

**LOGISTICS OUTSOURCING AND SERVICE DELIVERY AMONG
HUMANITARIAN ORGANIZATIONS IN KENYA**

BY:

MELKASADEK WARINGA

**A RESEARCH PROJECT SUBMITTED IN PARTIAL
FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF
THE DEGREE OF MASTER OF SUPPLY CHAIN MANAGEMENT,
FACULTY OF BUSINESS AND MANAGEMENT SCIENCE,
UNIVERSITY OF NAIROBI.**

2023

DECLARATION

I declare that this project is my original work and has not been presented for degree qualification of this or any other institution.


MELKASADEK WARINGA: Signature... Date ...28.11.2023

Reg No. D67/32989/2019

This research project has been submitted for examination with my approval as the university supervisors.

Supervisor:

ANGELA KAGUARA

Signature...  _____

Date 30/11/2023

ACKNOWLEDGEMENT

I wish to thank everyone that made this research possible. First and foremost, I am incredibly grateful to my supervisor, Angela Kagwara, whose expertise, guidance and encouragement from start to the end enabled me to develop an understanding of the key principles of my research subject. I would also like to thank my co-supervisor, Onserio Nyamwange, for their insightful feedback throughout the research process.

I am also thankful for the support of the Faculty of Business and Management Sciences at the University of Nairobi for facilitating this research. A special thank you to all the supply chain managers from the humanitarian organizations who graciously took the time to participate in this study through completing my surveys and interviews - without their vital perspectives and insights, this research findings would not have been possible.

I must also acknowledge the unfailing support of my family members, especially my wife and children, for their understanding, prayers and unconditional love throughout my years of study.

TABLE OF CONTENTS

| | |
|--|------|
| DECLARATION | i |
| ACKNOWLEDGEMENT | ii |
| LIST OF TABLES | v |
| LIST OF FIGURES | vi |
| ABBREVIATIONS AND ACRONYMS | vii |
| ABSTRACT..... | viii |
| CHAPTER ONE: INTRODUCTION..... | 1 |
| 1.1 Background of the Study | 1 |
| 1.1.1 Logistics Outsourcing | 2 |
| 1.1.2 Service Delivery..... | 3 |
| 1.1.3 Humanitarian Organizations in Kenya | 4 |
| 1.2 Research Problem | 6 |
| 1.3 Research Objectives..... | 8 |
| 1.4 Value of Study | 8 |
| CHAPTER TWO: LITERATURE REVIEW | 10 |
| 2.1 Introduction..... | 10 |
| 2.2 Theoretical Background..... | 10 |
| 2.2.1 Transactional Cost Theory | 10 |
| 2.2.2 Adaptive Theory | 11 |
| 2.3 Logistics Outsourcing Strategies | 12 |
| 2.3.1 Transportation | 13 |
| 2.3.2 Procurement..... | 13 |
| 2.3.3 Warehouse Management..... | 14 |
| 2.3.4 Handling..... | 14 |
| 2.3.5 Supporting and Enabling Activities..... | 15 |
| 2.5 Empirical Literature Review | 15 |
| 2.6 Summary of Literature Review and Gaps | 18 |
| 2.7 Conceptual Framework..... | 19 |
| CHAPTER THREE: RESEARCH METHODOLOGY | 20 |
| 3.1 Introduction..... | 20 |
| 3.2 Research Design | 20 |
| 3.3 Target Population | 20 |
| 3.4 Data Collection | 20 |
| 3.5 Data Analysis..... | 21 |
| CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION..... | 23 |
| 4.1 Introduction..... | 23 |

| | |
|--|-----------|
| 4.2 Response Rate | 23 |
| 4.3 Demographic Information..... | 23 |
| 4.3.1 Respondent's Gender | 23 |
| 4.3.2 Level of Education..... | 24 |
| 4.3.3 Years Worked in the Company | 25 |
| 4.4 Extent of employing Logistics Outsourcing Practices | 25 |
| 4.4.1 Transportation | 26 |
| 4.4.2 Warehouse Management | 26 |
| 4.4.3 Procurement and Handling..... | 27 |
| 4.4.4 Support and Enabling Activities..... | 28 |
| 4.5 Extent to which Logistics Outsourcing Practices Impact Service Delivery | 28 |
| 4.5.1 Resource Utilization | 29 |
| 4.5.2 Organizational Flexibility | 29 |
| 4.5.3 Reaction Times | 30 |
| 4.5.4 Availability of Services..... | 30 |
| 4.6 Relationship between Logistics Outsourcing Practices on Service Delivery | 31 |
| 4.7 Challenges in Utilizing Logistics Outsourcing Practices..... | 34 |
| 4.8 Discussion of Findings..... | 35 |
| CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION..... | 38 |
| 5.1 Introduction..... | 38 |
| 5.2 Summary of Findings..... | 38 |
| 5.3 Conclusion | 39 |
| 5.4 Limitations of Study | 40 |
| 5.5 Suggestions for Further Research | 40 |
| REFERENCES | 42 |
| APPENDIX I: QUESTIONNAIRE | 50 |
| APPENDIX II: LIST OF HUMANITARIAN ORGANIZATIONS | 53 |

LIST OF TABLES

| | |
|---|-------------------------------------|
| Table 1: Transportation services | 26 |
| Table 2: Warehouse management | 27 |
| Table 3: Procurement and handling | 27 |
| Table 4: Support and enabling activities | 28 |
| Table 5: Resource utilization | 29 |
| Table 6: Organizational flexibility | 30 |
| Table 7: Reaction times | 30 |
| Table 8: Availability of services | 31 |
| Table 9: The Summary of the Model | Error! Bookmark not defined. |
| Table 10: Analysis of Variance | 32 |
| Table 11: Significance of Regression Coefficients | 33 |

LIST OF FIGURES

| | |
|---|----|
| Figure 1: Conceptual Framework | 19 |
| Figure 2: Respondent's gender | 24 |
| Figure 3: Level of education | 24 |
| Figure 4: Years worked in the company | 25 |

ABBREVIATIONS AND ACRONYMS

| | |
|--------------|--|
| HL | Humanitarian Logistics |
| NGOs | Non-Governmental Organizations |
| LSPs | Logistics Service Providers |
| UN | United Nations |
| UNHRD | United Nations Humanitarian Response Depot |
| USAID | The United States Agency for International Development |
| WFP | World Food Program |
| WVI | World Vision International |
| IT | Information Technology |
| 3PL | Third-party Logistics |
| 4PL | Fourth-party Logistics |
| UNOPS | The UN Office of Project Services |
| HPC | Humanitarian Procurement Centers |

ABSTRACT

The aim of this study was to determine the impact of logistics outsourcing on service delivery among humanitarian organizations in Kenya. The specific objectives were to identify outsourced activities employed by organizations, examine the impact of implementing outsourcing on service delivery, and establish the challenges faced in attaining quality service delivery. Given the variability in effects of logistics outsourcing based on contextual constraints faced by organizations, the problem study was determining the nature of the relationship between outsourcing and service delivery. A cross-sectional survey research design was utilized, targeting the population of 100 leading Kenyan NGOs using a census approach, out of which 71 responded indicating that the response rate was 71%. Self-administered questionnaires were distributed to supply chain managers, collecting data on the extent of different logistics outsourcing practices and perceptions of impacts on aspects like resource utilization, organizational flexibility, reaction times, and service availability. The gathered data was analyzed using descriptive statistics and multiple regression in SPSS. The findings indicated that four logistics outsourcing predictor variables (transportation, warehouse management, procurement/handling, and support/enabling activities) explained 30.4% of variance in service delivery levels. Significantly, the coefficients table findings showed that both transportation and procurement/handling outsourcing had a statistically significant positive relationship with service delivery, with β values of 0.089 and 0.098 respectively. Also, they were the most outsourced logistics practice among the selected NGOs in Kenya. Conversely, the negative correlation between warehouse management outsourcing and outcomes ($p < 0.05$) demonstrates increased outsourcing of warehouses risks compromising service delivery due to lost direct oversight of core storage activities. Additional findings indicated challenges including loss of organizational control from outsourcing, unreliable supplier performance, and capacity constraints inhibiting adequate partnership management.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The 21st century has seen a widespread paradigm change as businesses across all industries work to improve their logistics operations and methods of issue resolution (Masudin et al., 2020). As a result, logistics methods have seen a dramatic shift as businesses work to provide clients with more tailored options for acquiring their goods and services. Since it has been shown that an organization can optimize its performance through keeping up lean operations (Baily, 2005; Masudin et al., 2020), more and more businesses are turning to third-party logistics (3PL) service providers to handle their less crucial tasks. Hence, it is more important than ever to conduct a comprehensive study of outsourcing with the goal of understanding the function of logistics outsourcing operations. As a rule, humanitarian organizations maintain control over all procedures that are essential but not fundamental and outsource all others (McIvor, 2013). As such, to stay relevant in today's dynamic environment, humanitarian firms are turning to outsourcing as a primary approach. According to Chima (2012), Kenyan humanitarian organizations have begun to outsource services and goods to 3PLs because of the advantages that accrue to the organization.

In this study, adaptive theory and transaction cost theory were used to elaborate the connection between logistics outsourcing and delivery of services among Kenyan humanitarian firms. Waidringer proposed the adaptive theory (2001). As a result of utilizing technology to automate, coordinate, optimize, and synchronize organizational operations and processes, adaptive theory in distribution network suggests that the system becomes more dependable (Laaksonen et al., 2020). The automation of logistics operations facilitates cargo tracking and tracing. Installing track devices in delivery

vehicles makes it possible for someone in the office to keep tabs on where the vehicles are at all times. This makes it simple to keep track of the vehicle fleet's location and speed since transport and logistics systems are inherently complex due to the interconnectedness of their networks, processes, and stakeholders (Ochieno & Kwasira, 2020). On the other hand, for logistics and outsourcing decision-making, transaction cost theory is widely recognized which was established by Hobbs in 1996 (Hennart, 2010). Using transaction cost theory, organizations and their service providers can rationalize forming partnerships (Iyer, 2011). In essence, the resource profile of companies tends to impact the amount to which the logistics process is outsourced.

1.1.1 Logistics Outsourcing

According to Stevenson (2010), “outsourcing” was coined from the phrase “outside resourcing,” referring to an organization's strategy of utilizing resources from outside its boundaries. Although the definitions in logistics literature are quite diverse as per Reeves et al. (2010), this study resorted to Lieb et al. (1993) definition terming outsourcing method as a way of companies engages an external firm to conduct some or all of the business's logistical tasks. The scope of the agreement may be restricted for instance, to only warehousing or expansive, including the whole supply chain (Gossler et al., 2020). In short, logistics outsourcing is a contractual supply of logistical processes as services (Razzaque & Sheng, 1998; Gossler et al., 2020).

Logistics has as its major purpose or mission the delivery of goods from the firm to the consumers at the appropriate time, in the proper quantity, and according to the schedule (Masudin et al., 2020). Therefore, logistics outsourcing encompasses tactical operations, strategic, and operational activities such as transportation, warehousing, stock controls and information systems. Humanitarian logistics heavily relies on outsourcing. Aid organizations spend billions of dollars annually on logistical services,

and Logistics Service Providers (LSPs) are vital to any crisis relief effort (Bealt et al., 2016). They are essential at both locally and internationally levels (Gossler et al., 2020). Nonetheless, few firms view their relationships with LSPs as effective (Bealt et al., 2016). Therefore, the logistics outsourcing functions that were focused in this study include; transport management, warehouse management, supporting and enabling activities and procurement and handling of relief materials.

1.1.2 Service Delivery

According to Pule (2014), "service delivery" is a business model in which services are provided by one party and received by another. In addition, it includes all of the back-and-forth that develops between the seller and customer over the duration of the service's provision and purchase. At its core, a service-based company provides customers with an intangible benefit that they would not otherwise be able to obtain (Balcik, 2015). The value provided to the consumer is typically the primary focus of service delivery processes. To achieve this goal, the company's operations and interactions with consumers are governed by a set of standards, principles, rules, and boundaries (Ojasalo & Gronroos, 2017). It is possible for a third party or outsourced provider to have a role in the service delivery process alongside the client and the service provider. Verhoeven and Pieterse (2010) posit that services are intangible business operations that result in no tangible assets and cannot be kept. Thus, the correlation between the quality of services and customer satisfaction underscores the necessity for a customer-centric approach.

Additionally, service delivery is dependent on organizational performance. It involves achieving company goals and objectives, particularly in satisfying consumer, employee, and investor requirements. According to Nyapara (2012), organizations are increasingly prioritizing the delivery of high-quality services as a means to enhance their efficacy,

productivity, and hence profitability. Besides, to thrive and be successful in the present era of globalization, businesses must remain stable and anticipate exceptional service delivery (Francis, 2013). In the current business world, firms view quality service delivery as a means of enhancing business focus, mitigating risks, and establishing a lasting competitive edge. Gaudenzi et al. (2020) notes that the quality of services impacts the company's entire success, encompassing customer satisfaction and staff morale. As a result, humanitarian organizations' competitiveness and long-term viability depend on their capacity to provide high-quality service. Achieving supply chain service delivery goals may be accomplished by continuously improving the capabilities needed to deliver required services and by offering solutions that give competitiveness (Ojasalo & Gronroos, 2017). Nonetheless, this study focused on the degree of resource utilization, organizational flexibility, reaction times, and availability of services as metrics for gauging the quality of services delivered.

1.1.3 Humanitarian Organizations in Kenya

Humanitarian organizations participate in two major categories of activity: (1) relief operations, encompassing the supply of aid to victims of huge disasters, and (2) short-term initiatives that emphasize the delivery of services and goods to reduce the immediate threat to human health and survival (Charles et al., 2010). In various regions of the country, there is an abundance of United Nations (UN)-affiliated organizations and foreign non-governmental organizations (NGOs) engaged in disaster, relief, health, rehabilitation, and development initiatives (Chima, 2012). In Kenya, the humanitarian organizations are either founded in the nation or came from elsewhere and have established independent offices there (as listed in Appendix I). According to their missions and funding levels, these companies give humanitarian help in methods that

alleviate suffering, promote recoveries, and foster long-term development (Njanja & Pellisier, 2011).

Service delivery by humanitarian organizations involves the provision of essential resources such as food, water, medication, shelter, and other necessities to communities affected by disasters. In doing so, these organizations engage in a wide range of activities, including preparedness, planning, procurement, transportation, customs clearance, warehousing, tracking, and tracing (Vachon & Klassen, 2007). According to Njanja and Pellisier (2011) humanitarian organization's development efforts comprise long-term strategies that emphasize self-sufficiency and sustainability of the community. This includes creating permanent and dependable transportation, housing, healthcare, and food (Njanja & Pellisier, 2011).

While some humanitarian organizations exclusively participate in relief work, while others also engage in development work. Many continue to engage in both activities. It is worth noting that Kenya's working environment is highly insecure, susceptible to political influence, and ineffective because of inadequate collaborative planning and inter-organizational coordination (Ruso & Frankel, 2007). Humanitarian organizations must contend with limited infrastructure and the unanticipated relocation of the origins and/or destinations of relief goods (Koh et al., 2013). This is further compounded by the frequent occurrence of disasters in remote places. As a result, humanitarian organizations operating in Kenya are under constant pressure to optimize their logistics management, especially through the strategic use of outsourcing, in order to enhance their service delivery and address the unique challenges posed by the country's operating environment.

1.2 Research Problem

Humanitarian logistics (HL) is hindered by a number of problems, such as the challenges of accessing areas hit by natural disasters owing to unstable post-disaster conditions and inadequate resources, particularly human resources (Koh et al., 2013). Frequently, humanitarian organizations are unsatisfied with the perceived performance and the expenditures associated with it (Schulz, 2009). Some additional hurdles include people service quality, quality of operation services, and technical service quality (Baporikar & Shangheta, 2018; Negi, 2022) According to Beatl et al. (2016), in the humanitarian environment, outsourcing encounters extremely special obstacles. Similarly, diverse cultures and working methods create tensions during collaboration (Negi, 2022). These limitations make it difficult to carry out logistical services efficiently and effectively, as well as to assess the quantity of products that may be stored to aid catastrophe victims.

A study conducted by Njagi (2020) to determine how last mile logistical operations impact the delivery of services in humanitarian firms found that the last mile deliveries, despite mostly being outsourced have a significant positive impact on operational efficiency. Besides, a study conducted by Muathe (2017) to determine the impact of outsourcing to service delivering among telecommunication companies found that the most outsourced services include warehouse management, inventory management, transportation and distribution management. The outsourced services according to the author led to greater profitability, productivity, service delivery efficiency, better cost efficiency and improved customer satisfaction. Muathe (2017) findings coincides with Srabotic and Ruzzier (2012) who concluded that outsourcing to third part service providers leads to more productivity and improved service delivery.

Moreover, humanitarian organizations are increasingly prioritizing the delivery of high-quality services as a means of enhancing their efficiency, and productivity. As such, most of these organizations adopt outsourcing practices because it allows them to focus on their core functions. Schiffing and Piecyk (2014) looked at how humanitarian groups measure service performance from two points of view: the expectations of donors and the direct recipients. A study conducted by Ochieno and Kwasira (2020) found that service delivery in many public institutions is gradual and is further complicated by problems in evaluating outcomes, higher scrutiny from the public and media, a lack of flexibility to operate in an arbitrary way and a necessity for choices to be founded on law. As such, most of these institutions have been able to achieve and identify the necessity to outsource a lot of services so that they may concentrate on their primary activities (Ochieno & Kwasira, 2020). Nonetheless, the unfamiliar complexity of outsourcing agreements hinders service delivery.

Furthermore, Kaluki (2015) noted that the issue with delivery of services among humanitarian organizations in Kenya such as lack of defined performance indicators, lack of coordinated supply chain and personnel. Besides that, Nyamu (2012) found that inaccessibility owing to insufficient transit options, home constraints, demand uncertainty and cost considerations. However, according to Ojwang (2016), efforts have been made to alleviate these issues by making large investments in automation of service delivery. Improved supply chain planning, network, and transport in various activities throughout the world are also highlighted in the USAID report as means to boost service delivery (USAID, 2014). Besides, Onyango (2016) noted that most humanitarian organizations have made efforts towards inventory management. In essence, there is a strong connection between logistics outsourcing and delivery of services. Given the scarcity of studies from the region, this research aims to assess how

outsourcing logistics affects service provision for Kenya's humanitarian organizations. This study aims to answer the question, "To what extent does logistics outsourcing contribute to the service delivery of selected Kenyan Humanitarian Organizations?"

1.3 Research Objectives

The main objective of the study is to determine the impact of logistics outsourcing and service delivery among selected humanitarian organizations in Kenya.

The specific objectives include the following:

- i. To find out the outsourced activities employed by the humanitarian firms.
- ii. To examine the impact of implementing logistics outsourcing on humanitarian firms' service delivery.
- iii. To establish the challenges faced in implementing logistics outsourcing in attaining quality service delivery among the selected humanitarian organizations.

1.4 Value of Study

Among researchers, this research would be of significant use in that it would expand our understanding of how logistics outsourcing may be utilized to improve the service delivery among humanitarian organizations in order to ensure its long-term viability. In the industry, logistics outsourcing is a valuable tool, which may use it to better serve their internal and external stakeholders, as well as improve their logistics function. This study sheds light on the need of adopting outsourcing ways and thereby providing the company a substantial competitive edge.

Moreover, the value of this study is extremely useful to state company management and employees, who would get insight into how their organizations may successfully execute logistics outsourcing to enhance their supply chain activities to meet the

demands of both internal and external stakeholders. Lastly, the findings might be very useful to academics, particularly those who want to do more logistics research. The researcher anticipates that the results add to the existing research in the field of study.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section presents the literature review of logistics outsourcing on service delivery. The first part provides an overview of the theoretical underpinnings supporting the study. In addition, the section covers the findings of other researchers in the topic. The subsequent sections of the chapter encompass the logistics outsourcing practices, empirical literature, summary of the reviews and the conceptual framework.

2.2 Theoretical Background

This study was based on the following theories: Transaction Cost theory, and Adaptive theory.

2.2.1 Transactional Cost Theory

The transaction cost theory is widely recognized as a valuable basis for comprehending logistics and outsourcing decisions. Hobbs invented this concept in 1996. Hobbs argues that logistics outsourcing cuts costs by centralizing order processing and lowering the need for working capital, assets, and overhead. Partnerships between businesses and the providers of their services are rationalized by TCT (Iyer, 2011). Increased asset specificity underpins the hierarchy decisions in accordance with the idea of TCT. Outsourcing choices can be guided by the total amount of transaction costs (Dewsnap & Hart, 2014). When asset specificity and uncertainty are low and transactions are routine, market outsourcing is likely to be the dominant mode of executing deals. Dewsnap and Hart (2014) further indicate that high asset specificity and unpredictability result in transactional challenges for transactions conducted internally inside the company's vertical integration.

TCT is applicable to this study since it provides a valuable framework for understanding the dynamics of logistics outsourcing among humanitarian organizations in Kenya. In the context of this study, TCT contends that these organizations may use logistics outsourcing to streamline order processing, minimize the need for current capital, reduce assets and overhead expenses, and improve efficiency. The theory holds that market outsourcing is the best way to do business when assets are not very unique and deals are normal. On the other hand, when assets are very specific and there is a lot of volatility, organizations are more likely to handle their own processes (Dewsnap & Hart, 2014). However, the assumption of rational decision-making in this theory is a shortcoming, especially given the dynamic and ever-changing nature of humanitarian organizations. Not only that, but humanitarian groups frequently have different interests than businesses, and TCT may not properly represent the particular aims and issues they encounter.

2.2.2 Adaptive Theory

The adaptive theory was developed by Waidringer (2001). Technology's ability to automate, coordinate, and synchronize company activities, systems, and processes is central to the Adaptive Theory of the supply chain. By streamlining logistics processes, it is easier to keep tabs on shipments in transit (Laaksonen et al., 2020). To do this, tracking devices are installed in the delivery vehicles, allowing office workers to follow their whereabouts at all times. This facilitates easy fleet tracking, providing real-time visibility into vehicle whereabouts and speeds. In his paper, Waidringer (2001) defined Adaptive theory as: "*The nature of the network, process, and stakeholders determines the complexity of transportation and logistics systems.*" Pointedly, this theory makes it possible to make control methods that force the information system to meet economic, social, and environmental needs (Ochieno & Kwasira, 2020). When all of the parts are

put together, they make it possible to adopt solutions for car management, logistics operations, and mobile labor management that link the distribution network to business IT systems.

Additionally, adaptive theory is significant to this study because it offers a framework for understanding how technology-driven solutions can be employed to optimize logistics and service delivery within humanitarian organizations operating in Kenya. The theory's emphasis on automating and synchronizing business processes, in particular, is in line with the aims of humanitarian groups looking to improve the effectiveness of their logistical operations. These organizations may expedite their supply chain procedures, enhance shipment tracking, and guarantee prompt delivery of essential materials during humanitarian crises by deploying tracking devices and real-time monitoring systems (Yang et al., 2020). While the adaptive theory provides insightful information on utilizing technology for supply chain optimization, it is important to take into account its limitations. One drawback of the theory is that it could not adequately address the special difficulties encountered by humanitarian groups, which frequently work in unexpected and resource-constrained circumstances (Schiffing et al., 2022). Furthermore, the theory's emphasis on technological solutions could not completely take into account the contextual and human aspects that affect decisions on logistics outsourcing and service delivery inside humanitarian organizations.

2.3 Logistics Outsourcing Strategies

Procurement, information systems, and transportation are the most crucial and frequently outsourced sectors in humanitarian organizations because of the nature of their logistical requirements (Balcik et al., 2010). This review concentrated on these logistics outsourcing strategies.

2.3.1 Transportation

Transportation is the area that outsourcing literature currently covers the most. Though it is not feasible to quantify the scope of outsourcing in this field, the multiple cases provided indicate that it is a frequent practice. This is consistent with Bealt et al. (2016), who identified this task as the one most suitable for outsourcing. Similarly, the relevance of mathematical models in outsourcing transportation choices (Wisetjindawat et al., 2014) might be understood in this manner. Regardless, transportation outsourcing varies greatly amongst humanitarian organizations. For instance, World Vision International (WVI) has no internal transportation capability whereas World Food Programme (WFP) runs a substantial number of its own vehicles (WFP, 2017). Rarely is it specified in the literature if outsourcing transportation entails merely the physical implementation of the transport or also the accompanying planning, administration, and regulating. Nonetheless, it is likely that the majority of them deal with the physical implementation of transportation. According to Schulz and Blecken (2010), service providers like United Nations Humanitarian Response Depot (UNHRD) offer to come up with framework agreements with transporters in place of humanitarian organizations for distributions from one of its warehouses.

2.3.2 Procurement

On a worldwide scale, humanitarian organizations utilize the procurement services provided by organizations such as the UNHRD, the UN Office of Project Services (UNOPS), the Humanitarian Procurement Centers (HPC), and UNICEF (Dufour et al., 2018). However, contracting local procurement is possible when an overarching organization manages the interaction with regional vendors (Balcik et al., 2010). WFP's national food pipeline in Sudan is one such initiative (Jahre et al., 2010). Purchasing activities, including supplier sourcing and contract negotiations, are frequently

outsourced by businesses. According to Schulz and Blecken (2010), the primary advantage of outsourcing procurement to organizations like UNHRD, RLU, or HPCs is the ability to get lower prices through longer-term contracts with established companies. Less significant is the lowering of internal costs: despite the fact that some organizations have UNHRD handle their procurement, they still maintain duplicate administrative structures.

2.3.3 Warehouse Management

Keeping raw materials, semi-finished items, and completed goods for extended periods of time (Coyle, 2003) is the primary function of a warehouse. Outsourced logistics companies aim to give the outsourcing company with the three core functions of a warehouse, which Lambert & Stock (2003) identify as transport, storage, and communication. With the goal of facilitating the definition, administration, and operation of inventory activities, a properly integrated warehousing system is often designed for side loading in lower quantities and focuses largely on proper handling of goods and inventory security (Ronald, 2014). For this reason, warehousing management is crucial to the supply chain as a whole, since it oversees not only the storage and control of the movement of things within a warehouse, but also the execution of associated tasks including distribution, unloading, storing, and choosing.

2.3.4 Handling

There are several examples of humanitarian organizations outsourcing administrative tasks. According to Bealt et al., customs clearance is one of the operations that presents itself well to outsourcing (2016). While UNHRD provides to manage export and import processes for its clients (Balcik et al., 2010), it outsources a portion of its own customs processing (Schulz, 2009). Certainly, business suppliers, particularly freight

forwarders, are also involved with relief organizations (Vega & Roussat, 2015). In addition, the literature provides evidence of outsourcing the actual handling of items (Vega & Roussat, 2015). Besides that, UNHRD manages items in staging zones prior to the entry point for its clients (Dufour et al., 2018). Besides, it outsources product handling at different airports to private companies (Schulz, 2009). Therefore, handling is a critical outsourcing component in quality service delivery.

2.3.5 Supporting and Enabling Activities

Humanitarian groups sometimes contract out for more than simply the most fundamental logistical chores. Partnerships, according to Nurmala et al. (2017), can include "generic support roles," however other writers provide more concrete examples. The military offers security and communication assistance to relief groups, as acknowledged by Balcik et al. (2010). Bealt et al. (2016) argue that information technology should not be outsourced but rather kept in-house. The widespread availability of specialist service providers, however, plus the inherent lack of competencies in humanitarian organizations make outsourcing a viable option for many technology-related service types. Both nonprofit and for-profit LSPs provide GPS tracking services (Delmonteil & Rancourt, 2017). As an enabling service, 4PLs or the Logistics Cluster may provide access to specialized information like customs processes (Abidi et al., 2015; Jahre et al., 2010). Finally, 4PLs may provide supply chain redesign as a comprehensive strategic solution including all logistical duties.

2.5 Empirical Literature Review

This section examines and summarizes prior research in the field of logistics outsourcing. In particular, it examines what scholars have discovered about the impact of strategies on service delivery and other related subjects. Services such as packaging,

inventory management, and final delivery to customers are all part of the 3PL package (Ahmadi, Seifi, & Tootooni, 2015). By eliminating surplus inventory through cross docking, businesses may improve their response services for humanitarian groups. Providers of logistic services also serve as facilitators by enhancing the capabilities of humanitarian groups (Ahmadi et al., 2015). In addition to assisting humanitarian groups in reacting more quickly to unique response needs, logistics providers also offer additional services on top of standard services. Moreover, Gossler et al. (2020) argue that outsourcing logistics is crucial for disaster response. Humanitarian groups spend billions of dollars annually on logistical services. Unfortunately, the idea of outsourcing has not been fully established in the literature on humanitarian operations, resulting in an incomplete understanding of the practice.

Moreover, Pazirandeh and Herlin (2014) and Gil and McNeil (2015) demonstrate unequivocally that there are variations in how firms outsource. In the literature, several probable causes for these disparities are offered. In addition to sector involvement (government or non-government), size is the most often stated variable (Bealt et al., 2016). While both large companies like WFP and small organizations (Kumar et al., 2009) outsource, small agencies have unique advantages and disadvantages. Besides that, small organizations may gain more from outsourcing (Pazirandeh & Herlin, 2014) and even rely on the attainable cost savings. Besides, they are concerned that outsourcing might make it more difficult for them to differentiate themselves from other organizations, which might result in competitive disadvantages. In addition to size, disparities in the organization's logistical competence (expertise, infrastructure, etc.) are frequently cited as a rationale for disparate outsourcing strategies (Wisetjindawat et al., 2014). In addition, location, mandate, finance structure, and organizational culture (Paul

& Wang, 2015) are presented as additional intra-organizational variables having importance for outsourcing.

Furthermore, In the context of Indonesian humanitarian logistics services, Masudin et al. (2020) highlight the influence of logistical service quality on client loyalty and satisfaction, with client trust acting as a mediating element. This assessment categorizes service quality into (1) human service quality, (2) technological service quality and (3) operation service quality. This suggests that clients in the humanitarian logistics industry do not care about service characteristics like logistics structure, a system for completing orders, tracking information technology given and operation hours. Nonetheless, the research found that while customer satisfaction promotes customer loyalty, human services have a positive impact on customer satisfaction. Thus, service providers want staff who are adept at performing their responsibilities. A competent recruiting and training procedure might aid in the development of skilled staff. Boosting customer satisfaction implies that service providers should improve the varied quality of technical services in addition to delivering on time and maintaining a physical presence in each location.

Onyango (2019) sought to investigate the implications of outsourcing strategies on NGOs' service delivery. The findings indicate that majority of service delivery were attributable to outsourcing decision making, contract management and supplier selection, while the remaining were attributable to other variables. This is because contract management allows for better delivery by outlining the standards for the inputs and outputs that both parties must provide in order to carry out the outsourced task. It was shown that better outsourcing choices, choosing suppliers, and managing contracts significantly improved service delivery. Before opting to outsource products and services, not just IT, the assessment suggests that the management of the vast majority

of NGOs should constantly consider the opinions of staff members and conduct proper planning. In addition, the study suggests that NGOs must always stick to the selection criteria when choosing an IT supplier and evaluate the dependability of possible suppliers who are able and qualified to provide the specified goods and services.

Last, Kunz et al. (2017) reported that material and supply logistics account for nearly 80percent of relief expenditures. Some academics concur with this supposition, finding that logistical expenses were the single most significant factor for many aid agencies. Further, Baporikar and Shangheta (2018) argue that as the incidence of natural disasters rises, humanitarian organizations demand cost-effective and adaptable logistic methods to connect catastrophe recipients with funders. Ineffective and inefficient service delivery to the impacted areas is a result of significant obstacles such as the inability to properly acquire relief supplies and resources, transportation concerns, and difficulty in assessing early assistance requirements. Nonetheless, it is remarkable, according to Christopher and Tatham (2011), that the issues of humanitarian logistics have not been taken seriously by the academic community as a whole until recently. Therefore, according Van Wassenhove (2006), logistics is a crucial aspect of every disaster relief effort and distinguishes a successful operation from an unsuccessful one.

2.6 Summary of Literature Review and Gaps

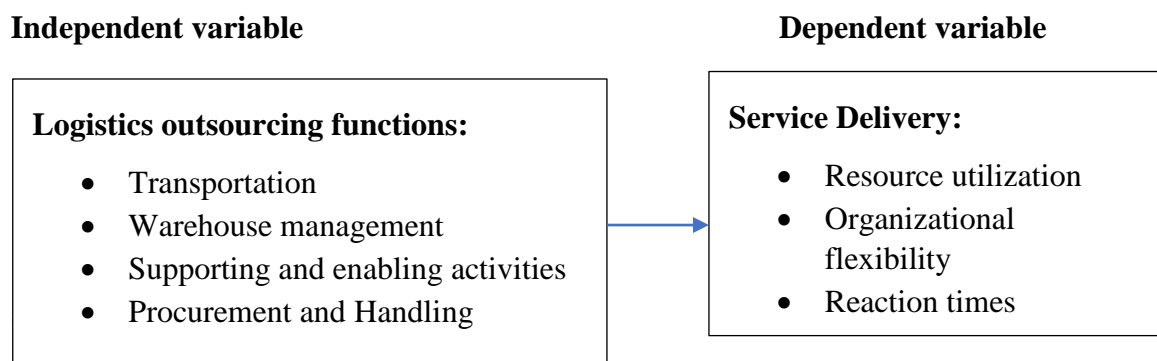
Outsourcing has a significant impact on humanitarian logistics service delivery since it may enhance the efficacy and efficiency of aid operations. In addition, aid agencies seek direction on how to offset the practice's inherent drawbacks. However, the scholarly literature on the subject is highly scattered. Publications allude to the notion using a variety of terms, including "coordination with LSPs," "partnerships with LSPs," and "cooperation with LSPs." Besides, the literature review has shown that logistics outsourcing is anticipated to rise significantly in the future, even though it is

currently prevalent. Often, aid organizations contract with commercial, humanitarian, or military service providers to carry out logistics tasks like procurement, transportation, and warehousing. Despite this widespread practice, several significant questions remain unanswered to this day. For instance, further study is required addressing the architecture of cross-sector outsourcing agreements and the joint outsourcing activities of humanitarian organizations in connection with quality-of-service delivery. In tackling these issues, research should provide additional explanatory and prescriptive models and widen the empirical base of the discipline.

2.7 Conceptual Framework

The independent variables of this study are derived from logistics outsourcing strategies and the dependent variable is the quality-of-service delivery among humanitarian organizations in Kenya.

Figure 1: Conceptual Framework



Source: Author, (2023)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This section delves into data collection and analysis for assessing the impact of logistics outsourcing on service delivery of humanitarian organizations in Kenya.

3.2 Research Design

Cross-sectional research design was used in this study to allow the researcher to examine service delivery measurement indicators in humanitarian organizations and the impact of outsourcing. Cross sectional research design is an appropriate method for this study since it allows one to compare various variables at the same time (Fisher, 2017).

3.3 Population of Study

The population for this study includes the leading international and national NGOs as shown in appendix II. This implies that a census approach was used where all 100 leading international and national NGOs were targeted. The study's choice of focusing on leading NGOs is influenced by various factors, such as their size, impact, scope of operations, and relevance to the research objectives. These organizations likely play a significant role in humanitarian efforts within Kenya, which makes them important subjects of investigation.

3.4 Data Collection

Structured questionnaires (as shown in appendix I) were utilized to obtain primary data from the selected NGOs and INGOs, which were administered through emails and physical interviews. Questionnaires offer a structured approach to data collection, ensuring all participants receive the same set of questions. This standardized approach reduces potential bias and variations leading to higher reliability of data collected

(Bryman & Bell, 2018). As such, the questionnaire for this study contains a mix of both open-ended and closed-ended questions. Closed-ended questions were designed with a 5-point Likert scale format, allowing for quantitative analysis of responses. These questions were used to assess specific aspects related to logistics outsourcing and service delivery. Open-ended questions within the questionnaire were used to gather qualitative data. These questions encouraged respondents to provide detailed insights, opinions, and experiences related to logistics outsourcing and service delivery. As such, 100 questionnaires were administered. The target respondent is the supply chain manager from each organization because they possess relevant expertise of the organization's supply chain. The questionnaire also was segmented into four sections labeled A, B, C, and D, each of which corresponded to a different research objective.

3.5 Data Analysis

The data analysis procedure started by organizing the questionnaire to evaluate the ones that are filled correctly and were considered for analysis using Microsoft Excel. To analyze the open-ended questions, a qualitative data analysis approach was employed. Responses were transcribed, coded, and categorized into themes. Common themes and patterns were identified to gain a deeper understanding of the qualitative data. After organizing, the data was coded into SPSS and then inferential and descriptive analyses were performed. Inferential analysis uses regression method while the descriptive analysis includes frequency distributions and percentages, mean scores as well as standard deviations. Cross tabulations were used to evaluate open ended responses from these humanitarian organizations' supply chain managers. The multiple regression model that was used is shown below:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where;

X_1 = Transportation

X_2 = Warehouse management

X_3 = Supporting and enabling activities

X_4 = Procurement and Handling

α = Constant Term

$\beta_{1,2,3,4,5}$ = Beta coefficients

X = Service delivery

ε = Error

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This section presents the data analysis, results and discussion from the study.

4.2 Response Rate

Out of 100 questionnaires sent, 71 were filled indicating that the response rate was 71%. As response rate of more than 50% as highlighted by Mugenda and Mugenda (2003) is adequate for analysis

4.3 Demographic Information

Key demographic details about the respondents who participated in the survey as provided. Capturing characteristics like gender, education level, and years of experience working in the sector helps contextualize the results and provides critical background information.

4.3.1 Respondent's Gender

The gender of respondents was split fairly evenly, with males making up a slight minority at 46% compared to 54% for females as shown in the figure below. The perspectives captured in the survey therefore incorporated views from both genders working in the humanitarian organizations.

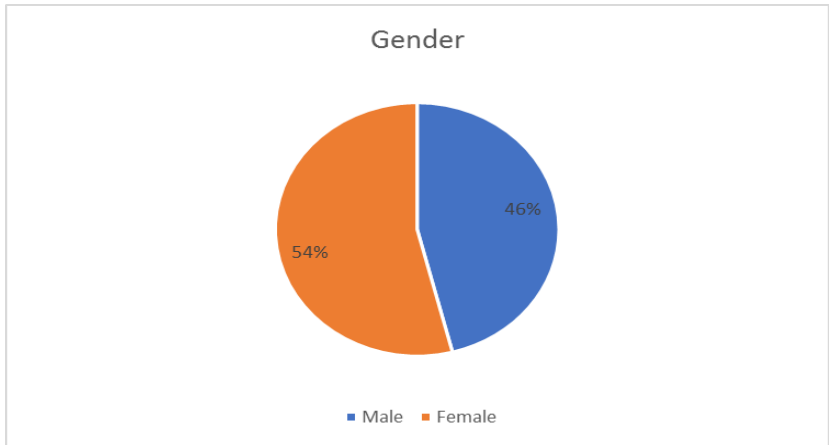


Figure 2: Respondent's gender

4.3.2 Level of Education

In terms of respondents' education levels, 6% held a diploma while the majority had an undergraduate degree or higher. Postgraduate qualifications like a master's degree were most prevalent at 38% and 27% respectively. Only 4% of respondents had obtained a doctoral degree as shown in the figure below. In general, the respondents were highly educated individuals.

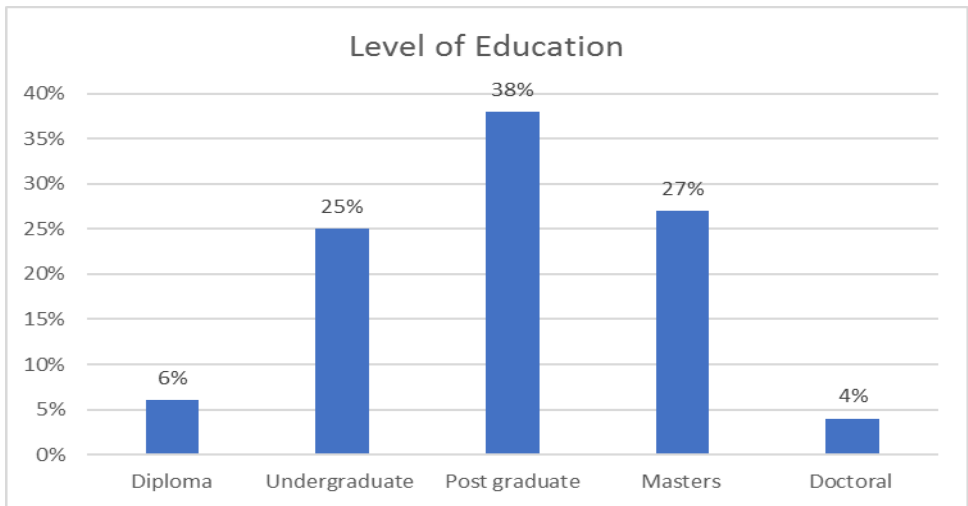


Figure 3: Level of education

4.3.3 Years Worked in the Company

When considering years of experience working for their organization, 39% of respondents had less than 5 years tenure. The huge percentage of respondents, 43%, had between 5 to 10 years' experience. The remaining 18% had worked over 10 years for their company as shown in the figure below. As such, most respondents had 5+ years of experience, demonstrating they had substantial familiarity and understanding of their organization's logistics outsourcing practices over time. Their views were informed by significant professional exposure.

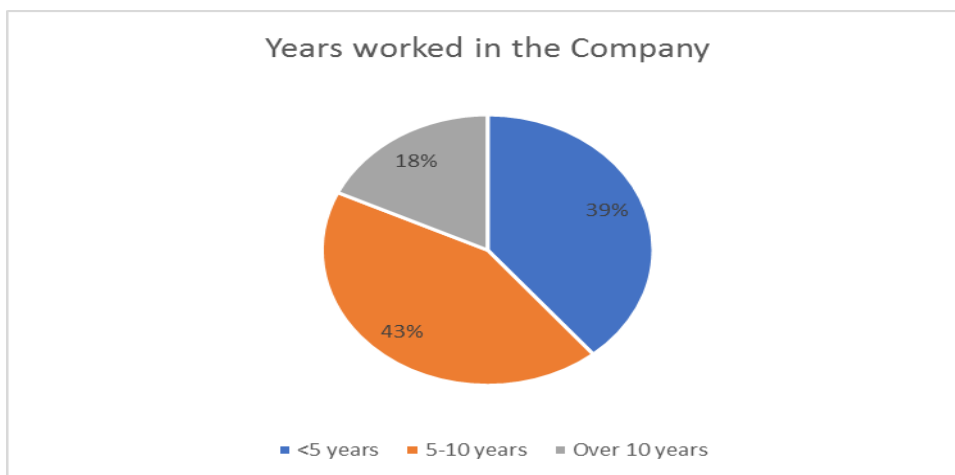


Figure 4: Years worked in the company

4.4 Extent of employing Logistics Outsourcing Practices

The extent to which the respondent organizations employ key logistics outsourcing practices was examined by analyzing data on the outsourcing of transportation, warehouse management, procurement and handling, as well as support/enabling activities. A 5-point Likert scale ranging from strongly disagree to strongly agree was used to measure respondents' level of agreement with statements relating to the outsourcing of each logistics function by their organization. Descriptive statistics including the mean, standard deviation and count were calculated for each statement

using SPSS. The mean indicates the average level of agreement across respondents, whereas standard deviation demonstrates the spread of responses. This provides a quantitative understanding of the prevalence and perceived impact of outsourcing for various logistics activities. Analyzing the data in this manner allows clear comparisons both within categories and across the different outsourced functions addressed in the survey.

4.4.1 Transportation

For transportation services as shown in the table below, the mean score was 4.30 indicating respondents on average "slightly agreed" their organizations outsourced this function. Outsourcing transportation was perceived to have a greater impact, with a mean of 4.49 "slightly agreeing" it positively impacted operational efficiency. However, for cost savings the mean was lower at 3.85, reflecting a more neutral view. The stronger agreement around efficiency versus cost suggests outsourcing transportation principally offered non-financial benefits according to respondents.

Table 1: Transportation services

| Descriptive Statistics | | | |
|--|----|------|----------------|
| | N | Mean | Std. Deviation |
| The organization outsource transportation services (e.g., transportation of relief materials, goods, or personnel) | 71 | 4.30 | .835 |
| Outsourcing transportation has impacted your organization's operational efficiency | 71 | 4.49 | .673 |
| There has been cost savings through transportation outsourcing | 71 | 3.85 | 1.078 |
| Valid N (listwise) | 71 | | |

4.4.2 Warehouse Management

Warehouse management and inventory control as shown in the table below saw lower levels of outsourcing than transportation, with a mean score of 3.86 signaling neutral

agreement. Improved inventory control and order fulfillment from outsourcing were also viewed relatively neutrally based on means of 4.06 and 3.90 respectively. These more modest values indicate outsourcing did not seem to profoundly alter warehousing functions compared to other logistics areas.

Table 2: Warehouse management

| Descriptive Statistics | | | |
|---|----|------|----------------|
| | N | Mean | Std. Deviation |
| The organization outsources warehouse management and inventory control | 71 | 3.86 | 1.060 |
| Outsourcing has improved inventory control in the organization | 71 | 4.06 | 1.040 |
| Outsourcing warehouse management has enhanced order fulfillment for your organization | 71 | 3.90 | .988 |
| Valid N (listwise) | 71 | | |

4.4.3 Procurement and Handling

With a mean of 3.38 as shown in the table below, procurement and handling of supplies had the lowest mean score, demonstrating neutral outsourcing according to responses. However, respondents slightly agreed (mean 4.01) that cost reduction was achieved. This implies procurement outsourcing provided specific economic advantages rather than significantly changing the activity overall.

Table 3: Procurement and handling

| Descriptive Statistics | | | |
|---|----|------|----------------|
| | N | Mean | Std. Deviation |
| The organization engages in outsourcing procurement and handling of relief materials and supplies | 71 | 3.38 | 1.223 |
| Outsourcing has positively impacted the organization's procurement cycle times | 71 | 3.75 | 1.092 |
| Outsourcing procurement and handling have resulted in cost reduction for your organization | 71 | 4.01 | .993 |
| Valid N (listwise) | 71 | | |

4.4.4 Support and Enabling Activities

A mean score of 3.42 showed neutral outsourcing of support/enabling logistics functions. Outsourcing was perceived to slightly contribute to strategy (3.73) and competencies (3.86) based on means around 3.75. However, with a mean of 4.07, data privacy concerns when outsourcing received the strongest level of agreement. This highlights an important risk that may caution greater outsourcing of information-based logistics work.

Table 4: Support and enabling activities

| Descriptive Statistics | | | |
|---|----|------|----------------|
| | N | Mean | Std. Deviation |
| The organization outsource support and enabling activities related to logistics, such as IT, customer service, or data management | 71 | 3.42 | 1.338 |
| Outsourcing support and enabling activities has contributed to a more focused organizational strategy | 71 | 3.73 | 1.146 |
| Outsourcing support and enabling activities has resulted in improvements in your organization's core competencies | 71 | 3.86 | .833 |
| There are huge concerns about data privacy in outsourcing | 71 | 4.07 | .884 |
| Valid N (listwise) | 71 | | |

4.5 Extent to which Logistics Outsourcing Practices Impact Service Delivery

The extent to which logistics outsourcing impacts key aspects relating to service delivery within the respondent organizations was examined. A 5-point Likert scale was again employed to capture perceptions of outsourcing's effect on dimensions such as resource utilization, organizational flexibility, reaction times, and availability of services. Through descriptive statistical analysis including the mean and standard deviation, this part aims to provide quantitative insight into how outsourcing influences critical service delivery metrics. Examining impacts across the different domains allows for identification of areas where value is accrued from outsourcing, as well as any

challenges. The analysis in this section evaluates the degree to which logistics outsourcing achieves the ultimate goal of enhanced end-user service provision for humanitarian organizations.

4.5.1 Resource Utilization

The mean scores for this section as depicted in the table below indicated respondents strongly agreed that outsourcing resulted in more efficient resource usage (4.48) and improvement in resource allocation (4.45). However, its impact on reducing waste was more neutral (3.35). This suggests outsourcing positively influenced resource management practices but not as much in eliminating inefficiency.

Table 5: Resource utilization

| Descriptive Statistics | | | |
|---|----|------|----------------|
| | N | Mean | Std. Deviation |
| The impact of logistics outsourcing on efficient resource usage is evident. | 71 | 4.48 | .629 |
| Outsourcing has resulted in an improvement in resource allocation. | 71 | 4.45 | 1.011 |
| Outsourcing contributes to the reduction of waste | 71 | 3.35 | 1.084 |
| Valid N (listwise) | 71 | | |

4.5.2 Organizational Flexibility

All aspects of flexibility received mean scores above 4.27 as depicted in the table below, demonstrating strong agreement from respondents that outsourcing significantly enhanced this dimension of service delivery. Adaptability and ability to adapt to changing demands scored only slightly lower at 4.34 and 4.27 respectively, while improving agility during disruptions saw the highest agreement level at 4.83. Somewhat incongruously, risks to organizational control from outsourcing were viewed more neutrally with a mean of just 3.65. In general, flexibility was largely perceived as a major benefit of the practices.

Table 6: Organizational flexibility

| Descriptive Statistics | | | |
|--|----|------|----------------|
| | N | Mean | Std. Deviation |
| Enhancements in organizational flexibility have been observed due to outsourcing. | 71 | 4.34 | .774 |
| The organization has shown the ability to adapt to changing demands through outsourcing. | 71 | 4.27 | .894 |
| Outsourcing has improved agility in responding to disruptions. | 71 | 4.83 | .377 |
| There are risks associated with reduced control due to outsourcing. | 71 | 3.65 | 1.070 |
| Valid N (listwise) | 71 | | |

4.5.3 Reaction Times

Reaction time statements attracted the highest agreement levels across all sections, with means over 4.50 for each as depicted in the table below. This indicates respondents overwhelmingly believed outsourcing greatly accelerated timely response, from stakeholders and to emergencies alike. The high scores strongly validate outsourcing's positive impact on agility and crisis responsiveness for humanitarian organizations.

Table 7: Reaction times

| Descriptive Statistics | | | |
|--|----|------|----------------|
| | N | Mean | Std. Deviation |
| Outsourcing has influenced quicker reaction times. | 71 | 4.51 | .504 |
| Response time to stakeholders has been reduced due to outsourcing. | 71 | 4.35 | .719 |
| Outsourcing has improved responsiveness to emergencies. | 71 | 4.55 | .501 |
| Valid N (listwise) | 71 | | |

4.5.4 Availability of Services

While service availability and meeting demands saw slightly lower means of 4.27 and 4.25 as shown in the table below, consistency received the top rating of 4.73,

underscoring the high value outsourcing holds for reliable operations. Some uncertainty was evident however with challenges to continuity attracting a neutral 3.59 mean. Yet outcomes were assessed as skewing heavily towards enhanced and predictable service quality generally.

Table 8: Availability of services

| Descriptive Statistics | | | |
|--|----|------|----------------|
| | N | Mean | Std. Deviation |
| The effect of outsourcing on service availability is noteworthy. | 71 | 4.27 | .716 |
| Outsourcing has enhanced service consistency. | 71 | 4.73 | .446 |
| Outsourcing contributes to meeting service demands. | 71 | 4.25 | .751 |
| There are potential challenges to service continuity due to outsourcing. | 71 | 3.59 | 1.116 |
| Valid N (listwise) | 71 | | |

4.6 Relationship between Logistics Outsourcing Practices on Service Delivery

The relationship between different logistics outsourcing functions and their impact on service delivery was evaluated. A multiple linear regression was conducted where the predictor variables were the four logistics activities of transportation, warehouse management, procurement/handling and support/enabling activities. Service delivery was the outcome variable.

4.6.1 Model Summary

The model summary table shown below provides key details about the regression model. The R value of 0.551 indicates a moderate level of correlation between the predictor and outcome variables. The R Square value of 0.304 means 30.4% of the variance in service delivery is explained by the four logistics outsourcing predictors together. The Adjusted R Square accounts for the number of predictors and sample size.

Table 9 Model Summary

| Model | R | R Square | Adjusted Square | R | Std. Error of the Estimate |
|-------|-------------------|----------|-----------------|---|----------------------------|
| 1 | .551 ^a | .304 | .262 | | .111 |

a. Predictors: (Constant), Support and Enabling Activities, Procurement and Handling, Transportation, Warehouse Management

4.6.2 Analysis of Variance

The ANOVA table tests whether the model is statistically significant by analyzing the regression residuals. With Sig. value of 0.000, which is less than 0.05, meaning there is over 95% confidence that the full model predicts the dependent variable significantly better than could be expected by chance.

Table 9: ANOVA^a

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|-------|-------------------|
| 1 | Regression | .354 | 4 | .089 | 7.199 | .000 ^b |
| | Residual | .813 | 66 | .012 | | |
| | Total | 1.167 | 70 | | | |

a. Dependent Variable: Service delivery

b. Predictors: (Constant), Support and Enabling Activities, Procurement and Handling, Transportation, Warehouse Management

4.6.3 Regression Coefficient

The Coefficients table provides valuable information about each predictor variable and its relationship with the outcome variable, service delivery.

Table 10: Significance of Regression Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|-------|---------------------------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 3.718 | .147 | | 25.302 | .000 |
| | Transportation | .089 | .026 | .544 | 3.446 | .001 |
| | Warehouse Management | -.069 | .027 | -.417 | -2.571 | .012 |
| | Procurement and Handling | .098 | .035 | .362 | 2.785 | .007 |
| | Support and Enabling Activities | .019 | .033 | .072 | .577 | .566 |

a. Dependent Variable: Service delivery

The following can be deduced from the table above. The coefficient results show that outsourcing transportation has a statistically significant positive relationship with service delivery levels. With a beta value of 0.089 and extremely low significance of 0.001, greater outsourcing of transportation functions is strongly correlated with improved delivery of services. Respondents can be over 99% confident this relationship is valid rather than occurring by chance. This indicates transportation outsourcing enhances organizations' ability to effectively provide services.

For warehouse management, the negative beta value of -0.069 signifies increased outsourcing relates to decreased service delivery, holding other predictors constant. This relationship also achieves statistical significance below 0.05, with a value of 0.012.

Therefore, respondents can be over 95% certain that higher reliance on outsourced warehouse operations tends to compromise the quality of services provided.

The positive 0.098 coefficient for procurement/handling outsourcing demonstrates a significant association with better end services at the 99% confidence level (sig. 0.007). Namely, higher outsourcing in this area correlates with organizations achieving better service delivery outcomes on average, given other factors in the model. Differing from the other predictors, the 0.566 significance for support/enabling activities exceeds the probability threshold ($p > 0.05$). As such, the regression analysis does not produce compelling evidence of a clear relationship between outsourcing this function and service delivery levels indicating that it is not significant. Therefore, from the multiple regression model; $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$, it becomes;

$$Y = 3.718 + 0.089(\text{Transportation}) - 0.069(\text{Warehouse management}) + 0.098(\text{Procurement and handling}) + \epsilon$$

In general, the regression analysis demonstrates that while all four logistics outsourcing practices are part of the model, only transportation, warehouse management and procurement/handling individually impact service delivery outcomes in the respondent organizations. This provides useful insight into which activities' outsourcing reaps the most benefits for humanitarian organizations.

4.7 Challenges in Utilizing Logistics Outsourcing Practices

The respondents indicated that the organizations they represented faced several significant challenges when outsourcing their logistics functions. A common issue mentioned was the loss of control over logistics operations and information when utilizing third party vendors. Related to this was the difficulty of maintaining confidentiality when sensitive data had to be shared with suppliers. Others experienced

unreliable performance from outsourced vendors in meeting requirements and service level agreements, according to the respondents. Supplier capacity constraints and the need for close management of outsourcers to ensure standards were upheld posed challenges as well, from the respondents' perspectives. Increased costs compared to internal logistics management was another hurdle reported by respondents. Respondents also indicated their organizations faced disruptions from regulatory changes, economic fluctuations in currency or fuel prices, infrastructure issues, long lead times and security concerns. Maintaining oversight of outsourced logistics operations while still achieving cost savings and capitalizing on vendor expertise seemed to be an obstacle the respondents noted was faced across various organizations.

4.8 Discussion of Findings

The study findings offer valuable contributions to understanding logistics practices within the Kenyan humanitarian sector. By quantifying the extent and perceived impacts of outsourcing activities, it provides empirical evidence to complement existing conceptual literature. Several findings aligned with prior research while also presenting important aspects to advance knowledge on this important subject. From the findings, transportation services and procurement or handling were the most outsourced services. As such, the high levels of transportation and procurement/handling outsourcing corresponds with previous studies indicating these functions experience significant outsourcing due to capacity limitations facing organizations (Gossler et al., 2020; Vega & Roussat, 2015). The study findings validate such patterns in the local Kenyan context. Having quantifiable metrics on the prevalence of different outsourced activities offers a baseline for tracking changes over time and effects of potential interventions.

Perhaps most significantly, positive correlations were observed between transportation and procurement/handling outsourcing with key performance indicators like efficiency,

cost savings, and strategic resource utilization. This aligns with literature emphasizing how utilizing specialized third-party expertise and resources can enhance operational capabilities and outcomes during disaster response (Ahmadi et al., 2015; Negi, 2022). Being able to quantify relationship strengths provides evidence to reinforce policy and partnership approaches leveraging outsourcing where most impactful.

However, the study also presented an unexpected finding - warehouse management outsourcing negatively correlated with service quality according to respondents. This relationship warrants further exploration, as literature generally portrays warehousing as commonly outsourced given infrastructure barriers (Kaluki, 2015). This relationship may stem from the dynamic operational challenges faced - resource constraints inhibited adequate due diligence and collaborative management, so losing direct oversight of core warehouse activities like inventory visibility, storage conditions and order fulfillment could more severely impact service levels when relying on external partners versus in-house staff under conditions of disruption. The findings suggest that while outsourcing infrastructure-heavy functions aims to overcome resource barriers, actually doing so effectively within the constraints of the Kenyan humanitarian context remains difficult to achieve in practice without investments in resilient collaboration approaches, integrated technologies, and personnel training to better coordinate activities, resolve issues, and maintain end-to-end supply chain visibility and consistent supplier performance despite capacity limitations - all of which are foundational to timely aid delivery.

On the other hand, the study highlighted key issues organizations encounter when outsourcing logistics functions. Loss of control over operations and information security were commonly mentioned challenges. As the study emphasized, confidentiality and oversight are understandably major concerns when sensitive

activities and data are handled externally. Previous studies have likewise underscored such governance risks nonprofit partners face (Vega & Roussat 2015; Gossler et al., 2020). Maintaining reliability of third-party vendors to consistently meet requirements and service level commitments was another widespread obstacle identified. The study highlighted capacity constraints suppliers faced, exacerbating performance variability. Literature echoes how flexibility and responsiveness during crisis response hinge on reliable partner capacities, posing ongoing challenges for the sector (Schiffling et al., 2022; Negi, 2022). Mitigation requires close collaborative management, yet resource limitations were also cited as inhibiting due diligence. While outsourcing aims to capitalize on specialized expertise, human and technical infrastructure barriers within Kenya posed capacity constraints inhibiting optimal management and oversight. Transportation networks, inventory visibility tools, and skilled personnel shortages hampered coordination between organizations and suppliers.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter presents a summary of the key findings from the study, draws conclusions and outlines recommendations and limitations.

5.2 Summary of Findings

The study aimed to investigate the impact of various logistics outsourcing practices on service delivery among humanitarian organizations in Kenya. A survey was distributed to 100 supply chain managers and a total of 71 complete responses were received, representing a 71% response rate. The study collected data on the extent to which organizations engaged in outsourcing key logistics activities like transportation, warehouse management, procurement/handling, and support/enabling functions. It also gathered perspectives on how outsourcing influenced important aspects of service delivery such as resource utilization, organizational flexibility, reaction times, and availability of services.

The model summary table showed that the four logistics outsourcing predictor variables - transportation, warehouse management, procurement/handling, and support/enabling activities - together explained 30.4% of the variance in the outcome variable of service delivery. This indicates that while the predictor variables are statistically significant, there are other factors not captured in the model that also influence levels of service delivery.

From the regression coefficient table, transportation and procurement/handling outsourcing had a statistically significant positive relationship with service delivery levels, with β values of 0.089 and 0.098 respectively ($p < 0.01$). Meanwhile, warehouse

management outsourcing had a significant negative correlation with a β value of -0.069 ($p < 0.05$). The positive relationships signify that higher reliance on outsourced transportation and procurement functions enhances organizations' operational effectiveness and ability to provide quality services to beneficiaries. Conversely, greater outsourcing of warehouse operations was correlated with reduced service delivery outcomes.

5.3 Conclusion

Several key conclusions can be drawn from the results of this study. The findings indicate that not all logistics outsourcing practices yield equal benefits or negatively impact service delivery levels. While outsourcing transportation and procurement functions showed clear positive relationships with improved operational effectiveness and quality service provision, greater reliance on outsourced warehouse management was correlated with reduced outcomes. This suggests that certain activities are better retained internally based on inherent requirements and capabilities. Also, establishing collaborative management partnerships between organizations and suppliers is critical for maximizing value from any outsourcing relationships. Close cooperation, mutual understanding of goals, transparent communication and jointly addressing unforeseen challenges are needed over time to ensure reliable, consistent third-party performance - especially given infrastructure, expertise and oversight limitations faced. Without resilient, adaptive frameworks for governance and mutual capacity building, potential benefits may not be fully realized. Finally, continued evaluation of dynamic partnerships and supply chain ecosystems is necessary as circumstances evolve. Environmental constraints, crises contexts and stakeholder needs are changing variables that impact appropriate sourcing decisions.

5.4 Limitations of the Study

There were several limitations to the current study that are important to acknowledge. First, only a limited set of predictor variables were considered, neglecting external factors that also influence relationships. Thus, a more comprehensive model is needed. Second, the inability to qualitatively explore logistics outsourcing partnerships meant operational realities may not be fully understood. Case studies could address this gap. Last, humanitarian settings have unique crisis-specific characteristics affecting logistics needs. Models may have constrained applicability in other relief scenarios without contextualization.

5.5 Suggestions for Further Research

The current study highlighted opportunities for additional exploration to build on its findings and address its limitations. A key recommendation is conducting qualitative research to gain a deeper understanding of logistics outsourcing relationships in practice. In-depth interviews and case studies of collaborative partnerships could provide nuanced insights into governance structures, shared decision-making, challenges encountered and adaptive strategies employed.

Longitudinal studies that track how associations change over extended time periods in dynamic contexts would also be valuable. This could involve periodic surveys or data collected through integrated digital platforms. Comparative analyses across organizations, sectors, geographic regions and disaster types would further contextualize outsourcing models appropriate for diverse scenarios.

Developing predictive analytics approaches incorporating broader sets of influencing factors could generate prescriptive guidance. Tools to optimize sourcing configurations and visualize "what if" scenarios based on multi-criteria decision analysis would

support strategic planning. Piloting technology-enabled tools for supplier performance monitoring, corrective action management and skills transfer could strengthen collaborative capacities.

Additional areas for development include formal guidelines and frameworks to structure resilient governance, cross-training curricula to build collaborative competencies, and shared digital workspaces for coordination and adaptive decision-making. Establishing benchmarks and performance indicators tailored to humanitarian settings would facilitate consistent monitoring and knowledge accumulation.

REFERENCES

- Abidi, H., De Leeuw, S., & Klumpp, M. (2015). The value of fourth-party logistics services in the humanitarian supply chain. *Journal of Humanitarian Logistics and Supply Chain Management*, 5(1), 35-60.
- Agi, M. A., & Yan, X. (2020). Greening products in a supply chain under market segmentation and different channel power structures. *International Journal of Production Economics*, 223, 107523.
- Ahmadi, M., Seifi, A., & Tootooni, B. (2015). A humanitarian logistics model for disaster relief operation considering network failure and standard relief time: A case study on San Francisco district. *Transportation Research Part E: Logistics and Transportation Review*, 75, 145-163.
- Balcik, B. (2015). Special issue on humanitarian relief chains in honor of Professor Benita Beamon. *Journal of Humanitarian Logistics and Supply Chain Management*, 12(8), 1-24.
- Baporikar, N., & Shangheta, L. B. (2018). Challenges facing humanitarian logistics in a nonprofit organization. *International Journal of Applied Logistics (IJAL)*, 8(1), 35-56.
- Balcik, B., Beamon, B. M., Krejci, C. C., Muramatsu, K. M., & Ramirez, M. (2010). Coordination in humanitarian relief chains: Practices, challenges and opportunities. *International Journal of production economics*, 126(1), 22-34.
- Banomyong, R., & Supatn, N. (2011). Developing a supply chain performance tool for SMEs in Thailand. *Supply chain management: an international journal*, 1(16), 20-31.

- Baporikar, N., & Shangheta, L. B. (2018). Challenges facing humanitarian logistics in a nonprofit organization. *International Journal of Applied Logistics (IJAL)*, 8(1), 35-56.
- Bealt, J., Barrera, J. C. F., & Mansouri, S. A. (2016). Collaborative relationships between logistics service providers and humanitarian organisations during disaster relief operations. *Journal of Humanitarian Logistics and Supply Chain Management*. Vol. 6 No. 2, pp. 118-144.
- Cachon, G. P., Girotra, K., & Netessine, S. (2020). Interesting, important, and impactful operations management. *Manufacturing & Service Operations Management*, 22(1), 214-222.
- Chapman, A. G., & Mitchell, J. E. (2018). A fair division approach to humanitarian logistics inspired by conditional value-at-risk. *Annals of Operations Research*, 262(1), 133-151.
- Chileshe, N., Jayasinghe, R. S., & Rameezdeen, R. (2019). Information flow-centric approach for reverse logistics supply chains. *Automation in Construction*, 106, 102858.
- Chima, C. M. (2007). Supply-chain management issues in the oil and gas industry. *Journal of Business & Economics Research (JBER)*, 5(6).
- Day, J. M. (2014). Fostering emergent resilience: the complex adaptive supply network of disaster relief. *International Journal of Production Research*, 52(7), 1970-1988.
- de Montclos, M. A. P. (2012). Humanitarian action in developing countries: Who evaluates who? *Evaluation and program planning*, 35(1), 154-160.

- Delmonteil, F. X., & Rancourt, M. È. (2017). The role of satellite technologies in relief logistics. *Journal of Humanitarian Logistics and Supply Chain Management*, 7(1), 57-78.
- Schiffing, S., & Piecyk, M. (2014). Performance measurement in humanitarian logistics: a customer-oriented approach. *Journal of Humanitarian Logistics and Supply Chain Management*, 4(2), 198-221.
- Dewsnap, B., & Hart, C. (2014). Category management: a new approach for fashion marketing? *European Journal of Marketing*, 38(7), 809-834.
- Dufour, É., Laporte, G., Paquette, J., & Rancourt, M. È. (2018). Logistics service network design for humanitarian response in East Africa. *Omega*, 74, 1-14.
- Gaudenzi, B., Confente, I., & Russo, I. (2021). Logistics service quality and customer satisfaction in B2B relationships: a qualitative comparative analysis approach. *The TQM Journal*, 33(1), 125-140.
- Negi, S. (2022). Humanitarian logistics challenges in disaster relief operations: A humanitarian organisations' perspective. *Journal of Transport and Supply Chain Management*, 16, 691.
- Gil, J. C. S., & McNeil, S. (2015). Supply chain outsourcing in response to manmade and natural disasters in Colombia, a humanitarian logistics perspective. *Procedia Engineering*, 107, 110-121.
- Gonçalves, P., & Castañeda, J. A. (2018). Stockpiling supplies for disaster response: an experimental analysis of prepositioning biases. *Production Planning & Control*, 29(14), 1207-1219.
- Gossler, T., Wakolbinger, T., & Burkart, C. (2020). Outsourcing in humanitarian logistics—status quo and future directions. *International Journal of Physical Distribution & Logistics Management*, 4(50), 403-438.

- Guan, Z., Zhang, X., Zhou, M., & Dan, Y. (2020). Demand information sharing in competing supply chains with manufacturer-provided service. *International Journal of Production Economics*, 220, 107450.
- Hancox, M., & Hackney, R. (2000). IT outsourcing: frameworks for conceptualizing practice and perception. *Information Systems Journal*, 10(3), 217-237.
- Hennart, J. F. (2010). Transaction cost theory and international business. *Journal of Retailing*, 86(3), 257-269.
- Hobbs, J. E. (1996). A transaction cost approach to supply chain management. *Supply Chain Management: An International Journal*.
- Huang, M., Ren, L., Lee, L. H., & Wang, X. (2015). 4PL routing optimization under emergency conditions. *Knowledge-Based Systems*, 89, 126-133.
- Iyer, K. N. (2011). Demand chain collaboration and operational performance: role of IT analytic capability and environmental uncertainty. *Journal of Business & Industrial Marketing*, 26(2). 17-28.
- Jahre, M., & Jensen, L. M. (2010). Coordination in humanitarian logistics through clusters. *International Journal of Physical Distribution & Logistics Management*. Vol. 40 Nos 8-9, pp. 657-674.
- Kakabadse, A., & Kakabadse, N. (2010). Outsourcing: current and future trends. *Thunderbird international business review*, 47(2), 183-204.
- Kaluki, B. (2015). Supply chain management practices and service delivery in humanitarian organization in Kenya. Nairobi. *Published student project, University of Nairobi*.
- Kazemi, N., Abdul-Rashid, S. H., Ghazilla, R. A. R., Shekarian, E., & Zanoni, S. (2018). Economic order quantity models for items with imperfect quality and

- emission considerations. *International Journal of Systems Science: Operations & Logistics*, 5(2), 99-115.
- Kenya Institute for Public Policy Research and Analysis (KIPPRA). (2013). Kenya's Economic reportx
- Koh, S. L., Demirbag, M., Bayraktar, E., Tatoglu, E., & Zaim, S. (2013). The impact of supply chain management practices on performance of SMEs. *Industrial Management & Data Systems*, 107(1). 103-124.
- Kumar, S., Niedan-Olsen, K., & Peterson, L. (2009). Educating the supply chain logistics for humanitarian efforts in Africa: a case study. *International Journal of Productivity and Performance Management*, 58(5). 480-500.
- Kunz, N., Van Wassenhove, L. N., Besiou, M., Hambye, C., & Kovacs, G. (2017). Relevance of humanitarian logistics research: best practices and way forward. *International Journal of Operations & Production Management*.145-163.
- Lieb, R. C., Millen, R. A., & Van Wassenhove, L. N. (1993). Third party logistics services: a comparison of experienced American and European manufacturers. *International Journal of Physical Distribution & Logistics Management*.
- Lu, Q., Goh, M., & De Souza, R. (2018). An empirical investigation of swift trust in humanitarian logistics operations. *Journal of Humanitarian Logistics and Supply Chain Management*.75-130.
- Masudin, I., Safitri, N. T., Restuputri, D. P., Wardana, R. W., & Amallynda, I. (2020). The effect of humanitarian logistics service quality to customer loyalty using Kansei engineering: Evidence from Indonesian logistics service providers. *Cogent Business & Management*, 7(1), 1826718.
- McIvor, R. (2013). Outsourcing: insights from the telecommunications industry. *Supply Chain Management: An International Journal*, 8(4). 380–394.

- Mollenkopf, D., Russo, I., & Frankel, R. (2007). The returns management process in supply chain strategy. *International Journal of Physical Distribution & Logistics Management*, 37(7). 568-592.
- Muathe, J. (2017). *Logistics Outsourcing and Service Delivery in Service Firms: a Survey of Telecommunications Firms in Nairobi* (Doctoral dissertation, University of Nairobi).
- Naor, M., Dey, A., Meyer Goldstein, S., & Rosen, Y. (2018). Civilian-military pooling of health care resources in Haiti: a theory of complementarities perspective. *International Journal of Production Research*, 56(21), 6741-6757.
- Negi, S., 2022, 'Humanitarian logistics challenges in disaster relief operations: A humanitarian organisations' perspective', *Journal of Transport and Supply Chain Management* 16(0), a691.
- Nilsson, F., & Waidringer, J. (2005, January). Toward adaptive logistics management. In *Proceedings of the 38th Annual Hawaii International Conference on System Sciences* (pp. 81c-81c). IEEE.
- Njanja, W. L. (2011). The integrative effects of various management strategies in the performance of MSMES. *International Business and Management*, 2(2), 105-116.
- Nyamu, T. K. (2012). Impact of supply chain management challenges on humanitarian organizations in Kenya. *Published student project, University of Nairobi*.
- Ojasalo, K. & Gronroos, C. (2017). Service Productivity: Towards a Conceptualization of the Transformation of inputs. Finland. *Swedish School of Economics and Business Administration*.

- Ojwang, J. S. (2016). Information technology usage on humanitarian logistics relief organizations in Kenya. Nairobi. *Published student project, University of Nairobi.*
- Onyango, J. (2019). Outsourcing and Service delivery in Non-Government Organizations in Uganda: The case of IITA-Uganda. *Published student project, Uganda Management Institute.*
- Onyango, S. M. (2016). Inventory Management Practices and Service Delivery of Health Humanitarian Organizations in Kenya. *Published Student Project, University of Nairobi.*
- Ottmöller, O., & Friedrich, H. (2019). Modeling change in supply-chain-structures and its effect on freight transport demand. *Transportation Research Part E: Logistics and Transportation Review, 121*, 23-42.
- Pazirandeh, A., & Herlin, H. (2014). Unfruitful cooperative purchasing: a case of humanitarian purchasing power. *Journal of Humanitarian Logistics and Supply Chain Management, 4*(1). 24-42.
- Pule, S. (2014). Supply chain information management and service delivery in public health sector organizations: A case study on national medical stores of Uganda. *International Journal of Supply Chain Management, 3*(3).
- Razzaque, M. A., & Sheng, C. C. (1998). Outsourcing of logistics functions: a literature survey. *International Journal of Physical Distribution & Logistics Management, 6*(3), 459-468.
- Reeves Jr, K. A., Caliskan, F., & Ozcan, O. (2010). Outsourcing distribution and logistics services within the automotive supplier industry. *Transportation Research Part E: Logistics and Transportation Review, 46*(3), 459-468.

- Schiffing, S., Hannibal, C., Tickle, M., & Fan, Y. (2022). The implications of complexity for humanitarian logistics: A complex adaptive systems perspective. *Annals of Operations Research*, 319(1), 1379-1410.
- Vega, D., & Roussat, C. (2015). Humanitarian logistics: the role of logistics service providers. *International Journal of Physical Distribution & Logistics Management*, 45(4), 352-375.
- Yang, W., Li, W., Cao, Y., Luo, Y., & He, L. (2020). An information theory inspired real-time self-adaptive scheduling for production-logistics resources: Framework, principle, and implementation. *Sensors*, 20(24), 7007.

APPENDICES

APPENDIX I: QUESTIONNAIRE

This questionnaire comprises of four parts and is designed to collect data on "*LOGISTICS OUTSOURCING AND SERVICE DELIVERY AMONG SELECTED HUMANITARIAN ORGANIZATIONS IN KENYA*" intended for completion of my Master's program.

NB: The information collected shall be treated in confidence and is purely academic.

SECTION A: GENERAL INFORMATION

1. Gender

Male Female

2. Level of Education

Undergraduate Postgraduate Masters Doctoral

Any other, specify:

3. Number of years worked in the organization

< 2 years 2-5 years 6-10 years > 10 years

SECTION B: LOGISTICS OUTSOURCING PRACTICES

4. Please indicate the extent to which your organization outsources each of the following logistics activities using the Likert scale: where 1 = strongly disagree, 2 = slightly disagree, 3 = neutral, 4 = slightly agree and 5 = strongly agree

| Logistics Outsourcing Activities | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Transportation | | | | | |
| 1. The organization outsource transportation services (e.g., transportation of relief materials, goods, or personnel) | | | | | |
| 2. Outsourcing transportation has impacted your organization's operational efficiency | | | | | |
| 3. There has been cost savings through transportation outsourcing | | | | | |
| Warehouse Management | | | | | |
| 1. The organization outsources warehouse management and inventory control | | | | | |

| | | | | | |
|--|--|--|--|--|--|
| 2. Outsourcing has improved inventory control in the organization | | | | | |
| 3. Outsourcing warehouse management has enhanced order fulfillment for your organization | | | | | |
| Procurement and Handling | | | | | |
| 1. The organization engages in outsourcing procurement and handling of relief materials and supplies | | | | | |
| 2. Outsourcing has positively impacted the organization's procurement cycle times | | | | | |
| 3. Outsourcing procurement and handling has resulted in cost reduction for your organization | | | | | |
| Support and Enabling Activities | | | | | |
| 1. The organization outsource support and enabling activities related to logistics, such as IT, customer service, or data management | | | | | |
| 2. Outsourcing support and enabling activities has contributed to a more focused organizational strategy | | | | | |
| 3. Outsourcing support and enabling activities has resulted in improvements in your organization's core competencies | | | | | |
| 4. There are huge concerns about data privacy in outsourcing | | | | | |

SECTION C: IMPACT OF LOGISTICS OUTSOURCING ON SERVICE DELIVERY

5. Please rate the impact of logistics outsourcing on the following aspects of service delivery using the Likert scale, where 1 is "Strongly Disagree" and 5 is "Strongly Agree":

| Aspects of Service Delivery | 1 | 2 | 3 | 4 | 5 |
|---|----------|----------|----------|----------|----------|
| Resource Utilization | | | | | |
| 1. The impact of logistics outsourcing on efficient resource usage is evident. | | | | | |
| 2. Outsourcing has resulted in an improvement in resource allocation. | | | | | |
| 3. Outsourcing contributes to the reduction of waste. | | | | | |
| Organizational Flexibility | | | | | |
| 1. Enhancements in organizational flexibility have been observed due to outsourcing. | | | | | |
| 2. The organization has shown the ability to adapt to changing demands through outsourcing. | | | | | |

| | | | | | |
|---|--|--|--|--|--|
| 3. Outsourcing has improved agility in responding to disruptions. | | | | | |
| 4. There are risks associated with reduced control due to outsourcing. | | | | | |
| Reaction Times | | | | | |
| 1. Outsourcing has influenced quicker reaction times. | | | | | |
| 2. Response time to stakeholders has been reduced due to outsourcing. | | | | | |
| 3. Outsourcing has improved responsiveness to emergencies. | | | | | |
| Availability of Services | | | | | |
| 1. The effect of outsourcing on service availability is noteworthy. | | | | | |
| 2. Outsourcing has enhanced service consistency. | | | | | |
| 3. Outsourcing contributes to meeting service demands. | | | | | |
| 4. There are potential challenges to service continuity due to outsourcing. | | | | | |

SECTION D: CHALLENGES IN LOGISTICS OUTSOURCING PRACTICES

5. What are the main challenges your organization has faced in logistics outsourcing practices?

.....
.....
.....
.....
.....

6. What strategies or recommendations would you propose to overcome these challenges and enhance the benefits of logistics outsourcing for service delivery?

.....
.....
.....
.....
.....

THANK YOU!

APPENDIX II: LIST OF HUMANITARIAN ORGANIZATIONS

Leading International NGOs in Kenya

| NO. | NAME OF THE ORGANISATION |
|-----|---|
| 1 | GIVEDIRECTLY KENYA |
| 2 | WORLD VISION KENYA |
| 3 | COMPASSION INTERNATIONAL INC. |
| 4 | AMREF HEALTH AFRICA IN KENYA |
| 5 | CATHOLIC RELIEF SERVICES |
| 6 | INTERNATIONAL RESCUE COMMITTEE |
| 7 | THE AFRICAN ACADEMY OF SCIENCES(AAS) |
| 8 | LAY VOLUNTEERS INTERNATIONAL ASOCIATION |
| 9 | CHILDFUND KENYA |
| 10 | PLAN INTERNATIONAL |
| 11 | DANISH REFUGEE COUNCIL |
| 12 | WORLD WIDE FUND FOR NATURE KENYA (WWF-KENYA) |
| 13 | PROGRAMME FOR APPROPRIATE TECHNOLOGY IN HEALTH(PATH) |
| 14 | AGRICULTURAL COMMODITIES DEVELOPMENT INTERNATIONAL VOLUNTARY COMMUNITY ASSOCIATIONS |
| 15 | SAVE THE CHILDREN INTERNATIONAL (KENYA) |
| 16 | WINDLE INTERNATIONAL -KENYA |
| 17 | GERMAN AGRO ACTION |
| 18 | MERCY CORPS |
| 19 | DAVID SHELDRIK WILDLIFE TRUST |
| 20 | ACTION AID INTERNATIONAL KENYA |
| 21 | MARIE STOPEK KENYA |
| 22 | PRACTICAL ACTION |
| 23 | PATHFINDER INTERNATIONAL |
| 24 | HANDICAP INTERNATIONAL |
| 25 | SELF HELP AFRICA |
| 26 | IMA WORLD HEALTH |
| 27 | QATAR CHARITY |
| 28 | FAMILY HEALTH INTERNATIONAL (FHI 360) / KENYA |
| 29 | THE BROOKE HOSPITAL FOR ANIMALS EAST AFRICA |
| 30 | MISSIONS OF HOPE INTERNATIONAL |
| 31 | CENTRALE HUMANITAIRE MEDICO - PHARMACEUTIQUE |
| 32 | CARE INTERNATIONAL |
| 33 | ACTION AGAINST HUNGER KENYA |
| 34 | PHARMACCESS FOUNDATION |
| 35 | WASHINGTON STATE UNIVERSITY - GLOBAL HEALTH KENYA |
| 36 | I CHOOSE LIFE AFRICA |
| 37 | GLOBAL PROGRAMS FOR RESEARCH & TRAINING |
| 38 | ISLAMIC RELIEF - KENYA |
| 39 | CONCERN WORLDWIDE |

| | |
|----|--|
| 40 | THE FRED HOLLOWS FOUNDATION KENYA |
| 41 | POPULATION SERVICES INTERNATIONAL KENYA |
| 42 | CENTERS FOR INTERNATIONAL PROGRAMS - KENYA |
| 43 | SHINING HOPE FOR COMMUNITIES |
| 44 | ANANDA MARGA UNIVERSAL RELIEF TEAM |
| 45 | VI-TREE PLANTING PROJECT (VI-AGROFORESTRY PROJECT) |
| 46 | DIRECT AID |
| 47 | VETERINARIES SANS FRONTIERS (VSF) SWITZERLAND |
| 48 | AVSI FOUNDATION |
| 49 | CAP YOUTH EMPOWERMENT INSTITUTE - KENYA |
| 50 | MEDECINS SANS FRONTIERES - SWITZERLAND |

Leading National NGOs in Kenya

| NO. | NAME OF THE ORGANISATION |
|-----|---|
| 1 | CENTER FOR INTERNATIONAL HEALTH, EDUCATION AND BIOSECURITY - KENYA |
| 2 | CENTRE FOR HEALTH SOLUTIONS - KENYA |
| 3 | LVCT HEALTH |
| 4 | SOS CHILDREN'S VILLAGE KENYA |
| 5 | POPULATION SERVICES KENYA |
| 6 | HOPE WORLDWIDE KENYA |
| 7 | MKOMANI CLINIC SOCIETY |
| 8 | LWALA COMMUNITY HEALTH CENTRE |
| 9 | RURAL AGENCY FOR COMMUNITY DEVELOPMENT AND ASSISTANCE (RACIDA) |
| 10 | ASSOCIATION FOR THE PHYSICALLY DISABLED OF KENYA |
| 11 | CENTRE FOR RIGHTS EDUCATION AND AWARENESS |
| 12 | AFRICAN MISSION HEALTHCARE - KENYA |
| 13 | IMPACT RESEARCH AND DEVELOPMENT ORGANIZATION |
| 14 | BIBLE TRANSLATION AND LITERACY (E.A) |
| 15 | SIGHT SAVERS INTERNATIONAL (ROYAL COMMONWEALTH SOCIETY FOR THE BLIND) |
| 16 | CENTRE FOR THE STUDY OF ADOLESCENCE |
| 17 | LAKE REGION DEVELOPMENT PROGRAM |
| 18 | TEACH FOR KENYA |
| 19 | NATIONAL ORGANIZATION OF PEER EDUCATORS |
| 20 | UNTOLD KENYA |
| 21 | COLLABORATIVE CENTRE FOR GENDER AND DEVELOPMENT |
| 22 | LATTER DAY SAINT CHARITIES |
| 23 | KENYA DRYLANDS EDUCATION FUND (KDEF) |
| 24 | AL-IETISAM DEVELOPMENT ORGANIZATION |
| 25 | HELPPAGE INTERNATIONAL |
| 26 | KENYA LEGAL AND ETHICAL ISSUES NETWORK ON HIV/AIDS |
| 27 | KENYA GOOD NEIGHBORS |
| 28 | CHESHIRE DISABILITY SERVICES KENYA |
| 29 | PASTORALIST COMMUNITY INITIATIVE DEVELOPMENT AND ASSISTANCE |

| | |
|----|---|
| 30 | STRATEGIES FOR NORTHERN DEVELOPMENT |
| 31 | BEACON OF HOPE |
| 32 | HUMANITARIAN INTERNATIONAL VOLUNTARY ASSOCIATION |
| 33 | NETWORK FOR ADOLESCENT AND YOUTH OF AFRICA (NAYA) KENYA CHAPTER |
| 34 | SAMBURU CHILDREN'S PROGRAMME |
| 35 | FEDERATION OF WOMEN LAWYERS-KENYA |
| 36 | MUSLIMS FOR HUMAN RIGHTS |
| 37 | KENYA MUSLIM CHARITABLE SOCIETY |
| 38 | PARTNERSHIP FOR A HIV FREE GENERATION |
| 39 | KENYA AIDS NGO'S CONSORTIUM |
| 40 | KIAMBU PEOPLE LIVING WITH HIV/AIDS(KIPEWA) |
| 41 | LOTUS KENYA ACTION FOR DEVELOPMENT ORGANIZATION |
| 42 | UNIVERSITY OF WASHINGTON GLOBAL ASSISTANCE PROGRAM KENYA |
| 43 | A ROCHA KENYA |
| 44 | AGRICULTURE IMPROVEMENT SUPPORT SERVICES |
| 45 | INDEPENDENT MEDICO-LEGAL UNIT |
| 46 | LEGAL ADVICE CENTRE (KITUO CHA SHERIA) |
| 47 | REFUGEE CONSORTIUM OF KENYA |
| 48 | KEEPING ALIVE SOCIETIES' HOPE |
| 49 | GENERATION PROGRAMME KENYA |
| 50 | SUSTAINABLE AGRICULTURE COMMUNITY DEVELOPMENT PRO-GRAM |

Source: (NGO's Coordination Board, 2022).