questionnaire and interviews. The literature reviews included previous studies, previous published interview and research reports on coffee producer and local coffee roasters.

The researcher was used a questionnaire for farmers to collected a quantitative aspect of the research methods that has been designed and prepared in two languages in English and Afan- oromifa specifically to be completed by a respondent with the helped of assigned data collectors. Also semi-structured interviews were employed for local roasting companies' officials. The researcher was used the work cliques who are working at Jima

Satellite office as a data collector and to helped the farmers to fill the questioners. While, the interview was made with the selected local roasting companies officials by the researcher himself. Data was collected under the involvement and continuous supervision of the researcher.

3.7 Method of Data Analysis

After data collected through questionnaire it was processed by verified, coded and entered the computer using SPSS. The data was subject to analysis using an application software packages named as Statistical Package for Social Sciences (SPSS) version 20. Data analysis was performed using descriptive and inferential statistics. Descriptive statistics recommended for interval scale items include the mean for central tendency and standard deviations for variability. Additional data analysis procedures appropriate for interval scale items would include the Pearson's r, ANOVA, and regression procedures. In order to make the data analysis easy, data was organized and present in the form of percentages, tables, and graphs. The primary purpose of data analysis is to find evidences from the field in order to answer the research questions and objectives. Each question in the questionnaires was categorized based on the study's research objectives and use Likert scale. According to Boone and Boone (2012), Likert scale data are analyzed at the interval measurement scale. Likert scale items are created by calculating a composite score (sum or mean) from four or more type Likert-type items; therefore, the composite score for Likert scales should be analyzed at the interval measurement scale. Finally, it was grouped on the basis of common characteristic, analyzed and interpreted in chapter four of this paper to arrive at conclusions.

3.7.1 Descriptive statistics

Descriptive statistics plus multiple regression was employed to assess the relationship between the independent variables and the dependent variable. The rational to used descriptive statistics was used to describe different characteristics. Frequencies and percentages were used to analyze general information about respondents, mean and standard deviation was used to describe aspects of opportunities of coffee value chain activities. The mean is preferred as it considers the precise score of each case thus it incorporates more information than the median which only states a scores relative position.

The standard deviation on the other hand, was used to measure variation. The results were presented using tables accompanied with explanations.

3.7.2 Inferential Statistical Analysis

In Inferential statistical analysis and correlation analysis were used to determine the relationship between the independent variable (farmers' practices using productivities, logistics, infrastructure, Human & Physical resource, Access to Market, Farmers & local roasting companies' relationship, government policy and Other actors' roles) and dependent variable (opportunity of coffee value chain activities). The results were presented using tables and each table by result interpretation.

Correlation may be defined as the degree of relationship existing between two or more variables (Koutsoyiannis, 1977). The correlation coefficient (r) is a measure of the degree of co-variability of the variables. The values that the correlation coefficient may assume vary from -1 to +1. When r is positive, there exists a positive correlation between the variables. r = +1 implies that there is a perfect positive correlation between variables. When r is negative, there exists a negative correlation between the variables. r = -1 implies that there is a perfect negative correlation between variables. when r is zero, then the variables are uncorrelated. The closer the value of r is to one, the greater is the degree of co-variability. On the other hand, the closer the value of r is to zero, the lesser is the degree of the co-variability.

3.8 Reliability Test of the Study

As stated by "Hair et al., (2007) reliability indicate the extents to which a variable or set variables is consistent in what it is intended to measure" (cited by siddiqi; 2011:20). Reliability analysis used to measure the consistency of questionnaire. There are different methods of reliability test, for this study Cronbach's alpha is suitable. Cronbach's alpha is the most common measure of reliability. For this study the Alpha coefficient for the overall scale calculated as a reliability indicator is 0.82. All the alpha coefficient for the overall scale were presented on the following table. As described by Andy (2006) the values of Cronbach's alpha more than 0.7 is good. The alpha values in this study are far from 0.7 and which are; therefore, it had very good reliability for the questioners.

Table 3.2 Reliability test Statistics

Instrument Dimension	Cronbach's alpha	Number of items
Productivities	0.767	5
Logistics	0.83	3
Infrastructure	0.828	3
Human and Physical resource	0.719	4
Access to market	0.758	5
Farmers & local roasting companies'r/ship	0.793	4
Government policy	0.843	4
Role of Other Value chain actors	0.944	7
Opportunity of coffee value chain	0.918	8
Overall	0.82	35

Source: Computed by the researcher from the primary data, (2020)

3.9 Validity Test of the Study

Malhotra (2010) mentioned about three types of validity in his study: content Validity, predictive validity, and constructive validity. This study addressed content validity through the review of literature and adapting instruments used in previous research. It is the degree to which the measurement device, in this case, the measuring questions in the questionnaire, provides sufficient coverage of the research investigative questions. To maintain the validity of the study the researcher adaptively used previous method of questionnaire development mechanizes the rests were done by carefully reviewing literatures in the chapter two of the research.

3.10 Ethical Consideration

To conducted this study, in order to protect the participant's secrecy and confidentiality of the information gather from them will not reveal to the third party. Hence, the respondent's rights to privacy and the information from any individual and companies confidentially without disclosing the respondent's identity. Further, data collectors have been given due attention for requesting the will of each actor to be treated as respondents of the study.

Finally, the researcher used many works of others and literatures and all source in this study has been acknowledged appropriately.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

This chapter deals with data presentation, analysis and interpretation. These data are presented and analyzed based on data collected through structured questionnaires, interview, and secondary data or documents from Coffee Producers, local Coffee roasting companies, Other coffee actors. For this purpose, questionnaires have been distributed to 125 coffee producers in selected primary coffee farmers in gomma woreda, Jimma Zone and 121 of the distributed questionnaires were returned. So, the analysis was made based on 121 responded questionnaires. These questionnaires are related to Productivities, Logistics, Infrastructure, Human and physical resource, Government policy, relationship with local roasting companies and other actor's roles, opportunities of coffee value chain from farmers to roasting companies using questionnaire. In addition to the questionnaires, there is an interview with local roasting companies and roles of value chain actors and secondary data or documents that are related to coffee value chain activities of the farmers and local roasting companies were used in the presentation and analysis.

4.1 Response Rate

According to Jack E.F(2008), response rate approximating 60% from most research should be the goal of researchers and certainly are the expectation of the editor and associate editors of the Journal and for the survey research intended to represent all schools and colleges or pharmacy, a response rate of > 80% is expected.

Table 4.1 Filled and returned data

	Frequency	Percent	Valid percent	Cumulative percent
Not Returned	4	3.2	3.2	3.2
Filled and Returned	121	96.8	96.8	100.0
Total	125	100.0	100.0	

Source: Computed by the researcher from the primary data, (2020)

Table 4.1 indicate that, the total population of 28,263 small scale coffee farmers the sample of 125 determined in chapter three of this studies using Carvahlo 1984 sample

determinations and from the total number of questionnaires distributed to the farmers in Jimma zone gomma woreda 4 respondents not return it with the percentage of 3.2% and 122 respondents were returned the questionnaire which is represented in percentage of 96.8% and this percentage was higher than the expected rate of return

4.2. The General Background of the Respondents

In the following table, the demographic information of respondents is presented. These include, age, marital status and total family size was presented the bellows graphs and the below table was presented gender of household head and educational level of respondents. To get information on these issues the respondents were asked structured question and their responses are presented and analyzed as follows. The results of this survey processed using the SPSS software.

Table 4.2 Sex characteristics of farmers

Category	**Variables**	Frequency	percent
Sex	Male	106	87.6
	Female	15	12.4
Total		121	100.0

Source: Computed by the researcher from the primary data, (2020)

As indicated in the above table, the sex characteristics of sampled households opined as, 87.6% of the sampled households were male headed and 12.4% of them were female headed. This indicates that the majority of farmers' households were male headed. However, one of the current and critical issues related to coffee farmers in the country is enhancing female's participation in the coffee production to minimize gender inequality in terms of socio-economic participation.

Table 4.3 Age of respondents

Category	**Variables**	Frequency	percent
Age of Respondents	30 - 39 years	35	28.9
	40 -49 years	59	48.8
	50 and above years	27	22.3
Total		121	100.0

Source: Computed by the researcher from the primary data, (2020)

Regarding the age group of the respondents, most of the respondents that is 59 in number (48.8%) falls within the age group of 40-49. 35 (28.9%) numbers of respondents fall within the age group of 30 to 39 and above the age of 50 is 27 (22.3%). From this we can say that 94 (77.7%) coffee farmers were filled with most actively working age group that can be able to transform the mission and vision of the coffee production into reality.

Table 4.4 Marital Status of the farmers

Category	**Variables**	Frequency	percent
Marital Status	Married	90	74.4
	Divorce	31	25.6
Total		121	100.0

Source: Computed by the researcher from the primary data, (2020)

As depicted from the above table concerning marital status, 74.4% were married. While, 25.6% of the respondents were divorce. Therefore, majority of members were married. From this one can conclude that they carry out different activities responsibly.

Table 4.5 family size of farmers

Category	**Variables**	Frequency	percent
Total Family Size	2	20	16.5
	4	22	18.2
	5	47	38.8
	6	16	13.2
	9	8	6.6
	10	8	6.6
Total		121	100.0

Source: Computed by the researcher from the primary data, (2020)

As showed from the above table, out of 121 of household, 38.8% of the respondents have 5 family members. The rest 16.5%, 18.2% ,13.2%, 6.6% and 6.6% of the respondents have 2, 4, 6, 9 and 10 members in the family respectively. Consequently, the family size may have a contribute of labor force for the coffee production.

Table 4.6 Educational Background of farmers

Category	**Variables**	Frequency	percent
Education level	Grade 1 - 4	30	24.8
	Grade 5-8	75	62
	Grade 9-12	16	13.2
Total		121	100.0

Source: Computed by the researcher from the primary data, (2020)

As showed from the above table, out of 121 of household head, 24.8% attended Grade 5 to 8. The rest 24.8% the sampled households had attended 1 to 4 grade and 13.2% of the sampled households had attended from 9 to 12 grade. Thus 100% of the sampled farmers' respondents were literate. Consequently, they can easily understand and communicate with the other coffee value chain actors.

Table 4.7 Work Experiences of the Respondents

Category	**Variables**	Frequency	percent
Service year	6-10 years	29	24
	11-15 years	92	76
Total		121	100.0

Source: Computed by the researcher from the primary data, (2020)

Regarding the service years of the respondents, most of the respondents that is 76% falls within service year of 11-15 years and the rest respondents from the samples 24% of respondents fall within the service year of 6-10 years. From this we can say that all of the respondents have 6 and more years of experienced that can be able to say all of the respondents were coffee cultivation expertise

4.2 Analysis and Discussion Coffee Value chain

The study used a five-point Likert scale method with 1=strongly agree, 2= agree, 3=neutral, 4=disagree, 5=strongly disagree was used to evaluate the information sharing on supply chain integration performance evaluation.

Analysis of data was done by using of mean and standard deviation. The mean is interpreted as 1-1.49 = strongly agree, 1.50-2.49 = agree, 2.5-3.49 = neutral, 3.5-4.49=disagree and 4.5 - 5= strongly disagree Jonald L. (2019).

Table 4.8 Productivities of Farmers Practices

1. Item related Productivities	N	Mean	Std. Deviation
Coffee production inputs (seedlings, fertilizer, pesticides, labor, ... etc) are sufficiently available locally	121	2.01	1.05
Your farm have enough plot of land to produce quality coffee production	121	1.95	0.97
Your coffee production is efficiently (low cost of producing and high turnover of selling Coffee)	121	1.81	0.85
You get a technical support from agriculture office for the improvement of your farm production	121	1.94	0.81
Your current coffee production (yield) is sufficient to sustain in the sector	121	2.26	1.33
Overall		1.994	1.002

Source: Computed by the researcher from the primary data, (2020)

As shown items 1from the above table 4.8, respondents reflected their view on coffee production inputs (seedlings, fertilizer, pesticides, labor, ... etc) are sufficiently available locally Majority of the respondent disagrees the issue with (M= 2.01, SD=1.05) and it was showed that there was a disagreement on the stated issue and majority of the respondents who were said that there was no availability of inputs for coffee production locally. This indicates that there was lack of availabilities of inputs for coffee production and it has major impact on productivities of farmers.

As the interview data indicates from the roasting companies technical and operational officials of the companies, the practices of sourcing of inputs specially green coffee is a major challenge for any local roasters and it was difficult to any local roasters to purchase the export quality green coffee from the ECX because of the highest grades are addressed to the export market; therefore, one of the challenge for local roasting companies were penetrate and promote in the international market with best quality of the Ethiopian roasted coffee. Moreover, sometimes there was a shortage of foreign currency to procure a raw material for packing of the roasted coffee and the packing material which available in the market is not good in qualities. Therefore, it was a challenge practice to acquire raw coffee and other inputs which is a major impact on the roasting companies' productivities practice.

Hence, there is shortage of inputs for coffee production and roasted companies lack of inputs for coffee production was a directly impact of productivities for farmers as well as roasting companies practice. Moreover, majority of the respondents show that falling on strongly disagree and disagree level on the issue that if they have had enough plot of land to produce quality coffee production. Besides the mean response were less than the range of moderate mean value ($2.5<X< 3.49$) which is ($M=1.95$, $SD= 0.97$). Accordingly, to the above result, it is possible to conclude that most of the farmer doesn't have enough plot of land for coffee production.

Considering the efficiency of the coffee production which is high turnover of selling of coffee with low cost of producing coffee, Majority of farmers responded that strongly disagree and disagree on the issue. It said that their coffee production practices were efficiently with high turnover selling the product with low cost of producing coffee with ($M=1.81$, $SD=0.85$) which is less than the range of neutral value($2.5<x<3.49$).

In reverse, as per the result of the interview the local companies' practices their performance relatively efficient which is also high turnover of selling of roasted coffee. As a result, the farmers respond show that the efficiency of coffee production as well as the turnover selling practices was more challenge for farmers to be productive and it was a good practice for roasting companies.

Regarding with the item 4, from table 4.3, Majority of the respondents responded show that falling on strongly disagree &disagree level with ($M=1.94$,$SD=0.81$) revealing that farmer disagrees of which the respondents were requested if there was a technical support

from agriculture office for the improvement of the farm production and based on the fact gained from the respondents the majority of the farmers responded that didn't get any technical support from agriculture office for coffee production improvement. According to the result of the interviews this is also true for roasting companies. Therefore, if the both of them didn't get a technical support from the stakeholders on improvement of production, operation then they were face a challenge on the farmers' and local roasting companies' productivities.

The last request from table 4.8 for the farmers on the current coffee production (yield) is sufficient to sustain in the sector. Based on the fact gained from the respondents the majority of the respondents respond falling on the range of a strong disagree and disagree with (M=2.26, SD=1.33) which is less than the range of moderate level($2.5<x<3.49$) and that indicate the farmers based on their respond they couldn't sustain in the sectors because of the current coffee production practices. Therefore, the farmers' current coffee production (yield) and the farmers sustain in the sector have positive relation and directly affect the farmers' productivities. In result with the interviews with the roasting companies, they have agreed on the above issue and in contrast with farmers' practices.

Table 4.9 Logistics of Farmers Practices

2. Item related Logistics	N	Mean	Std. Deviation
Storage facility is enough to store your coffee production	121	2.22	1.16
There are transport access to transport raw materials (seed, fertilizer and chemicals) to your plants	121	2.38	1.19
There are transportation access to transport the coffee product to local market	121	2.28	1.02
Overall	121	2.29	1.1233

Source: Computed by the researcher from the primary data, (2020)

As indicated in the above table 4.9 items 1, Majority of the respondent respond from the table show that a disagreement on the issue of storage facility is enough to store the coffee production of the farmers and the mean value of (M=2.22, SD=1.16) and it was showed that there is a disagreement on the stated issue. Therefore, according to the respondents the

storage facilities were not have enough to store the coffee products as well as the production inputs and its directly affect the logistics practice of the farmers. As per the interview data indicate, the roasting companies have good practices compared to the farmers' practices.

In addition, coffee producers were requested about their opinion whether there was transportation access to transport raw materials (seed, fertilizer and chemicals) to the plants. Consequently, the calculated mean value was less than the range of moderate mean ($2.5<x<3.49$) which is (M=2.38, SD=1.19) and as per the respondent respond the data indicate that, there is lack of transportation to transport an input for coffee production. Therefore, the result show that there is lack of transportation to transport inputs to the coffee farm and that indicate, logistic is a challenge for coffee farmers in regarding with the above issues. From the interviews sessions, the situation of local roasting companies' practices was get some challenge on accessing and getting the reliable transport companies for transport the inputs to the processing area.

The last request from table 4.9, coffee producers were requested again about their opinion whether there was transportation access to transport coffee product to local market. therefore, the calculated mean value was less than the moderate mean value($2.5<x<3.49$) which is (M=2.28 SD=1.02) and It indicate that, there was lack of transportation to transport a product to the market. Therefore, the result show that there was lack of transportation to transport coffee product to the coffee farm and that indicate, logistic was a challenge for coffee farmers to have better market for their products. As per the interview with the local roasting companies confirmed, most of the time, the companies were use their vehicles to transport roasted product to market and they believe that it was a good practice. Therefore, the result show that the farmers' practices agreed there is lack of storages and transportations practices and It show that there was a problem on logistics practice. In reverse, most of the local roasting companies' practices on above logistics activities somehow is good.

Table 4.10 Infrastructure of Farmers Practices

3. Item related Infrastructure	N	Mean	Std. Deviation
Your farm have an access of water supply or irrigation for the coffee production	121	2.45	1.44
Your farm has an access such as electric power, telephone and all weather road	121	2.36	1.35
Access for market information is available in your area	121	2.34	1.33
Overall		2.3833	1.373

Source: Computed by the researcher from the primary data, (2020)

As indicated in the above table 4.10 items 1, accessibility of water supply or irrigation for the coffee production, majority of the respondents respond Strongly disagree & disagree there was accessibility water for production (M= 2.45 SD=1.44) and it was showed that there is a disagreement on the stated issue. Therefore, according to the respondents there were no accessibility of water supply or irrigation and there was lack of infrastructure for coffee production in the selected study area.

In addition to the above issues, coffee producers were requested about their opinion whether there was accessibility of electric power, telephone and all-weather road. Consequently, the calculated mean value was less than the range of moderate mean value($2.5<x<3.49$) which is (M=2.36, SD=1.35) and It indicate that, there is lack of electric power, telephone and all-weather road for coffee production. Therefore, the result show that there was lack of infrastructures and that indicate, infrastructures were also a challenge for coffee farmers.

Besides that, coffee farmers were requested again about their opinion whether there was market information accessibility. therefore, the calculated mean value was less than the range of moderate mean value($2.5<x<3.49$) which is (M=2.34, SD=1.33) and It indicate that, there is lack of market information accessibility, Infrastructure regarding with the accessibility of market information was a challenge for coffee farmers and it was helpful to look for a better market for their products. As per the interview with the local companies' officials describe that there was a shortage on infrastructural facilities in the processing centers and impact the day to day practice of the local roasting operations but the companies were uses other options which help minimize the shortage of utilities by using

alternative source. Thus, the infrastructure has been major problem for both parties' practices, the roasting companies reduce its impact by using alternatives in reverse, the water supply and other infrastructure facilitate still a challenge for farmers' production.

According to the UNIDO (2009) They require input supplies (seeds, fertilizers, pesticides, etc.), agricultural machinery, irrigation equipment and manufacturing facilities, and continue with handling, storage, processing, packaging, and distribution activities. Other elements, such as power generation, logistics, etc., which form the chain environment, are also important factors affecting the performance of value chains and according to the reports Infrastructure have its own major impacts on the practices of coffee value chain activities.

Table 4.11 Human and Physical resource of Farmers Practices

4. Item related Human and Physical resource	N	Mean	Std. Deviation
You are utilized enough man power and skill labor for your coffee production	121	2.36	1.34
You have an access for a training from local roasting companies or one of other coffee value chain actors that improve the skills	121	2.28	1.34
You are utilized adequate equipment & technology for coffee production	121	2.34	1.34
Your currently coffee production and picking practices are mechanized (supported by modern equipment's and machines)	121	1.95	0.56
Overall		2.2325	1.526

Source: Computed by the researcher from the primary data, (2020)

According to table 4.11 for the first questions of utilized enough manpower and skill labor for the coffee production, the calculated mean value is less than the range of moderate level of agreement($2.5<x<3.49$) which was ($M=2.36$, $SD=1.34$). Based on majority of the respondents believed that, there were no enough utilization of man powers and skill labors for coffee production. The same result come from Interview with roasting companies' practices and acquiring and holding the technical skill for roasting company is a major problem.

Based on item 2 from table 4.11, most of the respondents disagreed on the issue of other value chain actors like local roasting companies give or facilitate training for the farmers. The calculated mean value is less than the range moderate level of agreement($2.5<x<3.49$) which is (M=2.28, SD1.34). Based on the interview result, the same challenge face for roasting companies were not easy to access a training for human skill specially to be a roaster by other stakeholders.

Majority of the respondents disagreed on the issue of utilization of equipment & technology for coffee production is adequate. (M=2.34, SD=1.34) is below the range of moderate level of agreement($2.5<x<3.49$). As per the interview with roasting companies that they use a better quality production technology because most of the time the roasted companies plan to compute the international market and tried to qualify the requirement of contend the glob market.

The majority of respondents and also disagree for the question of coffee production and picking practices are mechanized (supported by modern equipment's and machines) and the mean value result show that (M=1.95, SD= 0.56) which is the same as the above coffee practices and most of the respondents didn't use a mechanized practice for production and picking of coffee. Hence, Human and physical resource is a challenge for farmers practice in reverse, it was not as such a problem for roasting companies.

Table 4.12 Access to market of Farmers Practices

5. Item related Access to market	N	Mean	Std. Deviation
Farmers have enough market access to sell the coffee production	121	2.00	0.56
Your coffee product have access to market information for coffee marketing	121	1.84	0.53
Do you have enough source of information on demand, supply and price of other markets	121	1.93	0.66
It is useful to know the nearby market price before you sold raw coffee	121	1.95	0.6
Your product sell to directly to the local roasting companies	121	1.92	0.51
Overall		1.928	0.572

Source: Computed by the researcher from the primary data, (2020)

According to table 4.12, all items under the access to market scored lower than the moderate agreement value which were (M=1.928, SD=0.572) that means the findings showed that there is a disagreement related with access market to sell the coffee product, access to market information, enough information on demand supply & price of other market, useful to know the nearby market price to the sell coffee, the coffee product sell directly to the local roasting companies. This indicates that coffee value chain has challenged on market accessibility did not practice well in the study area. According to the interview with officials of three local roasting companies, they have both international and local market access for the roasted product. The major problem of the companies there was government restriction of selling a quality coffee to local market and also in the country there was a traditional ceremony which the consumer roasted and grinding the coffee by themselves and it was a majority impact to expand the domestic market size as much as possible. The local roasting companies were believed that Ethiopia coffee sectors were not benefited from coffee roasted product by exporting to international market and also the sector were in early stage and need government support to computed and sustain in the global market. One of the local companies believed that the domestic roasted market was need more advertising for local business. Therefore, the three roasting companies' business were focus on the global business to get a hard currency for the country and that made the business not to spread in local market. Findings are in line with other research that investigated access to market by (Beyenech,2016), (Girma, 2017) and (Nurilign,2019) in Ethiopia suggested that marketing is one factor that affects the coffee value chain. Therefore, based on this finding one can conclude that access to market is one of the problems that prohibit the effective achievement of the actors' roles in the coffee value chain. This research reinforces the significant influence of access to market on coffee farmers' practices in Jimma Zone, Goma Woreda and the local roasting companies located in Addis Ababa.

According to the Ethiopian Herald had an interview with the executive director for Alliance for coffee Excellence Darrin Daniel, the cup of excellence program was set to change the price of coffee for the benefit of smallholder farmers and the program is a spotlight to encourage higher prices for the quality coffee beans. In this case, the Competition program came to Addis in April, 2020 for testing and selecting favorable coffee beans from all

farmers throughout Ethiopia. The cup of Excellence competition benefits producers, roaster, exporters, coffee industry and host country at large. Quality coffee producers are the primary beneficiaries of the competition as they stand to earn significant incomes through an auction. Roasters and other major actors involved in the value chain also benefit from the event as it brings much higher prices for their coffees and creates a new market opportunity. As a result, from the competition 28 coffee farmers was successful and have get access to market for better price. In this case, NGO collaborate with other stockholders worked on facilitate the market accessibilities which may have a direct impact on the coffee value chain activities.

The above finding also supported by research of Borrella et al.,2015, Market access constraints are due to two reasons: accessibility of informational and infrastructures in developing countries, along with the remote rural areas where smallholders usually live and difficult access to efficient public transport, makes transportation of goods – especially perishable goods – to the marketplace very challenging. Coffee cherries need to be processed within hours from the moment they are picked. In order to face this constraint, some connective businesses (CB1 and CB2) provide support and/or credit to groups of farmers to build and operate small wet mills near their farms, in which they can first process their coffee from cherry to parchment. Coffee in parchment form considerably increases its value and its storage life. On the other hand, regarding informational barriers, the lack of awareness of market expectations reduces the opportunities of farmers to develop a product tailored to the customers' requirements. Connective businesses share end-market information with their suppliers and also translate these market requirements – in terms of quality and other additional attributes – to facilitate farmers' understanding.

Table 4.13 Farmers and local coffee roasting companies' relationship

6. Item Relationship between Farmers and local coffee roasting companies relationship	N	Mean	Std. Deviation
The relationship between farmers and local roasting companies in the coffee value chain is good	121	1.96	0.69
Each actors regularly exchange information and knowledge with relevant actor	121	2.02	0.70
Do the farmers get technical and materials support from local roasting companies	121	1.91	0.65
Farmers closely work with roasting companies due to the roasting companies provide better price	121	1.99	0.57
Overall		1.97	0.6525

Source: Computed by the researcher from the primary data, (2020)

As indicated in the above table 4.8, all items under the relationship between farmers and local roasting companies scored lower than the moderate agreement value which were 1.97,2.01, 2.04 and 2.02 with a standard deviation of 0.49, 0.54, 0.49 & 0.48 respectively. The finding show that there is a disagreement on the listed issues i.e. the relationship with local roasting companies in the coffee value chain is good, each actor regularly exchanges information and knowledge with relevant actor, the farmers get technical and materials support from local roasting companies, farmers closely work with roasting companies due to the roasting companies provide better price.

Moreover, the interview with local roasting companies result supports the above issues and as per the interview with the local roasting companies, they told me that one of the companies had their own coffee farm and local roasting companies were purchase or access a raw coffee from either from brokers at ECX or from their own coffee plantations for their roasting process and if companies did not closely work on the accessibility of green coffee and no communication with farms that show the current practices were weak relationship among them and also plan to have their own plantation as strategy of backyard integration business.

Therefore, most of them understand the challenge with coffee farmers but the government policy didn't make practices their integration with farmers and also one of the challenges to satisfy the local market in terms of price as well as quality.

This result is not the same as the argument with finding of Porter (1985) that indicated the fundamental success of the value chain would depend on the form of relationship between the members. The mode of relationship is fundamental to the design of the value chain. Hence the relationship between farmers and local roasting companies in the chain negatively affects the coffee value chain.

Table 4.14 Government policy on Farmers

7. Item related Government policy	N	Mean	Std. Deviation
you have enough information about government policy on coffee farmers	121	2.16	0.48
Government policy gives a privilege for coffee farmers	121	2.13	0.48
Government policy have flexible to the farmers work with local roasting companies	121	2.07	0.47
The current policy of government is favorable for farmers for expansion of coffee business	121	2.12	0.458
Overall		2.12	0.472

Source: Computed by the researcher from the primary data, (2020)

In table 4.14 all items under the government policy scored lower than the moderate agreement value which is (M=2.12, SD=0.472) and the findings showed that there is a disagreement related with government policy'. Farmers have enough information about government policy on coffee farmers, government policy gives a privilege for coffee farmers, government policy have flexible to the farmers work with local roasting companies, the current policy of government is favorable for farmers for expansion of coffee business. Moreover, interview with the three local roasting companies concurred the farmers respond and there was a gap on policy that facilitate the trade relationship between farmers and local roasting companies and also they believed that the government policy also one of the challenges to satisfy the local market in terms of price as well as quality. Therefore, we can say that the government policy flexibility on the possibility of farmers closely work with local roasting companies and lack of information on the government policy on coffee production negatively affects the coffee value chain.

Table 4.15 Role of value chain actors on Farmers

8. Item related Role of Value chain actors	N	Mean	Std. Deviation
You are work with one of others value chain actors(Finance Institution, Union/ cooperatives, NGO & ECX)	121	2.1	0.77
Farmers benefited from the current financial institutions practices (provide enough loan and subsidy)for coffee production business	121	2.00	0.73
One of the other actors encourage Investments on modern farming of coffee by coffee mechanization, production, processing and marketing	121	1.97	0.72
You get any benefits to be a members of cooperative or Unions	121	2.05	0.76
NGO facilitate training on Innovative ideas for your production and marketing linkage	121	2.71	0.76
Current practices of non-governmental organization gives you a technical/material support to facilitate on coffee production to be efficient	121	2.18	0.86
All coffee is sold through ECX with price that benefits farmers	121	2.12	0.78
Overall		2.1614	0.7685

Source: Computed by the researcher from the primary data, (2020)

The role played by other coffee value chain actors are important to facilitate effective achievement of coffee value chain practices. As indicated in the above table 4.15, all items under the respondents were requested on the role of other coffee value chain actors on farmers scored is higher than or equal disagreement value as per the average mean value which (M=2.1614, SD=0.7685). According to the table above items 1, the research wanted to request if there was work relation among framers with other actors and majority 81% of the respondents disagree on farmers work with one of others value chain actors (Finance Institution, Union/cooperatives, NGO & ECX). (M= 2.1, SD= 0.77). Hence, the roles of value chain actors in the value chain positively affects the coffee value chain of farmers practices.

The second items from the above table, Majority of the respondents respond strongly disagreed and disagree level about the issue of financial institutions in Ethiopia (Banks

both private and Government; Credit & Saving Institutions) provide enough loan and subsidy for coffee production and the calculated mean also concurred that (M= 2.00, SD=0.73) found to be low level from the moderate agreement level range (2.5<x<3.49). The Interview result with local roasting companies, they have a good practiced work with financial institutions for access of loan for operation expansion and getting foreign currency to get inputs from abroad and their export business also access a foreign currency for their banks operations.

Regarding items 3 & 6 from the above tables, majority of respondents disagreed that one of the other actors encourage Investments on modern farming of Coffee by Coffee mechanization, production, processing and marketing, and NGO gives you a technical/material support or facilitate on coffee production to be efficient because of a mean values of 1.97 & 2.18 with a standard deviation of 0.72 & 0.87 respectively which is less than the neutral value(2.5<x<3.49). The farmers respond show that they disagreed the practices by NGO, cooperatives and other actors encourage them to access technology and training. Therefore, the practices with NGO and cooperatives on encouragement in innovation using technology were not accessed on the production practices. The roasting companies responded interview also concurred the farmers' idea that there was no accessibility on the above issues. Therefore, the practice of other actors on encouragement and regarding with supporting on technology, both farmers and local roasting companies disagree their practices was not support with the above issues in the study area.

NGO facilitate training on Innovative ideas for your production and marketing linkage, according to the calculated mean (M=2.71 SD= 0.76), majority of the respondents falling on the moderate range vale (2.5<x<3.49). In reversely the above finding, a study by (Girma Bayu,2017), which was not supported the above issues, role of non-government organizations which are engaged in coffee subsector positively affect coffee value chain performance in introducing new and innovative ideas that improve productivity of coffee, market linkage and quality of coffee produced. Besides that, the Ethiopian Herald newsmagazine published dated December 8, 2019 had an interview with the COP of Feed the future value chain activities project and the officials said that in the interview, NGO contributed to support the smallholder farmers to change the volume of coffee in the long run with extension and implanting programs and also working with extension authority and

also the COP of the project indicate on the interview, the project will also plan to arrange training opportunities to train farmers to understand how to improve their production, how they process and how they influence their flavor.

Regarding with issue of farmers get any benefits to be a member of Cooperative or Unions Output the calculate mean(M= 2.05, SD=0.76) and show that there is a disagreement on the issues on study area reversely the result of the study by Bezabih, (2012) that indicated cooperatives play vital roles such as economic role (enhance production by providing inputs, fertilizer, improved seeds, pesticides, machinery, etc), creates employment and capacity building for members (social protection (price stabilization, protect members from exploitative pricing) and voicing). The study by Beyenech, (2017) also suggest the cooperatives have to encourage their members through providing different incentives mechanisms for the produced goods in the market. This facilitates the supply of coffee along the chain without any interruption. In addition, the cooperatives should create conductive environments for the member farmers to buy different agricultural inputs at a little cost in order to improve the coffee production. Therefore, farmers get a benefit to be a member of Cooperative or Unions. Therefore, from this finding one can be concluding that members joined the cooperatives to be benefited.

In this aspect, respondents where requested whether most of the farmers agreed that coffee is sold through ECX with price that benefits a farmer above table, majority of farmer respondents disagree on the issue on the study area because, (M= 2.12, SD=0.78) found to be low level from the rage of moderate level($2.5<x<3.49$). The data from interview with the local roasting companies agree the above issues because their green coffee for roasted product get it mostly from ECX. Therefore, farmers were not believing the coffee sold through ECX based on price and the service of ECX have affect the coffee value chain practice of farmers and local roasting companies.

Table 4.16 Opportunities of coffee value chain activities

9. Item related Current Farmers practices and Opportunities of coffee value chain activities	N	Mean	Std. Deviation
The farmers current productivities on coffee production practices is an opportunities of coffee value chain activities	121	2.06	0.58
The current logistics and Infrastructure practices are one of the opportunities to facilitate the coffee value chain	121	2.09	0.55
The availability human and physical resource for current coffee production are an opportunities of coffee value chain activities	121	2.13	0.65
The current farmers practices on market accessibilities for coffee product is an opportunities for coffee value chain activities	121	2.12	0.62
The current relationship between farmers and local roasting companies is an opportunity for the coffee value chain activities.	121	2.19	0.71
Flexibility on government policy is an opportunities for coffee value chain activities	121	2.13	0.67
Farmers current integration practices with one of other actors roles(Financial Institution, Union/Cooperative, NGO & ECX) are giving an opportunities for coffee value chain activities	121	2.18	0.73
The government support for current coffee production practices is enough and it is an opportunities of coffee value chain activities	121	2.15	0.67
Overall		2.13125	0.6475

Source: Computed by the researcher from the primary data, (2020)

The opportunities of coffee value chain were one of the most important issues in the day to day activities of farmers and local roasting companies' practices. Considering the current farmers' practices, as indicated in the above table 4.16, all items under the tables farmers scored lower than the moderate agreement value ($2.5<x<3.49$) and the finding show that there is a disagreement on the listed issues. Therefore, the current practices of farmers are not a good input for the opportunity of coffee value chain activities. From the structured interview with the local roasting companies, most of the variable related with above items was raised and discussed and result similarity with the farmers' practices and show that their practices still need some integration work with the value chain actors to contribute opportunities for coffee value chain activities.

4.6 Relationship between coffee value chain practice and opportunity of coffee value

The objective of the study was to examine the relationship between independent variables which is coffee value chain practices (productivities, logistics, infrastructure, human & physical resource, access to market, farmers and local roasting companies, government policy and roles other value chain actors) and dependent variables opportunities of coffee value chain. Inferential statistical analysis, correlation and multiple linear regression analysis were used to examine the relationship between the independent variable (coffee value chain practices with the above variables) and dependent variable (opportunities of coffee value chain).

4.6.1 Correlation Analysis

The indication of the correlation coefficient defines whether the correlation is positive or negative. The levels of the correlation coefficient describe the strength of the correlation and the strength of correlation can be defined using the direction of Evans (1996) suggests for the absolute value of r as cited in (Beldjazia and Alatou, 2016). If "r = 0.00-0.19 - very weak, r= 0.20-0.39 - weak, r = 0.40-0.59 - moderate, r = 0.60-0.79 - strong and r = 0.80-1.0 - very strong".

Pearson correlation coefficients were determined with the objective to obtain information about the relationships between the dependent and independent variables as presented in the below table

Table 4.17 Correlation Analysis

		OCVC	Pro	Lo	Infra	HPR	AM	RFLRC	GP	ROVCA
	Pearson Correlation	1								
OCVC	Sig. (2-tailed)									
	N	121								
	Pearson Correlation	.453**	1							
Pro	Sig. (2-tailed)	.000								
	N	121	121							
	Pearson Correlation	.383**	.850**	1						
Lo	Sig. (2-tailed)	.000	.000							
	N	121	121	121						
	Pearson Correlation	.490**	.996**	.860**	1					
Infra	Sig. (2-tailed)	.000	.000	.000						
	N	121	121	121	121					
	Pearson Correlation	.443**	.884**	.749**	.884**	1				
HPR	Sig. (2-tailed)	.000	.000	.000	.000					
	N	121	121	121	121	121				
	Pearson Correlation	.371**	.735**	.661**	.740**	.764**	1			
AM	Sig. (2-tailed)	.000	.000	.000	.000	.000				
	N	121	121	121	121	121	121			
	Pearson Correlation	.453**	.867**	.850**	.766**	.884**	.735**	1		
FLCR	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000			
	N	121	121	121	121	121	121	121		
	Pearson Correlation	.436**	.786**	.676**	.782**	.670**	.470**	.786**	1	
GP	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		
	N	121	121	121	121	121	121	121	121	
	Pearson Correlation	.665**	.469**	.375**	.464**	.400**	.272**	.469**	.437**	1
ROVCA	Sig. (2-tailed)	.000	.000	.000	.000	.000	.003	.000	.000	
	N	121	121	121	121	121	121	121	121	121

** Correlation is significant at the 0.01 level (2-tailed). Source: Computed by the researcher from the primary data, (2020)

N.B. Productivities (PRO), Logistics (LO), Infrastructure (INF), Human & Physical Resource (HPR), Access to Market (AM), relationship farmers and local coffee roasting companies (RFLCR), Government Policy (GP), Other Actors Role (OAR) and Opportunities of coffee value chain activities (OCVC).

The results indicated on the above tables show and according to Evans (1996) magnitude of correlation that there is a moderate relationship between Productivities and opportunities of coffee value chain ($r=0.453^{**}$, $p<0.01$). In addition, the result indicated that logistics practice is positively and do not have linear correlated with opportunities of coffee value chain ($r=0.383^{**}$, $p<0.01$). As a result, the relationship between the two variables is weak.

The results also showed that Infrastructure accessibility is Positively and Moderate correlated with opportunities of coffee value chain ($r=0.490^{**}$, $p<0.01$). Moreover, the result indicated that Market access with opportunities of coffee value chain, which is positive and ($r=0.371^{**}$, $p<0.01$) as a result, the relationship between the two variables is week. From the results, the correlation between Human skill & physical resource and opportunities coffee value chains ($r=0.443^{**}$, $p<0.01$) which is moderate relationship between the two variables according to the correlation magnitude of Evans (1996). According to the results, moderate and positive correlation is found between Farmers relations with local roasting companies and opportunities of coffee value chain with ($r=0.453^{**}$, $p<0.01$).

There was also a positive and moderate relationship between the dependent variable of Opportunities of coffee value chain with the government policy ($r =.436$ and $p<0.01$). and according to the correlation magnitude of Evans (1996), There relationship is weak.

From the correlation analysis, there was strong correlation between other actor's roles and opportunities of value chain, this indicates that as the other value chain actors' roles with positive and significant relation with the variables of opportunities of coffee value chain based on ($r=.665^{**}$, $p<0.01$) and they have strong relationship.

Generally, the correlation analysis showed that there is a positive and statistically significant relationship between the independent variables that is Productivities, Logistics, Infrastructure, Human & physical resource, Access to Market, Relationship farmers and local coffee roasting companies, Government Policy, Other actors role with the dependent variables opportunities of

coffee value chain activities. These findings are consistent with other research findings of (Nurilign,2019), (Beyenech, 2016) and (Girma, 2017) which conclude that the coffee value chain performance with some related independent variables. To sum up the correlations of dimensions the opportunities of coffee value chain have been identified a weak positives relationship with Logistics and Access to Market and Positive moderate relationship with Productivity, Infrastructure, Human & physical resource and Farmers relationship with local roasting companies. Moreover, there is a positive and strong relationship with Infrastructure and other value chain actors. The results suggest that all the dimensions have positive relationship with opportunity of coffee value chain activities of Jimma zone Goma woreda, though the strength of relationship is somehow different from the dimensions involved.

CHAPTER FIVE

SUMMARY of FINDING, CONCLUSION AND RECOMMENDATIONS

In this chapter, the researcher presented the precisely and clearly summary of the finding, conclusion and recommendations based on the research finding.

5.1 Summary of Finding

The study was focus on the opportunity of coffee value chain activities from farmers to local roasting companies. Therefore, considering the research specific objectives research questions were developed with the purpose of leading and constructing this study. For the purpose of answering those research questions a questionnaire and Interview was employed. Respondents who are farmers from Jimma zone gomma woreda and three roasting companies' officials Data analysis was conducted by the using descriptive and multiple regression methods with the respondent frequency and percentages and tables presentation analysis. The study used the eight variables to assess the Opportunity of coffee value chain activities from farmers to local roasting companies in the case of farmers in Jimma zone Goma woreda to Selected local roasting companies i.e. TO.MO.CA, Tarara Coffee and Moyee Ethiopia. These variables were Productivities, Logistics, Infrastructure, Human and physical resource, Access to Market, Relationship between farmers and local roasting companies, Other coffee value chain actors and Government policy. As per the data, the following summaries of findings were drawn;

- ✓ The finding show that, availability of production inputs & plot of land was a major problem, less practice in production efficiency as well as turnover selling, it was a challenge to have the access of technical support and insufficient of yield production result the farmers practices a challenge to be more productive and therefore, it was challenge of coffee value chain activities and the result show that mean value of 1.99 which is far from the range of moderate level and in terms of roasting companies productivities interview result also concurred that the result with farmers practices and coffee roasting companies have so many challenges to be productive in coffee sectors considering the same parameters with farmers.
- ✓ The result of the study also showed that there is lack of logistics practices for farmers which is shown by cumulative mean score value of 2.35 which is far from moderate level by

farmers' practices indicate that the respondent tried to show there is lack of transport accessibilities for distribute the product to markets and transport inputs to the farms and there is a shortage of store for both product and inputs materials. In reverse, the local roasting companies have enough transport accessibility and space availability for both inputs materials and roasted coffee.

- ✓ There is also a lack of infrastructure for farmers practice which is shown by cumulative mean score value of 2.38 which is far from moderate level by farmers' practices show that there are no accessibilities for water supply or irrigation, electric power, telephone, all weather road and information. In the other hand, interview result show that the local roasting companies have the accessibility of infrastructure even if there is sometimes a shortage happen because of power fluctuation.

- ✓ The result of the study also showed that there is shortage of human and physical resource in farmers' coffee production which is shown by a cumulative mean score of 2.23 which is far from moderate level and it is a great challenge to farmers practice due to lack of enough man power & skill labor utilization, less accessibility of training from right actors, lack of adequate equipment, machines & technology for farm production practices. In the other side, the interview with local roasting companies show that there is moderate level of availabilities of human and physical resources for roasting companies business.

- ✓ Moreover, the study presented that there is a problem of market accessibility for both farmers and local roasting companies due to lack market access, market information, nearby market and other market information on demand, supply and price, demand from roasting companies and considering farmers' practices which is shown by a cumulative mean score of 2.41 which is far from moderate level. Moreover, the local roasting companies interview show that there is also a big problem of market accessibility for local market as well as international market.

- ✓ The finding of this study presented that relationship among farmers and local roasting companies also another challenge for coffee value chain activities. This is due to there is no relationship among the parties, lack of exchange information, knowledge & technical supports with each other and based on the relationship, neither of the two get a price benefit and the farmers practiced showed by cumulative mean score value of 1.97. The interview

with local roasting companies result also concurred there is few relationships with farmers and lack of the company's relationship with farmers resulted that the farmers and local roasters practice affects opportunity of coffee value chain activities.

- ✓ The study presented that there is also a challenge of roles of value chain actors on farmers practice which is shown by cumulative mean score value of 2.16 and it is far from range of moderate level. The other value chain actors' roles whether there is a work relationship with them, benefited from actors' role, accessibility of training from the actors, membership of cooperative benefited the farmers and the actors encourage investment on modern farming. NGO roles on provide a technical training for farmers, all the remaining roles by other actors' was a challenge for farmers' practices. The interview result show that the local roasting companies practice benefited from financial institution roles, government institution roles and ECX roles relative with farmers practice.
- ✓ The study result on government policy for both farmers and roasting companies' practices is a challenge for coffee value chain activities. The result shown the government policy on farmers practice which is shown by cumulative mean score value of 2.12 and it is a far from range of moderate level of agreement. the result come from the government policy have flexibility farmers working other actors, the information about awareness, encourage to expand the business and privileged the farmers with policy. Considering this the farmers total disagree based on the above parameters and the government policy is a challenge for farmers practice. This result also similar with the local roasting companies interview and both parties' practices show that the government policy is majorly affect the opportunity of coffee value chain.

According to the finding, all the independent variables have a mean values which is far from moderate level and there is great challenge to practice the opportunities of coffee value chain activities. In addition to this the dependent variable which is opportunity of coffee value chain activities had a cumulative mean of 2.13 which is also far from range of moderate level. The result show that the farmers practice is directly affect the opportunity of coffee value chain activities. Besides that, the result from local roasting interview also affect the coffee value chain activities.

The correlation analysis had shown that, the six independent variables (Productivities, Logistics, Infrastructure, human and physical resource, Access to market, Relationship of farmers & local roasting companies, Government policy and Roles of other value chain actors) have a positive correlation with the dependent variable (opportunities of coffee value chain activities) at 0.01 p-value 2-tailed, by scoring a Pearson correlation Coefficient value of Correlation is significant at 0.453**,0.383**,0.449**,0.371**,0.453**,0.436**, 0.665** respectively.

5.2 Conclusion

The purpose of the study was to assess and identify the opportunity of coffee value chain from farmers to local roasting companies in the case of farmers and the selected roasting companies.

Considering the finding result, the research question of this study was answered and concluded that there are so many challenges in coffee value chain practices in the study area which indicate there was a productivities problem, challenge by availability of different facilities (logistics & infrastructures), lack of capacity in human & physical resource, lack of relationship among actors, role of other actors practice, lack of flexibilities of government policy and market accessibility practices are a major finding and it was affected and a challenge for the opportunity of the coffee value chain activities.

Moreover, it can be concluded that the whole of the independent variables have an impact and affected the opportunity of coffee value chain activities. Consequently, improving the practice on these areas will facilitate the performance of each actor and give a better integration for coffee value chain and also give the opportunity to the coffee value chain.

As per the study, the dependent variable which is opportunities coffee value chain was statistically significant and positive moderate relationships with Productivities, Infrastructure, human & physical resource, farmers & local roasting companies' relationship and Government Policy. Strong positive relationships with Role of value chain actors and finally positive but weak relationships with Logistics and access market.

5.3 Recommendation

Based on the study finding the following recommendations are forwarded to help and improve the farmers and local roasting practices of the coffee value chain, In addition to that the study confirmed that farmers and local roasting companies practices namely productivities, logistics, infrastructure, human and physical resource, access to market, farmers and local roasting companies' relationship, government policy and roles of value chain actors significantly influence the opportunities of coffee value chain activities. Therefore, the study recommends coffee sectors in the study area

- ✓ The farmers have been maintaining and develop a space for store the inputs as well as coffee product and use appropriate transportation to transport the coffee product in actively participate in the appropriate markets. In the other side, considering the domestic consumption, the local roasting companies have been benefit from the domestic market by advertise their product and create awareness about the product qualities. Moreover, to activate the exist practices of farmers and local roasting companies, the government improve and flexible its policy about the relationship between farmers and local roasting companies, market accessibility and the domestics market. The government policy acknowledges and facilitate the integration operation work among the coffee value chain actors, activities and encourage coffee value chain by facilitating potential opportunities for coffee sectors.
- ✓ It's an opportunity for coffee value chain, farmers and local roasting companies' practices must work closely with value chain actors to get technical support, to work on market accessibility, to get training for their staffs and farmers have been supported to use adequate equipment and modern tools for strength farms production capacity and picking practices. The farmers and local roasting companies work closely and integrated operation among them make the actors benefit market accessibility, knowledge and contribute on the value adding activities in coffee value chain. This also make the roasting companies to sustain and strength in the sectors a business strategy plans to address the domestic market.
- ✓ Farmers as well as local roasting companies work in collaboration with other stakeholders i.e. government, non-government and other responsible body to get a technical training, market accessibility, facilitate inputs and plot of land for expansion work. In addition to that, the responsible body give attentions on facilitating the water supply, electrics power and all

weather roads for farmers' practices to be more productive and to get better markets accessibilities. This issue should also be given attention for local roasting companies to eradicate the shortage. To overcome the challenge of market accessibility, the farmers work closely with all actors in the coffee value chain and also its important to have market information before sold their products. The role of different stakeholder or other value chain actors improve their service for coffee value chain practices and they contribute to overcome the farmers resource scarcity and encourage the local roasting companies' investments for expansions.

- ✓ Moreover, in order to see the relationship between opportunities of coffee value chain and farmers' practices in the study area, this study confirmed that: The dependent variable which is opportunities coffee value chain was statistically significant and positive moderate relationships with Productivities, Infrastructure, human & physical resource, farmers & local roasting companies' relationship and Government Policy. Strong positive relationships with Role of value chain actors and finally positive but weak relationships with Logistics and access market. Therefore, this study recommends the coffee sectors to give priority the farmers and local roasting companies practices which are contribute opportunities of coffee value chain considering the roles of value chain actors'.

5.4 Limitation and Suggestions for further study

The study had its own limitations, due to financial & time constraints as well as the current pandemic situations Covid-19, which are left for future research. Firstly, the study focused on eight dimension of farmers and local roasting companies practices namely productivities, logistics, infrastructure, human and physical resource, access to market, farmers and local roasting companies' relationship, government policy and roles of other actors. But the study did not include all coffee practices and hence it suggests conducting further studies considering several other types of logistics management practices like packaging and demand forecasting.

Secondly, the study only focused on the farmers and local roasting companies' practices. Due to the situation this study couldn't address others value chain actors which is found in coffee value chain in the study area.

Thirdly, the study also faces a challenge on sample size determination and it has been taken Carvalho J., (1984) and it has own impact on the study out puts. The study areas were narrow to

the specific area and limited to the farmers as well as the selected local roasting companies in Addis Ababa were taken and addressed them by Questionnaire and interview respectively. The officials in the selected roasting companies were interviewed, as a result population size were determined on opportunity of coffee value chain activities and as such the finding was not be generalized to all roasting companies' practices and also the study did not consider the possible solutions and therefore it suggests further studies on considering the value chain actors practices.

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Appendix I

Addis Ababa University, Faculty of Business and Economics School of commerce

Name of student: Abnet Gelan

Dear Respondents

The purpose of this questionnaire is to collect primary data for conducting a study on the topic, "Opportunities of coffee Value Chain from farmers to local roasting companies in the case of farmers in Jimma zone Gommaworeda and selected coffee roasting companies in Addis Ababa" as partial fulfillment to the completion of the masters of Art in Logistics and Supply Chain Management at Addis Ababa University School of Commerce. In this regard I kindly request your time to provide me with reliable information so that the findings of this study will meet the intended outcome. I strongly assure you for the confidential treatment of your answers. I would like to thank your voluntary participation for the success of my research study.

Name of enumerator: _____ Signature_____

Questionnaire number: _____ Date of data collection: _____/_____/_____

Survey questionnaire for farmers

I. Part One Demographic Data

1. Gender of household head A. Male B. Female
2. Age 1. Less than 20 2. 20-29 3.30-39 4. 40- 49 5. 50 and above
3. Marital status of household head

   1. Single 2. Married 3. Divorce 4. Widowed
4. Total Family size _____
5. Educational level of household head

   1. Illiterate 2. (1-4) grade 3. (5-8) grade 4. (9-12) grade 5. Above grade 12
6. How many languages do you speak?

   1. one 2. Two 3. Three 4. Four 5 Five or more

7. Main Occupation
    1. Farmers 2. Cooperatives 3. Union 4. Others _____
8. How long year experience in coffee farm production
    □ 1-5 years □ 5-10 years □ 10-15 years □ above 15 years

1. Practice of farmers

The following set of statements relates to the perceptions on the major Opportunities encountered by coffee gomma woreda. The following statements refer to opinion on whether farmers face opportunities or challenges to grow and sustain in business. Please read each statement carefully and show the extent of your agreement on the statements by putting a tick mark (√) in the boxes against each rating scale of choice. The rating represents your level of agreement as follows:

5=Strongly Agree, 4=Agree, 3=Neutral, 2=Disagree, 1=Strongly Disagree

I.	**Farmers Practices**					
1	**Productivities**	1	2	3	4	5
1.1	Coffee production inputs (seedlings, fertilizer, pesticides, labor, ... etc) are sufficiently available locally					
1.2	Your farm have enough plot of land to produce quality coffee production					
1.3	Your coffee production is efficiently (low cost of producing and high turnover of selling Coffee)					
1.4	You get a technical support from agriculture office for the improvement of your farm production					
1.5	Your current coffee production (yield) is sufficient to sustain in the sector					
2	**Logistics**	1	2	3	4	5
2.1	Storage facility is enough to store your coffee production					

2.2	There are transport access to transport raw materials (seed, fertilizer and chemicals) to your plants					
2.3	There is transportation access to transport the coffee product to local market					
3	**Infrastructure**	1	2	3	4	5
3.1	Your farm has an access of water supply or irrigation for the coffee production					
3.2	Your farm has an access such as electric power, telephone and all-weather road?					
3.3	Access for market information is available in your area					
4	**Human and Physical resource**	1	2	3	4	5
4.1	You are utilized enough manpower and skill labor for your coffee production					
4.2	You have an access for a training from local roasting companies or one of other coffee value chain actors that improve the skills					
4.3	You are utilized adequate equipment & technology for coffee production					
4.4	Your currently coffee production and picking practices are mechanized (supported by modern equipment's and machines)					
5	**Access to market**	1	2	3	4	5
5.1	Farmers have enough market access to sell the coffee production					
5.2	Your coffee product has access to market information for coffee marketing					
5.3	Do you have enough source of information on demand, supply and price of other markets					
5.4	It is useful to know the nearby market price before you sold raw coffee					
5.5	Your product sell to directly to the local roasting companies					

III	**Government policy and Other Coffee value chain actor's role on Farmers**					
6.	**Farmers and local coffee roasting companies' relationship**	1	2	3	4	5
6.1	The relationship between farmers and local roasting companies in the coffee value chain is good					
6.2	Each actor regularly exchanges information and knowledge with relevant actor					
6.3	Do the farmers get technical and materials support from local roasting companies					
6.4	Farmers closely work with roasting companies due to the roasting companies provide better price					
7	**Government policy**	1	2	3	4	5
7.1	you have enough information about government policy on coffee farmers					
7.2	Government policy gives a privilege for coffee farmers					
7.3	Government policy have flexible to the farmers work with local roasting companies					
7.4	The current policy of government is favorable for farmers for expansion of coffee business					
8	**Role of Other Value chain actors (Finance institution, Union/Cooperative, NGO & ECX)**	1	2	3	4	5
8.1	You are work with one of others value chain actors (Finance Institution, Union/cooperatives, NGO & ECX)					
8.2	Do you think financial institutions in Ethiopia (Banks both private and Government; Credit & Saving Institutions) provide enough loan and subsidy for coffee production business					

8.3	One of the other actors encourage Investments on modern farming of Coffee by Coffee mechanization, production, processing and marketing					
8.4	You get any benefits to be a member of Cooperative or Unions					
8.5	NGO facilitate training on Innovative ideas for your production and marketing linkage					
8.6	Do you consider NGO gives you a technical/material support or facilitate on coffee production to be efficient					
8.7	Do you think coffee is sold through ECX with price that benefits farmers					
IV	Opportunities of farmers practices					
9	Opportunities of Farmers practice in coffee value chain practices	1	2	3	4	5
9.1	The farmers current productivities on coffee production practices is an opportunities of coffee value chain activities					
9.2	The current logistics and Infrastructure practices are one of the opportunities to facilitate the coffee value chain					
9.3	The availability human and physical resource for current coffee production are an opportunities of coffee value chain activities					
9.4	The current farmers practices on market accessibilities for coffee product is an opportunities for coffee value chain activities					
9.5	The current relationship between farmers and local roasting companies is an opportunities for the coffee value chain activities					
9.6	Flexibility on government policy is an opportunities for coffee value chain activities					

9.7	Farmers current integration practices with one of other actors roles(Financial Institution, Union/Cooperative, NGO & ECX) are giving an opportunities for coffee value chain activities					
9.8	The government support for current coffee production practices is enough and it is an opportunities of coffee value chain activities					

Additional Information

_____

_____

_____

Thank you for your cooperation!!

Appendex II

Farmers Questionnaries -Afan Oromo Version

Yunivarsitii Finfinnee, Faakaltii Bizinasii fi Diinagdee (Ikonomiksii) Mbana barnotaa Daldalaa (Koomeersii)

Maqaa Barataa: Abinnat Galaan Magarsaa

Deebii kennitoota,

Kaayyoon gaafannoo kanaa qo'annoo mata-duree "Carraa fi hanqinaalee xinxaala cancala soona bunaa qotee bulaa irraa hanga dhaabbilee buna akka'aniitti: dhimma Tomookaa, Mooyyee fi Taraaraa" jedhamuuf xummura walakkaa digirii maastarsii artii Bulchiinsa cancala Loojastiikii fi dhiyeessii, Yunivarsitii Finfinnee, mana barnoota daldalaa (Koomeersii) ragaa dursaa walittiqabuufi. Kanuma irraa ka'uun odeeffannoo dhugaa irraatti hundaa'e fi bu'aan ykn argannoon qo'annoo kanaa galma barbaadame irraan gahuu danda'u akka naaf laattaan kabajaan isin gaafadha. Dabalattaan iccitummaan deebii keessanii aklka eegamu cimsee isiniif dhugoomsaa, bu'aa qabeessummaa qo'annoo kiyyaaf hirmaanaa keessan fedhii irraatti hunda'eef isin galateeffadha.

Maqaa qotee bulaa hirmaatee ---------- Mallattoo ----------

Lakkofsa gaafannoo ---------- Guyyaa Ragaan itti sasaabame ----------/ ----------/ ---------

Gaaffiiwwan Qoteebulaaf dhiyaatan

1. Kutaa tokko daanga ragaan irraa funaanamu ?

2. Saala Abbaa warraa / Haadha warraa A. Dhiira B. Dubartii

3. Umurii 1. Digidamaa gadi 2. 20-39 3. 4. 40-49 5. 50 fi isaa ol

4. Haala gaa'ila Abbaa warraa / Haadha warraa

1. Kan Hin fuune /hin herumne 2. Kan Fuudhe/Herumte 3. Kan Hiike
4. Kan dura du'e /Dute

4 Baayyina Maatii ----------

5. Sadarkaa Barnootaa Abbaa warraa/ Haadha warraa

1. kan hin baranne 2. Kutaa (1-4) 3. Kutaa (5-8) 4. Kutaa (9-12) 5. Kutaa 12 ol

6. Qoqa /Afaan meeqaa dubbatu

1.. Tokko 2. Lama 3. Sadii 4. Afur 5. Shan yookin ol

7.Hojiin isaanii ijoon

1.Qotee bulaa 2. Waldaa 3. Yuniiyanii 4. Kan biro _____

8.Omisha Bunaa irratti muuxannoo waggaa meeqaa qabu

□ 1-5 years □ 5-10 years □ 10-15 years □ above 15 years

□Waggaa 1-5 □ Waggaa 5-10 □ waggaa 10- 15 □ waggaa 15 ol

1.Carraa fi Rakko ??

Yaqadoonni armaan gaditti tarreeffaman Qonaan bultoota Bunaa Aanaa Gommaa Ganda Qonnaan Bulaa shan keessatti argaman Carraawwani gorgiddoo fi Rakkolee isaan mudatanin kan walqabataniidha. Qabxiilee (yaadoota) armaan gaditti tarreeffaman kana irratti hundaa'uudhaan, qonnaan bultoonni, waldaaleeni fi Yuuniyoonni carraawwan jiran haala isaan ittin guddisaa deemanii fi tursiisuu danda'ankan ibsaniidha. Barreeffamoota armaan gadii sirnaan dubbisaatii bareeffamicha irratti waliigaltee keessan mallattoo (√) ka'uun waliigaltee keessan ahaala kanaa gadiitin ibsa/gutaa

4= Waliigale 3 = Keessaa hin qabu 2 = wali hingalu 1= Baayyee wali hingalu

5 = Baayyeen wali gala

T.Lakk	Akaakuu					
1	**Omishtummaa**	1	2	3	4	5
1.1	Galewwaan calla bunaa (Sanyii, Xaa'oo, Qoricha ilbiisaa, Hojjataa humnaa.. kkf) Akka naannootti argachuu/jiraachuu					
1.2	Buna qulqullina qabu omishuuf lafa omisha kanaaf ta'uu gahaa qabduu?					

1.3	Qotee bulaan Buna gahaa ta'ee omishuuf (gatii xiqqaadhaan omishee gabaa guddaa argataa)					
1.4	Bu'aa qonna foyyefachuuf deeggarsa ogummaa Wajjira Qonnaa irraa argatuu?					
1.5	Omishna Bunaa yeroo ammaa omishaa jirtan kun hojii kana keessa isin tursiisuuf gahaadha ?					
1.6	Oomishini Bunaa cancala soona dabaluu keessatti rakkoo isa tokkodha.					
1.7	Omishtummaan qotee bulaaf carraa gaarii kena					
2	**Dhiyeessii (tajaajila geejibaa waliin wal qabatee)**	1	2	3	4	5
2.1	Iddoon calla bunaa itti kuufattan qabduu?					
2.2	Iddoon callaa bunaa itti kuufattan gahaa dha					
2.3	Meeshaalee dheedhii (Sanyii, Xaa'oo fi keemikaalaa) kan ittin iddoo maasaa keessanii ittin geeffattan tajaajilli geejibaa gahaan jiraa?					
2.4	Callaa bunaa keessani gabaa naannoo kan ittin geeffattan tajaajilli geejibaa qabduu? /argattuu?/					
2.5	Bu'aa barbaadame callaa Bunaa irraa argachuuf hanqinni dhiyeessii (tajaajila geejibaa) jiraachuun rokkoo isa tokko ta'uu danda'aa					
2.6	Tajaajila dhiyeessii (geejibaa)mijeessuun bu'aa callaa bunaa mijeesuuf ni ta'a jettanii yaadduu?					
3	**Misoomaalee Bu'uuraa**	1	2	3	4	5
3.1	Dhiyeessii Bishaanii yookin jallisii Omisha bunaa tiif kan oolu jiraa/qabdu?					
3.2	Tajaajila Ibsaa , Tajaajila bilbilaa fi daandii bonaa fi gannaa gahaa qabduu?					
3.3	Tajaajilli Miidiyaa Hawaasaa (TV,Raadiyoo) qabduu?					

3.4	Bilbilaan, Raadiyoo fi Teeleevizyinaan Odeeffannoo Gatii gabaa yeroo ni hubattuu (ni beektuu)					
3.5	Rakkoon Bu'uuraaleen misoomaa Rakko cancala soona Bunaati .					
3.6	Rakkolee bu'uuralee misoomaa hiikun bu'aa bunaa guddisuuf carraadha jetanii yaadduu?					
4	**Humna Namaa Baratee fi Teekinooloojii**	1	2	3	4	5
4.1	Omisha bunaa keessaniif Humna namaa baayinaa fi gahuumsan qabaduu?					
4.2	Bu'aa callaa bunaa keessan foyyeeffachuuf dhaabbilee biyya keessaa omisha bunaa irratti xiyyeeffannoon hojjetan irraa leenjii argattuu?					
4.3	Omisha bunaa keessaniitiif Meshaalee fi teekinooloojii gahaa qabaduu?					
4.4	Yeroo ammaa kana Callaa bunaa keessan karaa hammayaa'aa ta'een (meeshaalee hammayyaa fi maashiinootan deeggaramuu)					
4.5	Hanqina humna namaa baratee fi teekinooloojii rakkolee bu'aa bunaa tiif isa tokkodha					
4.6	Humni namaa fi teekinooloojii gahaan omishatummaa qotee bultooaaf tiif carraa ni kennu					
5.	**Walittidhufeenya Qonaan Bulaa fi Dhaabbilee Biyya Keessaa Hojii Bunaa Irratti Bobba'anii**	1	2	3	4	5
5.1	Walittidhufeenyi qonaan bulaa fi dhaabbilee biyya keessaa hojii bunaa irratti bobba'an gudduu jiru bu'aa bunaatiif gaarii yookin dhaabbileen biyyaa keessaa hojii bunaa irratti bobba'aan qotee bulaa wajjin walittidhiyeenyaan hojjechuu					
5.2	Qamoleen hariiroo hojii wal fakkaataa qaban Odeffannoo fi beekumsa wal jijjiruu					

5.3	Qoteebultootni deeggarsa teekiniikaa fi meeshaa dhaabbilee biyya keessaa omisha bunaa irratti bobba'aan irraa argatuu?					
5.4	Qotee bultootni dhaabbilee biyya keessaa hojii bunaa irratti bobba'aan waliin walittidhiyeenyaan hojjechuun gatii gaarii argamsiisa					
5.5	Hanqinni walittidhufeenya qotee bulaa fi dhaabbilee biyya keessaa hojii bunaa irratti bobba'aan rakkoo bu'aa bunaa isa tokkodha					
5.6	Osoo qoteebultonnii fi dhaabbilee biyya keessaa hojii bunaa irratti bobba'aan Waliin hojjetanii bu'aa qabeessummaa bunaatiif carraa gaariidha.					
6	**Gahee Waldaalee /Yuuniyaanootaa/**	1	2	3	4	5
6.1	Oomisha bunaa gurguruuf ,Waldaalee yookin Yuuniyaanoota/ dalaaloota waliin ni hojjettuu?					
6.2	Waldaalee yookin yuuniyanoota sanyii, xaa'oo fi keemikaaloota oomisha keessaniif dhiyeessan waliin dhiyeenyaatti waliin hojjettuu?					
6.3	Qotee bulaa/ Yuuniyanii / waldaalee/ keessaa deeggarsa teekiniikaa/ liqii karaa dhaabbilee biyya keessaa hojii bunaa irratti bobba'aaniin ni argatuu?					
6.4	Miseensa waldaa / Yuuniyaanii ta'uu keetin bu'aa argattee ?					
6.5	Akka qotee bulaa tokkotti omishtummaan kee qamoolee biroof soona (bu'aa) dabalee?					
6.6	Gaheen qamolee (taphattoota)biroo rakkoo sochii cancala soona (bu'aa) sdabaluu bunaati.					
6.7	Gaheen qamolee (taphattoota) biroo carraa cancala soona (bu'aa) dabaluu ni uuma.					
7	**Qaqqabummaa Gabaa**	1	2	3	4	5

7.1	Qotee bulaan callaa bunaa gurgurachuuf gabaa gahaa qabaa?					
7.2	Qotee bulaan buna dheedhii gurguruuf yaa'a(channalii) ykn karaa tamsaasaa mija'aa ta'e qabaa?					
7.2	Dhaqabummaa odeeffanno gabaa bunaa gahaa ta'e qabdaa?					
7.4	Madda odeeffannoo gahaa Fedhii, Dhiyeessii fi gatii gabaa biraa qabdaa?					
7.5	Osoo buna dheedhii hin gurguriin dura gatii gabaa bunaa dhiyoo beektaa?					
7.6	Omisha kee Dhaabbilee biyya keessaa hojii bunaarrtti bobba'aanitti gurgurtaa?					
7.7	Dhaabbileen biyyaa keessaa hojii bunaa irratti bobba'aan omishaa keetiif gatii gaarii siif keennuu ?					
7.8	Qotee bultootni buna isaanii yeroo barbaadanitti rakkoo tokko malee gurgurachuu					
7.9	Dhaqabummaa gabaa fi raabsiin buna qotee bultootaa soona (bu'aa) bunaa keessatti rakkoo cimaadhaa isa tokko					
7.10	Gabaa gahaani fi raabsaan bunaa qotee bultootaaf carraa ni kenna					
8	**Imaammata Mootummaa**	1	2	3	4	5
8.1	Qonna bunaa irratti odeeffannoo Imaammata Mootummaa qabdaa?					
8.2	Imaammatni Mootummaa Qonna bunaatiif ilaalcha addaa kennaa?					
8.3	Qonnaan bultoonni bunaa dhaabbilee hojii bunaa biyyaa keessaa irratti bobba'an waliin hojjechuuf Imaammatni Mootummaa mijaa'ummaa qaba					
8.4	Imaammatni Mootummaa amma jiru hojii dinagdee bunaa babal'isuu mijataadha					

8.5	Imaammatni Mootummaa soona (bu'aa qabeessummaa bunaa) dabaluu keessatti rakkoo tokko.					
8.6	Imaammatni Mootummaa qote bulaan omishaa isaa dabaluu fi bu'a qabeessa akka ta'u carraa gaariidha					
9	**Dhaabbilee Maallaqaa (Faayinaansii)**	1	2	3	4	5
9.1	Dhaabbileen Mallaqaa Itoophiyaa (Baankii dhuunfaa fi Mootummaa, Inistiitiyuutiwwan Liqii fi Qusannoo hojii misooma bunaa tiif liqaa gahaa kennuu					
9.2	Dhaabbata Maallqaa (Baankii dhuunfaa fi Mootummaa, Inistiitiyuutiiwwan Liqii fi Qusannoo) waliin ni hojjettaa?					
9.3	Dhaabbileen Maallaqaa Investiimantii hojii qonna bunaa hammayyeesuuf (Makaanaayizid gochuuf), Callaa Bunaa, adeemsaa fi gurgurtaa isaani jajjabeessuu?					
9.4	Dhaabbilee maallaqaa (faayinaansii) irraa maallaqa liqeeffachuuf Rakkoon isin qunname jiraa?					
9.5	Tajaajjilli Inistiitiyushinii Maallaqaa rakkoo bu'aa bunaa isa tokkoo					
9.6	Inistiitiyuushiniin Maallaqaa qonnaan bulaaf carraa ni kennu					
10	**Gahee Dhaabbilee Miti- Mootummaa) (Dh.M.M)**	1	2	3	4	5
10.1	Carraa Dhaabbilee Miti- Mootummaa waliin hojjechuu qabdaa?					
10.2	Omisha keessaniif deeggarsa teekiniikaa fi meeshaalee dhaabbilee Miti-Mootummaa irraa argatuu?					
10.3	Dhaabbileen Miti- Mootummaa walittihidhaminsa oomishaa fi gabaa irratti leenjii yaada kallqa'aa irraatti isiniif kennuu?					

10.4	Dhaabbileen Miti Mootummaa rakkolee ciccimoo fi gufuu oomishaa fi gabaa bunaa irraatti ni hojjetuu?					
10.5	Dhaabbileen Miti- Mootummaa omishini buna keessanii bu'a qabeessa akka ta'u deeggarsa teekiniikaa nu kenne jettanii yaadduu					
10.6	Rakkolee bu'aa qonna bunaa keessaatti gaheen dhaabbilee Miti- Mootummaa isa tokkoodha					
10.7	Gaheen Dhaabbileen Miti- Mootummaa Omishitummaa bunaa dabaluu keessatti carraa gaariidha					
11	**Gahee Inistiitiyuushinii Gabaa (Dhaabbata Gurgurtaa Meeshaalee Itiyoophiyaa)**	1	2	3	4	5
11.1	Dhaabbata gurgurtaa meeshaalee Itiyoophiyaa (ECEX) walitti dhiyeenyaan waliin ni hojjettuu?					
11.2	DhGMI (ECEX) keessatti bunnii gatii qonnaan bultoota fayyaduun ni gurgurama jettee yaaddaa?					
11.3	Odeeffannoon gatii buna DhGMI (ECEX) raabsamuu dhugaa irraatti kan hundaa'ee fi dhaqabamaadha.					
11.4	DhGMI (ECEX) sadarkaan qulqullina oomishini buna keetti olaanaa akka ta'u ni jajjabeessa					
11.5	Gaheen DhGMI (ECEX) taphatu cancala (Chain) soona (bu'aa) bunaa keessatti rakkoo tokko					
11.6	Gaheen DhGMI (ECEX) taphatu cancala (Chain) soona (bu'aa) bunaa keessatti Carraa gaariidha					

Odeeffannoo Dabalataa

_____

Appendix III

Addis Ababa University School of Commerce

MA- in Logistics and Supply Chain Management Program

Interview Questions for Roasting Companies

Dear respondents;

The purpose of this questionnaire is to collect primary data for conducting a study on the topic, "Opportunities of coffee Value Chain from farmers to local roasting companies in the case of farmers in Jimma zone Gommawored and selected coffee roasting companies in Addis Ababa" as partial fulfillment to the completion of the masters of Art in Logistics and Supply Chain Management at Addis Ababa University School of Commerce.

Considering that you have important roles in Ethiopia's coffee value chain you are humbly requested your precious time to do this interview for gathering primary data related to the topic of the study. I strongly assure you for the confidential treatment of your answers. I would like to thank your voluntary participation for the success of my research study. Finally, I express my special thanks for your concern, objectivity and patience while responding for my interview questions.

Thank you in advance!

1. How long do you involve in coffee roasting business?
2. What is your sex?
3. How old are you?
4. Where do you get the coffee roasting inputs such as green coffee, packing materials and other items? And do you think, there a quality problem on the purchase of green coffee?
5. Do you get quality green coffee product directly from farmers and what are the major challenge in coffee production in farmers' level to have a quality green coffee from farmers?
6. Do you think your coffee business have enough infrastructure facilitation?

7. To whom do you sell the roasted coffee? Domestic market or International market?
8. Which transportation method do you use to transport the inputs to the processing place and roasted coffee to market?
9. is your business closely work with farmers?
10. Do you believe the government policy flexible for local roasting companies to expand their business and work with other coffee value chain actors?
11. Is coffee giving you better revenue compared to your effort and expectation?
12. Is there a domestics demand available? If not, Why?
13. What do you suggest being done to make coffee more productive?
14. What makes you to choose coffee sectors instead of other business sectors?
15. What are the major opportunity and challenge in Companies' practices in terms of productivities, availability of facilities, availabilities of human and physical resources, Government policy flexibility?
16. How do you describe the farmers practice in terms of relationship with the local roasting companies?
17. How do you observe other actors' playing on value adding role in coffee value chain? From Which organization do you get a support?
18. What are the opportunity and challenge existing in the sector?