WOLKITE UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

DEPARTMENT OF MANAGEMENT

ASSESSMENT OF SUPPLY CHAIN MANAGEMENT PRACTICE IN CASE OF SEMIRA FLOUR FACTORY IN WOLKITE TOWN

A RESEARCH PAPER SUBMITTED TO THE DEPARTMENT OF MANAGEMENT FOR THE PARTIAL FUIFILLMENT OF THE REQUIREMENT FOR BACHELOR OF ARTS DEGREE IN MANAGEMENT

PREPARED BY: ABREHAM TEKLE

ID NO: SSR/0060/14

ADVISOR: ENDALK F. (MBA)

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Abstract

Supply Chain Management (SCM) is the means by which firms engaged in creating,distributing, and selling products, can join forces to establish a supply network with an unbeatable competitive advantage-has emerged as one of the most powerful business improvement tools around. Companies all over the world are pursuing supply chain as the latest methodology to reduce costs, increase customer satisfaction, better utilize assets and build new revenues. The purpose of this paper was to examine the practices of supply chain management in the case of Semira Flour Factory in Wolkite Town . For the accomplishment of this, the study employed descriptive design. Both primary and secondary sources of data were used for this study. In order to collect the primary data the researcher used closed ended and open ended question and structured interview. And also secondary data was collected through reviewing company's reports ,manuals, journals, publications, and books for assessing theories and principles related to the topic.The total numbers of Semira Flour Factory employees are 62 .So the researcher used census method. The questionnaire and interviews were used as instruments for data collection. The data was analysed by using descriptive statistics and presented in tables. The major findings indicated that, most SCM practices are moderately practiced with in the Semira Flour Factory.Manufacturing, supply and demand uncertainties which conveys almost moderate mean values are the major headaches or challenges of the case company's SC which prohibits effective implementation of SCM. Hence, the case company is suggested to improve its relationship with suppliers from simply buy-sale relationship to a modern supply chain relationship through establishing strategic or long term relationship, contract, and continuous information sharing in order to minimize supply uncertainty which resulted in demand and supply.

TABLE CONTENT

Acronym

SCM- ***Supply Chain management***

LIS **-** ***Logistic Information System***

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CHAPTER ONE

1. INTRODUCTION

1.1 Background of the Study

The international market has become more complex and competition is tighter, hence the need for companies to re-structure and re-establish their operations departments-in a bid to offer better goods and services to the users/consumers by effectively and efficiently managing supply chain practices (Stock & Boyer, 2009). Today, supply chain management is practiced in various industries (Ralston,2013). The main reason for this is to ensure that products produced meet the needs of the consumers (Kazi, 2012). In a business environment that is highly competitive and ever changing, supply chain management has emerged as one of the most vital features of any business.

Supply chain relationships play an important role in achieving the firm's goals (Kazi, 2012). Supply Chain Management (SCM) is the process of planning, implementing and controlling the operations of the supply chain with the purpose to satisfy customer requirements as efficiently as possible (Green, Zelbst, Meacham & Bhadhauria, 2012). SCM involves the coordination of information, financial flows and materials between and among all the enterprises that take part.

Many companies have started to see that SCM plays a crucial role in developing products that perform better than their competitors in the market (Jones, 1998). SCM entails the efforts taken by an organization to effectively manage its supply chain (Kazi, 2012).

The main aim of supply chain practices is to tackle complicated supply chains with the intention of combining all production and distribution activities that add value and getting rid of those which don't so as to deliver customer requirements (Lysons & Farrington, 2007). The modern supply chain differs in many ways from the traditional ones. The main aim of the modern supply chain is not only to satisfy the customer fully but also to make enough profit for the enterprises.

The instability in market demand, coupled by increase in product variety and the need to generate more profit occasioned the development of a new concept of supply chain best practices, which is an integration of the customer demands and supply chain dynamics (Kazi, 2012). SCM is basically a set of activities taken by an organization with a view to effectively manage its supply chain (Lee, Lee & Schniederjans, 2011).

Short term objectives of SCM are enhancing productivity, reducing inventory and lead time while the long-term objectives involve increasing market share and supply chain integration.

1.2 Statement of The Problem

The justification for targeting on flour sector is that, flour price increases are creating severe difficulties for poor people and have led to political unrest in many parts of the world. Currently in Ethiopia the price of flour related items are increasing and even there is shortage of some flour items on the market this may be due to poor supply chain management, collaboration, and other factors across the supply chain partners.

Therefore, the rationale of this study is to build awareness on supply chain management and to fill the empirical gap.

Companies which recognize opportunities in the supply chain management will usually direct their effort towards developing a competitive supply chain that is based on speed, flexibility, innovation, quality & responsiveness is believed to significantly improve customer service and their profitability. Therefore, the primary goal of supply chain management is to enhance competitive performance by closely integrating the internal functions within a company & closely linking them with external operations of suppliers, customers and other channel members (Kim, 2006).

For seeking the efficient and effective cooperation between organizations of a supply chain, each chain member must seek not only to improve its own individual competitiveness (i.e. quality, cost, delivery lead time, and etc.) but also improve the competitiveness and performance of all enterprises in its supply chain. This involves sharing of information, working together to reduce costs, cut lead-time and building total quality into all the stages of the supply chain (Davis, 1993).

According to (J. Bowersox, 2007:371) Supply chain coordination requires each stages of the supply chain to take in to account the impact its action on other stage. However, still there are many big corporations where each of the different functions do not know what the other are doing. a company might have promotion plan or special trade deal in place, and the SC people are unaware of it, or the SC manager plans how much inventory to put in place or how much capacity to invest in and does not share that with the sales and marketing people and so you may find yourself in a situation where the sales and marketing peoples are giving special deals with on a particular product when, in fact, you are running up to the capacity limit.

Therefore, the overall intention of this study was to assess the case company's orientation towards supply chain management practices. The selection of the case company for conducting this study is pertaining to the results of the preliminary observations made on few selected companies of which the researcher has identified problems on the SCM practices of Semira flour factory.

1.3 Basic Research question

1. Is there efficient raw material to produce flour product?
2. How the company distributes the product?
3. What is the collaboration/integration among the key players of the SC member?

1.4 Objectives of The Study

1.4.1 General Objectives of the Study

The main objective of the study is to assess the supply chain management practice (a case study of semira flour factory in wolkite town).

1.4.2 Specific Objectives of study

1. To evaluate the availability and efficiency of raw materials for flour production.

2. To analyze the distribution strategies for its products.

3. To assess the integration in supply chain members for smooth operations and collaboration.

1.5 Scope and Limitation of the study

Even though supply chain would be very important issue in the world, in Ethiopia it is difficult to conduct comprehensive as a whole due to its vast nature of the supply chain activities that needs along term study and huge finance.

Supply chain management (SCM) enables to see the members of the supply chain (SC) as an integrated whole and elicit synergy impact. In other terms, an effective and efficient SCM has the importance of cost minimization, reducing lead time, defect prevention, operational flexibility, system integration, resource utilization and ultimately customer satisfaction.

SCM encompasses vast areas of managerial practices. However, it is difficult and unmanageable to conduct the study in all areas that summarizes SCM. Therefore, the scope of this study was delimited

to specific context that is practices of SCM in the case of Semira Flour Factory in Wolkite Town. Moreover, the scope of the study was limited to the case company i.e,Smira Flour Factory and the down streams of the supply chain.

1.5.2 Limitation of the study

When undertaking the study, some problems were encountered, including:

- worker unable to return the question on time, resource (budget) and time restrictions, lack of cooperation from the organizations or respondents in providing information relevant to the study.

1.6 Significance of the study

Investigating the practices of supply chain management and hindrances for its effective implementation in the current complex and dynamic business world is believed to have the following advantage to the academicians, corporate managers, policy makers; and generally for business practitioners, but more specifically, for the case company.

Hence, this study can be taken to have the following major significance:

- It is going to be used for educators or training institutions to take into consideration while designing training on the issues related to the SCM.
- It will serve as an additional reference to conduct further study in the subject in caption; this is because in the current situation we can infer that only a limited number of researches are conducted in the area in Ethiopia.

1.7 Operational and Conceptual Definition of the Term

1.7.1 Operational Definition

Supply chain is essentially a planning orientation and frame work that seeks to single plan for flow of product, information and funds through business ,so that supply chain management build up on this frame work and seek to achieve linkage and coordination between the process of other entities in the principle the supplier, customer and organization itself .

The focus of the supply chain management on cooperation on trust and the recognition that, properly managed the whole can be greater than the sum of its part .in addition , as stated that supply chain management is upon the management of relationship in order achieve a more profitable out

comes for all parties in the chain ,this brings with it some significant challenge since ,there may be occasions when the narrow self-interest of one party has to be sub summed for the benefit of the chain as a whole

1.8 Organization of the study

The overall structure of this study would organized in to five chapter . Chapter one contains the introduction part dealing with back ground of the study and company, the research problem, objectives of the study, scope, significance of the study and operational definition of the term .

The second chapter discusses the literature review of the subject matter. In chapter three the research methodologies are assumed to be presented. In chapter four the results and discussion of the study and finally chapter five presents the major findings, conclusions and recommended suggestions.

CHAPTER TWO

2. LITERATURE REVIEW

2. 1. THEORTICAL LITRATUER REVIEW

2.1.1. Overview of Supply Chain Management

The advancement and operational of Supply Chain (SC) have become important subjects for organizational decision makers. Supply Chain management (SCM) is the strategic and efficient coordination of the conventional business functions and SCM is aimed at examining and managing Supply Chain networks (Christopher, 1998).

Before the term supply chain was coined, the term used for management and movement of product and services was logistics. The development of logistics was originally undertaken by the military in ancient times (Britannica, 1999). Therefore, Supply Chain Management is driven from Logistics concept. The term supply chain management was coined in 1982 by Keith Oliver, a management consultant at Booz Allen Hamilton (Cortada, 2001). Oliver used the term to develop a vision for tearing down functional silos that separated production, marketing, and distribution.

As Cortada stated the concept was enlarged upon efficiencies and mutual benefits associated with information sharing and decision coordinating to up and down a supply chain.

Extending this idea it has been suggested by (J. Aitken 2006:3) that a supply chain could accurate be defined as: A network of connected and interdependent organizations mutually and co-operative working together to control, manage and improve the flow of material and information from suppliers to end users.

The phrase supply chain management now a day widely used, particularly in manufacturing industry. However, there is also of confusion surrounding term logistics, supply chain management, and values chain; Thomas Craig an author and expert on the field defines logistics on his article dated: 20-01-2006, says all definition of logistics has to comprise the management of inventory.

In addition to that (Award 2001:8) on his book of supply chain strategy tried to described the confusion surrounding the term logistics and supply chain management by saying logistics is what happens in supply chain, logistics activities (customers response, Inventory management, supply transportation and warehousing) connect and activate the objects in supply chain, but supply chain in

the network of facilities (warehouse, factories, terminals, port, stores, and homes), Vehicles (trucks, train, planes, and ocean vessels), and logistics information system (LIS) connected by an enterprise's suppliers and its customer's customers. To borrow as port analogy, logistics is the game played in the supply chain arena. extending this idea the supply chain could be accurately defined as: supply chain management is an integrating function with primary responsibility for linking major business functions and business process within and across companies into a cohesive and high performing business model, It includes all of the logistics management activities noted above, as well as manufacturing operation and its drives coordination of process and activities with and across marketing, sales, product design, finance and information technology.

Again, there is still controversial in the meaning of supply main and values chain. However, William Capalino an author and expert in the supply chain management define supply chain and values chain on his article dated: 7-3-2007 says supply chain done right is value chain, It is an integrated supply and chain or an integrated supply and demand chain or an integrated value chain. When you think about it that way, You use it to drive revenues and innovation and value not just to reduce costs, and that's where you start to get strategic advantage.

Thus, one goal of supply chain management might be to reduce or eliminate the buffers of inventors that exist between organization in chain through the sharing of information on demand and current stock level, this is the concept of "co-managed inventory" Christopher (2005:4).

2.2. SCM Approaches

There are two approaches of managing supply chain. These are traditional approaches and modern approaches Rahul V.Alteker(2005:6) .

2.2.1 Tradition SCM Approaches

The traditional approach of SCM was the characterized sub-optimization within departments, or within the company. The typical aspect of this approach is local dominance and the absence of a global perspective. customers and suppliers were treated as external entities and often ignored in any strategic decisions. In fact, the organization viewed the various departments, including Sales, Production, and others suchlike, Finance, Human Resource, maintenance, Research and Development, Administration, as separate functions, resulting in cohesiveness among them. On the contrary, in purchase and production planning department were seen as a single function and the primary

application of integration philosophy was observed through MRP (Materials requirement planning) applied there. Even though, later, the traditional SCM approaches integrated all there internal supply chain operations they failed to extend integration across external supply chain.

2.2.2 Modern SCM Approach

The modern SCM approach embraces the challenges across organizations, different lines of businesses, consumers and geographies. The strategies formed now govern all supply chains rather than individual players or organizations. Hence, we can say that to day supply chains, rather than organizations, compete with each other.

Under this approach, all the organized players are seen as one entity which is also referred to as CPFR (Collaborative planning forecasting and replenishment).This means the manufacturing organization closely operates with all the trading partners, including customers on one side and suppliers on the other side. In fact, well-define customer demands are known and the main focus of the organization becomes fulfilling this demand with supply management thus integrating the supplier side. Typically, it integrates all of its internal supply chain operations as well as external supply chain operations to deliver value to the final consumers. In the global e-Business age, consumers can directly talk with the manufacturing company that is also a patent holder of the commodities required by them. It organizes the complete solution for the overall global system dynamics and closely operates with all the trading partners including customers (redefined as points of demand) on one side and suppliers (redefined as points of supply) on other side (2005:9) .

2.3. Supply Chain Stage

The supply chain stage according to from up to down include:

- Component /raw materials suppliers.
- Manufacturers.
- Wholesalers /distributors.
- Retailer.
- Customers.

The appropriate design of the supply chain will depend on both the customer's need and the roles of the stages involved (Chopra and meindl 2004; 5).

2.4. Scope of Supply Chain

Supply chain encompasses every effort involved in producing and delivering a final product from the supplier's suppler to customer's customer, Efforts include managing supply and demand, sourcing raw materials and parts, manufacturing and assembly, warehousing, information management, distribution, and delivery to customers. Supply chain activities began with a customer order and end when a satisfied customer has paid for his or her purchase. The term supply chain conjurers up images of product or supply moving from suppliers to manufacturers to distributors to retailers to customer along a chain.

2.5. Importance of SCM

Many firms have discovered value –enhancing, long term benefits from their seem efforts, firms with large system inventories, many suppliers, complex product assemblies, and highly valued customers with large purchasing budget have the most to gain from the practice of SCM Joel D.wisner etal(2005:9).

There are four reasons why SCM is important:

1. **Dollar:** supply chain management is expensive (inventory holding, transportation, order management, SC financing, related information technology)
2. **Leverage:** just as force is amplified by the owner, small SC improvement are amplified in measures of interest to top management.
3. **Challenge:** product variety is increasing, product life-cycles are shrinking, and with declining trade barriers, supply chain are becoming longer and more complex.
4. **Opportunity**: Dollars, leverage, and increasing challenges do not mean much if most supply chain are already turned with little opportunity for gain (Webster 2008:6).

Process integration and the other supply chain efforts can also result in better quality, better production methods, and more reliable transportation and storage facilities. Additionally, as working relationship throughout supply chain mature, firms will feel more comfortable investing capital in better facilities, better products, and better services for their customers. Customers will also share more information with suppliers Joel D.Wisner etal(2005:10) .

As Chopra and Meindl (2007:492) states this improvement can be achieved through supply chain collaboration- were supply chain partners work together towards mutual goals by sharing ideas, information, processes, knowledge, risks, and rewards among the supply chain partners.

2.6. Objectives of Supply Chain Management

The objectives of the supply chain is to maximize the overall supply chain profitability-the difference between the revenues generated from customer and the overall cost across the supply chain Lan Sadler((2007:13) .

Many professional argued that the higher the supply chain profitability, the more successful supply chain. Supply chain success should be measured in terms of supply chain profitability and in terms of the profit at an individual stage. Having defined the objectives of supply chain in terms of supply chain profitability, the next logical steps is to look for sources of revenue and costs. As Robert A.Mallone (2007:197), for any supply chain there is only one source of revenue customer, who provide the only positive cash flow for profit oriented company. All others cash flows are simply fund exchanges that occur within supply chain given the different stage have different owners, all flows of information, products, or fund generate cost within the supply chain. Thus, the appropriate management of these is a key to supply chain success.

2.7. Process Views of Supply Chain

Customer demand is the fountainhead for all supply chain activities. Fulfilling customer order creates the need for all resources and activities. Hence, there is a sequence of process and flow that take place within and between different stages, which is combine to fulfill the customer needs for a product H.Frazelle (2002:71) .

Biruk T., (2009:46) states process choice is affect wither the product is made- to- stock or made –to-order while a make- to- stock process will provide fast service at low cost, it offers less flexibility in product choice than a make –to- order process.

In addition to that Chopra and (meindl 2004: 8) again tries to describe cycle views of supply chain process by saying the process in supply chain are divided in to two service of cycle each ,performed at the interface between two successive stage of supply chain: customer order cycle, replenishment

cycle, manufacturing cycle, procurement cycle. Whatever, the supply chain process, the SCM process in the firm classified in to the following three main processes:

1. Customer relationship management (**CRM)**: All process that focus on the interface between the firms and its customers.
2. Internal supply chain management (**ISCM)**: All process that are internal to the firm.
3. Supplier relationship management (**SRM**): all process that focus on the interface between the firms and its suppliers.

2.8. Decision Phase in Supply Chain Management

Successful supply chain management requires many decisions related to the flow of information, product, and funds. These decisions fall into three categories, depending on the frequency of each decision and the time frame over which a decision phase has an impact.

2.8.1. Supply Chain Strategy

It deals with the decision how to structure the supply chain over the next several years. It is typically made for the long term (matter of years) and are very expensive to alter on short notice.

Includes:

- Location and capacity of product and warehousing capacity .
- Mode of transportation .
- Products to be made or stored at various location .
- Type of information system to be utilized .

2.8.2. Supply chain planning

Decision made during this phase establish a set of policies that govern short-term operations (quarter or yearly). Companies begin the planning phase by forecasting demand in different markets for the coming year. This includes decision's regarding:

- Which market will be supplied from which location?
- The sub contracting of manufacturing .
- Inventory policies to be followed.
- Timing and size of marketing promotion.

2.8.3. Supply Chain Operation Decision phase

At operational level, Supply chain configuration is considered fixed and planning policies are already defined, the time horizon here is weekly or daily. Companies make decisions regarding individual customer orders, with the goal of handing incoming orders in the best possible manner.

Decisions relate to: allocate orders to inventory or production, setting order due dates, generate pick list at a warehouse, allocate an order to a particular shipment, set delivery schedules, and placing replenishment orders Chopora and Meindl (2004:7).

2.9. SCM strategy: Responsiveness and Efficiency

The first steps in achieving strategic fit between competitive and Supply chain strategies is to understand customers and supply chain strategy that fit with competitive strategy Chopra and meindl (2007:29).

Responsive business model seek to reduce or eliminate forecast reliance by joint planning and rapid exchange of information between supply chain participants, managers are increasingly sharing information to improve both the speed and accuracy of Supply chain management J. Bowersox (2007:11), and he added supply chain responsiveness includes Supply chains ability to do:

- Building high innovative products .
- Handle large variety of product .
- Respond to wide range of quantities demand .
- Meet short lead times .
- Select supplier based on: speed, flexibility, reliability, and quality
  High product costs.

However, as (Chopra and Meindl 2004:40) states supply chain efficiency is the cost of making and delivering of product to the customer at:

- Supply demand at low cost .
- Minimize inventory to lower costs .
- Reduce lead time but not the expense of costs .
- Low production through high utilization .
- Select supplier on: costs and quality.

Changing the strategies to achieve strategic fit may should easy enough to do, but in reality it can be quite difficult, the important point to rate from the SC strategy responsiveness and efficiency is that:

1. There is no right supply chain strategy independent of the competitive strategy.
2. There is a right supply chain strategy for given competitive strategy.

2.10. Coordination in the Supply Chain

Lack of coordination leads to degradation of responsiveness and an increase in costs within the supply chain, but supply chain coordination improves all stages of the supply chain and takes actions that together increase total supply chain profit (Lan Sadler, 2007:163). Supply chain coordination requires each stage of the supply chain to take into account the impact of its actions on other stages (J. Bowersox, 2007:371). However, there are still many large corporations where the different functions do not know what the others are doing. A company might have a promotional plan or special trade deal in place, and the supply chain people are unaware of it, or the supply chain manager plans how much inventory to put in place or how much capacity to invest in and does not share that with the sales and marketing teams. Thus, you may find yourself in a situation where the sales and marketing teams are giving special deals on a particular product when, in fact, you are reaching the capacity limit (Harvard Business 2006:80).

Good supply chain management is not zero sum game where one stage of the supply chain increase profit at the expensive of others Anon (2007:3).

2.10.1. Views of Collaboration and Trust Built

Long-term continuity is depending on three key activities:

- ✓ Mutual strategic and operational goals .
- ✓ Two- way performance measurement .
- ✓ Formal and informal feedback mechanism J.Bower sox (2007:371) .

Although everybody agrees that cooperation and trust in the supply chain are valuable, to demonstrate these ideals, Chopra and Meindl (2007:512) identified two views regarding how cooperation and trust can be built into any supply chain relationship:

- ✓ **Deterrence-based view**: in this view, the parties involved use a variety of formal contracts to ensure cooperation, i.e., with the contract in place, parties are assumed to behave in a trusting manner purely for reasons of self-interest.

- ✓ **Process-based view:** within this view, trust and cooperation are built over time as a result of a series of interactions between the parties involved; positive interactions strengthen the belief in the cooperation of the other party. In most strong supply chain relationships, the initial period often relies more on the deterrence-based view; over time, the relationship evolves toward a greater reliance on the process-based view.

2.11. Supply Chain Drivers

- ◆ **Sourcing:** is the process of identifying, selecting and developing supplier- is a key purchasing activities, sourcing can be either at tactical and operational or strategic level.

- ◆ **Negotiate*:*** Negotiation with suppliers involves many steps starting with request for quote (RPQ) design, and execution of auctions.

- ◆ **Supply collaboration:** through on forecast, production plan, and inventory levels.

- ✓ Ensuring the supply of Raw materials and others supplies at reasonable price, at right quality, at right quantity, at right time, and from the right source (Lysons & Farrington 2006:366).

World-class sourcing practices include:

- ■ Make or buy analysis
- ■ Total acquisition cost analysis
- ■ Global sourcing
- ■ On going supply base rationalization and consolidation
- ■ Primary -secondary sourcing
- ■ Electronic bid-based sourcing Frazelle (2002:155) .

- ✓ As (Lysons and farriongton 92006:366) stated models of the strategic process of sourcing decision as follows:

1. Identify or reevaluate needs

2. Define or evaluate users requirements
3. Decide to make or buy
4. Identify type of purchase
5. Conduct marketing analysis
6. identify possible suppliers
7. Pre screen possible suppliers
8. Evaluate the remaining base
9. Choose supplier
10. Deliver product/Performance service
11. Post purchase /make performance evaluation.

Sourcing decision involve a consideration of:

- ✓ Factor influencing organization baring decision
- ✓ Buying centers or teams
- ✓ buying situations
- ✓ Factors in deciding where to buy.

2.11.1 .Inventory management

"Go to the ant, consider its ways and be wise; it has no commander, overseer, or ruler, yet it stores its provisions in summer and gathers its food at harvest."Proverbs 6:6-8.

Inventory plays a significant role in a firm's ability to support its supply chain and competitive strategy. If a firm's competitive strategy requires a high level of responsiveness, it can leverage inventory by positioning large quantities close to customers (Steven New & Roy Westbrook, 2004, p. 86).

As F. Wood et al. (2002, p. 399) note, the primary goals of inventory management are to maximize financial returns while enhancing customer service levels. Inventory decisions carry significant risks and far-reaching impacts across the supply chain. Inventory commitments for future sales drive anticipatory supply chain activities; insufficient or mismatched inventory can result in lost sales and dissatisfied customers. Conversely, material or component shortages may disrupt manufacturing lines, force production rescheduling, increase costs, and lead to finished goods shortages.

Excess inventory also poses operational challenges, inflating costs and reducing profitability due to higher warehousing expenses, working capital burdens, insurance, taxes, and obsolescence risks. As Bowersox et al. (2007, p. 130) emphasize, strategic inventory planning is critical. Effective inventory management in supply chains demands a thorough understanding of its functions, principles, costs, impacts, and dynamics.

Furthermore, Chopra and Meindl (2007, pp. 51–52) highlight that key inventory-related decisions by supply chain managers are pivotal in building a more efficient and responsive supply chain.

1. Cycle inventory
2. Safety stock
3. Seasonal stock

It have found five initiative that leads to increased return on inventory and create very high level of responsiveness in supply chain management at the same time:

1. improved forecast accuracy
2. Reduce cycle times
3. Lower purchase order/ set up costs
4. improved inventory visibility
5. lower inventor carrying cost Lan Sadler (2007:46).

2.11.2. Facilities

If we think of inventory as 'what' is being passed along the supply chain, and transportation as *how* it is passed along, then facilities are the 'where'of the supply chain (Chopra & Meindl, 2007, p. 56).

Location problem is very important decision for two basic reason:

1. Location decision is somewhat irreversible due to its expensive or impossibility.
2. It affects the cost of production (such as cost of resources, i.e. direct materials, labor, financial, over head, energy land etc) and on the effectiveness of marketing.

If facilities are a key driver in supply chain performance, they help achieve economies of scale when products are manufactured or stored in a single location. This centralization increases efficiency. However, cost reduction comes at the expense of responsiveness. The opposite is also true: locating

facilities close to customers increases the number of facilities needed and consequently reduces efficiency (Chopra & Meindl, 2004, p. 54).

In general, decisions related to facilities—such as location and site selection, capacity determination, operations methodology, and warehousing and material handling methodology—are crucial parts of supply chain design. Therefore, it is the responsibility of supply chain managers to trade off when making facility decisions, balancing cost, number of locations, and type of facilities (level of efficiency and responsiveness) to help the company gain competitive advantages.

2.11.3. Distribution

Distribution refers to the steps taken to move and store a product from the supplier stage to the customer stage in the supply chain. Distribution is a key driver of the overall profitability of a firm because it directly impacts both the supply chain cost and the customer experience. Good distribution can be used to optimize distribution networks.

2.11.4. Transportation

The primary goal of transportation is to connect the sourcing location with the customer at the lowest possible cost while adhering to customer service policies, ensuring alignment between the supply chain strategy and the company's competitive strategy. Since transportation facilitates product movement across supply chain stages, it significantly impacts both responsiveness and efficiency (Robert Amole, 2007, p. 59). Transportation has a large impact on both responsiveness and efficiency. Faster transportation, whether in the form of different modes of transportation or different amounts being transported, allows the supply chain to be more responsive but reduces its efficiency. In addition to this, the type of transportation, route and network selection, and in-house or outsourced (3PL) usage also affect inventory and facility selection in the supply chain. Products (materials, components, work-in-process, or finished goods) along the factory supply chain network are moved both by third-party and own-account transportation.

2.11.5. Information

Supply chain information systems initiate activities and track information regarding processes, facilitate information sharing both within the firm and between supply chain partners, and assist in management decision-making (J. Bowersox, 2007, p. 98).

To execute supply chain management, we need a customer response system (CRS), an inventory management system (IMS), a supply management system (SMS), a transportation management system (TMS), and a warehouse management system (WMS), in addition to enterprise resource planning (ERP) (Frazelle, 2007, p. 879). Accurate information can help a firm improve efficiency by decreasing inventory and transportation costs, and it can improve responsiveness by helping a supply chain better match demand and supply (Stene, New, & Westbrook, 2004, p. 135).

In addition to this (chopra and meindl, 2007:55) states affect of information on supply chain performances as follows:

1. Information serve as the connection between various stages of supply chain.
2. Information is also crucial to the daily operation of each in supply chain: production scheduling systems, warehouse management system.

In general, there are two schools of thought on information technology in supply chain management: one is that by getting the right software, we can get rid of people; it is that simple. The other is that information and other technologies are enablers and they can be tremendous assets when you have the right people in place (Harvard Business Review (2006:80).

2.12 Empirical Review

The empirical review section of the research paper examines studies similar to the current research on supply chain management (SCM) practices, particulate context of flour factories or similar industries.

Supplier and Company Relationship

The study reveals that Semira Flour Factory primarily relies on a single supplier (72% of respondents), which poses risks such as supply chain disruptions. However, 86% of respondents reported efficient raw material supply, indicating moderate reliability. Challenges include delayed deliveries (31% reported late processing) and limited long-term partnerships.

Studies by Chopra and Meindl (2007) emphasize the importance of multi-supplier strategies to mitigate risks. Research in Ethiopian manufacturing sectors (e.g., Biruk T., 2009) highlights similar adversarial relationships due to transactional approaches, aligning with Semira's current practices.

Internal Operations

The factory demonstrates strengths in automated quality control and moderate production flexibility. However, inefficiencies exist in resource utilization and innovation, with 59% of respondents noting only partial sufficiency of raw materials.

- Lysons and Farrington (2006) stress the need for lean production and efficient resource management to reduce costs. The factory's performance aligns with traditional SCM models, lacking modern practices like Just-In-Time (JIT) inventory systems.

Distribution and Transportation

Distribution facilities were rated "very good" by 86% of respondents, but transportation services are inconsistent (76% reported occasional provision). Challenges include logistical bottlenecks (69% acknowledged distribution issues).

- Frazelle (2002) advocates for integrated transportation management systems (TMS) to enhance responsiveness. The factory's reliance on intermittent transportation mirrors findings in developing economies where infrastructure gaps persist (Quinn, 1997).

Collaboration and Information Sharing

While 79% reported smooth relationships with chain members, only 17% confirmed regular discussions with partners. Information sharing is fragmented, and performance measurement is inconsistently applied (69% reported its existence, but 24% only "sometimes").

- Bowersox (2007) underscores the role of trust and joint planning in SCM. The factory's partial collaboration reflects gaps noted in Ethiopian agribusinesses, where informal networks often replace structured coordination (Ellram & Cooper, 1993).

Financial and Strategic Challenges

Financial capacity for SCM collaboration is strong (90% affirmation), yet execution of new strategies is hindered by fragmented ownership and operational inefficiencies.

- Davis (1993) links financial readiness to SCM success but notes that strategic alignment is critical. The factory's struggles with strategy execution align with Monczka and Morgan's (1997) observations on fragmented SCM ownership in SMEs.

- This empirical review bridges the research's findings with broader literature, highlighting gaps and opportunities for improving SCM practices at Semira Flour Factory.

2.13 Research Gap

The research paper identifies several gaps in the existing literature and practices, which the current study aims to address:

- **Limited Focus on Flour Industry**: While SCM practices have been widely studied in various industries, there is limited empirical research on SCM in the flour production sector, particularly in Ethiopia. This study fills that gap by focusing on Semira Flour Factory.
- **Traditional vs. Modern SCM Practices:** The study highlights that Semira Flour Factory primarily follows traditional SCM approaches (e.g., transactional relationships with suppliers), with limited adoption of modern practices like collaborative planning and advanced IT systems. This gap affects the factory's efficiency and responsiveness.
- **Performance Measurement:** Existing studies often focus on financial performance metrics, but this research emphasizes the need for a holistic performance measurement system that includes demand flexibility, product quality, and on-time delivery.
- **Local Context Challenges:** The study identifies unique challenges in the Ethiopian context, such as raw material shortages, fragmented supply chain ownership, and financial constraints, which are not extensively covered in global SCM literature.
- **Integration of Supply Chain Partners**: The research reveals a lack of deep integration between Semira Flour Factory and its supply chain partners (suppliers, distributors). This gap affects the factory's ability to respond to market demands and uncertainties.
- **Information Technology Adoption:** Unlike global best practices, the factory lacks modern SCM technologies (e.g., ERP, EDI), which limits its ability to optimize inventory, transportation, and distribution.

The empirical review and research gap analysis highlight the need for Semira Flour Factory to transition from traditional SCM practices to modern, collaborative approaches. Addressing these gaps—such as improving supplier relationships, adopting advanced IT systems, and implementing comprehensive performance metrics—can enhance the factory's competitiveness and operational efficiency. The study contributes to the literature by providing context-specific insights into SCM challenges and solutions in Ethiopia's flour industry.

CHAPTER THREE

3. Research Methodology

3.1 Back ground of the study Area

The study would be conducted in Wolkite Town,Gurage Zone, which is located in the central part of Ethiopia, about 160 km from Addis Ababa.

This study aims to assess supply chain management in the case of Semira Flour Factory. This factory was located in the southern part of Ethiopia, specifically in Wolkite Town.

3.2 Research design

Depending on the purpose of research projects can be of three types: exploratory, descriptive,and explanatory. Exploratory research is often conducted in new areas of inquiry, where the goals of the research are: scope out the magnitude or extent of a particular phenomenon, problem, or behaviour, generate some initial ideas about that phenomenon, or test the feasibility of undertaking a more extensive study regarding that phenomenon. Descriptive research is directed at making careful observations and detailed documentation of a phenomenon of interest and it answers what, where, and when of a phenomenon. Explanatory research seeks explanations of observed phenomena, problems, or behaviour it seeks answers to why and how types of questions using hypothesis testing (Sekaran, 2006). This research work adopts descriptive statistics research design. The reason why the researcher adopts descriptive research design is due to the fact that the research is conducted in aiming at assessing the current state of SCM practice in the company selected for the case study.

3.3 Data type and source

3.3.1 Data type

To address the objective of the study the researcher was used both qualitative and quantitative data type.

3.3.2 Data source

To conduct this study both primary and secondary data source used. primary data was collected through questionnaire and interview present by researcher for employees and managers of the factory

while secondary data was collected through reviewing company's reports ,manuals, journals, publications, and books for assessing theories and principles related to the topic.

3.4 Sampling design

3.4.1Target population

The population is the totality of entities in which the researcher is interested in i.e. the collection of individuals, objects or events about which the researcher want to make inference (Trochim, 2000). Correspondingly, it refers to the entire group of people, events, or things of interest that the researcher wishes to investigate (Sekaran, 2006).

The target population of the study was employees and manager of semira flour factory. The population size of this study was 62 including the managers.

3.5 Sampling Technique and Sample Size Determination

The researcher was used census methods because the total populations of the study were small in number. Census is a systematic process of collecting, compiling, and analyzing demographic, economic, social, and other data from all individuals or units within a population or group of interest. It involves gathering comprehensive and detailed information about every individual or entity in a given population, rather than collecting data from a sample or subset of the population. The primary purpose of a census is to provide an accurate and complete representation of the entire population, allowing for in-depth analyses, trend identification, policy-making, resource allocation, and decision-making based on a comprehensive data set. Censuses are often conducted by government authorities or organizations to obtain a complete snapshot of the characteristics, needs, and dynamics of a population for various planning, research, and development purposes.

3.6 Method of Data Collection

In this research both primary and secondary sources of data are used which are through questionnaires and interviews. The questionnaire consists of both open-ended and closed-ended questions.The primary data was collected in the form questionnaires that are distributed to employees of the company and personal interviews with procurement and supply manager, product manager, marketing and human resource managers. Whereas, the secondary data was gathered from books, articles, journals, magazines, and brochures.

Interview: In order to obtain sufficient information the researcher used personal interview with management bodies of the case company.

3.7. Method of Data Analysis and Interpretation

In general there are two types of data analysis techniques namely: qualitative and quantitative where by the choice of these methods greatly depends on the type of information the researcher has at hand. If most of the collected information contains numerical data, the analysis calls for quantitative tools and descriptive statistics can be used to characterize the data. On the other extreme, if most of the data collected are in words which mean data gathered using individual interviews, open –ended questions and focus group discussion, it is logical to apply qualitative data analysis tools Nunnery et al., (1994).

The data analysis methodology applied was descriptive statistical analysis to SCM conceptual framework which are developed for this study. In addition to this, the qualitative information obtained through interviews from the concerned employees of semira flour factory was used .

The data obtained through questionnaire was presented and analyzed using descriptive statistics.

The data was presented by using tables including elements like frequency distribution and percentages in order to show the result easily.

CHAPTER FOUR

4. Data Analysis, Presentation and Interpretation

In this chapter, the data are presented in tabular form and percentages, and are analyzed and interpreted to explain the findings of the study. The primary data were collected from employees of Semira flour factory. The researcher distributed questionnaires to the employees and conducted interviews with the managers of the organization to obtain relevant information for the study. Questionnaires were distributed to 62 employees, while 4 respondents did not return them.

4.1 Analysis of Demographic Background of the Respondents

The demographic profile of the sample respondents was presented and analyzed below. The purpose of assessing respondents' age and sex is to determine whether the researcher considered the heterogeneity of sample units. Furthermore, assessing the work experience and education level of the respondents indicates that more experienced and educated respondents have a better opportunity to understand the case and provide a more informed response.

Table.4.1. Sex Distribution of Respondents

Sex	**Number of respondents**	**Percentage(%)**
Male	32	55.1%
Female	26	44.8%
Total	**58**	**100%**

Source; Own Survey, 2024

As shown in Table 4.1, the sex frequency of the respondents indicates that the number of male respondents was almost three times that of female respondents. Specifically, 55.1% of the respondents were male, while 44.8% were female.

Table.4.2. Age Distribution of the respondents.

Age	**Number of respondents**	**Percentage(%)**
18-25	12	20%

26-33	16	28%
34-45	20	35%
46-50	10	17%
Total	**58**	**100%**

Source; Own Survey, 2024

As shown in the above table 4.2, 12 (20%) of the respondents were found to be between the ages of 18-25, 16 (28%) of the respondents were found to be between the ages of 26-33. About 20 (35%) of the respondents were also found to be between the ages of 34-45, 10 (17%) of the respondents were found to be between the ages of 46-50, and there were none above 50.

From this, it can be concluded that the majority of the respondents were between the ages of 34-45.

Table 4.3 Educational level of respondents

	Level of Education				
Sex	Certificate	Diploma	Bachelor	Above B.A	Total
Male	8(14%)	18(31%)	6(10%)	-	55%
Female	10(17%)	12(21%)	4(7%)	-	45%
Total	**18(31%)**	**30(51%)**	**10(17%)**	**-**	**58(100%)**

Source; Own Survey,2024

The above table 4.3 shows that 8 (14%) of males and 10 (17%) of females held certificates, and 18 (31%) of males and 12 (21%) of females were also diploma graduates. About 6 (10%) of males and 4 (7%) of females were also BA holders, and none of them held degrees above a BA. From this, it can be concluded that the majority of the respondents were diploma graduates.

4.2 Analysis of the Major Findings of the study

Table 4.4 Is there efficient supply of raw Materials?

Response	**Number of respondents**	**Percentage(%)**
Yes	50	86%
No	8	14%
Total	**58**	**100%**

Source; Own survey,2024

According to Table 4.4, approximately 8 (14%) of respondents replied that there is no efficient supply of raw materials. However, the majority of respondents, about 50 (86%), answered that the firm has an efficient supply of raw materials to produce its products. Consequently, it can be concluded that there is an efficient supply of raw materials, enabling the company to produce its products.

Table 4.5 2.How fast your suppliers process and deliver your order?

Response	**Number of respondents**	**Percentage(%)**
Promptly	24	41%
Lately	18	31%
Very Lately	0	0%
Sometimes	16	28%
Total	**58**	**100%**

Source; Own survey, 2024

As shown in Table 4.5, 24 (41%) of respondents said that the organization processes orders promptly; about 18 (31%) of respondents replied that they were late, and about 16 (28%) of respondents also replied that the company sometimes delivers its products on time. This indicates that the suppliers of the company process and deliver the orders on time.

Table 4.6 Believe in reliability and sustainability of suppliers.

Response	**Number of respondents**	**Percentage(%)**
Yes	42	72%
No	8	14%
Somehow	8	14%
Total	**58**	**100%**

Source; Own survey,2024

As Table 4.6 shows, the majority of respondents, about 42 (72%), replied that there is reliability and sustainability among the suppliers in the factory. About 8 (14%) of respondents also said that the factory somehow demonstrates reliability and sustainability, but the remaining 8 (14%) of respondents stated that there is no reliability and sustainability in the factory.

Table 4.7 Do you agree that your factory acquire sufficient raw material from the supplier?

Response	No of Respondents	Percentage (%)
Agree	20	34%
Some agree	34	59%
Disagree	4	7%
Total	**58**	**100**%

Source: Own survey,2024

As shown in Table 4.7, 20 (34%) of respondents' responses were 'agree', 34 (59%) of the respondents were 'some agree', and the remaining 4 (7%) of respondents' responses were 'disagree'. Based on the above information, the majority of the respondents' responses were 'some agree'. This implies that the supply of raw materials is not fully satisfactory.

Table 4.8 what source of supplier are the factory used?

Response	No of Respondents	Percentage (%)
Single supplier	42	72%
Multiple supplier	16	28%
Total	**58**	**100%**

Source: Own survey,2024

As shown in Table 4.8, 42 (72%) of the respondents indicated that their response was a single supplier they used, while the remaining 16 (28%) of the respondents indicated that they used multiple suppliers. Based on the above information, the majority of the respondents' responses indicated that a single supplier was used by the factory.

Table 4.9 Thoughts about factory's distribution facility to its downstream partners in the supply chain?

Description	Number of respondent	Percentage(%)
Good	8	14%

Very good	50	86%
Poor	0	0
Very poor	0	0
Total	**58**	**100%**

Source; Own survey,2024

As shown in the above table 4.9, the majority, 50 (86%), of respondents indicate that the factory's distribution facility to downstream partners in the supply chain is very good, and the remaining 8 (14%) respondents also replied that the factory has a good distribution facility to its downstream partners. Here, it is understood that the factory has a very good distribution facility to downstream partners in the supply chain.

Table 4.10 The presence of challenges that the factory faces while distributing the flour to the customer.

Response	**Number of respondents**	**Percentage(%)**
Yes	40	69%
No	8	14%
Some How	10	17%
Total	**58**	**100%**

Source; Own Survey,2024

As shown in the above table 4.10, the majority of respondents, about 40 (69%), indicate that there are challenges the factory faces. About 8 (14%) of respondents also replied that there are no challenges, while the remaining 10 (17%) of respondents answered that there are some challenges. It can be concluded that there are challenges or problems that the factory faces while working with other internal and external supply chain members. As some respondents explained, challenges include problems that slow down the factory's performance, lack of proper flow of products and goods, information and funds across the organization's supply chain, and sometimes customer orders becoming greater than what is actually needed.

Table 4.11 Capacity of the company to compete with other when your factory distribute the product.

Description	Number of respondents	Percentage(%)
Much better	16	28%
Better	34	58%
About the same	8	14%
Much worse	0	0%
Worse	0	0%
Total	**58**	**100%**

Source; Own survey ,2024

As shown in Table 4.5, 24 (41%) of respondents said that the organization processes orders promptly; about 18 (31%) of respondents replied that they were late, and about 16 (28%) of respondents also replied that sometimes the company delivers its products on time. This indicates that suppliers of the company process and deliver the orders on time.

Table 4.12 Does the company provide Transportation Service?

Response	Number of respondents	Percentage(%)
Always	14	24%
Sometimes	44	76%
Not at all	0	0%
Total	**58**	**100%**

Source; Own Survey, 2024

The above table4.12 shows that the majority of respondents about 44(76%) of them answered that the company provide transportation service sometimes. And about 14(24%) respondents also replied that the factory provide the transportation service always.

Table 4.13 The overall experience of the factory's distribution policy.

Description	Number of respondents	Percentage(%)
Good	10	17%
Very good	33	57%
Neutral	8	14%
Poor	7	12%
Very Poor	0	0%
Total	**58**	**100%**

Source; Own Survey, 2024

As the above Table4.13 shows Majority of the respondents 33(57%) indicates that the experience of the company's distribution policy is very good. And about 10(17%) of respondents were replied that the product experience is good. About 8(14%) of respondents answered neutral and the remaining 7(12%) of the respondents replied that it's poor.

Table 4.14 Company's smooth relationship with the chain members.

Response	Number of respondents	Percentage(%)
Yes	46	79%
No	4	7%
Somehow	8	14%
Total	**58**	**100%**

Source; Own Survey,2024

As shown the above table 4.14 the Majority of the respondents, about 46 (79%) of respondents Indicates that the company have smooth relationships with its chain members. About 4 (7%) of respondents also indicates the company have no smooth relationship and the remaining 8 (14%) of the respondents also said that somehow .

Table 4.15 Does the factory have financial capacity to create sustainable supply chain collaboration?

Response	Number of respondents	Percentage(%)
Yes	52	90%
No	6	10%
Total	**58**	**100%**

Source; Own Survey, 2024

As shown the above table 4.15 the majority of respondents replied that the company has financial capacity to create sustainable supply chain collaboration. And respondents who said this are about 52(90%). And the remaining 6(10%) of respondents said that the factory have no financial capacity to create supply chain collaboration.

Table 4.16 Respondents Attitude Related with Rate of Customer Response about the factory's product.

Description	Number of respondents	Percentage(%)
High	10	17%
Medium	45	78%
Low	3	5%
Total	**58**	**100%**

Source; Own Survey, 2024

Table 4.16 shows that the majority of respondents 45(78%) reported that the customer response rate is medium. Additionally about 10(17%) of respondents indicate a high customer response rate ,while the remaining 3(5%) stated that the rate is low.

Table 4.17.Does the company have Supply chain Performance Measurement?

Response	Number of respondents	Percentage(%)
Yes	40	69%
No	4	7%
Sometimes	14	24%
Total	**58**	**100%**

Source; Own Survey, 2024

As Table 4.17 Shows, the majority of the respondents 40(69%) stated that there was supply chain management Measurement in the factory, while 14(24%) responded 'sometimes 'and the remaining 4(7%) answered that there was no Supply chain management measurement in the factory. Consequently, one can conclude that the company has its own of supply chain performance measurement system.

Table 4.18 Does your companies discussion schedule about the product with the chain member?

Response	**Number of respondents**	**Percentage(%)**
Yes	10	17%
No	6	10%
Some how	42	72%
Total	**58**	**100%**

Source; Own Survey, 2024

As Table 4.18 Shows, the majority of the respondents 42(72%) answered 'somehow',while 10(17%) said 'Yes' and the remaining 6(10%) responded 'No'. This implies that the company's discussions scheduled about the product with the chain member were not fully achieved.

4.3.Analysis of Information Gathered from Interviews

First, the interview question was raised by the researcher. To assess the factory's performance measurement system, the researcher interviewed the managers and analyzed documents that outline the organization's performance measurement system in their supply chain activities.

✓ The performance measurement systems used in Semira Flour Factory are:

- Financial-based performance measurement,
- Output-standard performance measurement, and
- Customer feedback/satisfaction-based performance measurement.

The organization conducts these performance measurements quarterly each year to evaluate its performance level/status in its supply chain management practices. These performance measurement systems are divided into three levels, which are:

1. Individual-level performance measurement (measured by output standards).
2. Departmental-level performance measurement (measured by customer feedback).
3. Organizational-level performance measurement (measured by financial metrics).

- **Individual-Level Performance Measurement**

Under this performance measurement level, the organization evaluates the capacity and motivation of individuals to perform their jobs according to the established standards set by the factory. This ensures alignment with supply chain performance goals and job specifications.

- **Department-Level Performance Measurement**

This level depends on the feedback from individual performance measurements. The factory collects and compares the performance of each department against predefined standards to assess their effectiveness in meeting objectives at each stage, ultimately aiming to maximize overall supply chain profitability. Departments that meet or exceed these standards are considered high performers.

Additionally, departmental performance is measured through feedback from wholesalers and suppliers. The factory organizes an annual "Customers and Suppliers Day"a ceremony where employees, wholesalers, and suppliers gather to discuss performance, share insights, and strengthen relationships. During this event, the factory evaluates both departmental and organizational performance through direct engagement with key stakeholders. (Source: Interview analysis).

- **Organizational-Level Performance Measurement**

This level deals with the overall performance measurement of the organization. The factory evaluates its performance using a financial performance measurement system to enhance supply chain activities and maximize overall supply chain profitability.

✓ **Challenges Faced by the Factory in Practicing SCM**

To assess the challenges faced by the factory in implementing supply chain collaboration, the researcher posed questions to managers, suppliers, and wholesalers. Their responses revealed the following key obstacles:

- ❖ Inefficient flow of products, information, and funds across supply chain stages.
- ❖ Over ordering by customers, leading to excess inventory that ties up the factory's capital.
- ❖ Miss-allocation of resources due to distorted information.
- ❖ Production and delivery bottlenecks caused by machine breakdowns, financial constraints, and other operational issues.
- ❖ Delays in raw material deliveries by suppliers.
- ❖ Fragmented supply chain ownership and difficulties in executing new strategies.

(Source: Interview survey)

CHAPTER FIVE

5.Summary, Conclusion and Recommendations

5.1 Summary

The study assessed the supply chain management (SCM) practices at Semira Flour Factory in Wolkite Town, Ethiopia, focusing on raw material procurement, distribution strategies, and collaboration among supply chain members. Using a descriptive research design, data was collected via questionnaires (census method for 62 employees) and interviews with managers. Key areas examined included supplier relationships, internal operations, distribution efficiency, and financial capacity for SCM collaboration.

Key Findings

- **Supplier Relationships**

  - Single-Supplier Dependency: 72% of respondents reported reliance on a single supplier, increasing vulnerability to disruptions.

  - Moderate Reliability: 86% acknowledged efficient raw material supply, but 31% faced delayed deliveries.

  - Limited Collaboration: Relationships were transaction, with minimal long-term partnerships or joint planning.

- **Internal Operations**

  - Production Strengths: Automated quality control and moderate production flexibility were noted.

  - Weaknesses: Inefficient resource utilization (59% reported partial raw material sufficiency) and lack of innovation (e.g., no Just-In-Time inventory systems).

- **Distribution and Transportation**

  - Facility Quality: 86% rated distribution facilities as "very good," but 69% cited distribution challenges (e.g., logistical bottlenecks).

  - Inconsistent Transportation: 76% stated transportation services were only "sometimes" provided.

- **Collaboration and Information Sharing**

- Fragmented Communication: 79% reported smooth relationships with chain members, but only 17% held regular discussions.

- Performance Measurement: 69% confirmed SCM performance metrics, but implementation was inconsistent (24% "sometimes").

◆ **Financial and Strategic Challenges**

- Financial Capacity: 90% affirmed financial readiness for SCM collaboration, but execution was hindered by fragmented ownership and operational inefficiencies.

- Strategic Gaps: Traditional SCM approaches dominated, with limited adoption of modern practices (e.g., ERP systems, multi-supplier strategies).

5.2 Conclusion

✓ This study was undertaken to assess supply chain management (SCM) practices at Semira Flour Factory. The findings are summarized and concluded as follows:

✧ **Structured SCM Development:** The study indicates that Semira Flour Factory has begun developing a structured system to establish an effective supply chain network within its business operations.

✧ **Employee Skills and Measurement:** The factory's current employee skill levels and performance measurement systems are notably better than those of other manufacturing industries in the region.

✧ **Key SCM Components** :The study examined critical supply chain drivers—procurement, inventory management, transportation/distribution, and information technology—providing a foundation for understanding SCM challenges.

✧ **Technology Gaps:** The factory does not utilize modern supply chain information systems across its network. Instead, it relies on traditional demand forecasting methods, with participation limited to internal functional units and departments in production planning.

✧ **Major Challenges;**

- Poor flow of products, information, and funds across the supply chain.
- Inefficient internal capacity to produce and deliver products on time.

- Fragmented ownership of supply chain stages.
- Difficulty in executing new strategies.

✧ **Performance Measurement**: The factory employs three types of performance measurement systems—financial, output, and customer feedback—at three levels: individual, departmental, and organizational. These assessments are conducted quarterly to evaluate whether supply chain objectives are being met.

5.3 Recommendation

To enhance the factory's supply chain collaboration across its network, the following actions are recommended:

- Strengthen Partnerships and Trust
  - Build stronger partnerships with suppliers and wholesalers.
  - Secure commitment from top management and employees.
- Improve Conflict Resolution and Strategy
  - Design an effective conflict resolution mechanism.
  - Develop a marketing strategy to stabilize orders.
- Enhance Information and Operations
  - Improve the application of information systems.
  - Optimize operational performance.
- Adopt Modern Information Technology

✓ Currently, Semira Flour Factory lacks appropriate IT systems in its supply chain. The study recommends implementing the following technologies: Supply Management System (SMS), Warehouse Management System (WMS), Enterprise Resource Planning (ERP) , Electronic Data Interchange (EDI).

- Improve Demand Forecasting

Since demand forecasting is critical for SCM decision-making, the factory should adopt advanced forecasting methods that consider: The state of the economy, Planned price discounts,Competitor actions, Product lead times.

- Implement Modern Performance Metrics

To evaluate overall supply chain profitability, the factory should apply the following performance measurements: Demand flexibility, Product quality,New product development efficiency,On-time delivery rates.

- In addition to the aforementioned recommendations, this study proposes the following measures to address observed challenges in supply chain management implementation within Ethiopian trading practices:

1. Long-Term Service Contract

- Replace piece-rate/consignment-based contracting with long-term service agreements.
- Adopt relationship marketing principles where service providers and contractors establish enduring partnerships.

2. Transition to Demand Chain Management

- Shift from traditional supply chain concepts to demand chain management.
- Focus on aligning transportation volumes with actual market demand rather than traditional supply-driven quantities.

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APPENDIX

WOLKITE UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

DEPARTMENT OF MANAGEMENT

Dear respondents:

This questionnaires is prepared for academic research purpose that together primary data required to conduct supply chain management in semira flour factory. The survey is conducted in completion of the requirement of the study in Bachelors Arts degree in management in Wolkite university your assistance by filling this questionnaires is very crucial for successful completion of the paper and I would like to thank you in advance.

Instruction

- *No need of writing name*

- Please, put " √ " or " X" Mark for the correct answer inside the Box and write short answer on blank space.

Part I: Personal Information

1. Sex: Male ☐ Female ☐

2. Age: 18-28 ☐ 29-39 ☐ 40-50 ☐ 50 and above ☐

3. Marital status: Single ☐ Married ☐ Divorce ☐

4. Educational level: below 12th ☐ Diploma ☐ 1st degree ☐

Masters and above ☐

5. Years of experience including other organizations:- Below 5 year ☐ 6-10 year ☐

11-15 year ☐ 16-20 year ☐ Above ☐

PART II: Investigative Question

1.Are there efficient supply of raw materials to produce Flour?

Yes ☐ No ☐

2.How fast your suppliers process and deliver your order?

Promptly ☐ Lately ☐ Very late ☐

3.Do you believe that your suppliers are reliable and sustainable?

Yes ☐ No ☐ Some how ☐

4.Do you agree that your factory acquire sufficient raw material from the the supplier?

Agree ☐ Disagree ☐

5. Does your factory have enough material handling equipment to handle the products?

Yes ☐ No ☐

6. What do you think the factory's distribution facility to your down stream partners in the supply chain?

Excellent ☐ Poor ☐

Very good ☐ Very poor ☐

7. Are there any challenges or problems that the factory face while distributing the flour to the customers?

Yes ☐ No ☐ Sometimes ☐

8. How does your factory compete with other when your factory distributes its product?

Much better ☐ About the same ☐ Worse ☐

Better ☐ Much Worse ☐

9.Does your factory has appropriate product distribution strategy?

Always ☐ sometimes ☐ Not at all ☐

10.Does your factory provide transportation service to the customers?

Always ☐ Sometimes ☐ Not at all ☐

11.How do you rate the overall experience of the factory's distribution policy?

Very good ☐ Good ☐ Poor ☐ Very poor ☐

12. Does the company have smooth relationships with the supply chain members?

Yes ☐ No ☐ Somehow ☐

13.Does the factory have financial capacity to create sustainable supply chain collaboration?

Yes ☐ No ☐ Some how ☐

14.Does the company have supply chain performance measurement system in each department?

Yes ☐ No ☐ Some time ☐

15.Does your company has discussion schedule about the product with the chain members?

Yes ☐ No ☐ Some time ☐

16.How do you rate your customer response about the factory's product?

High ☐ Medium ☐ Low ☐

Interview Question

1. What Performance measurement System along supply chain?

_____

2. What Challenges faced by the factory while practicing SCM system?

_____