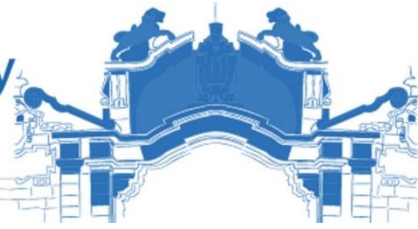




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## **An Assessment of the Performance of Outsourced Logistics Functions: The Case of Sur Construction plc**

**A Thesis Submitted in Partial fulfillment of the Requirement for the Award of Master of Arts in Logistics and Supply Chain Management**

**By: Hana Mulugeta**

**ID No GSD/0200/06**

**Advisor: Mengistu Bogale ,PhD**

**June,2017  
AddisAbaba,Ethiopia**

**ADDIS ABABA UNIVERSITY SCHOOL OF COMMERCE**

**DEPARTMENT OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT**

**‘An Assessment of the Performance of Outsourced Logistics Functions: The Case of Sur Construction plc’**

By: Hana Mulugeta

Approved by Board of Examiners and Advisor

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Advisor Signature Date

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Examiner Signature Date

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Chairman of Graduate Committee Signature Date

## DECLARATION

I, Hana Mulugeta, hereby declare that this study entitled '**An Assessment of the Performance of Outsourced Logistics Functions: The Case of Sur Construction plc**' is original work of my own. All information in this document has been obtained and presented in accordance with academic rules of ethical conduct.

Student Researcher

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Hana Mulugeta

Date: June, 2017

## Letter of Certification

This is to certify that HanaMulugeta has carried out her research work on the topic entitled ‘**An Assessment of thePerformance of Outsourced Logistics Functions: The Case of Sur Construction plc**’ as a partial fulfillment of the requirement of Master of Arts Degree in Logistics and Supply Chain Management. This study fulfills requirements to obtain academic Degree fromthe university.

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Advisor: MengistuBogale ,PhD

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## **Abbreviations**

**3PL** - Third Party Logistics

**GTP** - Growth and Transformation Plan

**SPSS** - Statistical Package for Social Science

## **ABSTRACT**

*The objective of this research was to assess the performance of the outsourced Logistics functions of Sur construction plc with the intention of identifying, reason for outsourcing, benefits of outsourced logistics functions and its implementation challenges. It was conducted in a bid to get relevant information about the study. To this end, the researcher has gathered data from primary sources using questionnaire, interview and personal observation. Descriptive type of research is applied using SPSS software to present and analyze the data gathered from 40 respondents. The finding shows that outsourcing logistics function was an ideal solution that helps the company to focus on its core activities, reduce its operation cost, to efficiently utilize company's asset and saving in capital investment. This research finding has shown that the implementation of outsourcing logistics function face some logistical challenges that would affect its performance. To overcome outsourcing logistics challenges, the company have to plan or schedule for required items or services and make clear the roles and duties of both parties and implement good monitoring and evaluation system a good communication system should also be established between outsourcing team of the company and 3Pl providers.*

**Keywords:** Logistics, Outsourcing, 3PLs

# CHAPTER ONE: INTRODUCTION

## 1.1 Background of the study

Business Process Outsourcing (BPO) is defined simply as the movement of business process from inside the organization to external service providers. BPO is increasingly being recognized as a strategic as well as tactical initiative (Wiley, 2005).

Logistics is one of these businesses Process that involves physical and information flows and storage from raw material through to the final distribution of the finished product and logistics also involves Inventory management, Procurement, Transportation, warehousing and Freight forwarding and custom clearing (Alan and Phil, 2006).

Owing to the globalization of sources, manufacturing and production, distribution companies in recent years have been adopting the logistics management view to guide their business operations. The adoption of logistics concepts has increasingly forced such companies to focus on their core business and, at the same time, to outsource their transport and other logistics activities (WingLam, 2005).

According to Mulat,(2007), outsourcing is in its infant stage in Ethiopia with the exception of outsourcing some non-core functions like security and Janitorial service.

The aim of outsourcing Logistic activities may be to reduce cost, fasten setup of the service or function, sharing of risk or to be able to reassign employee to other tasks that are more important. It is manifested in the increase of international outsourcing of materials and services inputs, in particular to low– and medium income countries (Wolfmayr, 2008).

Despite this remarkable achievement, there is still a need to assess performance of the outsourced logistics activities in order to understand the issues and implementation challenges of the outsourced logistics performance in construction industries.

## 1.2 Statement of the Problem

Nowadays, companies tend to focus on their core competencies that are critical for survival; therefore, they prefer to outsource one or more logistical functions to 3PLs. Outsourcing is becoming a widespread practice across all types of industries worldwide. In the past, 3PL used to provide services such as warehousing and transportation, which is single and short-term logistics service. More recently, 3PLs are putting more attention on building a long-term contractual relationship with their customers by providing multiple logistics services. Companies that used this new strategy of using third party logistics scored greater logistics performances instead of sourcing them from within (Yang ,2014).

In construction industry, as much as 60-80 % of the gross work involve materials and services purchased from suppliers and subcontractors (Scholman,1997). Hence, many SCM initiatives have been launched lately within the construction industry. As a part of these SCM initiatives, some contractors and clients have turned to third-party logistics (3PL) providers (Ekeskär and Rudberg, 2016).

Therefore, outsourcing logistics function is considered to be a critical area where companies with well strategies can beat their competitors and improve their performance.

Zayzan,(2011) cited “Sohail and Sohal (2003), investigated and concluded from analysis of 124 firms that, their work did not test the extent of logistics outsourcing practices particularly in any type of firms.”

Studied logistics outsourcing practices in Singapore and Malaysia generally did not probe into the actual practices applied in the firms. This is an obvious research gap from existing literature on logistics outsourcing. (Sohailand Sohal,2006). This is supported also by Maloni & Carter, (2006) further on it pointed out that, the main part of the studies, previously conducted are surveys providing a macro view of the 3PL field. This makes quantitative and qualitative study with firm’s focus of a particular interest is important in providing more detailed view of outsourcing phenomenon.

Different studies have been done in the area of outsourcing especially in the area of business process outsourcing. However, very few studies were done in Ethiopia with regards to outsourcing logistics activities, in addition managing outsourcing logistics and delivering the materials as required in time is the influential segment for the success of the company. However, there are no researches about implementation of outsourced logistics in the construction companies in Ethiopia.

Hence, the researcher assessed the challenges and performance of outsourced logistics functions undertaking a case study in SUR construction Company which is among the leading private construction company in Ethiopia can add value for the thriving construction industry in Ethiopia.

Sur Construction's Logistics managers and division heads perform various logistics activities undertaking in-house and outsourced. Among these activities, procurement, storing and transferring are the vital activities. Currently the company outsources three logistics activities to third party logistics providers these are transportation, customs clearing (transit) service and procurement partially on cement, fuel and reinforcement bar purchase.

There are eight major categories of items purchased by the company, among these fuel, cement and rebar purchase are outsourced by the company. Fuel, cement and re bar purchase with their transportation are also major costs of logistics. Properly managing outsourced logistics functions in the company, has major contribution for logistics performance in particular and company performance in general.

According to Sur Annual logistics report 2015/ 2016, the company has different problems in relation to managing logistics activities, like lengthy purchase decision making, unavailability of relevant and updated information.

Sur construction outsourced huge amounts of money in logistics thus assessing the company's outsourced logistics performance and analyzing the reasons behind and the challenges or problems in its implementations are important to improve the performance of outsourced logistics activities.

### **1.3 Research questions**

1. What is the existing practice of Outsourcing Logistics functions in Sur Construction Plc?
2. How is the performance of outsourced logistics functions of the company?
3. What are the challenges or problems in the application of logistics outsourcing in the Company?

### **1.4 Research Objective**

#### **General Objective**

The general objective of this study was to assess the performance of Outsourced Logistics functions in the company and its implementation challenges.

#### **Specific Objectives**

The specific objectives include

To assess the existing practice of outsourcing logistics functions in Sur Construction Plc.

To assess the performance of the outsourcing logistics functions in the company.

To identify challenges encountered in the application of Logistics outsourcing in the Company.

### **1.5 Significance of the study**

The study is useful to Sur Construction Plc and other similar construction companies, particularly for those considering outsourcing their logistics functions.

Moreover, the study can contribute as a reference or background information for further similar studies to be conducted

## **1.6 Scope of the Study**

The scope of the study is limited to outsourced logistics functions in Sur Construction. The subjects of the study are only the Head office outsourced logistics practices. The study did not cover Projects and Mekele rehabilitation center logistics practices. More over the research did not include data from Sur construction external suppliers.

## **1.7 Limitation of the Study**

Detail assessment of the performance of outsourced logistics functions in terms of logistics cost was not covered. In addition the research was not involved interviews such as suppliers or 3PL providers of the company because of time and resource limitation. The other limitation is lack of previous researches and written documents specifically in construction Industries in Ethiopia context.

## **1.8 Organization of the Study**

This research paper is organized in five chapters. The first chapter outlines the introductory part including with the general background, statement of the problem, significance and objectives of the study and questions that would answered by the study.

The second Chapter tells us the relative literature review of the study, which is mainly focuses on the outsourcing logistics functions to be practiced in, to ensuring to avoid the problems of managing Logistics outsourcing process at the Company. The third chapter is about research design and methodology, which tells us about the research design, sampling techniques, administration of questioner and interview and data analysis techniques.

The fourth chapter is the core part of the research which deals with the analysis of the collected data and its findings. Finally, the fifth chapter deals with the summaries of key findings concluding remarks and recommendations suggested for solving the problem stated in the introduction part.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter covers the theoretical basis of the study on logistics outsourcing which includes, Outsourcing Logistics Activities, Driving factors/Reason for outsourcing Logistics function and benefits /advantages, Challenges, Performance of Outsourcing Logistics Activities and Managing Outsourcing Logistics Activities empirical studies have also been discussed.

### **2.2 Outsourcing Logistics**

Outsourcing involves the transfer of an organization's regular business activities (functions and processes) to an outside service provider that provides the services back to the organization, as defined in a (typically) long-term contract (Denis,2003).

Outsourcing logistics function or third party logistics (3PL) is generally defined as the provision of a single or multiple logistics services by a vendor on a contractual basis (Razzaque & Sheng 1998). 3PL (Third Party Logistics) is a firm that provides service to its customers of outsourced (' third party') logistics services, for part or all of their logistics function.

Based on the 3PL location, outsourcing can be divided in to two, Nearshore outsourcing or 'nearshoring' is outsourcing within nearby territory, accessible by short travel or telephone in the same or neighboring time zone. And Offshore outsourcing or 'offshoring' is outsourcing overseas or in a separate country.

In recent years, logistics outsourcing has gained increasing importance and today issued by a large number of firms across virtually all industries worldwide. Logistics service providers have developed a wide array of services that are utilized to improve logistics processes - and mainly to cut costs (Deepen, 2007). According to Millen (1997) outsourcing should not be seen as an "all or nothing" kind of decision. Their analysis suggests that a mixed system, combining the use of in house and third party facilities, may prove the best.

According to Rahman (2011), percentage of outsourcing shows increasing trend with logistics service providers' efforts in their efficiency and productivity improvement through service integration and maximum utilization of information technology.

According to Sink (1997), in an effort to maximize profits and minimize expenses, many companies opt for out-of-country outsourcing divided into two categories: nearshoring and offshoring. Nearshoring means that an organization has transferred work to another organization within its own region. Offshoring, on the other hand, is the relocation by a company of a business process to a more distant location.

Third-party distribution has developed rapidly over the past few decades and has become a very competitive and dynamic industry. There has been a significant growth in both the number and the size of companies. Third-party companies have continued to expand the many services that they offer in order to succeed within a very competitive marketplace (Alan & Croucher, 2006). According to Mulat, (2007) Out Sourcing is in its infant stage in Ethiopia.

Outsourcing is a viable business strategy because turning non-core functions over to external suppliers enables companies to leverage their resources, spread risks, and concentrate on issues critical to survival and further growth. Many companies turned to outsource logistics activities as a way of restructuring their distribution networks and gain competitive advantage (Sink, 1997).

According to DeGrahl & Alexander, (2009) Business relationships between customer firms and their logistics service providers represent an increasingly important element of today's supply chains and thus, the success of such logistics outsourcing relationships has crucial relevance for the competitiveness of a supply chain. Business and other organizations are striving to be more efficient reducing their cost of doing business and more effective customer service to survive in the new environment a critical element for achieving these two objectives simultaneously is the supply chain organization and transportation is a critical ingredient for over all supply chain performance. It can be argued that transportation is the glue that holds the supply chain together (John et al. 2011)

### **2.2.1. Logistics Outsourcing Practice**

Logistics is that part of the supply chain processes that plans, implements, and controls the efficient and 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 requirements (Anderson B, 2001).

Logistics outsourcing practices include information management, transportation management, warehouse management, material handling management and inventory management. (Bruce and Useem,2008)

Solakivi et al.,(2013) states three dimensions of logistics outsourcing practices as :

**Transportation services** (domestic transportation, international transportation, reverse logistics, and freight forwarding)

**Information processing** (order processing, invoicing, logistics IT-systems)

**Materials management and value-added services** (warehousing, inventory management and product customization)

Procurement, inventory management, fleet management, warehousing, and distribution are dimension of logistics outsourcing practice (Hilletoft and Hilmola,2010).

According to Razzaque and Sheng(1998) Outsourcing Logistics practice can be classified as transportation, distribution, warehousing, inventory management, order processing and material handling.

The logistics activities/services most commonly outsourced include: warehousing management, inventory management, transport and transport management, custom clearing and freight forwarding, information and distribution network design.

### **2.2.2 Driving factors or Reason for outsourcing Logistics function**

In addition to saving on overhead and labor costs, the reasons companies employ outsourcing include improved efficiency, greater productivity and the opportunity to focus on coreproducts and functions of the business. Furthermore, more companies are looking to outsourcing providers as innovation centers (Alan & Croucher, 2006).

One reason to outsource is the expectation of receiving better service from the outsourcer than from internal staff. Outsourcer has to be chosen in that particular way to ensure that there is no bad influence on the quality of goods and services produced. Otherwise, company may loose its position on the market (Anderson ,2001)

On the other hand, as the world becomes more globally integrated and the boundaries between countries and cultures disappear, many developing countries, are turning into attractive centers for international firms because of their geographical locations, low working fees and high potential for market extensions (Aktas & Ulengin,2008).

According to Victor (2012), the Outsourcing Institute, a strong voice in the field of outsourcing, has built a top 10 reasons that a company would have to outsource services:

1. Cost reduction and operations control;
2. Improving company focus;
3. Gaining access to the various possibilities;
4. Free internal resources for other purposes;
5. Resources are not available within the company;
6. Accelerate the benefits reengineering;
7. Driving is expensive for some time;
8. Employment equity becomes available;
9. Sharing risks;
10. Capital injection

### **2.2.3 Benefits /Advantages of Outsourcing Logistics Activities**

The most significant advantages of outsourcing are focus on core activities, cost savings, access to experience, improving performance, and flexibility. First, many researchers agree on the fact that by handing over activities to a trusted third party, a company can concentrate on activities central to its value proposition and increase its competitive positioning. (Fanllet *al.*,2006. )

Green *et al*(2008) mentioned some of the advantages of using third party logistics service providers cost reduction improved efficiency, service and flexibility, focus on core competency, freeing up resources elimination of infrastructure resources, risk- sharing, better cash flow and access to resources not available at one's own organization.

As highlighted by Parashkevova (2007), outsourcing allows organization to focus their effort in its basic activity.

According to the article on Flat world Denis, (2003) Outsourcing has the following advantages:

**Swiftness and Expertise:** Most of the times tasks are outsourced to vendors who specialize in their field. The outsourced vendors also have specific equipment and technical expertise, most of the times better than the ones at the outsourcing organization. Effectively the tasks can be completed faster and with better quality output.

**Concentrating on core process rather than the supporting ones:** Outsourcing the supporting processes gives the organization more time to strengthen their core business process.

**Risk-sharing:** one of the most crucial factors determining the outcome of a campaign is risk-analysis. Outsourcing certain components of your business process helps the organization to shift certain responsibilities to the outsourced vendor. Since the outsourced vendor is a specialist, they plan your risk-mitigating factors better

**Reduced Operational and Recruitment costs:** Outsourcing eludes the need to hire individuals in-house; hence recruitment and operational costs can be minimized to a great extent. This is one of the prime advantages of offshore outsourcing.

Even though outsourcing has many advantages it also has disadvantages. Main disadvantages of outsourcing are loss of managerial control over outsourced operations, threat to security and confidentiality, quality problems, hidden costs and reallocation of existing teams (Fanll et al.2006 ).

Business organizations can increase their flexibility through a continuous redesign of their contracts that will allow them to meet their information needs at any given time. Outsourcing additionally provides a large degree of flexibility in the utilization of IT resources and makes it easier to face business level volatility, as the provider is left to deal with fluctuations in IT workloads (Llopis, 2010).

### **2.3. Managing Outsourcing Logistics Activities**

The transfer of ownership of business activities being outsourced is really what differentiates outsourcing from other business relationships.(Denis,2003)

According to Skjoett-Larsen(2000)3PL is also known as logistics alliances, logistics partnerships, logistics service providers.

Business relationships between customer firms and their logistics service providers represent an important element of success of logistics outsourcing relationships that has crucial relevance for the competitiveness of the company (Denis,2003).

Managing the outsourcing of logistic process may be a complex and expensive task. It is important for the parties to define the degree of the services to be outsourced and agree on relevant measures of quality (Elmuti & Kathwala, 2000)

Daugherty *et al.*, (1996) state that managers need a framework to make appropriate choices in terms of supplier relation.

According to Denis, (2003),the core of an out-sourcing arrangement is that the control and owner-ship of the business activities are put into the hands of the service provider. The service provider then owns and manages the business processes, including the resources that are used to provide the services to that organization. In a typical outsourcing, the people, the facilities, the equipment and the technology are transferred to the service provider. Given the magnitude and complexity involved, outsourcing relation-ships tend to be long-term propositions, usually in the 5 to 10 year range, and sometimes longer.

According to Donald (1998), outsourcing is not only about decision making, it also demands control mechanisms which include; service acquisition, service provider selection and service provider management.

Besides that, Crook et al.,(2008) focused on two types of knowledge and skills for logistics management: i) these were termed ,broad skills, knowledge generation and dissemination (such as communication, computer, understanding end customer, and project management);

ii) specialized supply chain skills, knowledge shared interpretation and responsiveness (like supplier relationship management and coordination, material management, metrics, and market knowledge).Logistician must be a talented who not only has a depth of logistics knowledge and capabilities but also knowledge and capabilities about non-logistics items; such as, finance, sales, marketing, customer service, and information systems, or their partners such as in business parts ( Razzaque et al., 2001).

### **2.3.1 Logistics outsourcing Performance**

Logistics management is not only consists the physical movement of goods but it has to be efficient in the facilitation of the movement through documents processing, coordination, monitoring and financing activities. Thus, logistics management covers the whole of infrastructure and systems competency (Abdul et al., 2012).

Performance measurement Provision is periodic evaluation of the performance of the provider enables the two parties to identify the gaps in service. On-time shipments, inventory accuracy, shipping errors, reduction in cash-to-cash cycle, logistics cost reduction, and reduction in customers' complaints may be used as the most important performance measures in logistics outsourcing (Bhatnagaret al.1999).

Performance measurement criteria include delivery timeliness (most popular), cost, overall quality, inventory management, picking accuracy, responsiveness and flexibility (Bourlakis and Melewar2011).

Considering construction industries Meng (2012) states that, as a result of the construction industry setting, many studies report on poor performance that originates from poor logistics management.

Murray & Javalagi (2008) and Goldstein (2009) identify three types of performance measures as necessary components in any outsourcing performance measurement system: strategic measures; financial measures; and quality measures. Other studies use additional dimensions of procurement performance such as costs savings, cycle time, customer satisfaction, and productivity to measure the effectiveness of outsourcing strategy (Goldstein 2010; Malhorta 2007; Carney 2007).

Long lead time is not a problem if delivery is predictable and demand is stable. However, if there is uncertainty about future demand, long lead time is costly, even if the customer knows exactly when the merchandise will arrive (Hummels, 2001).

Webb (2005) wrote that successful outsourcing is influenced by relationship management between firm and outsourcing service provider.

Cost has always been the main indispensable dimension in assessing the logistics performance (Andersson et al., 1989). Few studies only focus on other dimensions such as lead time, quality and flexibility (Andersson et al, 1989). The basic logistics cost consists of transportation and carrying inventory costs (Forslund, 2007).

It is very important to have the ability to measure the performance of an outsourcing assignment so that firms are able to evaluate the appropriateness of their outsourcing strategy. As mentioned by (Cho et al. 2008).

### **2.3.2 Challenges of Outsourcing Logistics Activities**

Making the decision to outsource selected supply chain functions and processes to a Third Party Logistics (3PL) company can be challenging yet rewarding to the organization.

The outsourcing concept of moving activities out of the organization to where the experts and their resources exist has challenged owning all of the resources as most traditional firms by the strategy for outsourcing (Denis,2003)

According to Srabotic & Ruzzier, (2010).Successful out-sourcing does not relate only to financial and business goals. As out-sourcing may have considerable impact on a company's competitiveness over time, it is a comprehensive vision of managing the relationship that demands careful consideration. Without an understanding of different participants' perspectives on those involved and affected in the process, measuring the success of outsourcing is not possible (Denis,2003).

A study by McKinsey,(2011) highlighted unclear communication between logistics services providers and users lead to business interruption is one of the challenges. Other challenges as reported by Armstrong and Associates (2004) were poor infrastructure management, regulation,

bureaucracy and culture, poor training, ICT, undeveloped domestic industry, high transport costs, poor warehousing and storage, regional imbalance and domestic trade barriers. It is important to understand why some logistics outsourcing relationships work well and why others fail.

Mayer Brown (2003) defines a number of key factors for customer success in outsourcing. Those factors are: top management commitment and support, the right people on the outsourcing team, clear objectives, fully defined scope, established financial baseline, rational process, the right vendor selection, an agreed contract and definition of outsourced services, acceptance of responsibilities, managing the transition phase as a project, maintaining competitive pressure, open and honest information flow, support and respect to individuals and personal development opportunities for any staff who transfer, improved service levels and commercial viability for both parties.

From a different perspective, obstacles such as poor choices of sourcing partners, inadequate planning and training/skills needed to manage outsourcing activities and poor organizational communication have also been identified as impacting the success of outsourcing projects (Goldstein 2010; Malhorta 2007; Carney 2007).

Minahan (1995) pointed out that firms that intend to outsource logistics services should examine physical assets and skills and also how these skills support their operations. Outsourcing decisions are also based on service related considerations including the competencies of service providers and operational flexibility, which depend on the market environment and client needs.

According to Victor (2012) Outsourcing results are not immediate. Most organizations had a 20% decline in labor productivity in the first year of an outsourcing contract, mainly because of time spent on knowledge transfer to the outsourcing provider. After bringing their customer and supplier knowledge and goals, they can work together more effectively, thereby generating cost savings.

## **2.4 Ethiopian Construction Industry**

According to an article published in the Ethiopian Herald, Robel (2016) stated that Construction sector is one of the sectors in Ethiopia, along with the service and agriculture sectors, that are likely to drive growth. The construction should contribute 20 percent of the total Gross Domestic Product (GDP), the top echelon of the sector is eyeing transforming the sector as a way of bypassing the challenges the industry faces.

According to Ethiopia GTP II Plan, One of the major strategic directions of road development sector in GTPII is improve the provision of road infrastructure, by expanding the road network both in terms of quantity and quality, to sustain and ensure the current and future economic growth. Plan target 2019/2020 to construct weather road length 220,000 km ,National railway 1545 km and to build 750,000 urban residential houses (GTP II)(2015/162019/20)Volume I).

The growth and increasing demand for the construction industry has followed a similar pattern as observed in the trend of the world. Currently, construction is one of the sectors leading the way towards modernization and industrialization in Ethiopia. The construction sector in Ethiopia, generally in the world, contributes to the realization of about fifty percent of the total capital. Being the second largest employer in the country, it's also an engine for technology, innovation and overall development (Tekle and Mahlet,2012).

The construction industry in Ethiopia is a sector that opens the door for the growth of many additional industries. Building works require high input. For instance, they require different metal products, clay works, and cement and cement products, etc. As such, the growth of these industries will surely follow the growth of the construction industry. The construction industry is a sector that can entertain big micro companies, that is widely labor based. All these being taken into consideration, the industry policy of the Federal Democratic Republic of Ethiopia has sought to pay special attention to the construction industry of the country.

Therefore, it is high time for Construction companies like Sur construction to look forward to adjust themselves to take over these multi-billion investments which call for a clear strategy of business expansion with high production, engineering, investment, synergy and human resource development capabilities.

## 2.5 Conceptual Framework

Gattorna et al. (1991) mentioned that the aspects that influence the outsourcing can be classified into control aspects and physical aspects. Control aspects involve requirements relating to exclusivity of service, range of managerial activities, continuity of relationship, ability for performance measurement, cost control, financial security, customer service and others. Physical aspects include operational flexibility, ability to cope with a wide range of physical activities, ability to maximize level of service, geographical coverage for service and others.

Both internal and external uncertainties appear to be closely linked in the field of logistics. Internal uncertainty has to do, for example, with the difficulty of companies to estimate precisely their future needs, particularly when it comes to volume the primary effects of uncertainty are twofold: industrial and commercial destabilization. Relocations and the specialization of production units and Just in Time particularly, upset the traditional models of logistics (Franzil, 2008).

Human Asset involves Competence, IT systems, resources and personnel qualification Ability of customer adaptation and general ability to solve problems efficient and effective handling of a firm's goods and services

Physical Asset involves Standardized and efficient procedures, common facilities. Demand Uncertainty defined as lack of predictability of changes, like procurement uncertainty, production uncertainty, demand uncertainty and distribution uncertainty.

## Conceptual Framework

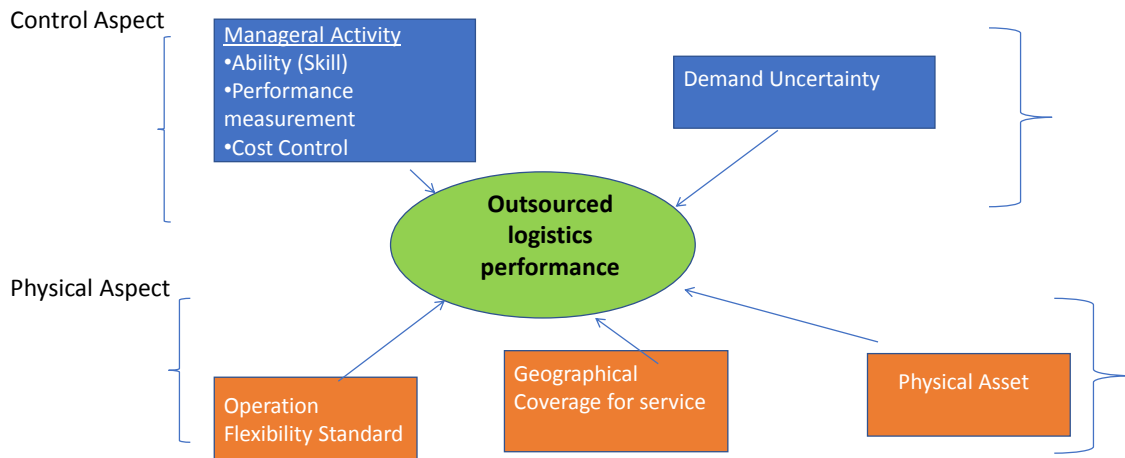


Figure 2.1: Conceptual frame work for outsourced Logistics performance (source: Adopted from Gattorna et al. ,1991)

Therefore conceptual framework assumes that performance of the outsourced logistics depends on control and physical aspect.

### 2.6 Logistics outsourcing researches and related findings

The study conducted in Kenya by Mchozi (2013) on The Effectiveness of Outsourcing Logistics function in construction firm a case of Inierbeton Company Limited, the finding on the Reasons for outsourcing logistics function showed that 4(15.9%) of the respondents said that they outsourced because of the increase production, a 7(45.5%) of the respondents agreed that their outsourcing logistics function because of reduction of the cost. On the other hand, 6 (25%) agreed that they outsourced logistic function because of core business. On the other hand 3 (13.6%) said they outsourced because of improving the quality.

The study conducted by Mulat (2007) on outsourcing in Ethiopia, listed the reason for procurement and Supplies Management Outsourcing according to their rank.

Table 2.1 Reason for Procurement and Supplies Management outsourcing

	Justification for making decision	Rank
1	Cost saving	2
2	Allow more focus on core business	1
3	Improve service level	3
4	Reduce risk	6
5	Control Budget	7
6	Lower ongoing investment required in internal infrastructure	10
7	Lack of internal expertise (To access skills that we do not have)	9
8	Increase flexibility to meet changing business conditions	4
9	Acquire innovative ideas (Access to new technology)	4
10	Turn fixed costs into variable costs(Free up resources and assets)	7

Source : (Mulat,2007,p50)

According to Mulat (2007), procurement and Supplies Management Outsourcing in Ethiopia, respondents granted great weight to allowing more focus on core business, cost savings and improving service level were ranked 1, 2 and 3 respectively. Based on his research result focus on core business, cost saving and improving service quality are the three top reasons for outsourcing the logistics services.

Wanyonyi (2014) researched on Logistics Outsourcing and performance of Road Construction Projects in Nairobi Country. She found out that road construction projects in Nairobi County face logistics outsourcing challenges. These challenges involves delay of delivery of construction materials. The study also concluded that logistics outsourcing facilitates performance of road construction projects in Nairobi County.

Besides that Ayele (2016) researched on the Assessment of Logistics Service Outsourcing of the Organization in the Case of Libya Oil Ethiopia Limited she found out that the performance of the logistics providers in Ethiopia are more or less satisfactory despite the challenges they have mentioned like lack of safety compliance. Collaboration with 3PL providers is a very powerful strategy to achieve effective outcome of outsourcing option.

Farrington,(2006) state some problems challenges associated with outsourcing are reducing of flexibility, dependence on new suppliers communication with suppliers, redundancy payment and quality of services The empirical studies also show that outsourcing logistics function help to improve organization revenues that means of reducing cost.

## **CHAPTER THREE: RESEARCH METHDODOLOGY**

### **3.1. Introduction**

The chapter presents the research design, the target population, sampling design, data collection instruments and procedures, and the techniques for data.

### **3.2 Description of the study area**

Sur construction plc was established in 1992 under EFFORT Investment center. SUR Construction is the largest and leading local construction company in Ethiopia which has been massively involved in the construction of all kinds of Civil Engineering Construction works. It has one branch (Mekele rehabilitation center in) Tigray region Mekele currently the company is engaged in four road projects, two buildings, dam and irrigation. A total of 10,000 workforces comprising over 200 Engineers, 2,000 permanent employees and about 8,000 project employees blended with its over 1,500 construction equipment and machineries.

At Head office of the company which is situated in Addis Ababa there are total of 216 employees. Logistics, Finance, Maintenance & Equipment administration and Construction departments are responsible for the logistics related activities.

This research tried to assess the existing practice, the performance and the challenges of the of outsourced logistics activities of the company at Head Office, and recommended possible solutions to improve the performance outsourced logistics activities.

### **3.3 Research Approach**

The researcher used qualitative and quantitative research approaches since it concerns with perceptions, attitudes and experience of staff as well using quantitative data to asses outsourced logistics functions. This research applied mixed approach in analysis because the data has both quantitative and qualitative nature.

### **3.4 Research Design**

The design for this study is cross-sectional study that includes both qualitative and quantitative data collection methods. Both primary and secondary data were collected through structured and semi structured questioner. Documents like reports were reviewed during the study because it requires assessing and analyzing the existing conditions and problems of the company which helps to explain the present situation in detail instead of relying on judgment.

### **3.5 Population and Sample Size Determination and Sampling**

According to Sur Construction plc employee data there are a total number of 216 employees in Head Office of the Company. When the structure of the study population is assessed with respect to the extent of need, usage frequency and significance of relevance of the Outsourcing Logistics it is highly heterogeneous population. As this heterogeneity dictates single stage stratified sampling design was employed for the formal employee survey of this study. The six necessary stratum for this study are identified to be Logistics, Construction, Maintenance, Finance and other department as well as management members. Since the subject matter needs some knowledge around the area a total sample size employees is determined to be studied subjectively.

Using the list as a sampling frame, the researcher cluster the employee based on their department. Because of the small number of employee in each department who are engaged in logistics, all are considered for the study. Besides their engagement in logistics their prior knowledge about the subject matter was considered. Accordingly all the 45 from departments were the study subjects as described in the table below.

**Table 3.5: Population of the study**

No.	Departments	Total number of employee	Number of employees in or related departments
1	Logistics Department	25	12
2	Construction Department	10	6
3	Maintenance & Equipment	10	8
4	Top Managements	4	3
5	Finance Department	23	6
6	Other Department	144	11
	<b>Total</b>		45

**Source: Researcher, 2017**

Therefore, the total population of this study was employee, which includes individual units work in a department which has direct or indirect relation with outsourcing logistics practice within the company.

Since, in this study there is small number of population and need to contact everyone in the population census survey is applied. The total number of the population intended to be forty five comprises of the top level managers, the department head and employees in each department and personnel working with logistics Department, in Head Office Addis Ababa. Due to small number of the research population the sample size is forty five employees working in selected Departments.

And the researcher select 10 key informants like manager of Logistics, Construction and maintenance departments and assistant managers purposively identified for in-depth interview based on their prior knowledge. This is because the researcher believed that the managers provided valuable information which cannot be obtained from other respondents.

### **3.6 Data Source and Types**

The study tried to assess the existing logistics outsourcing benefits, challenges and performance of Sur Construction Plc and related matters. To conduct this study both primary and secondary data were used.

### **3.7 Data Collection Procedures**

#### **The Primary Data**

This study utilized self administered questioners. The primary data is collected from employees as well from management members. Primary data collection activity includes self-administered questioner and key informant interview. Quantitative data was generated from the sample survey. The self-administered questioners distributed by the researcher. The qualitative information is collected from the key informant survey and the researcher observation to reinforce the findings of the research, the researcher triangulated the findings of both the quantitative and qualitative survey.

#### **The secondary data**

The necessary secondary data was collected from the company and out of the company published sources such as: company reports books, journals, brochures and internet resources. This secondary data filled the gap from the primary data and helps in interpreting and writing the findings from the formal survey.

### **3.8 Ethical Consideration**

All the participants in the research were informed about the purpose of the study and verbal consent is obtained from each respondent. In addition to this, the information given by each respondent was kept confidential. In relation to the secondary data, the sources had properly stated.

### **3.9 Data Analysis**

The completed questionnaires were edited for completeness and consistency, checked for errors and omissions and then coded to SPSS and analyzed quantitatively. The quantitative data entered to SPSS was analyzed using descriptive statistics. And for the qualitative data, the researcher analyzed the data thematically.

This enabled the researcher to make general statements in terms of the observed attributes hence conceptualization according to Saunders (2007).

# CHARTER FOUR: DATA ANALYSIS, RESULTS AND INTERPRETATION

## 4.1 Introduction

This section covers the summary data analysis and interpretations of findings, results and interpretation. This study was set to assess performance of outsourced logistics functions the case of Sur construction plc. The findings are presented in percentages and frequency distributions, mean, standard deviations and charts and graphs to identify reason for outsourcing, the challenges or problems of implementing logistics outsourcing, benefits of outsourced logistics function and its performance. A total of 45 questionnaires were issued out in order to include all individual units work in a department which have direct or indirect relation with outsourcing logistics practice within the company and 40 were returned. This represented a response rate of 88% considered a sufficient representation of the population for this study. And the researcher intended to conduct interview with ten the logistics manager, other department heads and division heads. However, only seven are available during the interview three of the respondents mentioned busy schedules as the reasons for not responding.

## 4.2 Reliability Test

For the test of reliability Cronbach's alpha was used as a measure of internal scale consistency using SPSS (Statistical package for social science studies).

**Table 4.1 Reliability Statistics**

Cronbach's Alpha	N of Items
.703	24

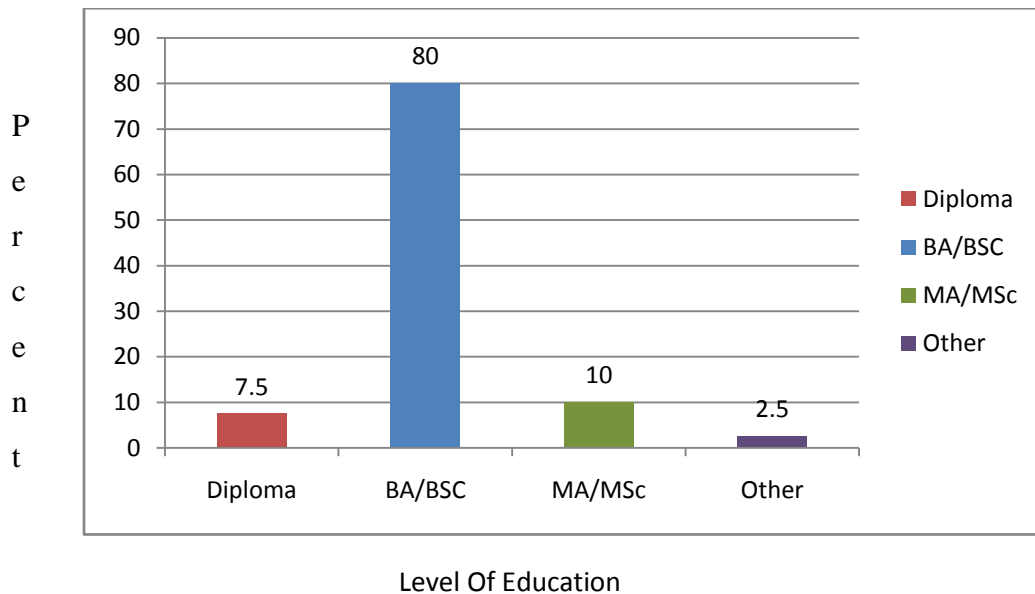
## 4.3 Respondents Profile

The demographic information considered in this study included level of education, Year of Experience and current position in the company.

### 4.3.1 Level of Education of Respondent

The study examined the highest level of education of its respondents. The level of education of respondents under this study was important because it gave confidence that respondents understood the question and hence, provided reliability and reliance on the information provided. Figure 4.1 illustrates the highest level of education attained by the respondent.

**Figure 4.1 : Respondents by Level of Education**



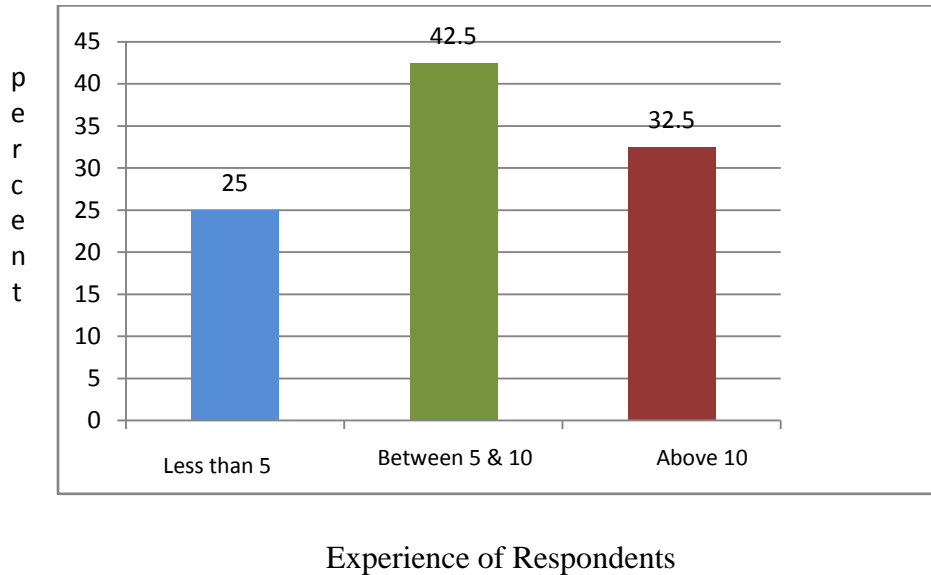
Source: Own Survey, 2017

Research data indicate most of (90%) of the respondents had a Degree and MA/MSc. This offered that the answers from respondents were reliable and that they can provide a true picture of the study concern in outsourced logistics function in the company.

### 4.3.2 Year of Experience of Respondents

The respondents were asked to indicate the duration they have continuously worked in the Company and the results are presented in Figure 4.2.

**Figure 4.2 Respondents by Year of Experience**



Source: Own Survey, 2017

The results in figure 4.2 show that 42.2% of the respondents had worked in their respective organizations for 5 to 10 years, 32.5% of the respondents indicated that they had worked in the organization for more than 10 years while 25% of the respondents said they have worked in the organization for less than 5 years. The results indicates that majority (75%) of the respondents have worked in the organization for more than 5 years indication that they understand the Reason, performance, benefits and challenges of outsourced logistics functions.

### **4.3.3 Distribution of respondents per position in the Company**

The performance, challenges and benefits of outsourced logistics functions depends on user departments ones who saw the performance of the service provider firm.

**Figure 4.3 Respondents Position in the Company**

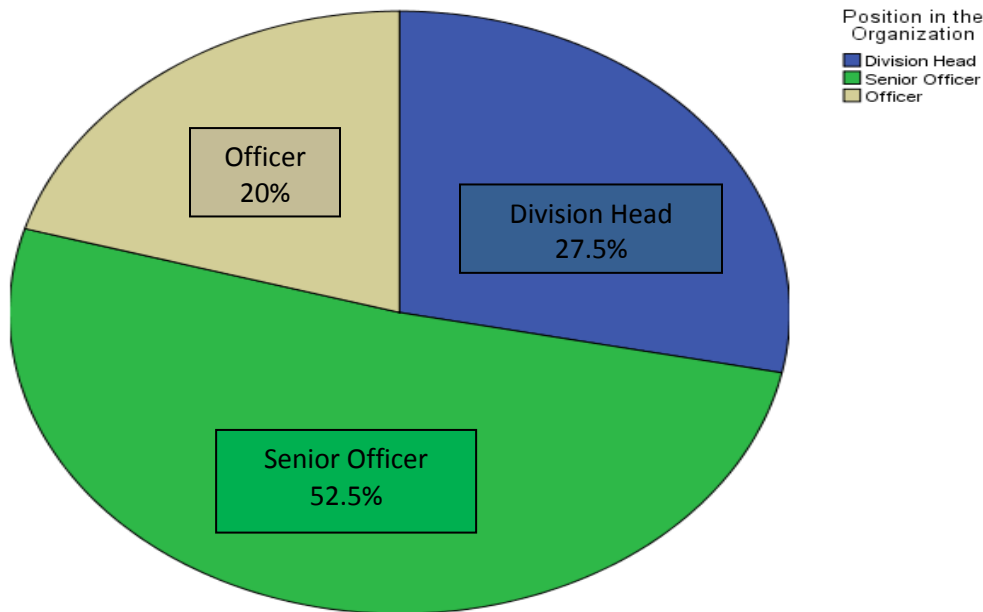


Figure 4.3 indicates that 21(52.5%) of the senior staff responded in this study . The obtained data imply that most of the respondents in the construction company came from the senior officer staffs.

#### **4.4 Analysis and Discussion on outsourced logistics Practices, Reason for outsourcing, Benefits ,its performance and Challenges**

The researcher were intended to indicate reason for outsourcing logistics practices, performance , benefit and challenges of outsourced logistics activities of the company using aspects in a five point Likert scale i.e ‘strongly disagree’ (1) ‘ disagree’ (2) ‘uncertain’ (3) ‘agree’ (4) and ‘strongly agree’ (5) and interview conducted with logistics managers and department heads of Sur construction plc.

The scores of strongly disagree have been taken to represent a variable which had a mean score of 0 to 1.5, the scores of disagree have been taken to represent a variable with a mean score of 1.5 to 2.5, the score of uncertain have been taken to represent a variable which had a mean score of 2.5 to 3.5, the score of agree have been taken to represent a variable which had a mean score of

3.5 to 4.5 and the score of strongly agree have been taken to represent a variable which had a mean score of above 4.5. A standard deviation of  $>0.9$  implies a significant difference on the impact of the variable among respondents.

#### 4.4.1 The Reasons to Outsource Logistics Activities

**Table 4.2 Reasons for outsourcing Logistics activities**

The respondents were asked to indicate the reasons for the company to outsource its logistics activity. The results are presented in Table 4.2

Variables	N	Mean	S.D.
To give more focus on Business (on core activities)	40	4.73	.452
Cost and revenue(cost reduction)	40	4.07	.764
To improve operational flexibility by service providers	40	4.02	.577
To improve Service quality	40	4.08	.417
Efficient utilization of company's asset	40	3.95	.597
Saving in capital investment	40	3.92	.656
The need to access outside expertise (which is not available in house)	40	3.85	.975

From all the reasons the highest ranking are the need to give more focus on core activities, to improve Service quality, cost reduction and to improve operational flexibility respectively. The need to access outside expertise with standard deviation of .975 implies there is a significant difference on reason, need to access outside expertise among respondents.

In the overall result of interview questions conducted by the researcher to high level officials working in the company, the key reasons of outsourcing logistics functions were to focus on its core activities, to get cost reduction, to improve operational flexibility and efficient utilization of company asset are all mentioned. In the case of the need to access outside expertise, the reason outsourcing is mainly for custom clearing.

#### 4.4.2 Benefits of outsourced logistics activities

The respondents were asked to indicate the benefits gained from outsourced logistics practices. The results are presented in Table 4.3

**Table 4.3 Benefits gained from outsourcing its Logistics Functions**

Variables	N	Mean	S.D
Help Sur Construction plc to focus on its core activities	40	4.78	.530
Help Sur Construction plc to reduce its operational cost	40	4.08	.572
Gives Sur Construction plc Operational flexibility	40	4.07	.417
Help Sur Construction plc for efficient utilization of company's asset	40	3.98	.733
Help Sur Construction plc in Saving in capital investment	40	3.88	.686
Help Sur Construction plc to access outside expertise (which is not available in house)	40	3.9	.900

Source: Research data (2017)

The result in Table 4.3 shows that all of the respondents agreed on the listed logistics outsourcing benefit with low variation of the standard deviation which is  $< 0.9$  indicates that respondents were agreed on all the benefits of outsourced logistics function except to access outside expertise standard deviation of 9 which implies there is a significant difference on the benefit among respondents.

From the result of interview questions the company benefited in access outside side expertise by outsourcing custom clearing.

#### 4.4.3 Performance of Outsourced Logistics functions of Sur Construction plc

**Table 4.4.: Performance of outsourced Logistics Functions**

Variables	N	Mean	S.D
There is on time response of information & documents	40	3.80	.648
There is less Mistakes and damages in delivery	40	4.00	.599
There is improved quality of service	40	3.93	.730
There is timely delivery of service	40	3.47	.877
There is timely delivery of materials	40	2.30	.608

Source: Research data (2017)

The findings from table 4.4 revealed that on **Performance of outsourced Logistics Functions** most of respondents agreed on time response of information & documents with mean value 3.8, there is less Mistakes and damages in delivery with mean value 3.8, there is improved quality of service with mean value of 3.8 There is timely delivery of service with mean value 3.8 but respondents disagree on timely delivery of materials with mean value of 2.3.

Based on the result of interview questions held by the researcher, it is found that all the above except that there is delay in delivery of materials all other performance of outsourced logistics function is good. Company's performance data on outsourced logistics function are not reported separately from other in house logistics activities. But the respondents respond the question by considering interruption of production or service and lead time.

#### 4.4.4 Challenges/Problems in implementation of outsourced logistics activities

The performance of the outsourced logistics operations have considerably influenced by different challenges or problems. The researcher sought to determine the challenges faced when implementing outsourced logistics operations in Sur Construction plc. Below are the results of the findings.

**Table 4.5 Challenges of Implementing outsourced Logistics functions**

<b>Variables</b>	<b>N</b>	<b>Mean</b>	<b>S.D</b>
Loss of control over the Logistics Service Providers	40	3.82	.594
Ineffective relationship management and performance evaluation	40	3.95	.504
The company encountered difficulties to measure the quality of work	40	3.98	.620
Poor information communication between the company and 3pls (Suppliers).	40	4.25	.543
The company faces uncertainty in demand	40	4.60	.545
Remote projects get difficulty in on time delivery of construction materials.	40	4.20	.405

**Source: Research Findings,2017**

From the findings in table 4.5, the results showed that challenges affecting implementation of Logistics outsourcing in Sur Construction plc are demand uncertainty of the company, Poor information communication, delay of delivery of construction materials of remote project, difficulty to measure the quality of work, ineffective relationship management and performance evaluation and Loss of control over the Logistics Service Providers with mean scores of 4.60, 4.25, 4.20, 3.98,3.95 and 3.82 respectively.

The low variation of the standard deviation which is  $< 0.9$  indicates that respondents were consistent on the challenges faced by outsourced logistics functions. This shows most of the respondents were agreed on all of the listed challenges faced on the implementation of outsourced logistics functions.

Based on the result of interview questions held by the researcher, it is found that all the above observed challenges are faced in implementation of outsourced functions of the company.

# **CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

## **5.1. Introduction**

This chapter is committed to present summary of the main findings and conclusions of the study and forward researchers recommendations based on the findings and conclusions.

## **5.2 Summary of Findings**

### **Findings on Reasons for Logistics Outsourcing of Sur Construction plc:-**

The study shows that the company has its own reasons to make outsourcing decisions. In this regard all the reasons i.e the need to give more focus on core activities, to improve Service quality, cost reduction and to improve operational flexibility respectively are all reasons for the company to outsource its logistics functions except that in the case of need to access outside expertise there is a significant difference on reason among respondents.

### **Findings on the benefits of outsourced logistics functions in Sur Construction plc:-**

Majority of the respondents confirm that the company benefited after outsourced some of its logistics functions. Outsourcing allowed the company to focus on its core activities, saving their time and money by reducing the need to control the day to day logistics operations. The company also benefited from outsourcing in efficient utilization of company's asset and saving in capital investment.

### **Findings on the Performance of outsourced logistics functions in Sur Construction plc:-**

The findings agreed on the Performance of outsourced Logistics Functions on timely response of information & documents with mean value , less Mistakes and damages in delivery, there is improved quality of service and on timely delivery of service but respondents disagree on timely delivery of materials. Based on the result, it is found that all the above except that there is delay in delivery of materials all other performance of outsourced logistics functions is well.

## **Findings on the challenges of outsourced logistics functions in Sur Construction plc:-**

Challenges affecting implementation of Logistics Outsourcing in the company is demand uncertainty, Poor information communication, delay of delivery of construction materials of remote project, difficulty to measure the quality of work, ineffective relationship management and performance evaluation and Loss of control over the Logistics Service Providers.

### **5.3 Conclusion**

Outsourcing allows organization to focus their effort in its basic activity. Sur construction also benefited in this aspect but in the case of reduction in operation cost even though most of the respondents agree the company is benefited in this aspect considering operation cost other cost considerations must be included. Based on result of interview questions conducted by the researcher to high level official, all agree that there is no written report regarding the performance of outsourced logistics functions interns of cost. Timely delivery of services and material to clients reduced lead time and improved performance.

In case of Sur construction there is good performance of delivery of service all interview respondents agree that no operation is interrupted due to late delivery of service. But late delivery of material is frequently seen especially in purchase of reinforcement bar. This might arise from demand uncertainty.

As the result shows demand uncertainty is the main challenge of outsourced logistics performance in the company. And this problem arises from underestimate the amount and type of resources required, users in which the same item requested over again and again and which might lead to increase cost and lead time or overestimate which results capital tied up.

Sur Construction's has no performance criteria as well as performance data on outsourced logistics functions, therefore, it is very challenging to obtain accurate and reliable performance data.

## **5.4 Recommendations**

Effective information delivery with suppliers of services and products, maintenance of good supplier relations and performance measurement to determine whether the company meets targets is important to know the performance of the outsourced logistics function. This would encourage the performance of the outsourced logistics, it would enable the company to concentrate on the basic activity (core competence) and increase its competitiveness as highlighted by Parashkevova (2007),

So since the amount of outsourced functions in the company is huge there must be a performance measurement criteria and written report concerning cost. And high officials also suggest this recommendation.

Most interview respondents agree that, most of the time reinforcement bar purchase is urgent. Here the lead time of reinforcement bar must consider the production time.

From the findings different challenges revealed and the researcher suggests the following recommendations as a solution based on each challenge.

### **Demand Uncertainty**

Long lead time is not a problem if delivery is predictable and demand is stable. However, if there is uncertainty about future demand, long lead time is costly, even if the customer knows exactly when the merchandise will arrive. (Hummels, 2001).

Demand uncertainty can be the cause for delay for delivery of construction materials for remote projects. So the company must have plan or schedule for required items or services and give to outsourcing team in order to manage the purchase and consolidate the freight properly by considering lead time and cost.

### **Poor information communication**

A good communication system should be established between outsourcing team of the company and 3PI providers for smooth operation of outsourced logistics functions as well as the company operation.

According to Rahman (2011), percentage of outsourcing shows increasing trend with logistics service providers' efforts in their efficiency and productivity improvement through service integration and maximum utilization of information technology.

So Linking of computers at different levels can be made through email communication or preferably through Wide Area Network.

### **Managing logistics to & from remote areas**

The challenges in relation to remote locations are: lack of nearby supplier, low quality supplies and high transportation cost. In order to mitigate this, the company needs to build a nearby warehouse or logistics hub which can able to use quality goods from major cities. On the other hand, the company needs to plan owning their own transport particularly for remote projects in order to improve on time delivery of material.

### **Difficulty to measure the quality**

Managing the outsourcing of logistic process may be a complex and expensive task. It is important for the parties to define the degree of the services to be outsourced and agree on relevant measures of quality (Elmuti & Kathwala, 2000)

Making clear the objective of the service and order size, volume and dimension of the task or activity for the contracting company helps to measure the quality of work.

**Ineffective relationship management and Performance evaluation and Loss of control over the Logistics Service Providers** are also challenges or problems the company face in implementing logistic outsourcing.

Webb (2005) wrote that successful outsourcing is influenced by relationship management between firm and outsourcing service provider.

The findings show that there is no good relationship management as well as performance evaluation system of 3Pl and the company sometimes losses control over logistics service providers.

Therefore Top managements must delegate the responsibilities of managing the service provider firm to the user department which are very close with outsourcing firms in the daily activities and make clear the roles and duties of both parties to the contract of outsourcing.

Business organizations can increase their flexibility through a continuous redesign of their contracts that will allow them to meet their information needs at any given time. (Llopis, 2010).

Daugherty *et al.*, (1996) state that managers need a framework to make appropriate choices in terms of supplier relation.

### **5.5 Ideas for Future Research**

This study can be used as a starting point for future researchers who are interested to work on the logistics outsourcing in the construction industry.

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# APPENDICES

## APPENDIX A

### Questionnaires

This questionnaire is designed to conduct a research on the topic “An Assessment on the Challenges and Performance of outsourced Logistics Functions: the case of Sur Construction plc” as a partial fulfillment for MA degree in logistics and supply chain management. For the successful accomplishment of the study, your response have key role by being used as valuable input for the study. The information that you provide is strictly confidential and will be used only for academic purpose. Thus, you are kindly requested to genuinely fill the questionnaire

Thank you

### QUESTIONNAIRE FOR SUR CONSTRUCTION PLC

#### Part 1: Personal information

1. what is your position in the organization \_\_\_\_\_

2. Year of experience in the organization \_\_\_\_\_

3. Level Of Education

Certificate

BA/BSc

Diploma

MA/MSc

Other \_\_\_\_\_

4. Field of Study \_\_\_\_\_

**Part 2 : Rationale/Reason behind outsourcing of logistics activities**

To what extent does these reasons of outsourcing matches to the company rationale/reason to outsource its Logistics activity, (Custom clearing, Transport and fuel, cement and rebar purchase activity), (please put a tick mark)

**5= strongly agree, 4= agree, 3= uncertain, 2=disagree and 1= strongly disagree**

<b>Reasons for outsourcing activity</b>	1	2	3	4	5
To give more focus on Business (on core activities)					
Cost and revenue(cost reduction)					
To improve operational flexibility by service providers					
To improve Service quality					
Efficient utilization of company's asset					
Saving in capital investment					
The need to access outside expertise (which is not available in house)					

Others please specify.....

.....

**Part 3: Benefits of outsourced Logistics Functions**

To what extent does the company benefited from outsourcing its Logistics Functions (Custom clearing, Transport and fuel, cement and rebar purchase activity), (please put a tick mark)

**5= strongly agree, 4= agree, 3= uncertain,2=disagree and 1= strongly disagree**

<b>Benefits gained from outsourcing its Logistics Functions</b>	1	2	3	4	5
Help Sur Construction plc to focus on its core activities					
Help Sur Construction plc to reduce its operational cost					
Gives Sur Construction plc Operational flexibility					
Help Sur Construction plc for efficient utilization of company's asset					
Help Sur Construction plc in Saving in capital investment					
Help Sur Construction plc to access outside expertise (which is not available in house)					

Others please specify.....

.....

**Part 4 : Performance of outsourced Logistics functions of Sur Construction plc**

To what extent will you concur with the following statements concerning the performance of outsourced logistics activities (Custom clearing, Transport and fuel, cement and rebar purchase activity)? (please put a tick mark)

Use the scale of: 5= strongly agree, 4= agree, 3= uncertain,2=disagree and 1= strongly disagree

<b>Performance of outsourced Logistics Functions</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	
There is on time response of information & documents						
There is less Mistakes and damages in delivery						
There is improved quality of service						
There is timely delivery of service						
There is timely delivery of materials						

Others please specify.....

.....

**Part 5 : Challenges/Problems in outsourced Logistics functions of Sur Construction plc**

Please indicate your level of agreement on Challenges/problems your company facing in improving the performance of outsourced Logistics Functions (Custom clearing activity Transport and fuel, cement & rebar purchase activity) (please put a tick mark) by using the following rating scales; 5= strongly agree, 4= agree, 3= uncertain, 2=disagree and 1= strongly disagree

<b>The Challenges/problems in outsourced Logistics Functions performance</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Loss of control over the Logistics Service Providers					
Ineffective relationship management and performance evaluation					
The company encountered difficulties to measure the quality of work					
Poor information communication between the company and 3pls (Suppliers).					
The company faces uncertainty in demand					
Remote projects get difficulty in on time delivery of construction materials.					

Others please specify.....

## **Appendix 2**

A Guideline of Interview Conducted with Logistics Manager and Department Heads of Sur Construction Plc.

- 1 Why do Sur construction plc outsource its Transport, fuel, rebar and cement purchase and custom clearing activity?
- 2 What are the benefits that Sur construction plc gained by outsourcing its Transport, fuel, rebar and cement purchase and custom clearing activity?
- 3 How is the performance of the outsourced logistics functions in Sur construction plc.
- 4 What are the challenges faced by Sur construction plc to improve the performance of the outsourced logistics functions (Transport, fuel, rebar and cement purchase and Custom Clearing)?  
Could you suggest some measures to overcome these challenges?
- 5 What are the major metrics of performance your company use to measure the impact of outsourced Logistics activities?