



An Assessment of Coffee Supply Chain Management Practices of Cooperatives:
The Case of Guji And West Guji Zones, Oromia, Ethiopia.

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COLLEGE OF BUSINESS AND ECONOMICS
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DEPARTMENT OF LOGISTICS AND SUPPLY CHAIN
MANAGEMENT

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Cooperatives: The Case of Guji and West Guji Zones, Oromia, Ethiopia.**

In Partial Fulfilment of the Requirements for MA Degree

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Declaration

I, Haro Duloma declare that this paper is a result of my independent research work on the topic entitled “An Assessment of Coffee Supply Chain Management Practices of Cooperatives”, in partial fulfilment of the requirements for the Degree of Masters of Art in Logistics and Supply Chain Management at Addis Ababa University. This work has not been submitted for a degree to any other university. All the references are also duly acknowledged.

Haro Duloma

Signature _____

Date _____

Confirmation

This is to certify that Haro Duloma has carried out this research work on the topic entitled “An Assessment of Coffee Supply Chain Management Practices of Cooperatives”, under my supervision. This work is original in nature and has not been presented for a degree in any University and it can be submitted for the partial fulfilment of the requirements for the award of the degree of Masters of Art in Logistics and Supply Chain Management.

Tariku Jebena (PhD)

Signature _____

Date _____

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Acronyms

SCM:- Supply Chain Management

SCR: Supplier and Customer Relationship

Abstract

Supply chain management practice in every sector (manufacturing, agriculture, construction, service etc) of Ethiopia, has arms length relationship and have rivalry relationship and compete among each other instead of cooperation, (Matiwos,2015).Lack of the understanding and adoption of the supply chain management concept and principles were stated as the statement of the problem of the research. In this study both quantitative methods was adopt to investigate the supply chain management practice. The purpose was to assess coffee supply chain management practices of the cooperatives in the case of Gujii and West Guji zones from farmers to export stage. Both sources of the data were used to collect the data from the three partners (farmers, primary cooperatives and cooperatives union) that involved in coffee supply chain. At the end, Statistical Package for Social Sciences was used to explain, understand and summarize data that was collected from partners. SCM practices, the case of the coffee supply chain management practice of cooperative has a great problem on understanding of supply chain management concept, training and IT practices at the different stage. Level of partners that understand the concept of supply chain management score mean values are 2.3, 2.3&2.1 respectively. 2.4, 2.71 & 2.5 are the groups mean values of survey that collected from the three partners respectively and 2.7 & 2.4 are the mean values of the cooperatives union and primary cooperatives respectively. Supply Chain Management is the implementation of a supply chain orientation across suppliers and customers. Companies implementing SCM must first have a supply chain orientation, (mentzer'et al, 2001).Create awareness is first step for practice supply chain management effectively, so each partners of coffee cooperative supply chain must work on the supply chain orientation.

Key: supply chain management

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

A supply chain consists of the series of activities and organizations that materials move through on their journey from initial suppliers to final customers (Waters, 2003).

The management of upstream and downstream relationships with suppliers and customers to deliver superior customer value at less cost to the supply chain as a whole. Thus, the focus of supply chain management is upon the management of relationships in order to achieve a more profitable outcome for all parties in the chain, (Christopher,2005) .supply chain management (SCM) has received in recent years a great deal of attention by researchers and practitioners. effective SCM will lead to lowering of the total amount of resources, required to provide the necessary level of customer services to a specific segment and improving customer service through and improving customer service through increased product availability and reduced order cycle time,(Banomyong and supatn 2011)

According to Business Case Study LLP (2015 Coffee is the world's most valuable agricultural commodity. The coffee industry in the United States, and around the world, has exploded in recent years. Consumer demand is ever increasing, and as consumers drink more and more coffee, quality and value become more and more important. One of the ways of improving the quality and value of coffees around the world is to integrate, collaborate, and improve existing supply chains. The majority of producers operate on farms that are less than 10 acres in size and in very remote locations. This can make it increasingly difficult to operate an efficient supply chain (<http://www.thetimes100.co.uk>).

The function of any supply chain is to successfully and efficiently manage the steps in production process as raw materials are turned into a finished product, and ultimately sold to consumers. The supply chain within the coffee industry can be very complex and difficult to manage. Supply chain management is a major concern in many industries as companies realize the importance of creating an integrated relationship with their suppliers and customers.

Managing the supply Chain has become a way of improving competitiveness by reducing uncertainty and improving service (Geige Christy.Honeyman r.Joel..Dooley .Frank, 1997)

According to Siber (2011) as cited by Fekadu (2013), the biggest sources of foreign trade for Ethiopia are coffee, flowers and oilseeds. In Ethiopia, about 25 % of the total population of the country is dependent on production, processing, distribution and export of coffee. It accounts for more than 25 % of the GNP, 40 % of the total export earnings, absorbing 25 % of the employment opportunity for both rural and urban dwellers, and 10 % of the total government revenue GDP. The total area covered by coffee in Ethiopia is about 600,000 hectares, with a total annual coffee production ranging from 300,000 to 350,000 tones about 40% of which is locally consumed. Out of this, small-scale subsistent farmers produce more than 95 % of the coffee, while the remaining comes from private and government owned large-scale farmers. The Coffee supply chains are poorly integrated to one another and with market systems. Moreover, they lack information and bargaining power, which effectively deny them the required level of benefits from the high consumer price of their produce.

1.2 Statement of the problem

Supply chain are set of three or more entities (organizations or individuals) directly involved in the upstream and downstream flows of products, services, finances, and/or information from a source to a customer (Meltzer et al, 2001). Another definition by Christopher (1998) a supply chain is the network of organizations that are involved, through upstream and downstream linkages, in the different processes and activities that produce value in the form of products and services delivered to the ultimate consumer. The management of upstream and downstream relationships with suppliers and customers to deliver superior customer value at less cost to the supply chain as a whole, (Christopher, 1998).

Supply Chain Management is: the systemic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses within the supply chain for the purposes of improving the long-term performance of the individual companies and the supply chain as a whole,(Meltzer et al., 2001)

According to (Fawcett and Magnum, 2002; Marine, 2000; Sandberg, 2007a) cited by Meltzer et al', the potential advantages SCM has shown to be difficult to implement and it could be argued that SCM is still a rare occurrence in today's business environment.SCM does not allow a

company to achieve improvement at the expense of other companies. Companies should build and maintain the following management practices: integrative behaviors, mutually sharing information, mutually sharing of risks and rewards, cooperation, the game goal and the same focus on serving customer, integration of processes, and building and maintaining long term relationship, (Meltzer et al 2001). Supply chain management practice in every sector (manufacturing, agriculture, construction, service etc) of Ethiopia, has arms length relationship and have rivalry relationship and compete among each other instead of cooperation (Matiwos, 2015).

According to Siber, (2011) as cited by Fekadu, (2013) the Coffee supply chains are poorly integrated to one another and with market systems. Moreover, they lack information and bargaining power, which effectively deny them the required level of benefits from the high consumer price of their produce. According to Business Case Study LLP (2015), one of the ways of improving the quality and value of coffees around the world is to integrate, collaborate, and improve existing supply chains, available at (<http://www.thetimes100.co.uk>). Lack of understanding and adoption of supply chain management concept and principles are stated as a statement of the problem of the research. Ethiopian plans to become the world's second largest coffee producer within seven years, (Ethiopian Business review, 2016). To achieve the country plan, understanding and practices of the supply chain management principles and strength the supply chain management is very important and only the way to achieve the intended plan. Therefore, purpose study is to assess supply chain management practices in the case of coffee cooperatives supply chain that found in the two zones by focus on the partners that involved in the chain from the farmer's stage up to export (union) stage

1.3 Basic research questions

- 1 What is the current level of understanding of SCM concept?
- 2 What is the current level of adoption of SCM?
- 3 What the level of information sharing between partners?
- 4 What is the internal operation looks like?

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 the study was to assess of coffee supply chain management practices of the cooperatives in the case of Guji and West Guji zones from the farmers to export stage.

1.4.2 Specific objective of the study

The specific objectives of the study are;

- 1.To assess the extent of understanding that the partners have about the supply chain management concept.
2. To assess current level of adoption of SCM practice.
3. To assess level of information sharing among the SCM partners.
4. To look into the internal operation integration of partners.

1.5 Significance of the study

This research contribute to the following areas

Create the awareness about the concept of the supply chain management and its importance on organizational performance.

It paves the way for educators or training institutions to consider when designing training on the issues relating to the SCM.

It serves as a step stone another researcher to conduct further and more detail study in the areas, in addition Ethiopian plans to become the world's second largest coffee producer so, to achieve this plan study may contribute.

1.6 Scope of the study

The focus of supply chain management is upon the management of relationships in order to achieve a more profitable outcome for all parties in the chain. This brings with it some

significant challenges since there may be occasions when the narrow self-interest of one party has to be subsumed for the benefit of the chain as a whole, (Christopher, 2005).

SCM encompasses vast areas of managerial practices. However, it is difficult and Unmanageable to conduct the study in all areas that summarizes SCM in terms of time, Finance and research manageability. Therefore, the scope of this study was delimited to specific context that is practices of SCM in coffee cooperatives supply chain (cooperatives union, primary cooperatives and farmers) that found in the Guji and West Guji zones. This study was analyzed based on the data collected from the three partners of coffee cooperatives supply chain.

1.7 Limitation of the study

The research samples were not corporate from all union primary cooperative producing area, so the conclusion from the two zones may not be represent all primary cooperatives of the union and also study is focus only from farmer up to export stage not encompass partners that downstream to the coffee supply chain. This study was proposed to collect data from manager and dispute manager of cooperatives union to further investigation of supply chain management practice but researcher cannot able to get them because of time and willingness. Additional researcher was faced the financial problem during the research data collection because of the distance of one coffee cooperative from others.

1.8 Definition of the terms

Supply chain: is all inter-linked resources and activities needed to create and deliver products and services to customers (Chopra, 2004).

Supply Chain Management: is a network of relationships, with the goal to deliver superior value, i.e., the management of upstream and downstream relationships with suppliers and customers to deliver superior customer value at less cost to the supply chain as a whole (Christopher 2005).

The management of upstream and downstream relationships with suppliers and customers to deliver superior customer value at less cost to the supply chain as a whole, (Christopher 1998).

Supply chain management practice; defined as approaches applied in managing integration and coordination of supply, demand and relationships in order to satisfy consumers in effective and profitable manners, (Ibrahim and Hamid, 2014). Lambert, Cooper, and Pagh (1998

) define the implementation of SCM as identifying the of SC members with whom it is critical to link , what processes need to be linked with each of these key members and what types /level of integration applies to each process link.

1.9 Organizations of the study

This research, paper was organized into five chapters: the report is structured so that the information presented to the reader is arranged in a logical sequence. It is presented in such a manner that the necessary background information is covered before going further into the next level of detail for maintaining the continuity of the subject matter. Contents of each presented as follows.

Chapter One: Introduction:-this chapter is to give introductory view to the reader about the thesis work like the statement of the problem, objectives scopes, significance, and limitations, and how the whole thesis is organized or structured.

Chapter Two: Literature Review:- this chapter is about the related literature in the area of the coffee supply chain management practices and theoretical frame of the study

Chapter Three: Research Methodologies:- was described different aspects of the methods used and situations that the researchers must consider during each phase of the study. Different ways of carrying out a study and ways of collecting information was discussed. The purpose of this chapter is to make the reader understand the methodological choices made on the study.

Chapter Four: Data Analysis And Interpretation:-this chapter was covered the result and interpretation of the research questionnaires and interview. This interpretation was used mean, frequency table, and percentile.

Chapter Five: summary of finding Conclusions, Recommendation And Future Works: - this chapter was presented the conclusions drawn from the study, and give recommendations. It was also include suggestion for further reaches in the area.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Definition supply chain management

A supply chain consists of all parties involved, directly or indirectly, in fulfilling a customer request. The supply chain includes not only the manufacturer and suppliers, but also transporters, warehouses, retailers, and even customers themselves. Within each organization, such as a manufacturer, the supply chain includes all functions involved in receiving and filling a customer request. These functions include, but are not limited to, new product development, marketing, operations, distribution, finance, and customer service (Chopra and Meindl, 2007)

CMCSP defines SCM as “encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all Logistics Management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third party service providers, and customers, (www.cscmp.org).

GSCF defines SCM as: “Supply Chain Management is the integration of key business processes from end user through original suppliers that provides products, services, and information that add value for customers and other stakeholders.” (Croxtton et al). On the forum website, they also write: “Supply Chain Management is not a business function; rather it is a new business model necessary for an organization's success and everyone in the organization needs to be involved” (www.scminstitute.org).

Supply chain management in this analysis as “the systematic, strategic coordination of the traditional business functions and tactics across these business functions within a particular company and across businesses within the supply chain, for the purposes of improving the long term performance of the individual companies and the supply chain as a whole, (mentzer’et al, 2001).

Supply chain management is the coordination of production, inventory, location, and transportation among the participants in a supply chain to achieve the best mix of responsiveness and efficiency for the market being served. Supply chain management acknowledges all of traditional logistics and includes activities such as marketing, new product development, finance, and customer service. In the wider view of supply chain thinking, these additional activities are

now seen as part of the work needed to fulfill customer requests. Supply chain management views the supply chain and the organizations in it as a single entity. It brings a systems approach to understanding and managing the different activities needed to coordinate the flow of products and services to serve the ultimate customer. This systems approach provides the framework in which to best respond to business requirements that otherwise would seem to be in conflict with each other, (Hugos, 2003)

Effective supply chain management involves the management of supply chain assets and product, information, and fund flows to maximize total supply chain profitability (Chopra and Meindl, 2007).Effective supply chain management requires simultaneous improvements in both customer service levels and the internal operating efficiencies of the companies in the supply chain, (Hugos, 2003).

The best companies around the world are discovering a powerful new source of competitive advantage. It's called supply-chain management and it encompasses all of those integrated activities that bring product to market and create satisfied customers, (zigiais, 2000). Supply chain consists of all stages involved, directly or indirectly, in fulfilling a customer request. The supply chain not only includes the manufacturer and suppliers, but also transporters, warehouses, retailers, and customers themselves, (Chopra & Meindl , 2003)

Supply chain management requires considering the organizational structure and identifying all the entities involved in manufacturing and shipping a product or service and connecting all of them with each other so that they can work efficiently as a team, (Hasan and Alim,2010). Supply chain management is on co-operation and trust and the recognition that, properly managed, the 'whole can be greater than the sum of its parts'. Focus of supply chain management is upon the management of relationships in order to achieve a more profitable outcome for all parties in the chain. This brings with it some significant challenges since there may be occasions when the narrow self-interest of one party has to be subsumed for the benefit of the chain as a whole (Christopher, 2005)

2.2 Evolution of supply chain management

The term Supply Chain Management was revealed in the late 1980s, and then it was exposed to all in 1990s. Before of that time Supply Chain Management was used as different terms like- logistics and operations management in the business fields,(Hugos, 2006).

At first blush, supply chain management may appear to be a vague concept. A great deal has been written on the subject without much concern for basic definition, structure, or common vocabulary. Confusion exists concerning the appropriate scope of what constitutes a supply chain, to what extent it involves integration with other companies as contrasted to internal operations, and how it is implemented in terms of competitive practices. For most managers, the supply chain concept has intrinsic appeal because it visions new business arrangements offering the potential to improve customer service. The concept also implies a highly efficient and effective network of business linkages that can serve to improve efficiency by eliminating duplicate and nonproductive work, (Bowersox, Closs and Cooper,2002).

2.3 Importance of Supply Chain Management

Supply chain management is a fundamentally different philosophy of business organization and is based upon the idea of partnership in the marketing channel and a high degree of linkage between entities in that channel. Traditional models of business organization were based upon the notion that the interests of individual firms are best served by maximizing their revenues and minimizing their costs. If these goals were achieved by disadvantaging another entity in the channel, then that was the way it was. Under the supply chain, management model the goal is to maximize profit through enhanced competitiveness in the final market a competitiveness that is achieved by a lower cost to serve, achieved in the shortest period possible. Such goals are only attainable if the supply chain as a whole is closely coordinated in order that total channel inventory is minimized, bottlenecks are eliminated, time frames compressed and quality problems eliminated. This new model of competition suggests that individual companies compete not as company against company, but rather as supply chain against supply chain. Thus, the successful companies will be those whose supply chains are more cost-effective than those of competitors are.

In the ancient Greek fable about the tortoise and the hare, the speedy and overconfident rabbit fell asleep on the job, while the slow and steady turtle won the race. That may have been true in

Aesop's time, but in today's demanding business environment, "slow and steady" won't get you out of the starting gate, let alone win any races. Managers these days recognize that getting products to customers faster than the competition will improve a company's competitive position. To remain competitive, companies must seek new solutions to important Supply Chain Management issues such as modal analysis, supply chain management, load planning, and route planning and distribution network design. Companies must face corporate challenges that impact Supply Chain Management such as reengineering globalization and outsourcing, (zigiais, 2000). Success or failure in this future world will hinge on the agility and strength of the supply chain team rather than on the competitive power of an individual company. Several forces are driving competition in this direction (Magnan,Fawcett, and Charter.2005).

There is a close connection between the design and management of supply chain flows (product, information, and funds) and the success of a supply chain. Wal-Mart, Dell Computer, and Seven-Eleven Japan are examples of companies that have built their success on superior design, planning, and operation of their supply chain. In contrast, the failure of many e-businesses such as Webvan can be attributed to weaknesses in their supply chain design and planning. Similarly, Quaker Oats's acquisition of Snapple in 1994 is an example of how the inability to design and manage supply chain flows effectively led to failure ,(Chopra and Meindl, 2007).

2.4 Objectives of Supply Chain Management

The objective of every supply chain should be to maximize the overall value generated.

The value a supply chain generates is the difference between what the final product is worth to the customer and the costs the supply chain incurs in filling the customer's request, (Chopra and Meindl , 2007).

The main reason and objective of SCM is to provide a strategic weapon to build up and enhance sustainable competitive advantage by cost reduction without compromising customer satisfaction (Meltzer et al. 2001).

The fundamental objective is to "*add value*". That brings us to the example of the fish fingers.

During the Supply Chain Management '98, conference in the United Kingdom this fall, a participant in a supply chain management seminar said that total time from fishing dock through manufacturing, distribution, and final sale of frozen fish fingers for his European grocery-products company was 150 days. Manufacturing took a mere 43 minutes. That suggests an

enormous target for supply chain managers. During all that time, company capital is almost literally in this case--frozen. What is true for fish fingers is true of most products.

Examine any extended supply chain, and it is likely to be a long one. James Morehouse, a vice president of consulting firm A.T. Kearney, reports that the total cycle time for corn flakes, for example, is close to a year and that the cycle times in the pharmaceutical industry average 465 days. In fact, Morehouse argues that if the supply chain, of what he calls an "extended enterprise," is encompassing everything from initial supplier to final customer fulfillment, could be cut to 30 days, that would provide not only more inventory turns, but fresher product, an ability to customize better, and improved customer responsiveness. "All that add value," he says. In addition, it provides a clear competitive advantage. Supply Chain Management becomes a tool to help accomplish corporate strategic objectives:

- reducing working capital,
- taking assets off the balance sheet,
- accelerating cash-to-cash cycles,
- Increasing inventory turns, and so on.

2.5 Supply Chain Principles

According to zigiáis (2000), they are seven supply chain principles.

1. **Segment customers based on service needs.** Companies traditionally have grouped customers by industry, product, or trade channel and then provided the same level of service to everyone within a segment. Effective supply-chain management, by contrast, groups customers by distinct service needs--regardless of industry--and then tailors services to those particular segments k

2. **Customize the Supply Chain Management network.** In designing their Supply Chain Management network, companies need to focus intensely on the service requirements and profitability of the customer segments identified. The conventional approach of creating a "monolithic" Supply Chain Management network runs counter to successful supply-chain management.

3. **Listen to signals of market demand and plan accordingly.** Sales and operations planning must span the entire chain to detect early warning signals of changing demand in ordering

patterns, customer promotions, and so forth. This demand-intensive approach leads to more consistent forecasts and optimal resource allocation.

4. **Differentiate product closer to the customer.** Companies today no longer can afford to stockpile inventory to compensate for possible forecasting errors. Instead, they need to postpone product differentiation in the manufacturing process closer to actual consumer demand.

5. **Strategically manage the sources of supply.** By working closely with their key suppliers to reduce the overall costs of owning materials and services, supply-chain management leaders enhance margins for both themselves and their suppliers. Beating multiple suppliers over the head for the lowest price is out, Andersen advises. "Gain sharing" is in.

6. **Develop a supply-chain-wide technology strategy.** As one of the cornerstones of successful supply-chain management, information technology must support multiple levels of decision-making. It also should afford a clear view of the flow of products, services, and information.

7. **Adopt channel-spanning performance measures.** Excellent supply-chain measurement systems do more than just monitor internal functions.

They adopt measures that apply to every link in the supply chain. Importantly, these measurement systems embrace both service and financial metrics, such as each account's true profitability.

2.6 Key components of supply chain management

According to Johnson and Pyke, (2000) cited by Assefa they identified twelve areas of SCM, from their own experience of teaching and researching supply chain management, from analysis of syllabus and research papers on supply chain, and from their discussions with managers. These twelve categories they identified and defined are: location, transportation and logistics, inventory and forecasting, marketing and channel restructuring, sourcing and supplier management, information and electronic mediated environments, product design and new product introduction, service and after sales support, reverse logistics and green issues, outsourcing and strategic alliances, metrics and incentives, and global issues. So that when anyone think about SCM should have to consider these issues, (Assefa Balda ,2011).

2.7 Collaborations in supply chain

Collaboration is increasingly promoted as somewhat of a “Silver Bullet” in many areas of SCM. By the term SCM, we refer to the integration of all activities associated with the flow and transformation of goods, information, and the associated funds, through improved supply chain relationships of all involved entities, (Mentzer et al., 2001).

It will be clear that one of the key ingredients of supply chain management excellence is a high level of collaboration across the network, (Christopher, 2011, p.214)

Those companies that can create collaborative supply chains will have a significant competitive advantage. Collaboration is not easy to implement and it will take time to become more common in business. However, prominent companies are already beginning to lead the way. Companies such as Wal-Mart, Dell, and Proctor & Gamble share point of sales data with all the other companies in their respective supply chains. The companies in these supply chains are also starting to share inventory data with each other. Sharing this kind of information provides a basis for each company to make decisions about its own activities that will yield better efficiencies and profits for itself and for the supply chain as a whole, (Hugos, 2006).

According to Magnan, Fawcett, and Charter (2005) .the competitive success will depend on a company’s ability to identify outstanding potential supply chain partners and then develop powerful supply chain alliances with them. Alliance creation and management will become a critical capability for successful companies. Given the implied importance of supply chain alliances to the success of emerging competitive strategies, managers and analysts alike not only need to understand more completely the status and impact of current supply chain alliance practice but also must be able to separate the rhetoric from the reality of alliance discussions to effectively formulate and implement their supply chain alliance strategies.

2.8 The supply chain as a Competitive Advantage

As companies such as Wal-Mart and Dell Computer have so clearly shown, if a company can design and build a supply chain that is responsive to market demands, it can grow from a small company to become a major player. Efficient supply chain operations are central to being able to satisfy market demands and to do so in a way that is profitable. Supply chain opportunities generally come in one of two categories. The first category is to fix or improve something already in place. The second category is to build something new. In both categories you have to

first define the goal and then set about to accomplish that goal. Depending on which type of opportunity you are pursuing, the way to accomplish the goal will be different (Hugos, 2006).

The need for managing supply chain and adopting supply chain management through integration with partners is inevitable for Ethiopian firms, because it is not only a source of competitive advantage for these firms but also to survive even as followers as the firms are already in the global market competing with global companies, (Matiwos; 2009)

Coffee supply chain can also develop the supply chain as the competitive weapon, but to make it as source of competitive they should work on each partner to improve coffee quality, create the collaborative spirit and develop the smooth relation with partners that directly or indirectly involved in supply chain.

2.9 Supply Chain Management Practice

The practice of SCM is refers to complete set of actions which are done in organizations towards to improve the effectiveness in the internal supply chain. SCM practices are defined also as approaches applied in managing integration and coordination of supply, demand and relationships in order to satisfy consumers in effective and profitable manners, (Ibrahim and Hamid, 2014).

Supply Chain Management is now recognized as a critical business process for companies manufacturing or distributing products. This is because customers' demand for most products are ever more demanding in response time, in choice and in seeking more competitive prices and thanks to globalization, customers can choose from an increased number of suppliers, (Lazarovic et al., 2007).

The implementation of SCM involves identifying the SC members with whom it is critical to link , what processes need to be linked with each of these key members and what types /level of integration applies to each process link. The objective of SCM is to maximize the competitiveness and profitability for the company as well as the whole supply chain network including the end customer (Lambert, Cooper, and Pagh 1998).

Supply chain management was considered just like a concept and Implementation of this concept was very difficult as there were some necessary components in the total chain to connect with each other. The focal part of the barrier to full supply chain management was the cost of communication and coordination among the many independent suppliers in each supply chain.

An entire supply chain covers the area from the creation of raw materials to the delivery of the finished consumer goods, (Hasan and Alim, 2010)

Supply chain management practice in every sector (manufacturing, agriculture, construction, service etc) of Ethiopia, has arms length relationship and have rivalry relationship and compete among each other instead of cooperation (Matiwos, 2015).

According to Siber (2011) as cited by Fekadu (2013) the Coffee supply chains are poorly integrated to one another and with market systems. Moreover, they lack information and bargaining power, which effectively deny them the required level of benefits from the high consumer price of their produce. Matiwos and Siber traced in their analysis that there is a problem of understanding and adoption of supply chain management principles. The main target of this study was to conduct assessment on the level of understanding supply chain management concept and the practice of supply chain management theory on the ground based on five basic perspectives of the supply chain management practices developed by (Perry and Sohl 2000; Lazarovic et al., 2007). These are namely; supplier and customer relationship, information sharing, internal operation, information technology and training

2.9.1 Supplier and Customer Relationship management

Supply chain management practices that encompasses supplier partnership, customer relationship and information sharing, (Sukat et al,2011)

According to Tan (2001) cited by Assefa,Supplier and customer relationship is defined as a set of firms' activities in managing its relationships with customers and suppliers to improve customer satisfaction and synchronize supply chain activities with suppliers, leverage suppliers' capacity to deliver superior products to customers. This is due to the ultimate objective of SCM is to deliver products to the satisfaction of end customers.

Firms that integrate with customers including: planning, implementing, and evaluating a successful relationship between the provider and recipient of both upstream and downstream of the supply chain. Therefore, customer relationship management (CRM) is not only focused on inbound customer relationships but also on outbound customer relationships in SCM, (Sukat et al, 2011).

Organizations depend on their customers and therefore should understand current and future customer needs, meet customer requirements, and strive to exceed customer expectations. Customer relationship management (CRM) is an important component of SCM. A firm's customer relationship practices can generate the organizational success in supply chain management practices efforts as well as its performance. Supplier's partnership represents the long-term relationship between the organization and suppliers. An effective supplier's management can be critical components of a leading edge supply chain, (Ibrahim and Hamid, 2014). In case of coffee industry develop the good relation with customer and supplier is very important for the success of the organization. In the Customer context, having the smooth relationship with your buyers is help organization while the coffee price fluctuation in the international market, organization loyal customer is not switch from them. Supplier's context it contribute a lot for fulfillment your customer requirement as per requirement. Customer and suppliers relationship is use in the research as core and one perspective of the supply chain management practices in the organization. Supply chain management principles does not allow a company to achieve improvement at the expensive of other companies, this is only if the good customer and suppliers relationship is developed.

2.9.2 Internal operation

In addition to the upstream and downstream integration, SCM also emphasize on the importance of both effectiveness and efficiency of firm's internal operations on its performance. This is due to a significant element of SCM practice is an internal operations and they are the basis for developing a competitive advantage before embarking into external integrations. Poor internal operations can lead to failure in coordinating with external partners,(Handfield and Nichols 1999). SCM practice as an effective and value adding the internal operation should be flexible in responding to changing market needs, which is expressed based on agility principles. This means that, a production system must be able to perform rapid change over in order patterns and mass customization, (Lambert and Cooper 2000).internal operation in any industry use as glue to hold the downstream and upstream supply chain management together. If both streams are strong but internal operation is weak, it's think about the success of the organization just like think about winning battle without weapon. the strong and integrated internal operation coffee industry contribute in following areas; flexibility of the production with customer requirement , create

the collaborative spirit that makes flow of product smooth between the departments, and makes each stage of production quality controller,,etc.

2.9.3 Information Sharing

Supply chain management practices that encompasses supplier partnership, customer relationship and information sharing, (Sukat,et al).

Information sharing is necessary to reduce uncertainty and lower inventory levels. The respondents stressed that willingness to share information must extend both in the firm and across the supply chain (suppliers and buyers). Communication in the company is important and may decide who the customer is and what the company's goals are, and may make sure that these two issues match (Geige Christy.Honeyman r.Joel..Dooley .Frank, 1997).

The sharing of information is a critical success factor if seamless product and money flows between initial suppliers and end-consumers in the 'macro' (or external) supply chain, as well as in the 'micro' (or internal) supply chain between different intra-organizational functions, is to be achieved. Inefficiency anywhere in the chain, is it internal or external in nature, will result in the chain as a whole failing to maximize its true competitive potential. The whole chain is only as strong as its weakest link, (Wagner and Sweeney, 2010).

Unconventional supply chains each stage in the chain tends to be disconnected from the others. Even within the same company, the tendency is for separate functions to seek to optimize their own performance. To overcome these problems it is clear that the supply chain needs to act as a synchronized network, not as a series of separate islands. Synchronization implies that each stage in the chain is connected to the other and that they all 'march to the same drumbeat'. The way in which entities in a supply chain become connected is through shared information, (Christopher, 2011).

According to Lee and Whang, (2000); Lee, (2002), Information sharing is an important aspect in achieving perfect integration in a supply chain. Cross-functional integration and inter organizational integration requires the visibility of information across the supply chain. Poor information sharing between partners in a supply chain will result in poor coordination that will lead to many serious problems such as high inventory levels, inaccurate forecasts, low resource utilization, and high production costs. Indeed, information sharing is highly considered as the way to reduce demand uncertainty, cited by Assefa Balda, (2011)

The way companies share information whatever the confidential level or not; determines the success of the collaboration. The nature of information to be across the supply chain differs based on the degree of integration, institutional trust and availability of infrastructure that facilitate the practice, (Lazarovic, et al., 2007). In old paradigm information is considered as the source power for single organization but now it shift from single to the supply chain partners without hoarding information between them, special in case of coffee supply chain management ,because the coffee price is determined based on the international market . In order to update with price information, information sharing and trust between each partners are crucial and important.

2.9.4 Information Technology

The use of information technology (IT) is considered a prerequisite for the effective control of today's complex supply chain, (Auramo,et.al, 2008)

Information technology plays a crucial role in SCM as a key enabler of supply chain integration and supply chain collaboration. Information technology, in general, refers to the technology of information processing, which includes three aspects: storage, computation, and transmission. Storage is to keep information in a media for future access. Computation is to execute calculations from input data to generate output. Transmission is to transfer information from one location to another for data sharing. From this perspective, many ancient inventions in history, such as papers, abacuses, and pigeons, were IT for storage, computation, and transmission. Information Technology (IT) has become an important enabler of today's global supply chain, and it not only facilitates the management of information flow along the supply chain, but also enhances the planning of product flow and cash flow (Liu, 2012). Information technology is play key role in coffee supply chain to coordinate the supply chain partners from the farmers up to the end user (cup).Supporting the partners with Upgrade of price information with international coffee price since coffee price is depending on the international price and price volatility is high.

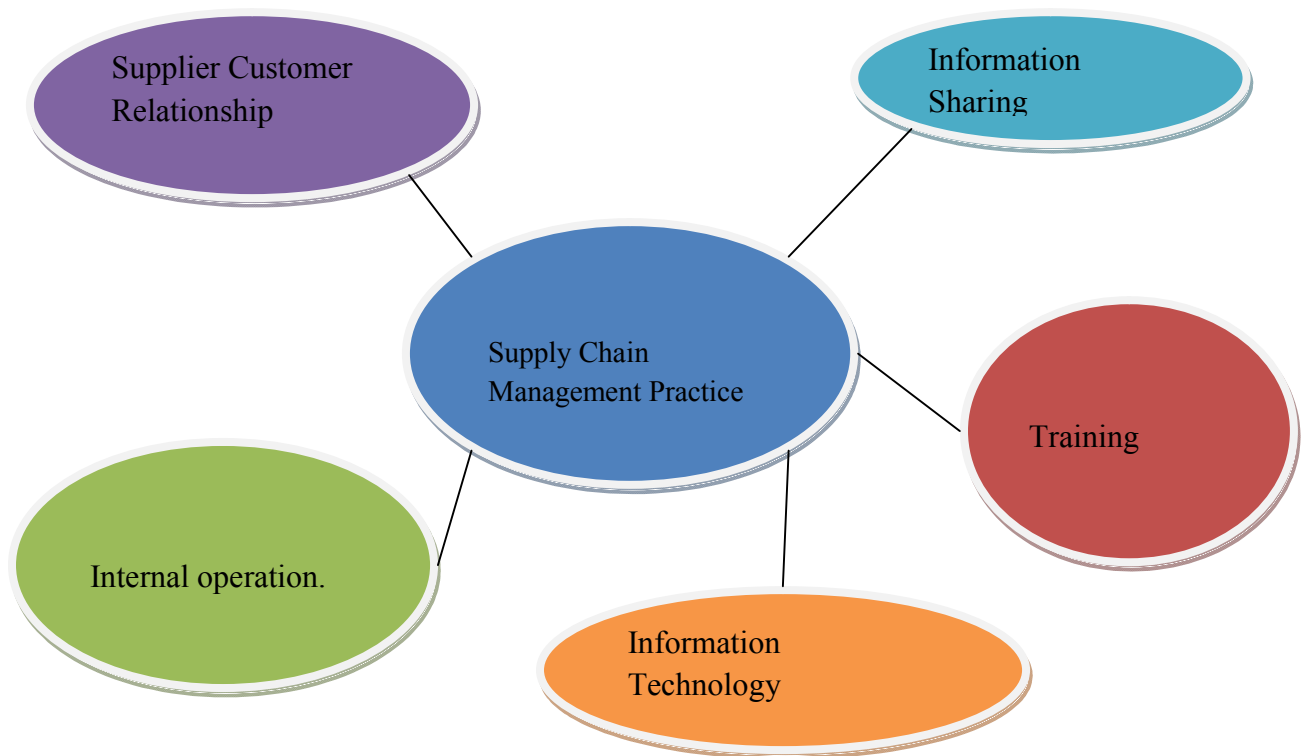
2.9.5 Training

The major concept of SCM is collaboration and seamless integration between various value adding activities within individual companies and across different organizations along a supply chain. Bringing this concept into practice requires significant changes in corporate culture as well as a new level of human performance. Successful implementation of SCM concept largely depends on human assets of organizations (Bowersox *et al.*, 2000; Mentzer, 2001).

According to Lazarovic, et al. research, (2007) training is significantly contribute improve the supply chain performance. In today the technology changing daily so to come up with new technology, training play great role for each partner at different stage of the supply chain. Training in the coffee supply chain management is about the create awareness about importance of the supply chain management, coffee quality, new technology.

2.10 Conceptual framework of the research

After the theoretical related literature of the research from the different books, journals, article. This conceptual frame is developed for further understanding and diagrammatical expression of the conceptual framework indicates commonly known SCM practices namely: supplier customer relationship, information sharing, information technology, training and internal operation.



(Source: Researcher, 2017)

Figure 2.1 Conceptual framework of the research

CHAPTER TREE

RESEARCH METHODOLOGY

3.1 Description of the study area

Geographically Guji and West Guji Zones are located at southern part of Oromia region. The livelihood of the society is mainly based on cattle herding, production of coffee and mineral product. Coffee growing in the highlands districts of two zones, major of them are namely Bule Hora, Qarca, Adola reedde, Galana Abbaya, Shakiso, Aaga wayu, Uraga, Hambla Wammana and Birbissa Kojowa.

3.2 Research Approach

Descriptive research is useful because it can provide important information regarding the average member of a group. Specifically, by gathering data on a large enough groups of people, a researcher can describe the average member, or the average performance of a member, of the particular group being studied, (Marczyk, DeMatteo, Festinger, 2005). To describe the supply chain management practices within five perspectives this types of the research is important, so this study was descriptive approach.

3.3 Research Design

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure.

In fact, the research design is the conceptual structure within which research is conducted. It constitutes the blueprint for the collection, measurement and analysis of data. Research design does not depend on whether you intend to use quantitative, qualitative or mixed methods of data collection and analysis (adam, 2007). This study was intended to assess the SCM practices based on fundamental theories, principles and management philosophies that were supposed to be effective parameters just to assess the SCM practice.

3.4 Population and Sample

In this research, the total population of study were includes all employees of Oromia Coffee Farmers Cooperatives Union Galan Branch, Primary Cooperatives of the two zones and Farmers those sell coffee for the primary cooperatives from two zones. Samples of the study were selected from the cooperatives union, primary cooperatives and farmers from the two zones that are believed to be the right information's sources for the subject under consideration. Population and samples of the study were mentioned as bellow from each supply chain partners (farmers-union) except the population of the farmers.

Sampling strategies are divided into two main group's probability and non-probability sample selection sampling so, this study was deployed both.

3.4.1 Cooperatives union

The Oromia coffee farmers' cooperatives union general has the three offices branches these are Galan branch, Dire Dawa branch and Kality branch. Galan branch is the Union headquarter as well as process center for coffee that come from the cooperatives that found in the two zones. The study samples were selected from Galan branch because of the study is based on the cooperatives from the two zones, and Galan branch is headquarter for the organization. Cooperatives union samples were selected based on the purposive sample selection strategy, because in this approach, the investigator has complete freedom in choosing his sample according to his wishes and desire and major employee's profession is not related to the main target of the study. The Oromia Coffee Farmers Cooperative Union has total 158 permanent employees; Galan branch has 117 permanent employees within eight the departments. Samples that were selected from the cooperatives union as follows from each department except the fright department and General Service Department. Fright department employees professions are Trucker driver and assistant, and General Service department employees are janitor and guard, so this department employees were not included into the samples of the study. Based on the Malhorta Naresh sample size determination samples for cooperatives union were selected. Researcher was selected each sample unit from each departments based on the their profession and position that target to the study judgmentally.

Table 3.1 Cooperatives union selection

Cooperatives Union Departments	Total population size	Number of sample
Finance Department	9	3
Commercial Department	6	5
Coffee Quality Management Department	7	5
Factory Processing Main Division Department	20	5
Warehouse Department	9	6
Project And Program Department	6	3
Total	57	27

(Source: researcher, 2017)

3.4.2 Primary cooperatives

The primary cooperatives are one of those partners that involved in the coffee cooperative supply chain, which buy coffee from farmers and sell it to cooperative union based on the price set by the Ethiopian commodity exchange. The Oromia coffee Farmers' cooperatives union general has the total number of 360 primary cooperatives that may increase/decrease from year to year depend on the interest of the cooperatives. The total primary cooperatives in the region supply coffee to the Oromia coffee Farmers cooperatives union. Cooperatives are found in the different zones of the Oromia region like, Wollega, Jimma, Illu Abba Bora, Hararge Guji, West Guji, Arsi and Bale are the major coffee producing zones but this thesis focus only on the primary cooperatives that found in the Guji and West Guji zones. The Guji and West Guji zones are found in the south part of the Oromia region and that share the large number of the primary cooperatives than others the zones that found in the south part of the region. The total numbers of the primary cooperative that found in the two zones are 67 in number. 21 primary cooperatives were selected from Guji and West Guji zones, based on the Malhorta Naresh, sample size determination.

Table. 2 Primary cooperative samples size determination

Population Size	Sample size		
	Low	Medium	High
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
3021-10,000	80	200	315
1001-35000	125	315	500
35001-150000	200	500	800

(Source: Malhorta Naresh, Marketing Research: an applied approach, 2007)

Researcher was followed the method of proportional allocation under which the sizes of the samples from two zones are kept proportional to the sizes of primary cooperatives of zones.

That is, if P_i represents the proportion of population included in stratum i , and n represents the total sample size, the number of elements selected from stratum i is $n \cdot P_i$

N = total number of primary cooperatives of the two zones which 67

n = total sample size which is 21 primary cooperatives

N_1 =total number of the primary cooperatives of on zone (Guji = 28)

N_2 = total number of the primary cooperatives of on zone (Guji = 39)

$P_1 = n (N_1/N) = 21(28/67) = 9$ primary cooperatives were selected from Guji zone.

$P_2 = n (N_2/N) = 21(39/67) = 12$ primary cooperatives were selected from West Guji zone.

3.4.3 Individual Farmers

A cooperative purchases coffee from farmers at the market price. The price is determined based on competition between cooperatives and private traders. The research Samples were selected from the farmers that sell their coffee to primary cooperative from the two zones.

Five farmers were selected from the each selected primary cooperatives, which means 105 farmers were selected for research samples out of selected farmers only 86(82%) farmers return the questioner. Samples were limited to the five farmers from each cooperatives only because of the manageability of the study, cost and time.

3.5 Data sources

Data are the data collected for records or any statistical investigation. Data collection is a practical activity, one that has to be carried out within time, spatial and resource constraints. It is therefore important to consider how valid social research data can be collected effectively and efficiently within those constraints. The history of social research has included the development of a range of research tools to help social researchers to organize and manage the task of data collection (Mathews and Rozz, 2010). There are two sources of data namely, primary and secondary source. Secondary data (information) always provides a better understanding of the problem and it may suggest reformulation and solution not considered previously. Primary Sources is important to collect the necessary original data from sample directly. These sources of data were used as source of data for the data that were collected from the three partners of supply chain. Primary data were collected from the cooperatives union, farmers and primary cooperatives through the questionnaires, and secondary data were collected by reviewing related literature.

3.6 Data Collection Procedures

In this research, both primary and secondary sources of data were used as source of data, through Questionnaires, and literature review. While primary data were collected by questionnaires and secondary data were collect through the literature review. Questionnaire: Close-ended questionnaire in a 5-point likert scaled questions were distributed to the three supply chain management partners to collect the data. The importance of using questionnaire is the data gathered through questionnaires is simple and clear to analyses and it allows for tabulation of

responses and quantitatively analyzes certain factors. The questionnaire has 5 rating scales ranging from 1- very low to 5- very high. The questionnaires that used in the research is modified from the questionnaires that developed by Assefa Balda,(2011). Secondary data were collected from necessary related literature like articles, journals brochures, partner’s annual reports, magazines, and internet.

3.7 Validity and Reliability of the Study

To make the instruments measure what was intended to measure the respondents are clearly communicated on the contents of the questioner as well as the objectives of the research. To keep consistency of the research researcher was used cronbach Alpha.

According to Zikmud et al (2010) cronbach’s alpha is a measure for the internal consistency of items to the concept. Scales with coefficient alpha between 0.8 and 0.95 are considered to have very good reliability, scales with coefficient alpha between 0.7 and 0.8 are considered to have good reliability and coefficient alpha between 0.6 and 0.7 indicates fair reliability.

Table 3.3 Cronbachs alpha coefficient of variables for the pilot test

	Cronbach's Alpha		N of items
Cooperatives Union	.802	Very good reliability	25
Primary cooperatives	.744	Good reliability	26
Farmers	.716	Good reliability	12

(source researcher surveys ,2017)

3.8 Data Analysis

In general, there are two types of data analysis techniques namely: qualitative and quantitative where by the choice of these methods greatly depends on the type of information that collects by researcher. Therefore, as determined in the data collection tool for this study, data were collected in questionnaire. The research data were analyzed quantitatively (mean and group mean). Data analysis used the Statistical Package for Social Sciences to explain understand and summarize

the data that were collected and it used to analysis data like mean, frequency and percentile to analyze respondent background and data.

3.9 Ethical Considerations

Ethics in research is a situated practice as the quotation above implies. Ethical decisions are the result of a weighing up of a myriad of factors in the specific complex social and political situations in which we conduct research (Bridget Some.KH and Cathy Lewin, 2005).

Social research is about human beings and because most social research involves human beings, their experiences, their attitudes and their ideas directly, and because participation in social research is itself a social activity which will have an impact on both the researcher and the research participants, ethical issues are important considerations when planning any social research (Matthews and Ross,2010). Researcher considered all necessary ethical issues that relate to all research participants directly or indirectly. Example, privacy right, keeping security of the organization and depend on the consent than enforce.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION

4.1 Response rate

Response rate for union, 27 total questioners were distributed out of that only 20 questionnaires were returned response rate is 74%. Response rate for primary cooperative, 63 total questionnaires were distributed to three employees that selected from twenty-one primary cooperatives out of that 56 were returned that means response rate 89%. Response rate for farmers, 105 total questionnaires distributed to the farmer's only 86 farmers returned the questionnaire. According to vice-chancellors committee and careers council of Australia (2001) which is cited Duncan D.Nulty (2008) regarded an overall response rate of 70% is to be desirable and achievable.

4.2 Demographic of the respondents

The demographic profile of the sample respondents were presented and analyzed below. The purpose of assessing respondents' age, sex, is that, to determine whether the researcher considered heterogeneity of sample units. On the other hand assessing the work experience and education level of the respondents' is that, when the respondents are more experienced and educated they have better opportunity to understand the case and give better response than else.

Gender frequency of the Union respondents shows that the numbers of male respondents were three times as female respondents. 75 % of the respondents were is male while 25% is female respondents with none of the invalid. Gender frequency distribution of the primary cooperatives of this survey show 67.9% respondents were male while 32.1% is respondents were women, this indicate from office holder of primary cooperatives employees majors are male.

Table 4.1 Demographic of the respondents

		Cooperatives Union	Primary cooperatives	Farmers
Gender	male	15	38	77
	Female	5	18	6
	total	20	56	Mis 3 86
Age	20-25 years	0	9	1
	26-30 years	5	12	0
	31-35 years	8	15	9
	36-40 years	3	7	27
	Above 40 years	4	13	47
	total	20	56	86
work experience	1-3 years	3	3	
	4-6 years	5	16	
	7-11 years	9	15	
	Total	3	22	
		20	56	
Educational qualification	Below grade 8	0	18	
	Grade 10 completed	0	13	
	Grade 12completed	0	7	
	Certificate	1	6	
	College diploma	7	8	
	First degree	10	3	
	Second degree and above	2	0	
	total	20	56	

(Source: researcher's survey,2017)

Gender frequency distribution of the farmers of this survey show 89.5% respondents were male while 7% is respondents were women remain 3.5% respondents did not identified their sex.

In order to collect the necessary data regard to respondents age, researcher divided the age in to four different groups, accordingly most of respondents age were found between 31-35 years this means about 40%, second age groups age between the 26-30 years about 25%, next is age groups that found above 40 years (20%). the least age groups are found between 36- 40 years.

In the generally most of the cooperative union employees are adult and productive that may contribute a lot for the union.

as clearly revealed in the above about the age information of the primary cooperatives respondents most respondents lies in ages 31-35 (26.8 %), 13 (23.2 %) respondents were age above 40 years, 12 (21.4%) respondents age were between 26-30 ages, this indicate the employees and members of the primary cooperatives are matured and adults as per respondents report.

As the above tables indicates age of the farmers respondents of the study most respondents ages were above 40 years (54%) and the ages between 36-40 ages (31.4 %) as a result the farmers that provide the coffee to primary cooperatives are matured and they produce coffee for the long period of time.

as the above table show years of work experience of the employees of the union are found between 7-11 years the next is years above the 11 years, this indicate that most union employees are experienced that considered as a fruitful opportunity for union to achieve the goal that stated to achieve in the future.

primary cooperatives respondents years of the experience was lies above 11 years (39.3%) experience years, 4-6 years experience were reported about the 28.6% (16) respondents, the next were the years of experience between the 7-11 years and the least distributed years as survey years between the 1-3 years. In generally employees and members of the primary cooperatives were most experienced and involved in the business for long period.

Above table is about the union employees education qualification the highest education level attained by most of the respondents are first degree holders which represents, (10) 50% and followed by college diploma which is (7) 35%.

4.3 Coffee supply chain management practices of cooperatives

Descriptive data analysis

As it were revealed in the methodology part, the designed method is descriptive statistical analysis to analyze the five components of the conceptual framework developed for this study. The analyses were on:

Supply chain management practices based on the five perspectives. The above listed items are the most critical parts of the conceptual framework and basic research variables of this paper. For the analysis of all these variables, mean and standard deviation is used. Particularly mean value of the respondents has considered as an important indicator to the extent of the coffee cooperatives practices on each items. To conclude, the overall performance of the case each supply chain practices on each variable, group mean was calculated and used. The mean and group mean statistical values approaching to 2.00 and less indicates the poor performance, 3.00, average/moderate while 4.00 and 5.00 indicates higher and very high/excellent performance of the company on that particular item and variable respectively. As it was briefly mentioned in the literature part of this study, the most common supply chain management practices are supplier and customer relationship, internal operation, information sharing, information technology and training (Perry and Sohal 2000; Lazarovic et al., 2007). This study focused on the case of coffee cooperatives SCM practices from these five perspectives. For each practices different items were developed and measured based on their mean and group mean values.

4.3.1 Descriptive data analysis for union

4.3.1.1 Customer and supplier relationship management

Supply chain as a whole may have its own identity and function like an independent firm. However, to accomplish this ultimate supply chain, all companies in the supply chain must have a supply chain orientation (mentzer'et al,2001). , Ellram and Cooper (1990) also contend the successful supply chain relies on forming strategic partnerships with long-term orientations. Cooperative relationships, i.e. joint planning, the company creates good relations and joint goals with its suppliers and with this kind of relations, it is easier to build long-term collaborations (Wong, 2003).Below table indicates the extent of relationship that exists between suppliers, Customers and the case primary cooperatives. Accordingly, the group means of suppliers and customers' relationship is 3.192, which is average/moderate performance with respect to the overall measures taken into consideration. All measurements were indicating the average/moderate performance. Union follow -up primary cooperatives for feedback mean score 2.7 which means union is weak in the feedback.

Table 4.2 customers and supplier relationship practice of SCM.

		N	Mean	Std. Deviation
1	Level of Customize the Supply Chain Management networks.	20	3.05	.826
2	Joint planning with primary cooperatives to improve the quality of coffee	20	3.15	.875
3	The level of cooperativeness with your primary cooperatives to develop the long term relationship and strength coffee supply chain management that of benefit all your partners	20	3.25	.716
4	Follow-up primary cooperatives for feedback	20	2.90	1.119
5	The level of cooperativeness with your buyers to develop the long relationship and strength coffee supply chain management that benefit all of your partners	20	3.20	.696
6	Follow-up buyers for feedback	20	3.40	.754
7	Joint product planning with buyers improve the quality of the coffee	20	3.40	.754
Group mean			3.192	

(Source: researcher's survey,2017)

4.3.1.2 Internal Operation

Poor internal operations can lead to failure in coordinating with external partners, (Handfield and Nichols 1999). SCM practice as an effective and value adding the internal operation should be flexible in responding to changing market needs, which is expressed based on agility principles. This means that, a production system must be able to perform rapid change over in order patterns and mass customization; (Lambert and Cooper 2000).Eight items were developed to see the internal operation with perspectives of supply chain management practice in the cooperatives union. The mean values of the group indicate the moderate performance of the union internal however the level of understanding concepts of supply chain management 50% (2.3 mean values) respondents reported as it is weak and adoption of the supply chain management concept 55% (2.1 mean value) respondents reported as it is weak. Thus, show less

understanding and adoption of supply chain management concepts at ground when compare with others items mean values, it is further assignment for cooperatives union to work on. While 50% respondents reported information system integration among internal functional units as medium.

Table 4.3 Internal operation practice of SCM

		N	Mean	Std. Deviation
1	Level of understanding the concept supply chain Management.	20	2.3	1.005
2	Level of adoption the supply chain management principle to the ground among your partners.	20	2.1	.979
3	Accuracy of Internal logistics flow.	20	3.15	1.040
4	Information system integration among internal functional units	20	3.00	.725
5	The extent of production process automation.	20	3.25	.967
6	Efficient utilization of resources.	20	3.20	.834
7	Periodic interdepartmental meetings.	20	2.95	.826
8	Extent of automated quality control.	20	3.30	.801
Group mean			3.0375	

(Source: researcher's survey,2017)

4.3.1.3 Information sharing practice

Information sharing has been found to reduce substantially the bullwhip effect across the supply chain (Dejonckheere et al., 2004; Barratt & Oke, 2007). Many researchers have reported that information sharing leads to better coordination of price, improved decision making and physical movement, and optimal inventory holding policies (Closs et al., 1997; Whang, 1995; Corbett & Tang, 1999; Garvirneni et al., 1999; Barratt & Oke, 2007). Information and communication technologies are important supply chain strategies to gain and maintain customer loyalty and to successfully implement strategic supply chain plans (Li & Lin, 2006). supply chain managements aims is to link all the supply chain agents to

jointly cooperate within the firm as a way to maximize productivity in the supply chain so to do that information sharing used as glue.

The information sharing of supply chain management practice perspectives groups mean values show 3.15, which medium types of information sharing in the supply chain. Level of the information sharing of union with primary cooperatives is low 50%(2.7 mean) respondents reported as weak, therefore there is low information sharing between union and primary cooperatives about coffee price fluctuation in the international market.

Table 4.4 information sharing practice of SCM

		N	Mean	Std. Deviation
1	Level of willingness to sharing information between partners	20	3.20	.951
2	Trust and commitment to share information to primary cooperatives	20	3.30	.923
3	Level of the information sharing with primary cooperatives regard the fluctuation of coffee price in international market	20	2.70	.788
4	Overall efforts of Inter-organizational information coordination and sharing	20	3.20	.616
Group mean			3.15	

(Source: researcher's survey, 2017)

4.3.1.4 Information technology

In order to see information technology in the cooperatives union two items were developed. In regard to IT, respondents reported that the level IT implementation was considerably low (2.72) . The level of IT based automated ordering from major customers and adequacy of IT systems throughout the supply chain show 2.75 and 2.7 respectively.

Table 4.5 Information Technology Practice of SCM

	N	Mean	Std. Deviation
The level of IT-based automated ordering from major customers	20	2.75	.639
The adequacy of IT systems throughout the supply chain	20	2.70	.657
Group mean		2.72	

(Source: researcher's survey,2017)

4.3.1.5 Training practice of SCM

The major concept of SCM is collaboration and seamless integration between various value adding activities within individual companies and across different organizations along a supply chain. Bringing this concept into practice requires significant changes in corporate culture as well as a new level of human performance. Successful implementation of SCM concept largely depends on human assets of organizations (Bowersox *et al.*, 2000; Mentzer, 2001).

Table 4.6 training practice of SCM

		N	Mean	Std. Deviation
1	Employees training in supply chain concepts & management.	20	2.10	.718
2	Provision of diversified skill training to employees to capacitate them.	20	2.45	.510
3	Giving training to upstream SC how they improve the quality coffee to compete international market.	20	2.55	.686
4	Adequacy of training and development for management	19	2.32	.582
	Group mean		2.355	

(Source: researcher's survey,2017)

Concerning training practice, respondents reported that the level cooperative union provides training to different level parts considerably very poor with group mean 2.355. Especially Employees training in supply chain concepts & management and training and development for the management is very poor (2.1 and 2.32 mean). Giving training in supply chain to upstream and Provision of diversified skill training to employees were reported score mean 2.55 and 2.45 respectively

4. 3.2 Descriptive data analysis for the primary cooperatives

4.3.2.1 Customers and suppliers relationship management practice of SCM

The below table revealed the customers and suppliers management practices of the primary cooperatives. Accordingly, the group means of suppliers and customers' relationship is 2.61 this indicate the there is poor customers and suppliers relationships management in case of coffee cooperatives. Especially feedback for union and level cooperativeness of the primary cooperatives with union to develop the long-term relationship and strength coffee supply chain management are very poor as survey reported with mean of the 2.16 and 2.25 respectively. On the other hand joint planning with farmers to improve the quality of the coffee and level cooperativeness of the primary cooperatives with farmers are moderate while we compare with others items mean with 3.13 and 3.09 respectively.

While we see, the items that out of single primary cooperatives about the level of cooperativeness of the primary cooperatives with each other's survey result were indicate poor level of cooperativeness between them.

Table 4.7 Customers and supplier’s relationship management practice of SCM.

		N	Mean	Std. Deviation
1	Level of customize the supply chain management network.	56	2.64	1.069
2	Joint planning with union to improve the quality of the coffee.	56	2.79	.847
3	The level of cooperativeness with union to develop the long term relationship and strength coffee supply chain management that benefit all partners.	56	2.25	1.014
4	Follow-up union for feedback.	56	2.16	.987
5	The level of cooperativeness with supplier(farmers) to develop the long term relationship and strength coffee supply chain management that benefit all of your partners.	56	3.09	1.014
6	Follow-up farmers for feedback.	56	2.73	1.087
7	Joint product planning with farmers to improve the quality of the coffee.	56	3.13	.875
8	The level of cooperatives with other primary cooperatives.	56	2.09	1.066
	Group mean		2.61	

(Source: researcher’s survey, 2017)

4.3 2.2 Internal operation practice of SCM

Poor internal operations can lead to failure in coordinating with external partners, (Handfield and Nichols 1999). SCM practice as an effective and value adding the internal operation should be flexible in responding to changing market needs, which is expressed based on agility principles. This means that, a production system must be able to perform rapid change over in order patterns and mass customization, (Lambert and Cooper 2000).

Eight items were developed to see the internal operation with perspectives of supply chain management in the primary cooperatives. The group mean of the internal operation practice of the primary cooperatives is 2.8, which show the moderate internal operation of the primary cooperatives. In particularly utilization of resource (mean, 3.61) and periodical meeting with members (mean, 3.25), give an idea about moderate performance nevertheless there was poor

level of understanding and adoption of the supply chain management principles in the ground as survey report with mean value 2.3 and 2.13 respectively .

Table 4.8 Internal operation practice of SCM

		N	Mean	Std. Deviation
1	Level of primary cooperatives understanding the concept supply chain management.	56	2.30	.971
2	Level of primary cooperatives adoption the supply chain management principle to the ground among your partners.	56	2.13	.916
3	Information system integration among internal functional units.	56	2.89	1.039
4	The extent of coffee process automation	56	2.48	1.079
5	Efficient utilization of resources like machine, labor force...etc	56	3.61	.779
6	Periodical meeting with members.	56	3.25	1.132
7	Periodical meeting with other supply chain partners	56	2.55	.872
8	Extent of automated coffee quality control	56	2.82	.993
Group mean			2.8	

(Source: researcher's survey,2017)

Therefore internal operation practice of primary cooperatives is moderate but need further awareness creation in the areas of concept and adoption of the supply chain management, periodical meeting with other supply chain partners, coffee process and quality control automation, and integration of the internal units.

4.3.2.3 Information sharing practice of SCM

Mohr & Spekman (1994) stated that the information sharing/flow refers to the extent to which critical & proprietary information is communicated to one's supply chain partner.

The theoretical evidence confirms that supply chain management rides on the back of information in order to meet the required resources at the right time, and at the right place, seamless and instantaneous information flow should exist across the value chain (Russell, 2006).

With respect to the above theoretical justification, this study tried to investigate the practices of information sharing among the supply chain participants of the coffee supply chain. Accordingly, the researcher used four items related to information sharing practice. The group mean of the information sharing along supply chain is 2.8 that indicate the moderate performance. Relatively, the high and the lowest mean values are scored by overall efforts of inter organization information coordination and trust and commitments to information sharing with other primary cooperatives that is 3.23 & 2.46 respectively.

Table 4.9 Information sharing practice of SCM

		N	Mean	Std. Deviation
1	Level of willingness to sharing information between partners	56	2.63	.945
2	Trust and commitment to share information to other primary cooperatives	56	2.46	.972
3	Level of the information sharing with farmers regard the fluctuation of coffee price in international market.	56	2.75	1.100
4	Overall efforts of Inter-organizational information coordination and sharing	56	3.23	1.009
Group mean			2.8	

(Source: researcher's survey,2017)

Level of willingness to sharing information between partners scored 2.63 mean. Groups mean of the information sharing among the internal and partners of the primary cooperatives indicate the moderate performance.

4.3.2.4. Information technology practice of SCM

Supply Chain Management is integrating management practices and information technology to optimize information and production flows among the processes and business partners within a supply chain. SCM is a management concept that integrates the management of supply chain process, (wag mare and Mehta, 2014).

As the below table indicate the researcher used two items related to information technology practice. Information technology is play key in today business activity by link different partners

to share information. Group mean of the information technology practice of primary cooperatives is 2.4 that be evidence for poor performance of coffee supply chain in case of IT practice.

Table 4.10 Information technology practice of SCM

		N	Mean	Std. Deviation
1	The level of IT-based automated ordering from the union.	56	2.12	.916
2	The adequacy of IT systems throughout the supply chain.	56	2.62	1.459
Group mean			2.4	

(Source: researcher's survey, 2017)

The level of IT based automated ordering from the cooperatives union and the adequacy of IT systems throughout the coffee cooperatives supply chain scores the mean 2.12 & 2.62 respectively this is indication for supply chain partners to work on it.

4.3.2.5 Training practice of SCM

Training has always been seen as a positive impact in every organization. Employee training increases employee motivation to perform which in-turn increases organizational performance, Ndibe(2014).

The major concept of SCM is collaboration and seamless integration between various value adding activities within individual companies and across different organizations along a supply chain. Bringing this concept into practice requires significant changes in corporate culture as well as a new level of human performance. Successful implementation of SCM concept largely depends on human assets of organizations (Bowersox *et al.*, 2000; Mentzer, 2001).

As below table revealed training practice of supply chain management, respondents reported that, the level of primary cooperative provides training to different level parts considerably low. Relatively, the high mean values are scored by level provide training to farmers how they improve the quality of coffee and training and development for managements is 2.91 & 2.89 correspondingly. The group's mean of the different items of training is 2.71, which is, clue for partners to increases the level of training they provide for each other's.

Table 4.11 Training practice of SCM

		N	Mean	Std. Deviation
1	Employees training in supply chain concepts & management.	56	2.20	1.119
2	Provision of diversified skill training to employees to capacitate them.	56	2.87	.935
3	Giving training to farmers how they improve the quality of coffee that makes them compete in international market	56	2.91	1.133
4	Adequacy of training and development for management	56	2.89	1.090
Group mean			2.71	

(Source: researcher's survey,2017)

Employees training in supply chain concepts & management, the overall adequacy of employees training, Provision of diversified skill training to employees, and level of farmers training to improve the quality of coffee, scored mean values of, 2.2, 2.89, 2.87, &2.91 respectively. General in order to practice supply chain managements effectively and that benefit all partners. Training and capacitates employees and farmers are very crucial.

4.3.3 Descriptive data analysis for Farmer's

4.3.3.1 Customer and suppliers managements practice of SCM

The below table revealed the level of the farmers joint planning with primary cooperatives is moderate with mean value 2.8 and level of the cooperativeness of the farmers with primary cooperatives is poor so, this indicates their relationship is transactional types relationship. These indicate an assignment for the farmers and primary cooperative to develop the smooth relationship that benefits all.

Table 4.12 Customer and suppliers managements practice of SCM

		N	Mean	Std. Deviation
1	Joint planning with primary cooperative to improve the quality of the coffee	84	2.80	.741
2	The level of cooperativeness with primary cooperatives to develop the long term relationship	86	2.45	.877
	Group mean		2.625	

(Source: researcher's survey, 2017)

4.3.3.2 Farmer's operational practice of SCM

The below table reveals the farmers operationally practices of the supply chain management practice. Resource utilization of the farmers and periodical meeting of the farmers with primary cooperatives score mean 3.43 & 3.12 respectively, that showed moderate performance, opposite of that level the farmers understand the concepts of the supply chain management and information system integration scored the mean value 2.07 & 2.49 respectively that demonstrate poor level of understanding and poor information system integration as per survey. Generally, the group mean of the all items is 2.8, which is reasonable performance but is also need further effort to create awareness and improve quality of coffee.

Table 4.13 Farmer's operational practice of SCM

		N	Mean	Std. Deviation
1	Level of understanding the concept of supply chain management.	84	2.07	.818
2	Information system integration among farmers	84	2.49	.784
3	The extent of coffee production and process automation	86	2.93	.809
4	Efficient utilization of resources	86	3.43	.819
5	Periodical meeting with primary cooperatives	84	3.12	.962
6	Extent of automated coffee quality control	83	2.71	.877
	Group Mean		2.8	

(Source: researcher's survey, 2017)

4.3.3.3 Information sharing practice of SCM

In order to survive and compete in today’s global economy, manufacturing sector strongly needs to create, share and disseminate up-to-date and appropriate knowledge and information.

The collaborative SCM process can be supported by enhanced information sharing and collaborative planning among partners and supported primarily through mechanisms such as information integration and process coordination, Zhang &Hu,J.(2005).the below table reveals information sharing practice of supply chain management. Trust and commitment between farmers and primary cooperative score mean values 2.44 & 2.79 respectively, which represent poor level of trust and commitment between farmers and primary cooperative. Group mean is 2.6 that indicated poor information sharing, without trust and commitment between the supply chain partners we cannot think about the effective supply chain management and quality information so; partners that involved in the coffee supply chain should work on trust and commitment between the partners.

Table 4.14 Information sharing practice of SCM

		N	Mean	Std. Deviation
1	Trust and commitment to share information to the other farmers like you	86	2.44	.941
2	Trust and commitment to share information to primary cooperatives	85	2.79	.874
Group Mean			2.615	

(Source: researcher’s survey, 2017)

4.3.3.4 Training practice of SCM

Training is the crucial area of human resource management; it is the fastest growing segment of personnel activities. Training which is referred to as a course of diet and exercise for developing the employees’ effective, cognitive and psychomotor skills assist the organizations to have a crucial method of developing the employee towards enhancing his productivity (Ezeani & Oladele, 2013). The major concept of SCM is collaboration and seamless integration between

various value adding activities within individual companies and across different organizations along a supply chain. Bringing this concept into practice requires significant changes in corporate culture as well as a new level of human performance. Successful implementation of SCM concept largely depends on human assets of organizations (Bowersox *et al.*, 2000; Mentzer, 2001). About training practice of supply chain management, respondents replied that level of training those farmers get from primary cooperative and union about the supply chain management and others is poor with the mean value 2.34 & 2.65 respectively. Union and primary cooperatives should have to work on training of the farmers because it contribute a lot to the quality of the coffee, without quality coffee they can't be able to compete in the international market.

Table 4.15 Training practice of SCM

		N	Mean	Std. Deviation
1	Level of training farmers gets from primary cooperatives and union regard to the supply chain concepts & management	85	2.34	.894
2	Diversified skill training that farmers get from primary cooperatives and union to capacitate and that makes them to change the way they process the coffee to improve the quality coffee	85	2.65	.909
Group Mean			2.5	

(Source: researcher's survey,2017)

Chapter five

Summary, Conclusion and Recommendations

This chapter summarizes the purpose of the study, the major findings and conclusions and recommendation.

5.1 Summary of findings

The purpose of this study was to assess the supply chain management practices in the case of coffee cooperatives that supply coffee to oromia coffee farmer's cooperatives union. Supply chain management practice was assessed based on five basic perspectives of SCM practice. Based on the quantitative discussion of results with respect to the basic questions, the following are the summary of major findings of this study.

The degree of relationship across the supply chain of coffee cooperatives transactional relationship as per data that were collected from three coffee supply chain partners. 3.19, 2.61, & 2.63 are the groups mean values of the cooperative union, primary cooperatives and farmers respectively. Level cooperativeness between each partner is very poor as the mean values of each partner indicated.

With regard to internal operation, the descriptive data analysis from the partners is conveys that there is moderate performance of the three partner internal performance but mean value of some the items were showed the poor performance. Some of those are; level of understanding supply chain management, coffee process automation, and coffee quality control.3.0, 2.8, &2.81 are the mean values of the cooperatives union, primary cooperatives and farmers respectively.

The level of the information sharing between the partners that involved in the supply chain is moderate internal and poor external as per mean of the partners. The level of information sharing about the coffee price fluctuation in the international market is poor.3.1, 2.8, &2.62 are the mean values of cooperatives union, primary cooperative and farmers respectively. The level of information sharing of the cooperatives union with the primary cooperatives and the level of information sharing of the primary cooperative with the farmers is poor.

Concerning information technology, the quantitative analysis indicated that, there is poor application of the information technology in the coffee supply chain. 2.7 & 2.4 are the mean values of the cooperatives union and primary cooperatives respectively.

Training practice of supply chain management in the case of coffee cooperative is poor as the group mean showed in the survey from the three partners. 2.4, 2.71 & 2.5 are the mean values of survey that collected from the three partners respectively. Especially training of the partners about supply chain management is too poor. 2.11, 2.2, & 2.34 are the mean values of the three partners about the supply chain management concept training at different stage.

5.2 Conclusion

Ethiopia is one of the top ten competing suppliers of coffee to the world market. Coffee production supply in the country is now increasing. Thus, Ethiopia has adequate and potentially expandable coffee production supply. Even though, Ethiopian coffee is the best in the world, quality problems due to handling from harvest to the final point of sale is still unresolved and because of the weak supply chain management in the case of coffee supply chain. The analysis was able to assess supply chain management practice in the case of the three-supply chain partner from farmers to Export stage (reach at the hand of the cooperatives union).

Accordingly, from this analysis, the following facts have become apparent.

SCM practices, the case of the coffee supply chain management practice of cooperative has a great problem on training and IT practices at the different stage. These two practices play a decisive role for creating effective and efficient SCM.

According to Lazarovic, et al. research, (2007) training is significantly contribute improve the supply chain performance. In today the technology changing daily so to come up with new technology, so training play great role for each partner at different stage of the supply chain. Poor IT facilities lead to poor information sharing and poor information sharing practices makes a supply chain management ineffective.

On the other hand, customer and supplier relationship management along the coffee supply chain is poor; it is transactional type of a relationship that means they come together only to buy/sell of

coffee rather than create the long-term relationship. To create the trust and commitment and sharing right information between the partners develop smooth relationship is very important.

At last, supply chain management need effective internal operation for creating integration with external partners. For making internal operation effective, the human resource is a critical factor and in order to have skilled, committed, and capable employees and managers, to utilize resources effectively and efficiently training plays a significant role.

Generally, this study revealed that knowledge about the supply chain management of coffee cooperatives and supply chain management concept adoption. There is poor implementation of the supply chain management within coffee cooperatives supply chain management.

5.3 Recommendations

Based on the findings and conclusions, the following suggestions were forwarded in order to improve the Supply Chain Management practice in the case of coffee cooperatives.

- Supply Chain Orientation is recognition by an organization of the systemic, strategic implications of the tactical activities involved in managing the various flows in a supply *chain*. Supply Chain Management is the implementation of a supply chain orientation across suppliers and customers. Companies implementing SCM must first have a supply chain orientation, (mentzer'et al, 2001).Create awareness is first step for practice supply chain management effectively, so each partners of coffee cooperative supply chain must work on the supply chain orientation.
- To succeed with this a win-win thinking is a must, it is not possible to say “I win, you figure out how to win” (Ireland and Bruce, 2000) so, every part involved in the coffee cooperatives supply chain must think win- win thinking to compete in the international coffee market.
- Provide short term as well as long term trainings and workshops on how to improve the coffee quality and develop integration behavior because, supply chain cannot be compete in the international market without quality coffee and common goal.
- Union and primary cooperatives should have to work on training of the farmers because it contribute a lot to the quality of the coffee, without quality coffee they can't be able to compete in the international market.

- Cooperatives union and primary cooperatives are now looking for quantity of coffee, they should shift this type's strategy to choice the right partners and develop the smooth relationship that makes them competitive and stay with them for long period.
- Information technology should be instituted to foster information communication within and among all supply chain members. Connectivity should start from customers through the organizations to the suppliers. Online information gathering and sharing should be designed based on mutual trust and purposes. Technologies also have to be compatible enough along the supply chain members to smooth the flow and understandings along the networked lines.

5.4 Direction for future research

This research assessed coffee supply chain management practice in case of cooperatives from the farmers up to export stage that means up to reach the hand of cooperatives union, so in the future research extended up to buyers and end consumer of coffee. Additional this study was focus on the extent of supply chain management practice not indentify barriers of supply chain management practice, so in the future research can conducted on challenges of coffee supply chain management practice of cooperatives supply chain.

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Dear sir/madam it is to inform you that, this questionnaire is aimed at getting your cordial response for the partial fulfillment of Masters of Art in Logistics and Supply chain Management in Addis Ababa University. To this end I kindly request that you complete the following short questionnaire regarding different bodies performance that are working jointly together with coffee supply chain partners. It should take no longer than 10 minutes of your time. Your response is of the utmost important to me. Please do not enter your name or contact details on the questionnaire. It remains anonymous. Kindly return the completed questionnaire to me in person.

Respondents Profile

1. Sex: Male _____ Female _____
2. Age: Below 20 years _____ 20-25 years _____ 26-30 years _____
31-35 years _____ 36- 40 years _____ above 40 years _____
3. Year of work experience in the organization:
1-3 years _____ 4- 6 years _____ 7-11 years _____ above 11 years _____
4. Educational Qualification:
Below grade 8 _____ Grade 10 completed _____ Grade 12 completed _____ certificate _____
College diploma _____ first Degree _____ Second Degree and above _____
5. Field of your Specialization _____
6. Your current position _____

Your answer is based on the following scales, please tick on the boxes in front of the questions.
 The answer of your questions are represented by the following numbers.

1. Very weak 2. Weak 3. Medium 4. Strong 5. very strong

	Variables	1	2	3	4	5
A	Suppliers And Customers Relationship	Very Weak	Weak	Medium	Strong	Very Strong
1.	Level of Customize the Supply Chain Management network					
2.	Joint planning with primary cooperatives to improve the quality of coffee					
3.	The level of cooperativeness with your primary cooperatives to develop the long term relationship and strength coffee supply chain management that of benefit all your partners					
4.	Follow-up primary cooperatives for feedback					
5.	The level of cooperativeness with your buyers to develop the long relationship and strength coffee supply chain management that benefit all of your partners					
6.	Follow-up buyers for feedback					
7.	Joint product planning with buyers improve the quality of the coffee					

B. Internal Operation

1	Level of your understanding the concept supply chain management					
2	Level of your adoption the supply chain management principle to the ground among your partners					
3	Accuracy of Internal logistics flow					
4	Information system integration among internal functional units					
5	The extent of production process automation					
6.	Efficient utilization of resources					
7.	Periodic interdepartmental meetings					
8.	Extent of automated quality control					

C. Information Sharing Related Question

1	Level of willingness to sharing information between partners					
2	Trust and commitment to share information to primary cooperatives					
3	Level of the information sharing with primary cooperatives regard the fluctuation of coffee price in international market					
4	Overall efforts of Inter-organizational information coordination and sharing					

D. Information Technology

1.	The level of IT-based automated ordering from major customers					
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2.	The adequacy of IT systems throughout the supply chain					
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E. Training

1.	Employees training in supply chain concepts & management.					
2.	Provision of diversified skill training to employees to capacitate them					
3.	Giving training to upstream SC how they improve the quality coffee to compete international market					
4.	Adequacy of training and development for management					

Thanks for Your Cooperation!

Dear sir/madam it is to inform you that, this questionnaire is aimed at getting your cordial response for the partial fulfillment of Masters of Art in Logistics and Supply chain Management in Addis Ababa University. To this end I, kindly request that you complete the following short questionnaire regarding different bodies performance that are working jointly together with coffee supply chain partners. It should take no longer than 10 minutes of your time. Your response is of the utmost important to me. Please do not enter your name or contact details on the questionnaire. It remains anonymous. Kindly return the completed questionnaire to me in person.

Respondents Profile

5. Sex: Male _____ Female _____

6. Age: Below 20 years _____ 20-25 years _____ 26-30 years _____
 31-35 years _____ 36- 40 years _____ above 40 years _____

Your answer is based on the following scales, please tick on the boxes in front of the questions. The answer of your questions are represented by the following numbers.

1. Very weak 2. Weak 3. Medium 4. Strong 5. very strong

	Variables	1	2	3	4	5
A	Suppliers And Customers Relationship	Very Weak	Weak	Medium	Strong	Very Strong
1.	Joint planning with primary cooperative to improve the quality of the coffee					
2.	The level of cooperativeness with your primary cooperatives to develop the long term relationship					

B. Internal Operation

1	Level of your understanding the concept supply chain management.					
2	Information system integration among farmers					
3	The extent of coffee production and process automation					
4	Efficient utilization of resources					
5	Periodical meeting with primary cooperatives					
6	Extent of automated coffee quality control					

C. Information Sharing Related Question

1	Trust and commitment to share information to the other farmers like you					
2	Trust and commitment to share information to primary cooperatives					

D. Training

1	Level of training you gets from primary cooperatives and union regard to the supply chain concepts & management					
2	Diversified skill training that you get from primary cooperatives and union to capacitate you and that makes you to change the way you process the coffee to improve the quality coffee.					

Dear sir/madam it is to inform you that, this questionnaire is aimed at getting your cordial response for the partial fulfillment of Masters of Art in Logistics and Supply chain Management in Addis Ababa University. To this end I kindly request that you complete the following short questionnaire regarding different bodies performance that are working jointly together with coffee supply chain partners. It should take no longer than 10 minutes of your time. Your response is of the utmost important to me. Please do not enter your name or contact details on the questionnaire. It remains anonymous. Kindly return the completed questionnaire to me in person.

Respondents Profile

7. Sex: Male _____ Female _____

8. Age: Below 20 years _____ 20-25 years _____ 26-30 years _____
31-35 years _____ 36- 40 years _____ above 40 years _____

9. Year of work experience in the organization:

1-3 years _____ 4- 6 years _____ 7-11 years _____ above 11 years _____

10. Educational Qualification:

Below grade 8 _____ Grade 10 completed _____ Grade 12 completed _____ certificate _____

College diploma _____ first Degree _____ Second Degree and above _____

5. Field of your Specialization _____

6. Your current position _____

Your answer is based on the following scales, please tick on the boxes in front of the questions.

The answer of your questions are represented by the following numbers.

3. Very weak 2. Weak 3. Medium 4. Strong 5. very strong

S/N	Variables	1	2	3	4	5
A	Suppliers And Customers Relationship	Very Weak	Weak	Medium	Strong	Very Strong
1.	Level of Customize the Supply Chain Management network					
2.	Joint planning with union to improve the quality of the coffee					
3.	The level of cooperativeness with union to develop the long term relationship and strength coffee supply chain management that benefit all partners					
4.	Follow-up union for feedback					
5.	The level of cooperativeness with your supplier(farmers) to develop the long term relationship and strength coffee supply chain management that benefit all of your partners					
6	Follow-up farmers for feedback					
7	Joint product planning with farmers to improve the quality of the coffee					
8	The level of cooperatives with other primary cooperative that found around you.					

B. Internal Operation

1	Level of your understanding the concept supply chain management					
2	Level of your adoption the supply chain management principle to the ground among your partners.					
3	Information system integration among internal functional units					
4	The extent of coffee process automation					

6.	Efficient utilization of resources like machine, labor force...etc					
7.	Periodical meeting with members.					
8	Periodical meeting with other supply chain partners					
9.	Extent of automated coffee quality control					

C. Information Sharing Related Question

1	Level of willingness to sharing information between partners					
2	Trust and commitment to share information to other primary cooperatives					
3	Level of the information sharing with farmers regard the fluctuation of coffee price in international market					
4	Overall efforts of Inter-organizational information coordination and sharing					

D. Information Technology

1	The level of IT-based automated ordering from the union					
2	The adequacy of IT systems throughout the supply chain					

E. Training

1	Employees training in supply chain concepts & management.					
2	Provision of diversified skill training to employees to capacitate them.					
3	Giving training to farmers how they improve the quality of coffee that makes them compete in international market					
4.	Adequacy of training and development for management					

Thanks for Your Cooperation!