



**ST.MARY'S UNIVERSITY  
SCHOOL OF GRADUATE STUDIES  
MASTERS OF GENERAL MANAGEMENT**

**ASSESSING THE PRACTICES & CHALLENGES OF SUPPLY  
CHAIN MANAGEMENT**

**IN THE CASE OF SHEBA LEATHER INDUSTRY PLC.  
ADDIS ABABA, ETHIOPIA**

**PREPARED BY: TIGIST TADDESSE SGS/0062/2008**

**JUNE, 2020  
ADDIS ABABA, ETHIOPIA**

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**A THESIS SUBMITTED FOR PARTIAL FULFILLMENT OF THE  
REQUIREMENTS FOR MASTER OF GENERAL MANAGEMENT**

**PREPARED BY: TIGIST TADDESSE**

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## DECLARATION

I, Tigist Tadesse declare that this thesis is a result of my independent research work on the topic entitled “Practices & Challenges of Supply Chain Management the Case of Sheba Leather Industry PLC. Addis Ababa, Akaki Kality sub city in partial fulfillment of the requirements for the Degree of Masters of General Management at St. Mary’s University. This work is original in nature and has not been presented for a degree in any other University. All the references are also duly acknowledged.

Tigist Tadesse

Signature \_\_\_\_\_

Date \_\_\_\_\_

## **ENDORSEMENT**

This is to certify that Tigist Tadesse has carried out this thesis proposal on the topic entitled “Practices & Challenges of Supply Chain Management the Case of Sheba Leather Industry PLC Addis ababa Akaki Kality sub city. Under my supervision. Accordingly, I here assure that his work is appropriate and standard enough to be submitted for the partial fulfillment of the requirements for the award of the degree of Masters of General Management.

Mohammed Mohammednur (Asst. Prof.)

Signature\_\_\_\_\_

Date \_\_\_\_\_

## **ACKNOWLEDGEMENT**

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## LIST OF ABBREVIATIONS/ACRONYMS

<i>CRM</i>	<i>Customer Relationship</i>
<i>ICT</i>	<i>Information Communication Technology</i>
<i>II</i>	<i>Information Integration</i>
<i>M</i>	<i>Mean</i>
<i>SC</i>	<i>Supply Chain</i>
<i>SD</i>	<i>Standard Deviation</i>
<i>SCI</i>	<i>Supply Chain Integration</i>
<i>SCM</i>	<i>Supply Chain Management</i>
<i>ITS</i>	<i>Information Technology systems</i>
<i>HRM</i>	<i>Human Resource management</i>
<i>SP</i>	<i>Strategic Planning</i>
<i>PLC</i>	<i>Private Limited Company</i>

## **ABSTRACT**

*This study is a survey on practice challenges of Supply Chain Management in Sheba Leather Industry. The objective is to examine the existing practice and challenges of the SCM in Sheba Leather Industry. The research is basically a descriptive research with more qualitative approach. In doing so, 8 firms from Tanneries, Shoe Manufacturers, and Leather Goods and Garment producers located in Addis Ababa were sampled. Beside 112 questionnaires were also distributed to end users/consumers. The method of data collection was structured questionnaire in the form likert scale. For analyzing SCM practice, mean and standard deviation were used whereas. Through these methods the data's were analyzed and the result shows an average mean value which means, the practice of SCM is average. On the other hand, regarding, the SCM practice among firm. Based on these facts, searching for potential market for raw materials, cooperation of all stakeholders, and establishment of consultative forum from firms and other stakeholders were recommended in this study.*

**Key Words:** *Supply chain, Challenge, Practice, Information Sharing, Operational Efficiency*

# **CHAPTER ONE**

## **BACKGROUND OF THE STUDY**

### **INTRODUCTION**

This chapter discusses the background of the Study, Statement of the problem, Research Questions, Research Objectives, and Significance of the Study, Scope of the Study, Limitation of the Study, Definition of Terms and Organization of the Study.

#### **1.1. Background of the Study area**

Supply Chain Management is the integration and management of supply chain organizations and activities through cooperative organizational relationships, effective business processes, and high levels of information sharing to create high-performing value systems that provide member organizations a sustainable competitive advantage. In this definition, the supply chain includes managing information systems, sourcing and procurement, production scheduling, order processing, inventory management, warehousing, customer service, and after-market disposition of packaging and materials. (Robert and Ernest, 2002 pp. 8.)

The world is seen as becoming increasingly interconnected by economic, political, sociological and cultural forces as a result of globalization. As a result of interconnectedness of firms, this day's multinational enterprises are being developed, and firms are competing in both domestically and at international market in order to defend international competitors, integration of firms in order to provide quality product at the required time and place, etc. Thus, for the sake of achieving competitiveness and satisfying customers, the new management philosophy called 'Supply Chain Management' is developed Fawcett et al (2007).

Different authors describe the term 'Supply Chain' as being in existence since 1980's and defined the term in different ways (Delfmann & Albers, 2000, pp. 1). As Mentzer et al. (2001, p 4) defined Supply Chain as “---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”. This means that, it is not a single activity performed by individual firm rather it is a continuous activity done by different organization. Adolfo Crespo

Marquez, (2010), explained the term Supply chain and supply chain management can be depicted as “---supply chain is the stream of processes of moving goods from the customer order through the raw materials stage, supply, production, and distribution of products to the customer. All firms have supply chains of varying degrees, depending upon the size of the organization and the type of product manufactured. SCM Was initially related to the inventory management within a supply chain. This concept was later broadened to include management of all functions (Habib, 2011).

Recently, the Council of SCM Professionals, which is the premier organization of supply chain practitioners, researchers, and academicians, has defined SCM as: the planning and management of all activities involved in sourcing and procurement, conversion, and all Logistics Management activities. The concept of supply chain management flows of products, information, and finance upstream and downstream. Therefore, lack of coordination occurs in the supply chain, when the chain members’ had incomplete information about the flow of products, information, and funds. Such causes will reduce the supply chain performances as a whole. Mentzer et al. (2001, p 9).

In addition most of the Ethiopian leather and leather product factories are not achieving their proper performance and are characterized by low productivity (material and labor), poor working conditions, and improper utilization of resources, weak relationship with customers and suppliers and poor management (Tomas, 2011 pp. 2). However, different researchers identified problems related to implementation and managing supply chain (Hussein & Mohammed, 2010; Tiringo, 2013. As per Tiring (2013, P.2) explanation, “challenges in implementation of SCM are lack of top management support, unwillingness to share information and lack of trust among supply chain members. Tujuba (2019) conducted on supply chain management practices, challenges and opportunities in milk industry, consequently findings of the study indicates, the case Company’s Orientations towards SCM lacks substantial indicators of SCM practices, SC collaboration and an integrated SCM, in related to this finding Daniel Abi (2018) found that poor exchange of information, lack of integrated system, inadequate education or sensitization program are some of the major challenges of supply chain management in case of commercial Bank of Ethiopia.

Another study was conducted by Tringo (2013) on challenges and perspective of Ethiopian Leather industry and he found that, there was the challenges regards to searching for potential

market for raw materials, cooperation of all stakeholders, and establishment of consultative forum from firms and other stakeholders, by using correlational analysis while in this study the researcher going to describe the conditions.

Therefore most of the above studies were focusing on the challenges and opportunities, practicing of supply- chain management with different study area, this is why the researcher intended to conduct the study by considering above gap. Even though there are extensively researched on supply chain management no more study is conducted in case of Sheba Leather Industry PLC. Consequently, by using the dimensions of SCM, the researcher interested to examine current SCM practices and challenges identify challenges for the case company to help in developing effective supply chain management system in the Sheba Leather Industry PLC and which helps further help to tackle the factors hindering the performance of the industry.

Hence, the focus of this study was “Practices and Challenges of Supply Chain Management, in case of Sheba Leather Industry PLC”.

## **1.2. Statement of the Problem**

The Leather supply chain management begins with animal husbandry; then it follows four stages. These stages are: slaughtering, tanning, production of leather products, and finally marketing the leather products (Robert B. Hadfield and Ernest L. Nichols, Jr; (2002). Having these processing stages, the African leather industry is affected by a lot of problems with regard to its competitiveness.

The problems that negatively affect the growth and competitiveness of the leather industry are: Poor quality of hides and skins, poor and deteriorating infrastructure of roads, power supply and telecommunications that affects all the components of the chain, low levels of transparency in business operations, insufficient experience in trade negotiations, inadequate levels of technological development and low labor productivity and poor management (Stevenson, W.J., 2002).

According to researcher problem identification survey, Sheba Leather Industry PLC have been complaining & reported several times associated with supply chain management practices in the



firm. The supply chains challenges may be related to internal communication lines, and procurement, supply chain management, IT systems, HR management, strategic planning, finance/accounting, manufacturing/logistics, and engineering). Supply chain practices inefficiencies such as inventory management efficiency, waste on the company operation and asset, inefficient supplier relationship and the integration problem across the company is observed in the company. This also leads to the problem in the operational performer and also affecting profitability and operations of the company.

The researcher identified an empirical gap and there is a lack of hard research in the earlier research literature. The previous research has focused primarily on logistics and supply chain management. Very little research has been done on practices of supply chain upstream avoid downstream to properly evaluation the problem.

The above problems invited the researcher to carry out a study with both downstream and upstream supply chain in the leather industry this is, therefore, in this study we seek to provide on the contributing examination by addressing the gaps in practices and challenges of supply chain management in Sheba Leather Industry PLC.

### **1.3. Research Question**

In line with the above problem statements, the following basic research questions need to be addressed.

- ✓ How do Sheba Leather Industry PLC integrate with supply chain partners?
- ✓ How is the practice of Sheba Leather Industry PLC Operational Efficiency and Capacity Development?
- ✓ How is the flow of information and communication sharing across functional areas of Sheba Leather Industry PLC?
- ✓ What are the Challenges and Potential Threats of supply chain management in Sheba Leather Industry PLC?

## **1.4. Objectives of the Study**

### **1.4.1. General Objective**

The general objective of this study is to investigate practices and challenges of supply chain management: The case of selected Ethiopian Leather Industries.

### **1.4.2. Specific Objectives**

The study was tried to address more specific objectives as follows:

- ✓ To assess the supply chain integration of Sheba Leather Industry PLC with partners;
- ✓ To assess the operational efficiency and capacity of development incorporate with the supply chain in Sheba Leather Industry PLC;
- ✓ To assess the supply chain flow of information and communication sharing in Sheba Leather Industry PLC.
- ✓ To examine the Challenges and Potential Threats of supply chain management element in Sheba Leather Industry PLC;

## **1.5. Scope of the Study / Delimitation**

The SCM of leather industry starts the process from animal husbandry, slaughtering, tanning, manufacturing leather products, and finally to the market. The scope of the study is limited to three sets of criteria's:

First limited to Geographical area, due to the nature of the business there are two tanneries with high production capacity; Sheba Leather industry almost all tanneries activity processed which one is located in the northern part of Ethiopia, Tigray Regional State, Weqro town and the other one is in Akaki Kality have a finished leather production capacity. As a result, the focus of the study limits the scope in Akaki Kality which is near to the researcher and with regard to a finished leather production is thought to be representative.

Second size of the firm, there are lots of firms involved in leather product manufacturing in rural area in nature of the business. But, to make the research manageable the researcher focuses on near to Addis Ababa and have branches of part of the product have been processed in Sheba Leather industry PLC.

Third type of economic operations, the scope of the thesis also limited to three leather industries will be considered as sample of the study from Oromia Regional State and Addis Ababa City of Administration and also intends to assess practice and challenges of supply chain management leather industry from raw material to end-users branches throughout the country. Even though researcher wants to conduct in all leathers industries, due to scarce resource the researcher delimited to leather industry located in Oromia Regional state and Addis Ababa city of Administration specifically, Akaki kaliti Sub-city Sheba Leather Industry PLC.

## **1.6. Significance of the Study**

There is limited information at what status in practicing the supply chain management and the key challenges to implement the process. What gaps should be bridged or filled and what assignments should we take next time from the past experience of the supply chain management practice. In addition, there are limited organized document of empirical assessment and evaluation of the overall condition of the supply chain management in the particular Leather Industry. Hence, this paper is intended to identify and analyze the practices and challenges of supply chain management in Sheba Leather Industry PLC. The study may be useful in the academic circles as it may contribute immensely towards filling the gaps in knowledge in the area of manufacturing industry particularly in leather industry as well it can be used as a base for future study. This study helps Sheba Leather Industry PLC management as input through giving the insight challenges they faced in practicing of supply chain management in their future plan and also helps as a reference for other researchers and experts for the further investigation.

## **1.7. Definition of Terms**

**Supply Chain:** - refers to those activities associated with the transformation and flow of goods and services, including their attendant information flows, from sources of raw materials to end users (Ronald et al 2000 pp. 9).

**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 business within the supply chain, for the purpose of improving the long term performance of the individual companies and the supply chain as a whole (Mentzer et al 2001 pp. 18).

## **1.8. Organization of the Paper**

This study will be organized in a way it consist of five chapters:

The first chapter will contain of an introduction part which consists of background of the study, statement of the problem, research question, objectives of the study, delimitation of the study, definition of terms, and significance of the study. The second chapter will discuss about the review of related literature. The third chapter deals with the research design and method of the study. The fourth chapter will discuss about presentation, analysis and interpretation of the data. The fifth chapter deals with the summary conclusions and recommendations of the study.

Finally, references and a set of appendices will be included that contain the interview guide, focus group discussion guide and observation checklist that will be used to collect primary data for this work and other supplementary documents of the study.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

#### **INTRODUCTIONS**

In this chapter's supply chain, supply chain management and its Historical Development, Objectives of supply chain management, benefits of supply chain management, supply chain management practices, challenges of SCM, Supply chain collaboration is included.

#### **2.1. Definition and concept of Supply Chain Management**

##### **2.1.1. Definition of Supply Chain Management**

Supply chain management is defined by different practitioners and researchers depending on the background where they come from. To this end, the following definitions can be used as a working definition of supply chain and supply chain management.

Supply chain is defined as the sequence of events that cover a product's entire life cycle, from the conception to consumption (Blanchard, 2010). These days companies are not only competing as autonomous entities instead they entered into an era of competing among different supply chains, leading

#### **2.2. Concept of Supply Chain Management**

A supply chain is the network of organization that are involved through upstream and downstream linkages, in the different processes and activities that produce value in the form of products services in the hands of the ultimate consumer. Moreover, Christopher defines the objective of supply chain management in a relative manner as delivering superior value at less cost. In order to reflect the fact that there will normally be multiple suppliers, and suppliers to those suppliers, as well as multiple customers, and customers 'customers, to be included in the total system, Christopher argues that the word chain 'should be replaced by network'(Christopher, 2005). He also argues that since the chain should be driven by the market, not by the suppliers, the phrase supply chain management should be termed demand chain management.

Supply chain management consists of managing the flow of resources across the enterprise for efficient business process. These resources can be “people, materials, information, and other organizational assets such as vehicles and machinery” (Vivik S. 2009). Lee et al (2007) defined supply chain management as “an integrated management tool for information and materials/services flow among different facilities and stakeholders”. Supply chain management is defined as “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”. Supply Chain Management, as a term, first appeared in the early 1980s to describe: the range of activities coordinated by an organization to procure and manage’. Supply Chain Management is a concept originating from the supply system used by Toyota to coordinate its supplies and reduce its inventory. After its emergence in the Japanese automotive industry as part of a production system, the concept of supply chain management has been evolved as an industrial management theory and a distinctive subject of scientific research (Vivik S. 2009).

## **2.3. Objectives and Benefits of Supply Chain Management**

### **2.3.1. Objective of Supply Chain Management**

The objective of supply chain management is to satisfy the requirement of the end customer. Supply chain management objective is “to maximize the overall value generated rather than profit generated in a particular supply chain. Besides, different authors described that; the objective of supply chain management is to enhance the “profitability” of a firm and the supply chain members, and also to increase “competitiveness” On the other hand classified the objective of Supply Chain Management in to two: as short term and long term objective. Consequently, “the short term objective is primarily to increase productivity and reduce inventory and cycle time, while the long-term objective is to increase customer satisfaction, market share and profits for all members of the supply chain”. Supply Chain Management can strengthen performance through effectively utilizing the internal and external capabilities of the supplier. This on the other hand leads to “inter-supply chain competition” from “inter-company competition (Hussain and Mohammad, 2010).

## **2.4. Benefits of Supply Chain Management**

Supply Chain Management is used in reduction of costs, sustaining high quality standards, in improving customer service and in adapting environmental pressures (Michael Q. 2006). Despite the benefits of supply chain management, there is limited empirical research on how practitioners evaluate their suppliers and implement SCM practices and how these practices impact firm performance (Tan et al. (2002). As the essence of supply chain management is a pull system and starts from the customer, the role and involvement level would lead in the end to the satisfaction of the customers. These days, customers are demanding enough due to the level of the awareness created. They expect for lower prices, better quality, shorter lead times on deliveries and increased reliability (Verwal, et al., 2004).

Generally, an effective and coordinated supply chain management enables companies to lower inventory level, delivery lead times and costs. It also enables them to provide goods and services in a good and reliable quality. As integration and coordination among the member of the supply chain is strategically seen to serve the end consumer better, they would be in a position to proactively strive for changes and innovation where at the end of the day, both would be involved in a position to secure a customer satisfaction.

## **2.5. Practices and Challenges of Supply Chain management**

SCM Practices are defined as a set of activities undertaken in an organization to promote effective management of its supply chain. SCM practices are multidimensional which affect the performance of partners in the supply chain. These SCM practices were seen and discussed by different researchers from different perspectives.

According to Haque, (2013), SCM practices are a fundamental to firm performance; in today's globalized business all firms get their competitive advantage by managing various challenges within the country and internationally and this devote substantial attention. As effective SCM provides benefits that go beyond the entities or the organization itself on both of its upstream and downstream sides and those firms may comprehend their potential of integrating their external

relationship that is the firms external suppliers, the firm itself and the firms customer and also the firms internal operational practices with a view to enhancing their level of competitiveness and performance as well as customer satisfaction.

As it is argued by Krimi & Rafiee (2014), SCM practices have been defined as a set of activities undertaken in an organization to promote effective management of its supply chain. The empirical study include in their list of SCM practices concentrate on core competencies, use of inter-organizational systems such as EDI, and elimination of excess inventory levels by postponing customization toward the end of the supply chain. They Identify four aspects of SCM practice through factor analysis: supply chain integration, information sharing, supply chain characteristics, customer service management, geographical proximity and JIT capability. They use supplier base reduction, long-term relationship, communication, cross functional teams and supplier involvement to measure buyer–supplier relationships (Zhao, X., & Lee, T. 2009).

At it is cited by Addis (2015), SCM practices as a set of activities carry out in any organization to promote effective management of its supply chains; From this we can see that components of SCM practices includes supply and material management issues, operations, information technology and sharing (Information Communication Technologies) and customer service. Other components such as technology, cost, inventory management, competitiveness and external regulations, according to needs to be managed effectively to achieve to business goals of each supply chain members. It also leads to value creation to end customer (Charles, Diyuoh & Opong, 2014)

SCM involves the coordination and configuration of different process that is necessary to make products available in a timely, reputable, and suitable condition. The distinctiveness of SCM could be achieved by identifying and making use of SCM practices, in organized way. SCM practices involve a set of activities undertaken by the organization to promote effective management of their supply chain. (Faisal, 2011)

SCM stands on integration of activities from product development stage to delivering the product to the customer (A. Gunasekaran and Ngai 2004 pp. 270). This shows that, all activities need to



be integrated to achieve customer expectation and needs. Having this issue to assess the practice of SCM in this paper, five aspects of SCM practices are considered which is cited by Petrovic-Lazarevic et al (2007) from Perry and Sohal (2000) and Petrovic –Lazarevic et al (2007). These SCM practices are: Supplier and Customer relationship, information sharing, internal operation, training and information technology. (Tiringo, 2013 pp.13-14).

SCM practices have been defined as a set of activities undertaken in an organization to promote effective management of its supply chain. SCM practices are multidimensional which affect the performance of partners in the supply chain. These SCM practices were seen and discussed by different researchers from different perspectives. (Donlon 1996) describes the evolution of SCM practices, which include supplier partnership, outsourcing, cycle time compression, continuous process flow, and information technology sharing. (Tan et al. 1998) use purchasing, quality, and customer relations to represent SCM practices, in their empirical study. (Tan et al. 2002) identify six aspects of SCM practice through factor analysis: supply chain integration, information sharing, supply chain characteristics, customer service management, geographical proximity, and just in time capability. (Alvarado and Kotzab 2001) include in their list of SCM practices concentration on core competencies, use of inter-organizational systems such as elimination of excess inventory levels by postponing customization toward the end of the supply chain.

Current supply chains are growing in complexity due to several factors. Customers are demanding innovative products at the right time and at a reasonable price. This creates challenges for companies since creating both responsive and cost-effective supply chains are critically difficult (Berrios, 2014). Most SCM related-problems mainly occur from uncertainties and an inability to co-ordinate several activities and partners (Turban et al, 2004).

### **2.5.1. Supplier and Customer Relationship**

Supplier and Customer Relationship is a way of managing an organization relationship with customers and suppliers in order to advance customer satisfaction (Petrovic-Lazarevic et al 2007). They also state that, close relationship with customers allows firms to fulfill the demand of its customers and through identifying the need of customer; firms can improve the satisfaction

of customers. Supplier Relationship management is a way of managing a firm's communication with other firms that provide the “products and services it uses. They also described as it is a ‘process’ which states the way a firm contacts with its “suppliers”.

Geiger and Dooley, (1998) described that, “strategic alliances and partnerships” are important for a successful supply chain. Accordingly, suppliers need to involve in customer's product development and share expertise and technologies in order to deliver quality product on time to the customers (Tan et al 2002). If “critical suppliers” are involved in the process of designing a product the firm can gain ‘loyalty’ from these suppliers and also a firm can reduce quality problems under production process. On the other hand, for managing customer relationship, firms need to manage the customer complaints, build long term relationship and improve customer satisfaction.

### **2.5.2. Information Sharing**

Imam and Nicholas (2006) stated that, effective Supply Chain Management consists of the “integration and coordination” of information flows with regard to “material, information and finance”. On the other hand, Christy et al (1997) described that information sharing is necessary to reduce uncertainty and lower inventory levels, and the share of information must extend both in the firm and across the supply chain (suppliers and buyers). Information sharing within organizational functions and across organizational boundaries is essential as a result of “global competition” which results integration of “suppliers, internal processes, and customers” (Lee et al 2007).

For successful buyer/supplier relationship, the following types of information sharing are crucial. These are product development information (new products, improvements, etc.), cost data, demand schedules (including point of sale data), how much material the buyer will need and production schedules (Christy et al 1997). Besides, Adolfo C. (2010) strengthened type of information shared among the SC members by including: inventory, sales, demand forecast, order status, product planning, logistics, production schedule, etc., and they can be summarized as product information, customer demand and transaction information, and inventory information.

For successful supply chains, information sharing and coordination are important. Information sharing helps in obtaining the “right information for the right trading partner in the right place and at the right time” (Adolfo C. (2010).

The advantage of information sharing also strengthened by Imam and Nicholas (2006, pp. 1) stating that: information sharing helps firms to effectively utilize resources and “lower supply chain costs”. Besides, lower cost advantage, information sharing and integration between “retailers and manufacturers” help for development of “new products” (Imam and Nicholas 2006). Information flows on the supply chain facilitate quick payment for the “goods and services”, and allow for “improved decision-making” for members of the supply chain (Robert and Ernest 2002).

Thus, Firms in the supply chain need to integrate with “high level of trust” to achieve a “common goal in supply chain efficiency” (Imam and Nicholas 2006). The information sharing among supply chain members should be “accurate, timely and properly formatted” in order to perceive the value of the information (Christopher et al 2002).

As Christopher et al (2005) described for “successful implementation of SCM: the relationship between channel member need to be ‘strong’”. Accordingly companies could be able to work together to coordinate the “entire supply chain for the benefit of all firms in the channel”. Besides Christopher et al (2005) stated that, as relationship between channel members increases, information exchange increases whereas relationship could be stronger “as trust increases”; thus, companies exchange information with partners that “demonstrate a long-term commitment to the relationship”. Besides, it is depicted that, effective information sharing is one of the most competence of supply chain process (Sunhilde CUC, 2008).

In general, information helps: in Reducing variability in the supply chain, Suppliers to make better forecasts, accounting for promotion and market changes, in enabling retailers to better serve their customers by offering tools for locating desired items, in enabling retailers to react and adapt to supply problems more rapidly, in reduction of lead time (David et al., 2006). Even though, information sharing has different benefits, it has some challenges as described by Fawcett et al (2007). These are: “cost and complexity of implementing advanced systems,

system incompatibility, high cost of connectivity as a result of incompatibility and managers don't understand the willingness dimensions of information sharing”.

### **2.5.3. Information Technology**

Information Technology is considered as a problem solver for attaining “high customer satisfaction” in supply chain integration (Stanley et al 2005). IT is allowing companies to share “valuable information” which they were not sharing before. Besides, IT helps the firms with whom partnership can be formed in the state or across international boundaries (Stanley *et.al...* 2005). Information technology helps managers to make better decisions through providing “relevant, accurate, and timely information” (Fawcett et al (2007).

As David et al., (2006) described that, “effective use of IT is a success factor for the company’s supply chain management because, and IT helps the integration of companies and their internal operation”. Firms use information system for different levels like for ‘monitoring of inventory and schedule production, to produce high levels of customer service, and to enhance their competitive position.

Saunders M.J. (1998), described that, implementation of Information Technology in Supply Chain Management have different objectives like: providing information availability and visibility, enabling single point of contact of data, allow decisions based on total supply chain information, and enabling collaboration with supply chain partners. Thus, the uses of Information Technology in supply chain management are: improve cooperation relationships in internal and external dimensions, increasing responsibility, creating new relationships with customers to identify needs, developing sales channels, improving performance and improving competitive positions of the chain Shahram G. *et al* (2011).

Even if the implementations of IT have the above mentioned advantages, when developing and IT integrated Supply Chain Management, there are some challenges faced by members of the channels. These problems are: ‘lack of integration between IT and business model, lack of proper strategic planning, poor IT infrastructure, insufficient application of IT in virtual enterprise, and inadequate implementation knowledge of IT in Supply Chain Management’ Shahram G. *et al* (2011).

#### **2.5.4. Internal Operation**

The internal operation of a firm is a base for firms “competitive advantage”; poor internal operation “leads to failure in coordinating with external partners” Sunil Chopra and Peter Meindl (2007). They also discussed internal Supply Chain Management focuses on the internal operation of a firm. Accordingly, they described the practices performed by the internal operations.

#### **2.6. Drivers of Supply Chain Management**

Different authors described the drivers of SCM in different ways. Consequently, Sunhilde CUC (2008) described that:-

*As a result of lowering costs firms are outsourcing production of their goods. Thus, they are moving towards “specialization” of products rather than “vertical integration”. Consumers have new choices due to increased competition which leads firms to deliver high customer value products at a lower cost.*

Mentzer, et al, (2001) on the other hand, described that, the drivers of supply chain management are “trends in global sourcing, an emphasis on time and quality- based on competition, and their respective contribution to greater environmental uncertainty”. All these drivers are further strengthened by Tan et al. (2002) and Fawcett & Magnan, 2001). Thus in general, the drivers of supply chain management are: globalization and the change in demand by consumers which results that: “customers are demanding products consistently delivered faster, exactly on time, and with no damage” (Mentzer et al 2001). Mentzer also described that, these days “getting a defect-free product to the customer faster and more reliably than the competition is no longer seen as competitive advantage, but simply a requirement to be in the market”.

#### **2.7. Supply Chain Management Components**

Chain Management Practices stands on integration of activities from product development stage to delivering the product to the customer (A. Gunasegaram and Ngai 2004). This shows that, all activities need to be integrated to achieve customer expectation and needs. Consequently, (Lee et al., 2007) indicated three essential linkages: supplier, internal and customer related linkages.

## ❖ Purchasing

Purchasing is the organized acquisition of goods and services on behalf of the buying entity. Purchasing activities are needed to ensure that needed items are obtained in a timely manner and at a reasonable cost. A purchasing department is especially necessary in a manufacturing business, where large amounts of raw materials and components must be obtained on a recurring basis. The purchasing department's primary goals are as follows:

- To locate suppliers that can provide goods and services in accordance with the buyer's requirements.
- To buy items that meets the quality specifications of the buyer.
- To create a stream of deliveries into the buyer's premises that minimize the raw materials inventory investment while still ensuring that goods are available as needed.
- To minimize the amount of cash invested in inventory.
- Common purchasing activities are as follows
  - Receive and verify purchase requisitions from around the company.
  - Search for qualified suppliers that can fulfill the buyer's needs.
  - Prepare and issue request for proposal (RFP) documents to qualified suppliers.
  - Evaluate supplier responses to RFPs, select a winner, and negotiate a contract.
  - Issue purchase orders to suppliers that authorize purchases. A master purchase order may be issued when there are a number of deliveries contemplated under a purchasing arrangement.
  - Administer contracts that have a longer duration.
  - Review open purchase orders to see if any should be closed.

## ❖ Warehousing

Warehouses or distribution Centre's are places where raw materials, semi-finished or finished goods are stored. They represent an interruption in the flow of material and thus add cost to the system. Items should be warehoused only if there is an offsetting benefit gained from storing them. Warehouses include plant warehouses, regional warehouses, and local warehouses. They

may be owned and operated by the supplier or intermediaries such as wholesalers, or they may be public warehouses. The latter offer a general service to their public that includes providing storage space and warehouse services. Some warehouses specialize in the kinds of services they offer and the goods they store.

The general warehouse where goods are stored for long periods and where the prime purpose is to protect goods until they are needed. There is minimal handling, movement, and relationship to transportation. Furniture storage or a depository for documents is examples of this type of storage. It is also the type used for inventories accumulated in anticipation of seasonal sales. The distribution warehouse has a dynamic purpose of movement and mixing. Goods are received in large-volume uniform lots, stored briefly, and then broken down into small individual orders of different items required by the customer in the marketplace. The emphasis is on movement and handling rather than on storage. This type of warehouse is widely used in distribution systems. The size of the warehouse is not so much its physical size as it is the throughput or volume of traffic handled.

### ❖ **Inventory Management.**

Inventory Management is the part of Supply chain management that plans, implements and controls the efficient, effective, forward, and reverse flow and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customer's requirements. Inventory management is defined as “the continuing process of planning, organizing and controlling inventory that aims at minimizing the investment in inventory while balancing supply and demand”. Specifically, the process is a supervision of supply, storage and accessibility of items in order to ensure an adequate supply without excessive oversupply.

### ❖ **Material Handling**

Material handling is the movement, protection, storage and control of materials and products throughout manufacturing, warehousing, distribution, consumption and disposal. As a process, material handling incorporates a wide range of manual, semi-automated and automated equipment and systems that support logistics and make the supply chain work. Their application

helps with: Forecasting, Resource allocation, Production planning, Flow and process management, Inventory management and control, Customer delivery, After-sales support and service. A company's material handling system and processes are put in place to improve customer service, reduce inventory, shorten delivery time, and lower overall handling costs in manufacturing.

## ❖ **Transportation and distribution**

Transport Systems Transport processes are essential parts of the supply chain. They perform the flow of materials that connects an enterprise with its suppliers and with its customers. The integrated view of transport, production and inventory holding processes is characteristic of the modern SCM concept. The appropriate structure of a transport system mainly depends on the size of the single shipments: Large shipments can go directly from the source to the destination in full transport units, e. g. trucks or containers. Small shipments have to be consolidated in a transport network, where a single shipment is transshipped once or several times and the transport is broken at transshipment points (TPs). A particularly effective consolidation of small shipments is achieved by a logistics service provider (LSP), who can combine the transports from many senders. The consolidation of transport flows decreases the transport cost. As the cost of a single trip of a certain vehicle on a certain route is nearly independent of the load, a high utilization of the loading capacity is advantageous. Moreover, the relative cost per loading capacity decreases with increasing size of the vehicles. But even with a strong consolidation of shipments to full loads, e. g. by an LSP, the smaller shipments cause relatively higher cost, because the consolidation requires detours to different loading places, additional stops and transshipment (see Fleischmann 1998, pp. 65). The following transport processes occur in a supply chain:

- The supply of materials from external suppliers or from an own remote factory to a production site. Both cases are identical from the viewpoint of logistics.
- The distribution of products from a factory to the customers.

The distribution system depends on the type of products: – Investment goods, e. g. machines or equipment for industrial customers, are shipped only once or seldom on a certain transport link. –



Materials for production are also shipped to industrial customers, but regularly and frequently on the same path. Consumer goods are shipped to wholesalers or retailers, often in very small order sizes (with an average below 100 kg in some businesses), requiring a consolidation of the transports. Distribution function of the supplier as well as part of the procurement functions of the receiver. Transport planning is usually the responsibility of the supplier.

But there are important exceptions, e. g. in the automotive industry, where the manufacturer controls the transports from his suppliers. In this case, transport planning occurs on the procurement side as well. An LSP may consolidate the transport flows of several “shippers”, operating in separate supply chains, in his own network. Then he is responsible for planning how the transports are executed, i.e. by which vehicles along which routes. However, the decisions on the transport orders, i.e. the quantity, source and destination of every shipment, remain a task of the APS of the shipper. Usually, it is not practicable to include the flows of all other shippers of an LSP into the APS. However, the additional flows have an impact on the transport cost and should be taken into account implicitly by appropriate transport cost functions.

### ❖ **Order Processing**

An order processing system captures order data from customer service employees or from customers directly, stores the data in a central database and sends order information to the accounting and shipping departments, if applicable. Order processing systems provide tracking data on orders and inventory for every step of the way. Customer satisfaction is key to long-term success in business, and fulfilling customer orders reliably and accurately is key to customer satisfaction. Order processing systems help ensure that all of your customers' orders are filled on time, since automated systems can reduce errors in order processing. This can enhance the customer experience and maximize your company's profitability. Traditional order processing systems are fully manual, utilizing hand-written notes with manual filing systems and reminders. In a one-person shoe repair company, for example, the proprietor may write orders by hand, in person, on an order log sheet. He may take the sheet home with him to make the orders, and then bring it back to the shop with the completed order to keep track of who the customer was.

Modern order processing systems are largely technological in nature. A designer hat boutique with outlets in multiple countries, for example, is likely to accept orders online, where they are captured by a specialized order processing software package and sent automatically to a third-party manufacturer in another country. The manufacturer may then attach the order sheet to the product when shipping it to the hat shop or it may ship the hat directly to the customer using shipping information from the system. Having a solid order processing system in place creates a win-win situation for businesses and their customers. Customers experience more reliable deliveries and accurate order fulfillment. Businesses can maximize their profitability by not misplacing or misreading orders, not to mention the long-term revenue boost that comes from consistently satisfying customers.

Highly technological order processing systems can be costly to implement and maintain, possibly requiring additional information technology personnel to ensure that the system functions smoothly at all times. Technological solutions are generally hands-off in nature, since a large number of processes occur in the background of software programs, requiring no input from employees. Because of this, however, it can be much more difficult to track down problems in technology-driven systems than with simpler, manual systems where an employee can personally recall each step in the process. Order processing systems can utilize both the new and old processes, mixing traditional manual methods with technological solutions. A wholesaler, for example, may have salespeople who manually write down order information, then enter the information into a computer software package that automatically forwards the information to the packing and shipping departments.

### ❖ Customer Service

Importance of Customer Service in Supply Chain Management. Supply chain is basically considered as a strategic concept that involves understanding and managing the sequence of activities -from supplier to customer-that add value to the product supply pipeline.

In some companies, customer service isn't considered part of supply chain. However, if you look at the scope of supply chain management's definition in the toilet paper industry – “From stump

to rump?” You can see that the supply chain isn’t complete until your product reached the end user. Customer service functions as the voice of the customer at your company. What shipping method does your customer want? What size boxes do you need to pack your product in and how many units per pack? Those answers can be driven by your customer, especially if your customer is a big box retailer. There is not a better team positioned to drive your company to deliver what your customers want, when your customers want it, than your customer service team. Since on time delivery (both outbound and inbound) is one of the primary functions of the supply chain management, customer service belongs to supply chain.

- Strategic Planning: - is about designing the supply chain.
- Demand Planning: - focuses on forecasting demand and analyzing the impact on pricing and promotions.
- Supply Planning: - this process takes demand forecast and the resources available by strategic planning as an input; it can produce a plan to meet the demand.
- Fulfillment: - this process links the orders available to supply sources and ‘means of transportation’ and
- Field Service: - this process focuses on ‘setting inventory level’ and ‘scheduling service calls’.

## ❖ Training and Development

SCM requires a change in “mindset from adversarial to collaborative company interaction” (Stanley et al 2005 pp. 6). The human resources readiness highly contributes for the successful implementation of SCM. Organizations recognized as “excellent in supply chain management” practices do have a strong concern on “training and re-training of its employees” (Richard M. Hoppe, (2001).

Supply Chain Management success depends on the “human resource development” (Richard M. Hoppe, (2001). There are different types of training that would be provided for job performers of an organization. Accordingly, (Richard M. Hoppe, (2001), described that, trainings like: ‘team-building skills for suppliers quality evaluation, problem-solving skills for suppliers partnerships,

leadership skills for customer satisfaction evaluation, job skills for competitive benchmarking, and team building skills for continuous improvement teams’.

## **2.8. Integration of Supply Chain Management Processes**

Increasingly, supply chain management is being recognized as the management of key business processes across the network of organizations that comprise the supply chain. While many have recognized the benefits of a process approach to managing the business and the supply chain, most are vague about what processes are to be considered, what sub-processes and activities are contained in each process, and how the processes interact with each other and with the traditional functional silos.

The Global Supply Chain Forum identified eight key processes that make up the core of supply chain management (Cooper, et al., 1997):

- I.** Customer Relationship Management: the structure for how the relationship with the customer is developed and maintained.
- II.** Customer Service Management: the single source of customer information, such as product availability, shipping dates and order status.
- III.** Demand Management: includes forecasting demand and synchronizing it with production, procurement, and distribution.
- IV.** Order Fulfillment: integration of the firm’s manufacturing, logistics and marketing plans.
- V.** Manufacturing Flow Management: deals with making the products and establishing the manufacturing flexibility needed to serve the target markets.
- VI.** Procurement (Supplier Relationship Management): defines how a company interacts with its suppliers.
- VII.** Product Development and Commercialization; developing new products quickly and getting them to the marketplace in an efficient manner is a major component of corporate success and
- VIII.** Returns: identifying productivity improvement opportunities and breakthrough projects.

The eight key business processes run the length of the supply chain and cut across firms and functional silos within each firm. Functional silos include Marketing, Research and

Development, Finance, Production, Purchasing and Logistics. Activities in these processes reside inside a functional silo, but an entire process will not be contained within one function.

## **2.9. Empirical framework**

According to Shah *et al.* (2002), much of the current theoretical/ empirical research in SCM focuses on only the upstream or downstream side of the supply chain, or certain aspects/perspectives of SCM. However, there are certain previous researchers which have devoted a great deal of attention to the relationship of supply chain management practices and certain aspects of overall organizational performance from different perspective/dimensions or overall supply chain. Some of these researches findings are discussed as follows:

(Salazar, 2012) conducted a study The Effect of SCM process on competitive advantage and organizational performance. This research conceptualizes and develops three dimensions of SCM practice (supplier relationship management, manufacturing flow management, and product development and commercialization) and tests the relationships between these SCM practices, competitive advantage, and organizational performance. Data for the study was collected from prominent organizations and the relationships proposed in the framework were tested using rigorous statistical techniques. The results indicate that higher levels of SCM practice can lead to enhanced competitive advantage and improved organizational performance.

A study on Supply chain performance measurement in the manufacturing industry conducted by (Sillanpää, 2010). The main aim of this study is to create a supply chain measurement framework for manufacturing industry, define what data should be measured and verify the measurement framework in the case company's supply chain. This study presents the main theory framework of supply chain performance measurement. The key elements for the measurement framework were defined as time, profitability, order book analysis and managerial analysis. The measurement framework is tested by measuring case supply chain performance. The measurement framework is a valid framework for supply chain performance measurement in manufacturing industry. It is stated that supply chain performance measurement is extremely important in developing supply chain. The measurement framework in this study offers

guidelines for measuring the supply chain in manufacturing industry but the measurement framework could be used in different areas of industry as well.

Klemencic. (2006) conducted study on management of Supply chain the case of Denmark Manufacturing Company called Danfoss Heating District Business Area by viewing the supply chain as a strategic asset the study tried to highlight theoretical frameworks that improve supply chain performance especially in service level and logistics cost. The study analyzed SCM practice dividing them in to building blocks a described in (Cohen, 2004) Model it continued with evaluating SC strategies, process, organization, Collaboration model and also evaluated the performance of SC on the basis of the current performance indicators by dividing in to four critical success areas time ,service, quality and cost. The analysis of good supply chain strategy the researcher concluded that all building blocks, as defined by Cohen (2004, P. 18), are present in the supply chain strategy today and the actually support overall Vision very well, but they have not been revised and structured in one document. The Study also concluded from the analysis of collaboration model with external partners that it is also an area for improvement especially in terms of defining key collaboration partners, to whom operational activities can be outsourced or in sourced (talking about joined demand planning efforts with key customers) or better utilization of e-commerce to improve efficiency of operational processes (e.g. order placement). In general the researcher concluded that implemented concepts and strategies are contributing significantly to the business result.

Supply Chain Management, Product Quality and Business Performance in case of Malaysian manufacturing companies conducted by Arawati (2011), the study specifically investigates relationships between SCM, product quality and business performance and these associations are analyzed and the result demonstrates that SCM dimensions namely lean production new technology and innovation strategic supplier partnership and postponement concept appear to be of primary importance and exhibit significant effects on product quality and business performance. Among the studied companies, the supply chain integration especially on some factors was unique. Configuration and coordination aspects of the Ethiopian firms supply chains have been investigated, for example, sourcing processes from local and international suppliers, supplier selection, and price decision issues in the chain. The first issue to be addressed is the

identification of supply chain members and allocation of functions among the members. These aspects are depicted as representative in Figures. The figures also show the material flow and some aspects of coordination, which in this case refer to the presence of formal orders, information exchange, and standard procedures. The Figures, we can observe that each of the supply chains consists of different members. The supply chain members in the chain are wholesalers that act as their direct customers, manufacturer, and agents—which distribute the products to the end customers. Sometimes, the agents can also deal directly with companies without the presence of wholesaler. The important major differences in the SCs are the wholesaler participation in sourcing and delivery processes and supply chain members in such activities. For example, in Ethiopian context, manufacturer wholesaler and small retailers actively participated in both sourcing and delivery processes to the suppliers and the final customers. This makes delivery process more challenging and unique in the developing world. The figures show the typical supply chain configurations in alcohol, textile, and leather garment.

**Figure 1. Liquor and alcohol industry supply chain. Arawati (2011).**

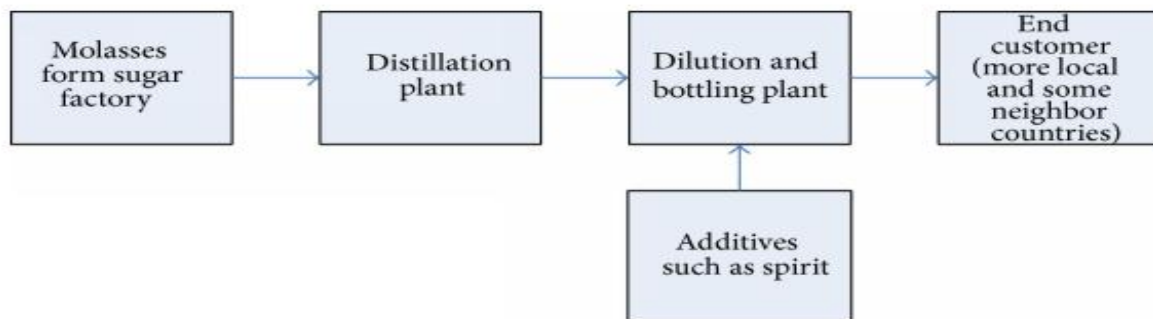
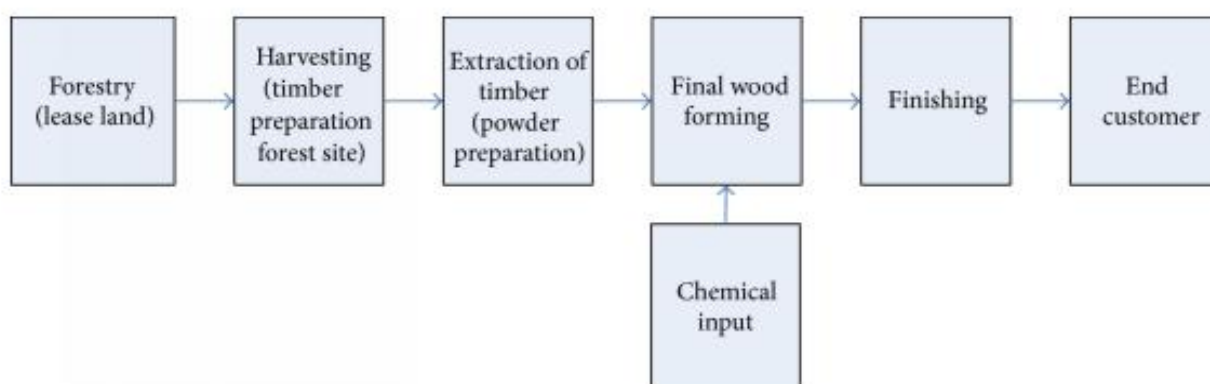


Figure demonstrates liquor and alcohol industry supply chain is a pioneer in manufacturing liquors and alcohol products in the country. The factory attempts to produce and distribute alcohol and various liquor products based on customer demand.

The factory is working with its customers to meet and exceed their needs. It has employed different strategies to reach all potential market areas locally and globally by building its own capacity through the project expansion. It has started to maximize the business opportunities over the next years being supported by the implementation Quality Management System ISO

9001:2008. The company has faced higher challenges in their raw material sourcing because its raw material has strategically diverted to the production of ethanol alcohol by policy maker for blended kerosene production. Therefore, the firm needs to find the new raw material resources for the future purpose.

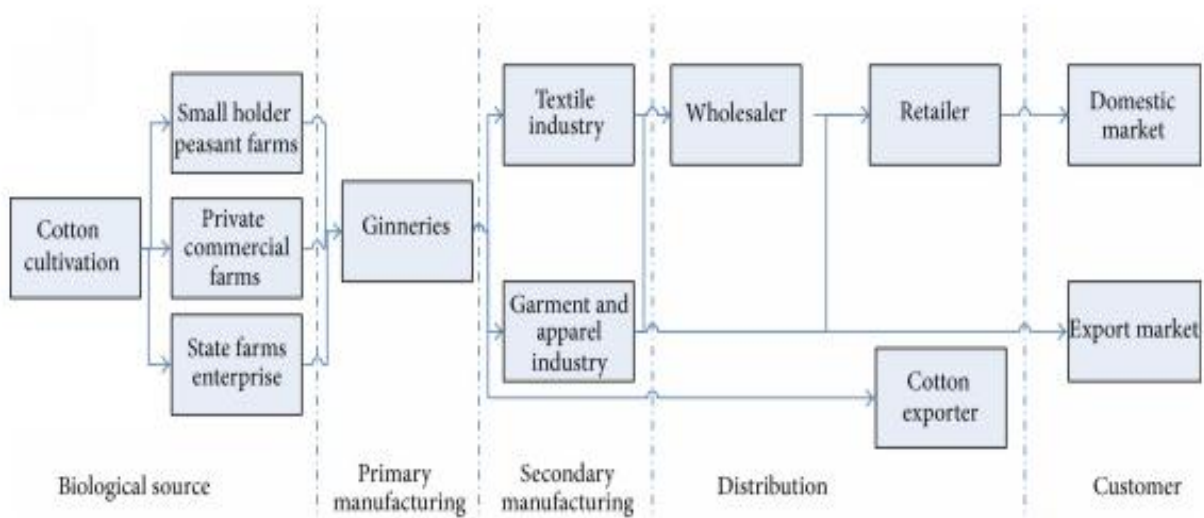
**Figure 2\_Textile industry supply chain. Arawati (2011)**



The textile is one of the potential areas for further development and job opportunities in the developing countries at present and in the near future. Because of the large agricultural land for production of cotton as the raw material source, the developing countries should take advantages for further processing their raw material to finished product garment. The main challenges in this industry were lack of technology know-how and high competition from global markets. The company needs to upgrade its capacity to compete in the global supply chain. The firm manufactures textile mostly for local market. The company operates as a textile mill. It uses local wool producer from local supply. However, its production activities still depend on imported chemicals and spare parts. The above figure shows the textile supply chain industry. The supply chain starts from cotton cultivation from local suppliers and ends with the final customers both to local and foreign materials.



**Figure 3\_Leather industry supply chain. Arawati (2011)**



Tannery the leather industries are other potential areas for the developing countries. The sector is trying to get advantages from large livestock potential and promising market for leather products. However, the industry is highly fragmented. The presence of a large number of chain participants is creating high price fluctuation and unstable market. The industry is operating in production of the gloves and hides. The company produces finished sports gloves leather from sheepskin. While employing conventional tanning process, the factory has installed an exemplary Effluent Treatment Plant, an environmentally compliant project. The factory has achieved process management standards and received ISO Certification. The factory has produced finished dress and sports leather gloves from sheep have penetrated the international market. Company has more than 500 workers.

This tannery is dedicated in production of goat suede and shoe leather. This firm is producing raw leather for foreign market export which is mainly located in Italy. The company produces finished goat suede for shoe upper, finished cowhide for shoe upper, and finished crust lining leather. A chrome-recovery project has been put in place at the goat suede and shoe leather. The factory has achieved process management standards and received ISO Certification. The company earned annual revenue around 43 million dollar before tax. The firm has around 200 employees. Figure 6 demonstrates the leather industry supply chain involving different players.

*(Leather Garment and Article)*. This factory is producing leather goods and garment article products mainly for local markets. The company produces finished leather garments for men and women. During the interview time, the company are mainly produced for local market focusing on jackets, bags, and some leather article. The factory has achieved process management standards and received ISO Certification. The firm has around 250 employees. The firm has planned to enter aggressively to export markets. The firm also has introduced new fashion design cloth for the markets.

Several research agendas can be raised to advance the understanding of supply chain integration. One of the areas to examine involves how effectively and efficiently the firms in developing countries integrated within the organization and with their suppliers and customers even with existing resource constraints. Since global supply chain is trying to integrate the entire supply chain that involves developing countries in the existing enablers and capabilities, future research should identify the factors that facilitate the success of integrated supply chain. It is also important to identify the most appropriate techniques that facilitate the modelling and improvement of the process of integration. Accordingly researchers need to address how to model a supply chain involving developing firms and the influencing factors should be considered in such a model. Arawati (2011)

Generally, from above literature reviews it can be easily understandable that the work on supply chain management measurements/ practices and its influences on different perspectives of the organization and overall supply chain partners increasing and yields good backgrounds. However, the relationship of SCM with performance cannot be regarded as conclusive Arawati (2011) & (Cousins, et al., 2006). Despite the increase of empirical research in the last few years, important differences in research design undermine comparability: lack of consensus about the definition and dimensionality of the SCM construct, use of different units of analysis, and different approaches to performance measurement.

## 2.10. Conceptual framework

There are many corporate and industrial environmental philosophies and practices that are closely linked to and support green supply chain management that have also been a focus of significant research, practice, and application. The incorporation of adequate environmental initiatives at each step of the supply chain. These initiatives cover purchases, product design and development, production, transportation, packaging, storage and end-of-life management after the sale. Environmental issues within corporate organizational boundaries have been a concern for decades. These issues have ranged from reactive concerns to legislation and regulatory pressures to more proactive concerns that include building organizational competitive advantage and developing a strong corporate environmental image. Greater importance of interorganizational relationships has caused organizations to consider building competitive advantage by management of their supplier and customer partnerships and networks (Revilla, E., James Cordeiro, and Joseph Sarkis, 2011).

Based on overall review of related literature and particularly from the work of (Sillanpää, 2010), (Klemencic, 2006), (Salazar, 2012), (Lambert & cooper, 2000) and (Mohammed, 2014) the following conceptual framework in which this specific study governed was developed:

Figure: 4. Conceptual framework of SCM process (Lambert and Cooper, 2000)

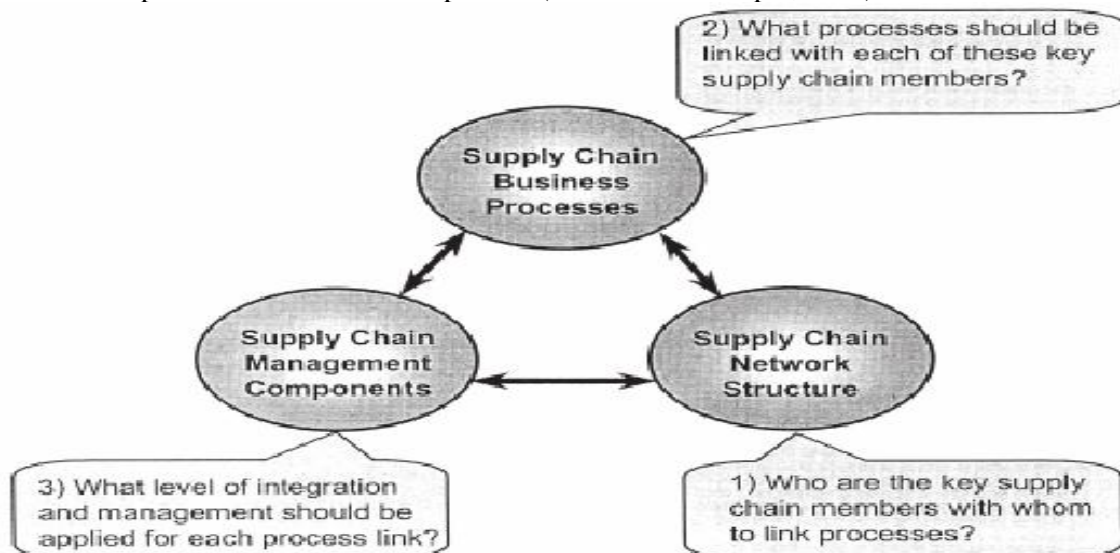


Figure: 5. Conceptual framework of SCM leather industry operations process (Lambert & Cooper, 2000)



## 2.11. Company background

Sheba Leather Industry P.L.C is one of the 16 companies under the group of the Endowment Fund for Rehabilitation of Tigray (EFFORT). The company is a legally registered entity established in 1993 G.C. in accordance with the commercial code of Ethiopia with paid-up capital of 118 million Birr. The company has started its operations in 2004. Currently, the company has created job opportunities for more than 763 employees.

The company distributes its products through direct selling, commission agents and wholesale distributors. You can contact marketing and sales department for any interest in distributing our products to the domestic and international market. Currently, Guna Trading House P.L.C. is our company's exclusive shoes distributor for the local market, which can be contacted at [guna.trading@ethionet.et](mailto:guna.trading@ethionet.et).

The factory is located in the northern part of Ethiopia, Tigray Regional State, Wukro town (45 Kilometres from the regional capital Mekelle.) The region is known for the best origin of hid and

skins, especially goatskin. It is also located at a reasonable distance from East African ports. In its first shipment since ceasing operations, the company has exported 6,588 pairs of shoes to Italy and generated 83,000 dollars. Sheba also plans to ship 25,000 pair's shoes to the same destination next year. Established with a paid-up capital of 93 million Br in 2004, the 900-employee company is located in Wuqerotown, 45Km from Meqelle, Tigray Regional State.

Sheba Leather started operations in leather manufacturing and added the production of women's bags, and men's and women's shoes following the government's mandatory requirement of value addition in 2010. In the six years prior to the government's announcement, the company was producing and exporting pickled and wet blue sheep and goats leathers, in addition to supplying sheep crust, gloves and lining, and goat crust.

Currently, Sheba Leather manufacturer's six women's and nine men's branded shoes. The raw materials including leather, shoestrings and soles for its products are sourced from the local market with some imports from Italy and Turkey. The resumption of its export business will play a significant role in generating much needed foreign currency into the country.

Data from the Ministry of Trade shows that exports keep missing set targets. During the past 11 months of the just-ended fiscal year, the country generated only 2.5 billion dollars in revenues from export, which is 53pc of the target. This has widened the trade deficit of the country.

During the past fiscal year, Ethiopia generated 45.5 million dollars from footwear exports, representing just 1.8pc of total export revenue. It will also promote local products to the international market and keep the brand reputation at the international level.

Sheba is one of 16 operational leather manufacturers still operating in Ethiopia, although 24 are registered. The rest of the companies are at different stages of construction, according to data provided by Ethiopian Leather Industries Development Institution. The institution provides assistance and support to existing and new companies, according to Berhanu Serjebo, communications director at the institute. The company had only halted the export of footwear, not all leather products.

## **CHAPTER THREE**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **INTRODUCTIONS**

The main purpose of the research methodology is to explain how the research is accomplished, what knowledge is required, what information is needed and how information is collected.

Research methodology consists of research approach, sample design-sampling technique, sample size, source and instruments of data collection, methods of data analysis, ethical issues, validity and reliability of the study.

#### **3.1. Research Design**

Descriptive design is an appropriate choice when the research aim is to identify characteristics, frequencies, trends, and categories. Before you can research why something happens, you need to understand how, when and where it happen Shona McCombie's. cc. (2019). Therefore, the researcher persuades to use descriptive research design in order to assess the challenges and practicing of supply chain management in case of Sheba Leather Industry PLC, to describe how the supply chain is practicing and its challenges in case of the study area.

#### **3.2. Target Population**

The target population is said to be a specified group of people or object for which questions can be asked or observed made to develop required data structures and information. Shona McCombie's. cc. (2019).

The target population of the sheba leather industry. Therefore from Butcheries-8, Collectors-8, Wholesalers-16, Tanner's-20, Semi-product manufacturer-20, Final-product manufacturer-20, end consumer-20, all employees are proceeds; However, regarding Factory machine cleaner agent-39, Drivers-14, Guards-9, Field staff workers-17, and office dispatcher-6 of the retail shops have shopping outlet of the factories, the data were collected only from manufacturing firms in Akaki Kality sub city..

So that among from the total 500 employees of the Sheba Leather Industry PLC the rest of 388 population left out; for this study, therefore, the target populations are Akaki Kality sub city particularly those 197 Employees of the company are the target of the total population.

### **3.3. Sampling Technique**

Sampling technique is choosing representative population in the study for determining the character of the whole population (Mugo F. 2002 pp 1). As James M. (1996 pp. 85) described population is a collection of elements that conform to specific criteria and we intend to generalize the result of the research.

Malhortra and Peterson (2006) and Zikmund (2003) stated that, the larger the sampling size of a research, the more accurate the data generated. However, due to time and financial limitations and the nature of the population, sample determination method developed by (J Carvalho, 1984), "Archival application of mathematical sampling techniques", (1984). (Quoted by national Archive report Richmond, 2005) was preferred to be used by researcher as a method to determine a sample size.

For the purpose of this study, the researcher used probability sampling technique particularly simple random sampling in order to give the population an equal probability of being selected. Moreover, this referred to as random sampling is the purest and the most straight forward probability sampling strategy.

### **3.4. Sample size**

With regards to the sampling technique, in simple random sampling each member of population is equally likely to be chosen as part of the sample. It has been stated that “the logic behind simple random sampling is that it removes bias from the selection procedure and should result in representative samples Gravetter, F.J &Forzano, L.B. (2011)

To determine the sample size from the selected firms, the researcher used rule of thumb. It is derived for a quick calculation of a sample size; the rule thumb is worked out for qualitative variable interpreting alpha for dichotomous questions or Likert scale questions with a failure or success outcome.



For the above reason, the sample size under the study is (112), by using simple random sampling techniques through distributing questionnaires. Interview also conducted purposively for marketing and customers' relationship branch managers to get supportive ideas. With regards to the sampling technique, purposive sampling technique will be used for the researcher convenience.

### **3.5. Sources of Data and tools of Data Collection methods**

#### **3.5.1. Sources of Data**

Both primary and secondary sources of data were employed. Based on the above assumptions; General Manager, production manager, marketing manager, purchasing/supplies manager, quality control manager, planning manager and finance manager, supervisors, technicians and other important personnel's as major sources of the primary data.

Other essential secondary sources included in this study shall include: relevant books, academic journals, books, articles contributed by deferent authors, internet based information which contains relevant information related to the subject under the study. For example, policy documents and the like were also being consulted thoroughly. Moreover, site visit and observation of the leather industries was considered as an important source of data.

#### **3.5.2. Data Collection methods**

To construct the questionnaire firstly, main areas of indicators were developed and also communicating those sampled respondent. After getting their permission, distribute the questionnaires and inform the respondents when the response could be required and when they need explanation on questionnaire an address were given and through the speech briefing were conducted. Accordingly, regarding the interview first an appointment with those interviewed personnel was made. At the time of interview, the researcher was use telephone because of COVID-19 social and personal distance.

The questionnaire variables measured using Likert- scale which is a type of psychometric response scale used to measure attitudes or opinions.

To determine the minimum and the maximum length of the 5-point Likert type scale, *First method*: the range is calculated by  $(5 - 1 = 4)$  then divided by five as it is the greatest value of



the scale ( $4 \div 5 = 0.80$ ). Afterwards, number one which is the least value in the scale was added in order to identify the maximum of this cell. The length of the cells is determined below:

- From 1 to 1.80 represents (strongly disagree).
- From 1.81 until 2.60 represents (do not agree).
- From 2.61 until 3.40 represents (true to some extent).
- From 3.41 until 4.20 represents (agree).
- From 4.21 until 5.00 represents (strongly agree).

*Second method* is the traditional way:

- mean score from 0.01 to 1.00 is (strongly disagree);
  - to 2.00 is (disagree);
  - from 2.01 until 3.00 is (neutral);
  - 3.01 until 4.00 is (agree);
  - Mean score from 4.01 until 5.00 is (strongly agree)
- <http://www.statisticshowto.com>.

Therefore; with this scale respondents are asked in which specify their level of agreement to a statement typically in five response categories. (Strongly agree =5, agree=4, neutral=3, disagree=2, strongly disagree=1).

### **3.6. Method of Data Analysis**

The data collected through questionnaire, semi structured interview from the study representative sample will be processed and subjected to a variety of analysis techniques. The researcher will use both qualitative and quantitative method of analysis. Thus, descriptive statistics such as tabulation, frequency counts, percentage, mean, SD. Finally, the researcher will support the analysis with adequate interpretation and discussion.

### **3.7. Validity and Reliability**

#### **3.7.1. Validity**

Validity indicates the accuracy of the instruments in relation to what they intend to measure. Checking the validity of data collecting instruments before providing to the actual study subject is the core to assure the quality of the data (Creswell. 2009). To secure the content validity of the instrument, the researcher referred previous researcher's questionnaires that fit the purpose and to review the instrument before distributing to the respondents and taking an advice from advisor.

### 3.7.2. Reliability

Reliability is concerned with the internal consistency of the items. Hair et al. (2006) defined reliability as the extents to which a variable or a set of variable is consistent in what it is extended to measure. As this study uses multiple items in all variables, internal consistency analysis carried out through Cronbach's alpha reliability tests. Based on the results of the reliability analysis, one can conclude that the items are internal consistent, that is, how closely related a set of items are as a group.

It was tested through Cronbach alpha, it is a convenient test used to estimate the reliability, or internal consistency, of a composite score. Cronbach's alpha,  $\alpha$  (or *coefficient alpha*), developed by Lee Cronbach in 1951, measures reliability, or internal consistency. "Reliability" is how well a test measures what it should. Cronbach's alpha tests to see if multiple-question Likert scale surveys are reliable. The formula for Cronbach's alpha is:

$$\alpha = \frac{N \cdot \bar{c}}{\bar{v} + (N - 1) \cdot \bar{c}}$$

Where:

- N = the number of items.
- $\bar{c}$  = average covariance between item-pairs.
- $\bar{v}$  = average variance.

The minimum acceptable value ca70%; below this value the internal consistency of the common range is low. Meanwhile the maximum expected value is ca0.90; above this value is perceived as redundancy or duplication. The figure show below <https://www.researchgate.net>>post.

<b>Cronbach's alpha</b>	<b>Internal consistency</b>
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

*Source: Mohsen Tavakol and Reg Dennick. Making Sense of Cronbach's Alpha. International Journal of Medical Education. 2011; 2:53-55 Editorial*

### **3.8. Ethical Considerations**

The researcher will address ethical considerations of confidentiality and privacy. The researcher will use a rigorous and conscious effort at all times to sustain this promise. A guarantee will be given to the respondents that their names should not be revealed in the research report. Moreover, participants will receive a verbal and written description of the study, and informed consent will not be obtained before the survey. Participation in the study will be voluntary, and all participant responses will be confidential and can quiet to respond the question anytime they like. Finally, a copy of the final report will be available to the schools if necessary.

## CHAPTER FOUR

### RESULT AND DISCUSION

#### INTRODUCTION

In this chapter analysis, Supply Chain Management Practices and Challenges; in the case of Sheba Leather Industry P.L.C. data's that has been collected through questionnaire and interviews different categories of variables were consequently are presented, discussed and interpreted.

To determine the minimum and the maximum length of the 5-point Likert type scale, the researcher used the *First method*: the range is calculated by  $(5 - 1 = 4)$  then divided by five as it is the greatest value of the scale  $(4 \div 5 = 0.80)$ . Afterwards, number one which is the least value in the scale was added in order to identify the maximum of this cell. In following variable explanation, the length of the cells is determined below:

- From 1 to 1.80 represents (strongly disagree).
- From 1.81 until 2.60 represents (disagree).
- From 2.61 until 3.40 represents (neutral).
- From 3:41 until 4:20 represents (agree).
- From 4:21 until 5:00 represents (strongly agree).

#### 4.1. Respondent Rate

**Table 1. Response Rate**

No.	Name of the supplier's	No. of Questionnaire Distributed	No. of Questionnaire Collected	No. of Questionnaire Uncollected
1	Butcheries	8	8	-
2	Collectors	8	8	-
3	Wholesalers	16	16	-
4	Tanner's	20	20	-
5	Semi-product manufacturer	20	20	-
6	Final-product manufacturer	20	20	-
7	End Consumer	20	20	-
Total		112	112	0

*Source: (researcher field Survey, Data, 2020)*

## 4.2. Respondent Profile

**Table 2. Background of respondents**

Items	Description	Frequency	Percent
Sex	Male	17	15.18
	Female	95	84.82
	Total	112	100
Age of respondents	Below 20 years	35	31.25
	21-30 years	40	35.71
	31-40	25	22.32
	41-50 years	12	10.71
	Total	112	100
Work Experience of respondents	below 5 years	19	16.96
	5-10 years	68	60.71
	11 -15 years	10	8.93
	above 15 years	15	13.39
	Total	112	100

*Source: (researcher field Survey, Data, 2020)*

According to the above table, more than 85% of respondents are females and more than 15% respondents are males.

Regarding to above table 67% respondents relies below 20 to 30 years age. Less number of respondents are aged 41 to 50 years interval that accounts 11%.

According to experience level of respondents, more than 61% of respondents have five to ten years' experience and about 17% of respondents have experience below ten years. From this it can be concluded that the majority of respondents, 68 respondents (61%) fall at a work experience between five to ten years. This implies the fact that most of the respondents have sufficient knowledge and experience about their firm and the subject matter of the study.

### 4.3. Practicing of Supply Chain Integration

**Table 3: Supply Chain Integrations**

Description of items	Rating (x)	Mean score	Freq.	Percent	
The establishment of quick ordering system with our major customer	5	Strongly agree	33	29.5	
	4	Agree	54	48.2	
	3	Neutral	10	8.9	
	2	Disagree	13	11.6	
	1	Strongly disagree	2	1.8	
			$\Sigma f$	112.0	100
			<b>Mean</b>	<b><u>3.9</u></b>	
Level of helping our major supplier to improve their process	5	Strongly agree	19	17.0	
	4	Agree	27	24.1	
	3	Neutral	16	14.3	
	2	Disagree	45	40.2	
	1	Strongly disagree	5	4.5	
			$\Sigma f$	112	100
			<b>Mean</b>	<b><u>3.1</u></b>	
The level of providing advice and support to suppliers on quality based	5	Strongly agree	45.0	40.2	
	4	Agree	25.0	22.3	
	3	Neutral	13.0	11.6	
	2	Disagree	25.0	22.3	
	1	Strongly disagree	4.0	3.6	
			$\Sigma f$	112	100
			<b>Mean</b>	<b><u>3.7</u></b>	
Description of items	Rating(x)	Mean score	Frequency	Percent	
There is cooperation with suppliers	5	Strongly agree	11	9.8	
	4	Agree	26	23.2	
	3	Neutral	11	9.8	
	2	Disagree	57	50.9	
	1	Strongly disagree	7	6.3	
			$\Sigma f$	112	100
			<b>Mean</b>	<b><u>2.8</u></b>	

Description of items	Rating (x)	Mean score	Freq.	Percent	
The degree to regularly solve problems jointly with our suppliers	5	Strongly agree	3	2.7	
	4	Agree	10	8.9	
	3	Neutral	10	8.9	
	2	Disagree	75	67.0	
	1	Strongly disagree	14	12.5	
	$\Sigma f$			112	100
	<b>Mean</b>			<b><u>2.2</u></b>	
Degrees of joint product planning and marketing with suppliers	5	Strongly agree	29	25.9	
	4	Agree	60	53.6	
	3	Neutral	5	4.5	
	2	Disagree	14	12.5	
	1	Strongly disagree	4	3.6	
	$\Sigma f$			112	100
	<b>Mean</b>			<b><u>3.9</u></b>	

Source: Own computation

Based on the analysis on Table 4.5.1., all the supply chain integration had mean scores between 2.5 to 3.9, which imply the respondents agreed to the fact that their business integration is good. The above table shows that, about 77% of respondents are strongly agreed and agreed response as the establishment of quick ordering system with their major customer. More than 11% of respondents is hesitated with the establishment of quick ordering system with our major customer. Therefore, according to above elaboration there is quick ordering system, mean there is no challenges related to quick ordering to help our major supplier to improve their process to better meet to our customers. Less numbers of respondents are strongly disagree with the level of providing advice and support on quality based and more than 9% of respondents are remain silent towards the issue.

In section 4.5.1. Table 3. Listed in regarding the level of helping our major supplier to improve their process 41% of respondents are strongly agree and relatively agreed as there is helping the major supplier to improve their process. Exactly 44% of respondents are disagreed as there is no helping the major supplier to improve their process. 14% respondents are remaining silent or undecided on the issues, and less numbers of respondents are strongly disagreed. Those numbers

tells us fifty percent and it incompetent the firm should improve regarding to helping the major supplier to improve their process.

In section 4.5.1. Table 3. 62% respond strongly agree and agree about the level of providing advice and support to suppliers on quality based. 22% of among respondent response disagreed; few respondent disagreed, the rest of respondent remain silence. It implies that providing advice and support to suppliers on quality based is improve the quality of the products of the firm and built the strength long last relations.

Above 39% of respondents are strongly agree cooperation with the suppliers and more than 50% of respondents are disagreed that there is no cooperation with suppliers and the rest of the respondents are neutral. It inference there is a problem with suppliers to cooperate. Since cooperation with suppliers is back bone of supply chain management as we can see from above table respondent's analysis; So that the organization shall hard working on it. In relation to this finding Adebayo (2012) also confirmed that Supply chain Performance has positive influence on organizational presentations by stating the prime aim of realizing the enhancement of in supply chain is to perform better in the supply chain.

More than 79% of respondents are disagrees as there is regularly solving problem jointly with our suppliers. Above 11% of respondents are agree as there degrees and less number of respondents is remaining neutral to regularly solving problems jointly with their suppliers. Therefore, there is a problem related to jointly solving with their suppliers that need to be solved.

According to A. Gunasegaram and Ngai 2004 Chain Management Practices stands on integration of activities from product development stage to delivering the product to the customer (A. Gunasegaram and Ngai 2004). This shows that, all activities need to be integrated to achieve customer expectation and needs. Consequently, (Lee et al., 2007) indicated three essential linkages: supplier, internal and customer related linkages. Regarding to this study finding the researcher could identify supposed as there is a challenges related to cooperation with suppliers and related to jointly solving with their suppliers that need to be solved.



#### 4.4. Issue of Information sharing and communication

**Table 4: Information sharing and communication**

Description of items	Rating(x)	Mean score	Frequency	Percent	
The level of information sharing across functional areas of the organization.	5	Strongly agree	23	20.5	
	4	Agree	27	24.1	
	3	Neutral	11	9.8	
	2	Disagree	45	40.2	
	1	strongly disagree	6	5.4	
			$\Sigma f$	112	100
			<b>Mean</b>	<b><u>3.1</u></b>	
There is trust among your firm's supply chain members	5	Strongly agree	52	46.4	
	4	Agree	23	20.5	
	3	Neutral	6	5.4	
	2	Disagree	20	17.9	
	1	strongly disagree	11	9.8	
			$\Sigma f$	112	100
			<b>Mean</b>	<b><u>3.8</u></b>	
Information sharing on production and sales forecast with customers	5	Strongly agree	27	24.1	
	4	Agree	44	39.3	
	3	Neutral	7	6.3	
	2	Disagree	19	17.0	
	1	strongly disagree	15	13.4	
			$\Sigma f$	112	100
			<b>Mean</b>	<b><u>3.4</u></b>	
Quality and adequacy of information flow through the supply chain	5	Strongly agree	28	25.0	
	4	Agree	45	40.2	
	3	Neutral	8	7.1	
	2	Disagree	20	17.9	
	1	strongly disagree	11	9.8	
			$\Sigma f$	112	100
			<b>Mean</b>	<b><u>3.5</u></b>	

Description of items	Rating(x)	Mean score	Frequency	Percent	
Sharing information about issues that affect our business	5	Strongly agree	32	28.6	
	3	Neutral	8	7.1	
	2	Disagree	15	13.4	
Creating a friendly information system with suppliers and customers	5	Strongly agree	35	31.3	
	4	Agree	53	47.3	
	3	Neutral	6	5.4	
	2	Disagree	11	9.8	
	1	strongly disagree	7	6.3	
			$\Sigma f$	112	100
			<b>Mean</b>	<b><u>3.9</u></b>	
Stable procurement through network with our major supplier	5	Strongly agree	37	33.0	
	4	Agree	63	56.3	
	3	Neutral	1	0.9	
	2	Disagree	7	6.3	
	1	strongly disagree	4	3.6	
			$\Sigma f$	112	100
			<b>Mean</b>	<b><u>4.1</u></b>	
Up to datedness of IT technologies throughout the supply chain	5	Strongly agree	14	12.5	
	4	Agree	30	26.8	
	3	Neutral	15	13.4	
	2	Disagree	39	34.8	
	1	strongly disagree	14	12.5	
			$\Sigma f$	112	100
			<b>Mean</b>	<b><u>2.9</u></b>	

According to above table, the level of sharing information across functional areas of the organization more than 45% of respondents are disagrees and more than 45% of respondents are agrees on issues respectively. Therefore, half respondents are agrees as information sharing is takes place as functional areas of the organization; moderately confident as there is information sharing regarding to production and sales forecast with customers.

According to above table for assessment taken on the availability of trust among firms supply Chain more than 67% of respondents are strongly agreed, while more than 27% of respondents

are disagree as there is no trust among their firms supply chain members. Less number of respondents is neutral as there is trust among their firms. Therefore, in Sheba Leather Industry PLC no more information disclosing problem.

Accordingly about 65% of respondents are agrees as the quality and adequacy information flow through the supply chain. 27% of respondents are disagreed respectively. 7% of respondents are neutral as there are quality and adequacy of information flow through the supply chain. Therefore, in regarding the quality and adequacy of information flow through the supply chain in the firm is highly available. Information is a key to success for any organization.

In the above section 4.6 table 4.6.1 indicated that Over 63% of respondents are strongly agree as sharing information about issue that affects their business. About 30% of respondents are disagree. Therefore, it is possible to say there is information sharing related to minimize or else to eliminate the uncertainty.

In the above section 4.6 table 4.6.1 compute 77% of the sample size response that strongly agree in the issue on creating a friendly information system with suppliers and customers. While 15% of the respondent's side with disagreed about the issue and the rest 5% the respondent's remains neutral whether there is friendly information system with suppliers and customers. Therefore, we can say no more aggravated challenges related to friendly flow information system with suppliers and customers. Creating and exercising the nature of friendly smooth information is back bone of any business organization, regarding to this concept.

In the above table compute on the issue of stable procurement through network with our major supplier 89% respondents are strongly agree and 10% of the sample size remaining with disagree more over in this case no neutral respondent were found. Therefore, it implies that Sheba leather industry PLC have a strong and smooth stable procurement through network with major suppliers.

In section 4.6 table 4.6.1 Listed in regarding of up to datedness of IT technologies throughout the supply chain, 38% of respondents are agreed and more than 47% respondent opposed as up to datedness of IT technologies throughout the supply chain. Therefore, unavailability of updated IT technology throughout supply chain management. This makes the supply chain management operation weak and inefficient.

Based on the above table 4.6.1 to conclude the firm face in to two major findings; the first one is in the issue of quality and adequacy of information flow through the supply chain has great

contribution for organization. The other one is regarding of up to datedness of IT technologies throughout the supply chain, and the level of sharing information across functional areas of the organization as poor. So that the organization should look ahead regarding this outcomes.

#### 4.5. Issue of Operational Efficiency and Capacity Development

**Table 5. Operational efficiency and capacity development**

Description of items	Rating (x)	Scale	Frequency	Percent	
Regularly measure and evaluating customer	5	Strongly agree	34	30.36	
	4	Agree	57	50.89	
	3	Neutral	6	5.36	
	2	Disagree	10	8.93	
	1	Strongly disagree	5	4.46	
	$\Sigma f$			112	100
	<b>Mean</b>			<b><u>3.9</u></b>	
There is regularly anticipating customer needs	5	Strongly agree	29	25.9	
	4	Agree	59	52.7	
	3	Neutral	9	8.0	
	2	disagree	13	11.6	
	1	Strongly disagree	2	1.8	
	$\Sigma f$			112	100
	<b>Mean</b>			<b><u>3.9</u></b>	
Description of items	Rate(x)	Mean score	Frequency	Percent	
The extent of utilization of periodic interdepartmental	5	Strongly agree	22	19.64	
	4	agree	67	59.82	
	3	neutral	9	8.04	
	2	disagree	12	10.71	
	1	Strongly disagree	2	1.79	
	$\Sigma f$			112	100
	<b>Mean</b>			<b><u>3.8</u></b>	

The level of data integration among internal function	5	Strongly agree	11	9.82
	4	agree	31	27.68
	3	neutral	16	14.29
	2	disagree	43	38.39
	1	Strongly disagree	11	9.82
	$\Sigma f$			<u>112</u>
<b>Mean</b>			<b><u>3.9</u></b>	
Degrees of integrative inventory management	5	Strongly agree	18	16.07
	4	Agree	64	57.14
	3	Neutral	11	9.82
	2	Disagree	15	13.39
	1	Strongly disagree	4	3.57
	$\Sigma f$			<u>112</u>
<b>Mean</b>			<b><u>3.7</u></b>	
Level of providing training to downstream SC members	5	Strongly agree	6	5.36
	4	Agree	9	8.04
	3	Neutral	22	19.64
	2	Disagree	60	53.57
	1	Strongly disagree	15	13.39
	$\Sigma f$			<u>112</u>
<b>Mean</b>			<b><u>2.4</u></b>	
Level of adequacy of training for management	5	Strongly agree	24	21.43
	4	agree	60	53.57
	3	neutral	10	8.93
	2	disagree	11	9.82
	1	strongly disagree	7	6.25
	$\Sigma f$			<u>112</u>
<b>Mean</b>			<b><u>2.5</u></b>	

Source: own survey computation

According to above table, regarding to regularly measuring and evaluating customers, more than 80% of respondents are highly supposed. About 13% of respondents are assumed as there is no regularly measuring and evaluating customers. Less numbers of respondents are remaining neutral. Therefore, highly there is no bold challenge with regularly measuring and evaluating customers.

Regarding regularly measuring and evaluating customers above 78% of respondents agreed and 13% respondents disagreed accordingly. While 8% of respondents are remaining neutral and less confident. Therefore, regularly following and updating with customer need is asset in marketing, in case of Supply Chain management.

More than 80% respondent's response strongly agreed on issues of the extent of utilization of periodic interdepartmental. 11% of respondents are opposed and 8% remain neutral. It implies that there is strong utilization of periodic interdepartmental in the firm.

In the section 4.7 table 4.7.1 analysis in the question of the level of data integration among internal function; 29% the respondent answer among the sample size agreed, 49% disagree and 14% respondents remaining silence respectively. It implies that there is somehow data integration among internal function, this result causes negative assumption to the firm through time.

In the same section 4.7 according to the specific question of degrees of integrative inventory management; 73% the respondent answer strongly agreed, 16% respondent disagreed and the rest of 9% respondent neutral. There for the firm incorporate with inventory management.

Regarding to providing of training downstream Supply Chain members, above 13% of respondents are agreed. And more than 19% of respondents are undecided on s training is given downstream and also more than, 66% of respondents are strongly disagreed as provision of training to downstream Supply Chain members. Less number of respondents is confident as there is provision of training to downstream Supply Chain Members. Form this analysis it is possible to understand as there is bottle neck with provision of downstream training to SC members.

For question asked for availability of training for management, more than 74% of respondents are confident as there is adequacy of training for management and more than 16% of respondents are disagrees as there is no adequacy of training. While 9% of respondents are remain silent. Therefore, as above the organization provide training program for management team, while there is high suspecting training provision for supply chain members, this May big experiment on the effectiveness of the supply chain management.

#### 4.6. Challenges and Potential Threats of Supply Chain management

**Table 6: Challenges and Potential Threats**

Description of items	Rating(x)	Mean score	Freq.	Percent	
Level of flexibility of organizational systems process	5	Strongly agree	37	33.0	
	4	Agree	22	19.6	
	3	Neutral	25	22.3	
	2	Disagree	18	16.1	
	1	Strongly disagree	10	8.9	
			$\Sigma f$	112	100
			<b>Mean</b>	<b><u>3.5</u></b>	
Degree of adequacy of information systems	5	Strongly agree	27	24.1	
	4	Agree	25	22.3	
	3	Neutral	20	17.9	
	2	Disagree	24	21.4	
	1	Strongly disagree	16	14.3	
			$\Sigma f$	112	100
			<b>Mean</b>	<b><u>3.2</u></b>	
There are clear guidelines for managing supply chain alliances	5	Strongly agree	16	14.29	
	4	Agree	26	23.21	
	3	Neutral	23	20.54	
	2	Disagree	30	26.79	
	1	Strongly disagree	17	15.18	
			$\Sigma f$	112	100
			<b>Mean</b>	<b><u>2.9</u></b>	
Level of employee loyalty/motivation/empowerment	5	Strongly agree	22	19.64	
	4	Agree	13	11.61	
	3	Neutral	18	16.07	
	2	Disagree	26	23.21	
	1	strongly disagree	33	29.46	
		$\Sigma f$	112	100	
		<b>Mean</b>	<b><u>2.7</u></b>		

Description of items	Rating(x)	Mean score	Freq.	Percent	
The extent of willingness to share risks and rewards	5	Strongly agree	21	18.75	
	4	Agree	17	15.18	
	3	Neutral	22	19.64	
	2	Disagree	21	18.75	
	1	strongly disagree	31	27.68	
			$\Sigma f$	112	100
			<b>Mean</b>	<b><u>2.8</u></b>	
Degree of willingness to share needed information	5	Strongly agree	24	21.43	
	4	Agree	26	23.21	
	3	Neutral	24	21.43	
	2	Disagree	20	17.86	
	1	strongly disagree	18	16.07	
			$\Sigma f$	112	100
			<b>Mean</b>	<b><u>3.2</u></b>	
Level of trust among supply chain members	5	Strongly agree	16	14.29	
	4	Agree	22	19.64	
	3	Neutral	24	21.43	
	2	Disagree	29	25.89	
	1	strongly disagree	21	18.75	
			$\Sigma f$	112	100
			<b>Mean</b>	<b><u>2.8</u></b>	
The level of affordability of the cost of product	5	Strongly agree	34	30.36	
	4	Agree	17	15.18	
	3	Neutral	24	21.43	
	2	Disagree	19	16.96	
	1	strongly disagree	18	16.07	
			$\Sigma f$	112	100
			<b>Mean</b>	<b><u>3.3</u></b>	

Source: Own Survey Computation



The flexibility of organizational system process is very important. According to above, about 52% of respondents are agrees as there is flexibility of organizational system process, while more than 22% of respondents are remain neutral and few number of respondents are hesitate on the issue. 24% of respondents are disagree as there is no availability of information system.

And more than 44% of respondents are agrees as there is an information adequacy system. Whereas 35% of respondents are disagree and strongly disagree and 18% of respondents are remain neutral respectively. Therefore, averagely there is adequacy of information system.

According, more than 41% of respondents are not supposed as there are clear guide lines in managing supply chain management. And more than 37% of respondents are accepted as there are clear guide lines. 20% of respondents are remain neutral.

More than 31% of respondents are highly supposed as there are employee loyalty/motivation/empowerment. Whereas, 16% of respondents are undecided towards issue. And 52% of respondents are disagrees and strongly disagrees respectively. When we look above analysis, there is a problem with employee's motivation/empowerment averagely based on respondents rating.

The extent of willingness to share risks and rewards, accordingly more than 34% of respondents are highly assumed as there is willingness to share and rewards and more than 19% of respondents are neutral. And more than 21% of respondents are disagrees. Therefore, when we compare responded average of respondents is believed as there is willingness to share risks and rewards.

Regarding to willingness to share needed information, about 44% of respondents are strongly agreed. Among the sample size of 33% of respondents are disagreed as there is willingness to share needed information. The rest of 21% of respondents are responded as they have no idea.

Regarding to availability of trust among supply chain members. About 33% of respondents of are strongly agreed as there is trust among supply chain management. And more than 43% of respondents are disagrees as supply chain members are no trust each other. Whereas more than 21% of respondents are remain silent towards the issue. Therefore more respondents are hesitated as there is trust among supply chain members.

From the above section 4.8 table 4.8.1 analysis last question regarding cost affordability more than 45% of respondents are muscularly agrees as there is cost affordability, more than 32% of respondents are dis strappingly agreed and the rest 21% of respondents are remaining neutral.

## **CHAPTER FIVE SUMMERY, CONCLUSION AND RECOMMENDATION**

### **INTRODUCTIONS**

The study was conducted on Practices and Challenges of Supply Chain Management the Case of Sheba Leather Industry PLC with objective of assessing practice and challenges of supply chain management in study area. Quantitative mode of enquiry with was employed with descriptive method of data analysis. Questionnaires were distributed for 112 for sample respondents and 100% of distributed questionnaires were filled and returned. The collected data was analyzed under category themes, finally interpreted accordingly.

### **5.1. SUMMERY OF MAJOR FINDINGS**

Based on analysis made on the previous chapter, the major findings of the study are summarized as follows:

1. Regarding to supply chain integration with the value of grand mean 3.27, there is a moderate on level of integration among chain members of the supply chain. Thus, firms need to measure the level of their customer satisfaction in order to improve their product quality, feature, color and others that satisfies the consumers. Accordingly, the data obtained from Sheba Leather industry plc.
  
2. According to Information Sharing and Communication with grand mean 3.56 that shows a moderate level of information sharing on the firm with customers, quality and adequacy of information flow through the supply chain, the level of information sharing across functional areas of the organization, the level of information sharing with suppliers on inventory and quality of raw material, the level of trust among firms of supply chain members, and the extent to share information about issues that affect their business respectively.

3. regarding supply chain management challenges and threat with grand mean of 3.02 there is a problem in terms of level of establishing relationships based on shared risks & rewards and level of employee loyalty/ motivation/ empowerment, there is a no significant difference on the supply chain management challenges with 70% confidence interval regarding level of trust among supply chain members, degree of adequacy of information systems and level of clear guidelines for managing supply chain alliances. However, there is significant difference regarding the extent of willingness to share risks and rewards.
4. Operational Efficiency and Capacity Development with a grand mean of 3.44 the degree of productivity is highly improve their process to better meet firms needs indicate that, there is no significant . Under this dimension, the higher the mean value the higher the challenge. Thus, firms with higher mean value have to improve the practice. Accordingly, those having a mean value of Very High, High and Average need to improve the practice.

## 5.2. CONCLUSION

In Sheba Leather Industry PLC Supply Chain management practice relatively takes place.

Regarding to helping major supplier to improve their process to better meet supplier's needs no more satisfactory condition, more than 44% of respondents were confirmed. Creating cooperation with the suppliers is back bone of supply chain management effectiveness. The study found as there is a problem related to cooperation with suppliers; about 50% confirmed that leads to absence of jointly solving problem faced the organization supply chain management.

Regarding to the issue of Information Sharing and Communication. The researcher identified as the level of information sharing across functional areas of the organization, Information sharing on production and sales forecast with customers quality and adequacy of information flow through the supply chain in healthy condition. The up to datedness of IT technologies throughout the supply chain is one of unsatisfactory condition.

Regarding to operational capacity and capacity building, the researcher identified as there is a problems in a provision of training downstream Supply Chain members, which confirmed by more than 70% of respondents. From this analysis it is possible to understand as there is bottle neck with provision of only the downstream training to SC members, but there is training sufficient provision for management, that may challenges the operational efficiency and capacity development of members.

In this study Challenges and Potential Threats of Supply Chain management were identified. There is no clear guide line in managing supply chain management. Empowering employees also not adopted in Sheba Leather Industry PLC. Supply chain management is challenging lack of willingness to share information which is confirmed by more than 75% of respondents. And absence of trust among supply chain management also one of the challenge.

Quality and adequacy of information flow through the supply chain has great contribution for organization. The other one is regarding of up to datedness of IT technologies throughout the supply chain, and the level of sharing information across functional areas of the organization as poor. So that the organization should look ahead regarding this outcomes.

The quality of communication and sharing information among their suppliers and clients, determine the degree of achievement of the key principles. So, Lacking of communication between the partners inhibits the improvement of supply chain collaboration.

To improve coordination among suppliers relationships are very necessary. Mutual relationship with supplier leads to reliable environment, with higher efficiency level and higher profits. SCM has a key role to improve the efficiency and productivity of companies. Companies involve in an organization for creating a product and transmitting it to the end user. Even if major steps are taken to improve the efficiency and productivity of leather industry for the last decades and alignments on performance of construction industry in terms of the budget, quality of service, quality of materials and time of delivery, there is still room for the improvements of supply chain management tools for the construction industry.

### 5.3. RECOMMENDATION

Based on the finding the researcher recommends the following points for concerned body;

Improving supply chain management process with suppliers interest

- ❖ Even though the supply chain integration is observed as above average with Grand Mean of 3.27, from modern business perspective a good business strategy should start with working with all supply chain members both from upper side and down side. Chain members may have sound market ideas than a producers from the proximity to the market they have.
- ❖ Regard integration help the industry consider possible decision alternatives and make sound decisions.
- ❖ As it is clearly indicated in the conclusion the information flow across the supply chain is not as such satisfactory and it may impede the integration that should exist among the supply chain players. In an attempt to integrate and facilitate a smooth flow conformation among the actors new technology need to be in place that can systematically coordinate the works across the chain of the leather industry. Soft wares such as ERP specifically SCM soft may facilitate their communication.
- ❖ With regard to operational efficiency and capacity building, the study founded that the industry operation is having some potential problems providing downstream training for supply chain management members.
- ❖ Naturally functions of supply chain are networked each other. Any deficiency observed in one of the actors can immediately reflected in the remaining part of the chain. As the result of this, the operational efficiency of the system can be affected proportionally. As the chain capacity building program need to in place so that the chain members will have both technical and managerial capacity in integrating their operation.

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**ST.MARY’S UNIVERSITY  
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MASTERS OF GENERAL MANAGEMENT**

**Appendix**

**Questionnaires**

Questionnaires to be filled by the employees a study on assessment of practices and challenges of supply chain management: the case of selected Leather Industries in Ethiopia.

Dear Respondents

I would like to express my heartfelt appreciation, in advance, for taking time to discuss the following issues. The Questionnaire guide is designed for the preparation of a research for the fulfillment of M.A degree in Business Management.

The purpose of this questionnaire is just to get information regarding the magnitude of the issue under investigation. Be confident that the information you provide will be kept and used only for academic research purpose. So you are kindly requested to give your genuine answer. Please respond to each of the information by writing or putting a “” mark in the space provided.

**Section I. Personal Information**

1.1 Industry Type \_\_\_\_\_

1.2 Sex  Male  Female

1.3 Age (1) Below 20 years

(2) 21-30 years   
 (3) 31-40 years

(4) 41-50 years   
 (5) 51 and above

1.4 Experience on current occupation.

- ❖ Below 10 years
- ❖ 10-20 years
- ❖ Above 20 years

1.5 Academic Qualification

Certificate & Below  Diploma   
 First Degree  MA/MSc and above

1.6. Position of Respondents \_\_\_\_\_

**Section II. Issue of Supply Chain Management**

Direction 1: Please rate the following questions on this questionnaire by putting the "√" mark in the space provided. Accordingly rate as follows. 5. Very High, 4. High, 3. Medium 2. Low 1. Very Low.

No	Practicing of supply chain management	Rating Scales				
		5	4	3	2	1
1	The establishment of quick ordering system with our major customer					
2	The level to help our major supplier to improve their process to better meet our needs					
3	Level of Our customers share demand forecast with us					
4	The level of providing advice and support to suppliers on quality result					
5	The level of cooperation with suppliers					
6	The degree to regularly solve problems jointly with our suppliers					
7	Contacting end users of your product to get feedback on the product quality.					

Direction 2: Please rate the following questions on this questionnaire by putting the “√” mark in the space provided. Accordingly rate as follow 1. Very High 2. High 3. Medium 4. Low 5. Very Low.

No	Information Sharing and Communication	Rating Scales				
		1	2	3	4	5
1	The level of information sharing across functional areas of the organization.					
2	The level of information sharing with suppliers on inventory and quality of raw material					
3	The level of trust among your firm’s supply chain members					
4	Level of information sharing on production and sales forecast with customers					
5	Quality and adequacy of information flow through the supply chain					
6	The level of information sharing on production and sales forecast planning with suppliers					
7	The extent to share information about issues that affect our business					
8	The level of timely information exchange between us and our trading partners					

Direction 3: Please rate the following questions on this questionnaire by putting the "√" mark in the space provided. Accordingly rate as follow 5.Very High 4. High 3. Medium 2. Low 1. Very Low.

No	Information Technology and Usage	Rating Scales				
		1	2	3	4	5
1	The level of IT- based automated ordering					
2	Adequacy of IT system through the supply chain					
3	The level of creating a friendly information system with suppliers and customers					
4	Degree of stable procurement through network with our major supplier					
5	Up to datedness of IT technologies throughout the supply chain					

Direction 3: Please rate the following questions on this questionnaire by putting the "√" mark in the space provided. Accordingly rate as follow 1.Very High 2. High 3. Medium 4. Low 5. Very Low.

No	Operational Efficiency and Capacity Development	Rating Scales				
		1	2	3	4	5
1	The degree to regularly measure and evaluate customer satisfaction					
2	Level of regularly anticipating customer needs					
3	The extent of utilization of periodic interdepartmental meetings among internal functions					
4	The level of data integration among internal functions					
5	Degree of integrative inventory management					
6	Level of providing training to downstream SC members					
7	Level of providing training to upstream SC members					
8	Level of adequacy of training for management					
9	Degree of providing diversified skill training for employees					

Section VI. Issue of Challenges

Direction 3: Please rate the following questions on this questionnaire by putting the "√" mark in the space provided. Accordingly rate as follow 5.Very High 4. High 3. Medium 2.Low 1. Very Low.

No	Issues hindering the supply chain practicing	Rating Scales				
		1	2	3	4	5
1	Level of flexibility of organizational systems process					
2	Degree of adequacy of information systems					
3	Level of clear guidelines for managing supply chain alliances					
4	Level of employee loyalty/motivation/empowerment					
5	The extent of willingness to share risks and rewards					
6	Level of establishing relationships based on shared risks & rewards					
7	Degree of willingness to share needed information					
8	The level of affordability of the cost of product					
9	Level of training for new mindsets and skills					