



ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS

**HUMANITARIAN LOGISTICS PRACTICES IN DISASTER RELIEF
OPERATION THE CASE OF CATHOLIC RELIEF SERVICE ETHIOPIA**

By

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DECLARATION

I undersigned hereby declare the study entitled “**Humanitarian Logistics Practices in Disaster Response Operation in the case of Catholic Relief Service of Ethiopia**” is my original work and has never been summited to any other university for assessment or award of a degree or fellowship and all source of material used for the study have been duly acknowledge .

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Abstract

Natural and manmade disasters frequently affect people in unexpected way. The efficacy and speed of present and future humanitarian operations and initiatives are dependent on humanitarian logistics. The objective of the research is to assess the humanitarian logistics practices of CRS in disaster response operation. Specifically, the study is intended to assess the humanitarian logistics practices of CRS in terms of procurement, transport and warehouse management as well as identify factors affecting it. A descriptive research design was utilized in combination with a mixed research technique in this study. Because the target population is so tiny, a census survey is used. Questionnaires were used to obtain data from the logistics employees. To collect data from the logistics staffs using questionnaires mainly from supply chain and logistics, program officers, emergence management, procurement officers. Procurement, transportation, and warehouse management are all performed here, according to the study's results, although procurement and transportation procedures need to be emphasized more. The challenges of infrastructure condition, accessibility, security, and limited technological utilization were noted. Therefore the organization needs to improve the humanitarian logistics practices by implementing the humanitarian policy and strategies on the organization and using the advance technology in the relief operation. By partnering with similar organization CRS needs to request for assistance from the government in the improvement on facilities.

Key words: *Disaster, humanitarian, logistics*

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ACRONYMS AND ABBREVIATIONS

CARE: Cooperative for Assistance and Relief Everywhere

CRS: Catholic Relief Service

DFAP: Development Food Assistance Program

DMTP: Disaster Management Training Program

FHE : Food for the Hungry Ethiopia

JEOP: Development Food Assistance Program

HA: Humanitarian Aid

HL: Humanitarian Logistics

HRO: Humanitarian Relief Organizations

NGO's: Non-Governmental Organizations

PAHO: Pan American Health Organizations

REAAP: Reliance Through Enhanced Adaption Action Learning and partnership

SCM: Supply Chain Management

SPSS: Statistical Package for Social Science

WHO: World Food Organization

CHAPTER ONE

INTRODUCTION

The study's background, problem statement, research questions, study objectives, significance of the research, scope of the study, as well as the study's definition of terms and study's organization are all discussed in this section.

1.1 Background of the study

Natural and manmade disaster frequently hit people in unexpected way.it usually has affect the people capacity in pull through this .so most of the time they ask for help from national emergency management agencies or else it's from international relief organization .this organization usually performs the most well know activity in the world which is humanitarian activity/Acton. The aim of humanitarian action is to support people affected by conflict and natural disaster to save lives, alleviate suffering and maintain human dignity during crisis.it has been taken in many forms and also has been conceived in many different ways over time .there are four humanitarian principles they are humanity, neutrality, impartiality and independence these principle were develop by (Henry Dunant, 1983).

These principles are intended to help establish and also maintain access to crisis affected people. Through the course of time there has been devastating incident throughout time to time. Which are unavoidable or they cannot be easily eradicated. Due to this different international organizations have been initiated to help those who become victims of disasters and limit or decrease the severity of the damages they bring. By organizing the needed items and also by gathering the needed work forces all the way through the entire journey .throughout this processes the most important element is humanitarian logistics.

Humanitarian logistics is a procedure that involves establishing a cost-effective and efficient movement and storage of resources from the point of origin to the site of consumption to alleviate suffering among vulnerable populations. Functions include planning and procurement as well as transportation and storage as well as tracking and tracing as well as clearing of customs (Thomas and Kopczak, 2005).In recent time humanitarian organizations identify that logistics is a key to relief operation. It is also the one that makes difference in the success or feller in the operation. (Van wassenhove, 2006)

Humanitarian logistics improve the efficacy and rapidity of present and future operational and program activities between disaster planning and response, procurement and distribution, it also functions as a conduit for information and communication. And also a tie between the headquarters and the field.

The effectiveness indicate saving time which is also help us on saving life ,the effectiveness reducing the costs in order to save the life of the people .this are obtained by enhancing the logistics performance of the organization .the logistics in disaster respond are similar elements with the commercial logistics but it differs in the following ways it is impossible for the logisticians to prepare and form accurate plan it is due to the random time as well as the location of the next disaster occurrence ,the relief operation are exposed to the time pressure because both seconds and hours are counted for the responding critical needs for those lives, because of the disaster the communication, transport and also the infrastructure might be destroyed as a result of this it is very difficult for the relief organization to function in the very difficult situation , the population which are strikes by disaster need those relief organization on figuring on the identifying the specify needed items so that they can figure out which important item are needed to be transported otherwise it will jam up the transportation system .over all the main difference between humanitarian logistics and commercial logistics are based on the demand pattern, inventory control, goal.

In Ethiopia, due to the change in climate it cause for the occurrence of disaster such as drought, flood, earthquake, pests, wildfire, landslide, epidemics, etc. These different hazard occur with varying frequency and severity .some are result national wide disaster, while others are localized (Adane *et al.*, 2006). Responding appropriately to disasters is a tough endeavor due to a variety of issues. There are several factors to consider, such as the chaotic post-disaster relief environment (such as fear of the public, lack of transportation and communication infrastructure) (Tomasini & Wassenhove, 2009), the large number of actors involved, etc (e.g., donors, media, governments, military, humanitarian groups...) (Van Wassenhove, 2006) There are several factors to consider, such as the chaotic post-disaster relief environment (such as fear of the public, lack of transportation and communication infrastructure) (Tomasini & Wassenhove, 2009), the large number of actors involved, etc (e.g., donors, media, governments, military, humanitarian groups...)

In addition, an unavailability resource is a challenge to providing adequate emergency response (Akhtar *et al.*, 2012). The need of efficient yet flexible humanitarian aid supply chains in disaster assistance has been highlighted by academics as well as practitioners (Kovács & Spens, 2007). Disaster the famines in Ethiopia has been occurring periodical through the Ethiopian history. From

1983-1985 a widespread famine affected Ethiopia which is the worst famine to hit the country in the century. The main reason for the occurrence is due to drought and climatic phenomena until now it has been affecting the country in different places. CRS organization has been doing a continuous aid and also disaster relief operation for those areas which are affected by drought.

The aim of the research is to assess humanitarian logistics practice on the disaster relief operation of Catholic Relief Services organization based on humanitarian logistic chain structure; supply acquisition and procurement, pre-positioning and warehousing, transportation.

1.2 Background of the organization

Catholic Relief Services (CRS) is a non-profit organization that provides humanitarian Ethiopia has a long and illustrious history that dates back to 1958. When the Ethiopia Catholic Bishops Conference invited Catholic relief service in Ethiopia to operate in the nation with government clearance. CRS has been a part of the fight against humanitarian crises and food insecurity since 1958, with activities aimed at alleviating human suffering and cultivating compassion. Since the 1984/85 drought, CRS has played a significant role in supporting famine victims by distributing emergency food and giving medications through the Joint Relief Partnership of the country's three largest denominations. Ethiopian Orthodox Church, Ethiopian Evangelical Church Mekane -Yesus, Ethiopian Catholic Church, and Lutheran World Federation

CRS Ethiopia is one of CRS' largest national programs, with 213 personnel, CRS Ethiopia performs program activities in 70 Woreda's throughout 10 Ethiopian regions, directly impacting over 2.5 million people with the JEOP project, 250,000 with DFAP, and roughly 300,000 with the rest of the initiatives. CRS/strategic Ethiopia's purpose is to alleviate extreme poverty by enhancing food security and building the ability of local civil society groups, who are essential local partners of CRS Ethiopia. CRS Ethiopia's whole program operates in tandem with CRS's long-term integrated development aims. And CRS/local Ethiopia's partners coordinate the two ways within their operational regions to mitigate the harmful effects of the acute crisis via relief and various emergency response operations. CRS Ethiopia also work with Six international NGOS For the implementation of the JEOP and REAAP projects those international partners are CARE, Save the Children, Food for the Hungry, and World Vision, Cordaid and Handicap internationals throughout the country based on the Ethiopian Government's Humanitarian Requirements rules and regulations.

1.3 Statement of the problem

Humanitarian logistics is highly participated in rescue missions and emergencies; Disasters occurrence like famines, floods, earth quakes, agricultural diseases and pests, hail, floods and flash

floods, hurricanes, tornados, tsunamis etc. all the above-mentioned tragedies have in common which is it always sudden events that change the course of actions and environments of the society they occur on radically. Most of the causes for disasters and emergencies are controlled in a very limited basis if not entirely uncontrollable. In the relief operation there is always challenge in which is faced in the disaster management cycle. The major challenge in overall cycle are lack of coordination, , collaboration , lack of funding and also inappropriate donation ,people behavior , lack of early warning etc.....“The best way to find a problem is always to define it together with humanitarian organizations” (Gyöngyi Kovács, 2010).

The supply chain disaster relief consist the following steps; - supply acquisition and procurement per-positioning and warehousing, transportation. In each phases there are problem they face, acquisition and delivery of adequate relief suppliers from local or from international suppliers are time consuming and also very expensive so only few relief organization can support the expense of operating international distribution center to store and distribute relief supplies and also the facility location decision has effect on the relief operation. The reason for this large number is that humanitarian organization s, through the pre-stocking of crucial aid at critical areas across the world, are typically prepared for disasters. Although this strategy improves the capacity to respond rapidly to a crisis, it is also expensive (Balcik & Beamon, 2008).

Moreover, humanitarian organizations, to verify that the relief provided reaches the needy, they face increased pressure from donors. Consequently, the results of the organization should be clear and operational (Van Wassenhove, 2006), which forces it to use its resources more effectively (Scholten, Scott & Fynes, 2010). The considerations discussed above affect purchase decisions of humanitarian organizations and also underline the need of effective procurement activities.

The exact location of the tragedy is quite difficult to anticipate. Transportation infrastructures may be disrupted because of unfavorable conditions at the disaster area. The distance between the location and facility involved is also important. The gathering and supply of relief materials is also a major problem (Agarwal & Singh, 2018).

The guidelines in the commercial sector logistics should be used in order to enhance the logistical operations of humanitarian organizations. Since humanitarian help deals with massive activities requiring fast reactions, many highly motivated and, above all, many life-saving people participate. The attempt to enhance logistics is worthwhile (Agostinho, 2013). This means that humanitarian

organizations must enhance their logistical practices in order to save the maximum lives and reduce suffering, which involves assessing the procedures and identifying the challenges that obstruct them. Balcik *et al* (2008) described in his findings in humanitarian logistics and disaster, every natural or man-made disasters relief of aid differs from one to another depending on the level of damage done in the zone, but as he explains, there are two significant logistical problems generated in the last mile. The first one refers to the difficulties in transportation of emergency supplies due to damaged infrastructure and the second one refers to the deficiency on coordination among relief actors. Facing up a coordinating way to provide the in-kinds and the distribution of those in-kinds with a low transportation infrastructure, becomes a big challenge among all the actors involved on the chain. This study deal with the aspect of distribution practices of humanitarian logistics, however it focused on last mile distribution which is difficult to generalize the entire problem is faced due to distribution challenge.

Beamon (2004) says that reliefs supply chains frequently have challenges with their structure, the layout of distribution networks, inventory control, disaster evaluation, collaboration and coordination, uncertainties and constraints on procurement and performance measurement.

In Ethiopia some research has been conducted on the humanitarian logistics in the relief operation which shows the major problem faced by each relief operation in different organization but assessment on the humanitarian logistics practices and also challenges faced on relief operation in CRS organization has not been done which is important to assess humanitarian operation on relief operation of the organization. In the response made in the preliminary interview with the stuffs of CRS that mutual problem has been identified specifically problems faced in the practices of humanitarian logistics and also there are major factors affecting the humanitarian logistics practice of the organizations. Similar to other research fields, this study explores the common organizational problems in the humanitarian logistics practice.

1.4 Research question

To reach its objective, the research tried to address the following questions

- How humanitarian logistics is being practiced in terms of procurement at CRS?
- How humanitarian logistics is being practiced in terms of transport at CRS?
- How humanitarian logistics is being practiced in terms of warehouse at CRS?
- What are internal challenge affecting the humanitarian logistics practices of CRS?
- What are the external challenge affecting the humanitarian logistics practices of CRS?

1.5 Objective of the study

1.5.1 General objective

The main objective of the study is to assess the humanitarian logistics practices in relief operation of the Catholic Relief Service in Ethiopia.

1.5.2 Specific objective

The research aimed to accomplish the following specific objectives

- To assess the humanitarian logistics procurement practices in Catholic Relief Service.
- To evaluate the humanitarian logistics transport practices in Catholic Relief Service.
- To assess the humanitarian logistics warehouse practices in Catholic Relief Service
- To identify internal challenge that affects the humanitarian logistics practices of CRS.
- To identify the external challenge that affects the humanitarian logistics practices in the CRS.

1.6 Significance of the study

The study's significance Based on the study's findings, the organization will be able to assess the shortcomings in existing humanitarian logistics procedures and take remedial action. The study was carried out within the Catholic Relief Service in Ethiopia, but it is useful to other organizations involved in humanitarian logistics. By addressing potential problems that may occur during a disaster response and informing people how they overcome such issues and by offering information about humanitarian logistical practice in disaster response operations. Lastly, study findings are also essential for future research into humanitarian logistics practice.

1.7 Scope of the study

The research focuses on humanitarian logistical methods in CRS disaster response organizations. The study is restricted to a specific organization. It studied the organization's overall humanitarian logistics operations by identifying the factors that affect humanitarian logistics practice. Due to time constraints, limited resources, and the extensive range of the organization's operations and geographical areas, the research focused mainly on the organization's head office, which is situated in Addis Ababa. The research approach used in this study is descriptive research. Data is gathered through combination of primary and secondary data.

1.8 Limitation of the study

The research is conducted in humanitarian logistics practice on disaster response operation; the research was limited in the geographical area of the study. Which only conduct in the head office

even though these organizations have different regional offices it failed to show the practices of this region due to lack of sufficient time, lack of communication due to the outbreak of COVID-19 so it's difficult to find staffs of the organization. Another constraint is that the study is limited to the study area in which it was conducted. The population was drawn from the Logistics and Supply Chain Division (Warehouse & Distribution, Procurement, and Transport Management) because the researcher believes that the correct data should be obtained from the staffs of the mentioned division. The major challenge was a lack of resource availability on the data, as well as a lack of related studies on this topic, despite the fact that there was plenty of literature on the subject.

1.9 Organization of the study

The research consists of five sections. The first chapter focuses on the introduction, which includes the study's background, research problems, research objectives, and research questions, scope, and limitations, as well as definition terms. The second chapter reviews relevant theoretical literature and empirical studies on related and similar topics, and a conceptual framework is formed as an outcome. The third chapter focuses on study technique, including the research design and methodology, as well as the source, population, data collecting processes, and data analysis technique employed. The study's fourth chapter presents the findings and thoroughly analyses them, whereas the study's fifth chapter is given to summarize, discussion of results, and recommendation section, which contains the main aspects, make conclusions, and offers researcher recommendations based on the findings.

1.10 Definition of terms

Disaster: It's an occurrence that puts people's lives, property, and wellness in risk. It commonly occurs in a severe disruption of a society's structure, leading to widespread people, material, or ecological losses that surpass the afflicted society's capacity to adapt using just all its resources (WHO, 2002).

Disaster management: The organization, planning, and application of measures preparing for, responding to and recovering from disaster (The United Nation Office for Disaster Reduction, 2017)

Humanitarian Logistics: the process of planning, executing and controlling the flow and efficient storage, Inexpensive goods and materials and related information from place of origin to place of consumption to alleviate the suffering of vulnerable people. The role encompasses a variety of activities including preparation, planning, procurement, transportation, warehousing, shipment tracking, and customs clearance (Thomas and Kopczak, 2005).

Procurement management: the strategy of procuring or acquiring goods and service (Mc falls, 2016)

Transportation management : operation of all type ,including tracking and managing every aspect of vehicle maintenance ,fuel costing routing and mapping ,and cargo handling ,carrier selection . (Maharjana, R. and Hanaoka, S.2016)

Warehouse management: is means of providing functions of temporary storage ,protection of goods ,fulfillment of individual customer order ,packaging of goods ,after sales service repairs ,testing ,inspection ,just in time sequencing and assembly .(Heragu *et al* ,2005)

CHAPTER TWO

RELATED LITERATURE REVIEW

In this section theoretical as well as empirical literature has been reviewed by reviewing different Scholar's works which are related with the field of humanitarian logistics, disaster management Cycle, humanitarian logistics practices and factors affecting humanitarian logistics practices

2.1 Theoretical Literature Review

2.1.1 Meaning and types of disaster

2.1.1.1 .Disaster definition

According to UNDP (1992), disaster is defined as “A disaster can be defined a dazzling event that extremely influences the operation of a community or civilization by creating human, fabric, financial, or natural harm that neighborhood organizations cannot address utilizing normal forms.”

Van Wassenhove (2006) the definition of disaster is “Typically, a disaster refers to an interruption that has a physical impact on the system as a whole, jeopardizing its priorities and objectives, and categorized according to their causes (natural versus technological or manmade).”

A disaster is “A critical interruption of a network or society's functioning, resulting in significant human, material, financial, or environmental losses and consequences, which surpasses the afflicted network's or society's capacity to govern the use of its original resources”. UNISDR, (2009).

Disaster was defined by Biswas and Choudhur (2012) as "a dynamic process that starts with the activation of a threat and flows through the device as a chain of events, in a logical collection to give a loss of life, property, and livelihood by negatively impacting the emergency systems." As a result, a disaster is an unforeseen event.

Thus, a disaster is an unforeseen event which, due to natural or technical reasons, disturbs the regular functioning and results in human, economic, substantial and environmental losses,. In order to recover an initial stability, it requires the participation of the many players in the society.

Generally disaster are classify into two categories: natural and manmade, (UNDR, 1992).

Storms, earthquakes, floods, droughts, diseases, and volcanic activity are all examples of natural disaster. Human activity is the direct cause of man-made disasters. (Nikbakhsh and Farahani, 2011)

whether intentional (e.g., wars, terrorist attacks) or unintentional (e.g., industrial accidents, infrastructure breakdowns).

2.1.1.2 Disaster relief operation

The process of reacting to a catastrophic situation by giving humanitarian help to people and communities who have been affected by a disaster is known as a disaster relief operation. It includes dealing with and avoiding risks, as well as preparing for, sustaining, and restoring society in the event of natural or man-made disasters. Disaster relief is generally the ongoing process by which all people, groups and communities manage dangers to avoid or control the effect of disaster scenarios. Actions taken are influenced in part by people's exposed perceptions of risk. Effective disaster management is dependent on the comprehensive integration of emergency plans at all levels of government and non-government engagement. Individual, group, and communal activities have an impact on the other levels.

Humanitarian actions during disaster preparations, immediate response, and reconstruction are all included in disaster relief. However, unless otherwise mentioned, disaster aid can be equated with operations in the initial reaction phase. Emergency relief, humanitarian help, and humanitarian help are all synonyms. Preparation, planning, prevention/recovery, restoration, and rehabilitation are all synonyms for disaster relief phases. Activities from multiple disaster relief stages can occur simultaneously, and activities can also be linked to each other in a cyclical fashion, so the phases don't have to be observed in order. The purpose of disaster relief operations is to “The objective of disaster relief operations is to plan the transportation of initial aid material, nourishment, equipment, and emergency responders from points of supply to a great amount of goal hubs geologically dispersed throughout the disaster area, as well as the clearing and exchange of disaster-affected individuals to wellbeing care facilities in a secure and timely manner.”(Barbarosoğlu, Özdamar & Çevik,2002).

According to (Zanjirani Farahani et al 2011), “disaster management may be a collection of actions intended to be connected some time later, amid, and after disasters to keep a strategic distance from or reduce their impacts.” Its goal is to “reduce or minimize possible hazardous losses, provide fast and appropriate support to disaster victims, and achieve speedy and efficient recovery” (Hallikas, Karvonen,, Pulkkinen Virolainen & Tuominen M ,2004).

“Disaster Risk Management” is defined as “the sum of all activities, programs, and procedures that may be implemented prior to, during, and after a disaster with the goal of preventing a disaster, reducing its effect, or reimbursing losses” (Khan,2008). It "focuses on the structure and organization

of assets and duties to manage all aspects of crises and disasters, including status, response, and early recovery phases," according to the report (UN-SPIDER, 2020).

Cycle of disaster management "The disaster management cycle is a sequence through which governments, businesses, and civil society prepare and also mitigate the effects of disasters, respond during and shortly after a disaster, and recover after a disaster has occurred. The four phases of disaster management depicted below do not usually, or even frequently, occur in this exact order. The length of each phase of the cycle is highly dependent on the intensity of the disaster" (Khan, 2008).

The general cycle of disaster management, agreeing to Tomasini and van Wassenhove 2009, contains of four phases:

- ❖ **Mitigation:** deals with the constructive social aspect of disasters. This involves legislative rules and procedures that increase the population's adaptability while minimizing its susceptibility.
- ❖ **Preparation:** Players in the catastrophe relief supply chain must acquire mechanisms and reflex devices to distinguish additives that society hasn't been able to avoid up to this point (withstanding risks and helplessness).
- ❖ **Response:** the process of dealing with a disaster.
- ❖ **Rehabilitation/Recovery:** This is the final stage of the disaster management plan, during which society is assisted via the use of survivor education. And there are initiatives on a regular basis to reduce misfortunes and restore some semblance of normalcy to the lives of the afflicted.

Kovács and Spens 2007, for example, characterize the stages of disaster relief efforts as follows.

Preparation In a nutshell, it means "putting in place reaction mechanisms to counterbalance components that society has not been able to control (risks and vulnerability)" (Tomasini & van Wassenhove, 2009).

Depending on the type of disaster, preparedness efforts may include things such free planning, establishing and rehearsing exit strategies before of time, and taking actions to mitigate catastrophic losses.

Immediate disaster response "When a disaster occurs, territorial performing artists activate their crisis plans. However, regardless of how well prepared these players are, they will be required to function in a destabilized foundation environment" (Kovács & Spens, 2007). "Because the nature of most disasters necessitates a rapid reaction, supply chains must be built and dispatched as soon as possible, even if data on the situation is limited" (Beamon,&Balcik, B, 2007). "It is frequently

debatable which assets are accessible, and the assistance and commitment of suppliers is uncertain” (Kovacs & Spens, 2007)

“In the initial reaction phase, distant assistance providers make assumptions about catastrophe victims' needs based on scant information.” Wood, Barne, Murphy, and Wardlow (Wood, Barne, Murphy, and Wardlow, 1995). “Assumptions must be established considering the type and level of goods required, request dates and regions, and the structure of any possible transportation of these supplies to any place of consumption” (Kovács, G., and Spens, 2007).

Reconstruction The final stage is recreation, “when humanitarian actors included pursuit for reestablishing a few shape of typicality to the victims’ lives” (Lodree & Taskin, 1995), and “the regional actors can start to assist casualties within the area of their family and friends” (UN-SPIDER, 2020). As previously said, the recovery period is essential since disasters can have brief effects on a region. Furthermore, disasters might have long-term consequences for project management.

At long last, concurring to the Joined together Countries, 2015 (UN-SPIDER, 2020) “disaster-risk administration is the precise prepare of utilizing regulatory orders, organizations, and operational skills/capacities to execute techniques, arrangements and moved forward adapting capacities. Usually in order to decrease the negative effects of hazards and the possibility of a disaster. Usually effective, disaster-risk management measures focus on minimizing the effects of risks through exercises and actions associated to anticipation, relief, and preparedness” (UN-SPIDER, 2020).

2.1.2 Humanitarian Logistics definition and humanitarian action

Humanitarian logistics is defined as the process of organizing, actualizing, and managing the effectual, expense stream and capacity of products and materials, as well as associated data, from the point of origin to the point of usage for the purpose of improving the welfare of victims (Thomas and Kopczak, 2005).

Humanitarian logistics defined as that special branch of logistics which managed response supply chain of critical supplies and service with the challenges such as infrastructure, vulnerabilities and vast scope and size of the operation. (Aruna apte,2009).

According to Kovuács and Spens (2007), humanitarian logistics are a "multi cluster of activities" that include disaster relief as well as ongoing support for developing communities, namely a as a response to specific disasters. They perceive the connection in all of these activities in that their goal is to assist folks in surviving. They also involve the planning of the transportation of all different

materials and labor from supply points to a wide number of target hubs, as well as the exchange of persons impacted by the disaster to wellbeing care facilities.

According to Trunick (2005), logistics is the most costly aspect of a relief mission, accounting for about 80% of the total amount raised. As a result, the proper execution of logistics procedures will be a significant contributor to the operation's efficiency and adequacy. In humanitarian supply chains, adequacy assures that we spare time, and time spared implies more lives spared; effectiveness guarantees that we spare money, and costs spared mean more lives made a difference.

Humanitarian organizations are therefore under greater scrutiny to monitor the impact of aid and the arrangement of their entire operations; they have to prove to donors, who are pledging millions in aid and goods, that they are really reaching the ones in need (Van Wassenhove, 2006).

The targets of humanitarian activity are to spare lives, ease enduring and keep up human nobility amid and within the consequence of man-made emergencies and characteristic fiascos, as well as to avoid and reinforce readiness for the event of such circumstances (Van Wassenhove, 2006).

Humanitarian activity should be guided by humankind's compassionate standards, which include the importance of sparing human lives and reducing suffering wherever it is found; impartiality, which means carrying out activities solely on the basis of need, without discrimination between or within influenced populations; and non-partisanship, which means that compassionate activity should not favor any sibling. and freedom, which refers to the independence of helpful aims from political, economic, military, or other goals that any actors may have in relation to places where humanitarian action is carried out.

. It also can be one of the most expensive parts in the relief operation and the effectiveness of the operation is always being monitored in order to improve the operation and to minimize the operating cost with the maximum of result's operation. Tomasini, R. & Van Wassenhove, L. N. (2009), stated that disaster management is a key factor that drives the successful execution of relief efforts. Disaster management is described Humanitarian activity incorporates the security of civilians and those who are no longer taking part in threats, as well as the provision of nourishment, water and sanitation, security, health services, and other forms of assistance for the benefit of impacted individuals and to facilitate the return to normal lives and livelihoods.

Humanitarian logistics refers to the process of deploying people, assets, skills, and information to aid catastrophe victims. In compassionate handling, logistics is at the heart of the mobilization movement because it serves as a link between catastrophe planning and response, acquisition and

dispersion, and base camp and field. It may also be one of the most expensive aspects of the relief operation, and the adequacy of the operation is always being monitored in order to advance the operation and reduce the working taken a toll with the most severe of results operation.

Tomasini, R. & Van Wassenhove, L. N. (2009), stated that Disaster management is a critical component in ensuring the effectiveness of relief activities. Disaster management is described as a process that composed of several Stages However, the most part that is usually discussed in the literature are Mitigation, Preparation, Response and Reconstruction, which of the disaster management cycle .

Disaster management cycle refers to mitigation refers to laws and mechanisms that reduce social vulnerability. Among the concerns in relief are the obligations of governments, which do not include the coordination of logisticians' interests. The planning alludes to numerous operations that occurred lately when a disaster struck by combining the skills of execution, of an efficient operational reaction. This arrangement is critical since it is where the physical arrangement plan, data and communications innovation frameworks, and collaboration foundations are established. The goal of this arrangement is to keep a strategic gap from the most severe possible outcomes of a calamity and the efforts made between catastrophes in learning and modifying from previous encounters in order to tackle current challenges. The reaction alludes to the different operations that are instantly executed after a catastrophe happens

The response refers to the various operations that are instantly implemented after a disaster occurs.

There are two main objectives in this stage which are to immediately respond by activating the “silent network” or “temporary networks”, and to reestablish the basic administrations and product conveyance to the greatest number of beneficiaries in the shortest time possible. The recreation organize alludes to distinctive operations within the consequence of a calamity. It involves recuperation, and thus arranges points to solve the issue in the long run. For case, promptly after catastrophe, transportation companies may experience a modular move from street to rail that wins long after the event of the disaster. Large-scale exercises, irregular requests, and strange imperatives define humanitarian logistics (Beamon and Kotleba, 2006). The difficulties can vary from a loss of control sources to a limited transportation architecture that includes a ‘controlled’ environment with a few small changes (e.g. activity clog) (Kovacs and Spens, 2009).

2.1.3 The Players Involved in Humanitarian Logistics

Individuals or organizations that contribute to the humanitarian logistics plan are referred to as participants in humanitarian logistics. Governments, the military, aid groups, donors, non-governmental organizations (NGOs), and private commercial firms are all participants in humanitarian logistics. All actors have critical duties and errands to ensure the humanitarian logistics arrangement is productive and cost-effective.

2.1 Table below shows the summary of the role for every player in humanitarian logistics.

Player	Role/responsibility
Government	The humanitarian activators, who must be able to conduct activities and implement strategic.(Daud <i>et al.</i> 2016, Kessler 2013)
The military	A critical participant since military are relied upon to provide critical assistance, such as clinic and camp installation, broadcast communications, and course repair..(Daud <i>et al.</i> 2016)
Donors	Participants who just make monetary contributions to support operation.
NGO	To provide the supports to humanitarian operation based on its role; donors, collectors or providers. Donors-give financial in cash to support the operation; collector-collect the financial from customers, employee and suppliers to support the operation; provider- a company that offers its goods and services for free.

Table 2.1: The summary of players in humanitarian logistics

The humanitarian activators, who must be able to conduct activities and implement strategic , the military a critical participant since military are relied upon to provide citical assistance, such as clinic and camp installation, broadcast communications, and course repair Donors Those who exclusively give financial means to fund aid operations NGO To give the supports to humanitarian operation based on its role; donors, collectors or providers. Donors-give financial in cash to support the operation; collector-collect the financial from customers, employee and suppliers to support the operation; provider- a company that offers its goods and services for free.;

2.1.4 Humanitarian logistic practices

2.1.4.1 Procurement management

Relief groups make an initial evaluation immediately after a disaster occurs (usually within one day after occurrence). The choice of a modality should be based on technical factors as well as an objective assessment of the requirements of the afflicted community (PAHO, 2000). The projected quantity of goods necessary to address the afflicted population's relief requirements, as well as pre-positioned goods currently accessible at the organization's warehouses, are assessed (Thomas, 2003). The relief products that must be obtained from suppliers are determined (Balcik & Beamon, 2008). The assessment is then put into supply requirements as the following phase. The quantity, criticality, and kind of necessary resources vary greatly, and demand for relief supplies is much unexpected (Kovács & Spens, 2007). In order to give equitable opportunity to all enterprises interested, humanitarian groups frequently acquire relief supplies from worldwide vendors through competitive bidding processes (Balcik & Beamon, 2008). Competitive bidding processes are rarely used in times of major disasters, when supplying items rapidly and in big quantities is critical (Taupiac, 2001). Humanitarian organizations begin the bidding process by identifying possible suppliers who can fulfill the item's and delivery requirements. The qualified vendors are then requested to submit bids. Humanitarian organizations analyze the purchase bids as a final step before finalizing contracts with the winning supplier. After that, supplies are delivered to the impacted communities. To improve response, humanitarian groups began forming pre-purchasing agreements with suppliers, which stipulate quality and delivery standards for essential supplies ahead of time. Typically, these agreements state that vendors must have emergency supplies on hand for humanitarian groups (Balcik & Beamon, 2008). Donations and grants can be multilateral, handled by agencies that pool resources from several countries and disperse them, or bilateral, provided directly from a giver to a recipient (Russell, 2005). Goods and services enter the relief logistics chain through a variety of sources, forms, and places, according to the author. Non-kind gifts of products and services might enter the network (i.e., non-monetary goods and services).

2.1.4.2 Transportation management

Relief organizations' operation is heavily reliant on transportation and logistics. Increasing the efficiency of transportation and logistics systems has the potential to make a major difference. Increase the availability of humanitarian aid (Dolinskaya *et al.*, 2011). Immediately following the tragedy, when it comes to carrying big amounts of aid, humanitarian groups frequently confronts major challenges. food, clothes, medical supplies, machinery, and manpower from a variety of sources Several points of origin to a variety of places inside the disaster zone, To increase the

affected population's survival rate and reduce operational costs, supplies and relief staff must be transported promptly and effectively (Haghani & M. Afshar, 2009).

A lot of transportation is nerve-wracking to provide help to those in need at the right time and in the right place. In a disaster event, selecting a means of transportation is a critical consideration. This will automatically identify any hazards that are manageable (Peck, 2005). For example, lacks of heavy vehicle drivers in the United Kingdom or a crane driver strike at an Australian seaport. As with any crisis, aid arrives from all corners of the globe. As a result, it's critical to choose the most efficient means of transportation to provide humanitarian aid to individuals in need as fast as possible.

Foreign shipping, waif distribution, military transportation, non-commercial transportation, third-party logistics agencies, freight forwarders, container shipments, and local aircraft in the shape of ships, trucks, cars, boats, or, if necessary, aircraft are all examples of this. However, transportation is reliant on road conditions, fuel availability, and disaster-free airports and ports. To give international support, the types of vehicles that may be employed are determined by the highways leading to the disaster area and the height of other major areas. Flow capacity is an important factor to consider while deciding on a transportation strategy for a corridor. A solid transportation infrastructure is essential for a disaster-stricken area's survival and rehabilitation (Masaba, 2015). Transportation is an essential part of any humanitarian relief operation. Its goal is to get items and other necessities to those who have been affected by natural catastrophes. Trucks, aircraft, ships, and other modes of transportation can be used, as long as they are regarded appropriate for the circumstances (Oloruntoba, 2000).

2.1.4.3 Warehouse management and distribution

The amounts of distribution stations have been decided in order to reduce the distance between recipients, but they should be located in pre-existing community centers and gathering places. such as clubs, churches, and so on. Successful distribution programs need accurate data on the commodities offered and the people who will be impacted. The humanitarian operation is made easier by the employment of military actions in cargo handling and road clearance. To reduce congestion at the entrance point, it will be vital to have workers who are familiar with customs clearance. . It should also train personnel to operate in the region, reducing mistakes and avoiding airport and warehouse congestion.

It should also look into suitable storage locations owned by Government and public entities, along with device accessibility (forklifts, pallet transporters, and so on) that can be mobilized in the least

amount of time. Logisticians can utilize a variety of approaches to ensure that warehouse and distribution centers are properly placed (Roh Jang, & Han, 2013). A final two steps of the relief supply chain represent the final stage between an expanded distribution point and the beneficiaries, which are sites or warehouses near the affected region. The final mile procedure is crucial in ensuring that relief items reach the people who need them most. Due to damaged infrastructure and road restrictions in the affected region, this phase might be difficult (Duran et. al, 2016)

2.1.5 Challenges affecting the humanitarian logistics practices

Humanitarian logistics are faced with several challenges.

Thomas & Kopczak, 2005, presented challenges afflicting humanitarian logistics that are common and applicable to most countries in the world; need of acknowledgment of the significance of logistics, need of proficient staff, lacking utilize of innovation, need of institutional learning and limited collaboration among the humanitarian organizations themselves and with other stakeholder are considered internal factors and the external factors are infra-structure ,socio economic factor, lack of donor funding ,political factor, economic factors..etc. These challenges usually affect the performance activity of the relief operation. Some of the external challenge that affecting the humanitarian logistics practices are shown below.

Lack of Infrastructure

Infrastructure The accessibility of a street organization, railroad, air terminals, and control supplies are all important components of humanitarian logistics operation (Chakravarty, 2011). Communication is as important as nourishment during a crisis. A disaster can damage telecommunication infrastructure. He Corrupted infrastructure issues on roads, railroads, airplane terminals, control supply, stockrooms, communications lines, and so on which were harmed in the disaster or were non-existent to proceed with inside the impacted area have turned into a significant impediment to the execution of humanitarian logistics (Tomasini & Van Wassenhove, 2009).If an event happens in a densely populated area, thousands of people can try to make calls at the same time overloading the system (Van Wassenhove and Samii, 2003) which also affect in the performance of aid activities.

Socio-Economic

Socio-economic indicators show instability of supply and demand, unreliable economy, and lack of support from local suppliers, competition for access to personnel, lack of support from financial sponsors, culture and dialect of the country, animal husbandry and transportation, and need. For trust between participants in the supply chain (Oloruntoba et al. Gray 2006).

Inventory Management Practice Issues

Inventory is the basis of humanitarian logistics, but cerebral pains on the ground have a wide-ranging impact on the success of relief efforts. According to Richardson, keeping a sufficient reserve is essential for crisis preparedness and disaster management (Richardson et al., 2010).

Internal challenges

This segment contains the challenges that come from inside the organization and specifically influence the humanitarian logistics practices

Lack of Qualified staff

Having the necessary tools for the job does not guarantee that the task will be done successfully, because users of these tools may not understand how to utilize them effectively. The lack of competent employees and resultant waste of money and time is a major problem faced by most humanitarian organizations. Many players participating in the relief process contribute diverse structures, cultures, responsibilities and mandates, which eventually lead to obstacles to cooperation amongst the many players involved in the relief process (Kabra and Ramesh, 2015). According to John, Gurumurthy, Soni, and Jain (2018), the individuals in charge of logistics and humanitarian supply chain management in most NGOs and other humanitarian organizations are frequently untrained in this area. As a result, they are not specialists in problem-solving techniques that may be used during operations.

Lack of Coordination

Humanitarian situations include a wide range of people, each with its own set of tasks, interests, talents, and logistical knowledge. While commercial I supply chain management coordination techniques have been widely studied, humanitarian relief chain coordination is still in its infancy (Balcik et al., 2010). The supply organize is wide and perplexing, with a few actors (benefactors, NGOs, government, and merchants), making it difficult to organize all of the things that must be given. In spite of their social, political, geological, and historical disparities, there is a growing demand for collaboration and task specialization in humanitarian supply chains between NGOs, government, and private enterprises (Kabra, Ramesh and Arshinder, 2015). One of the most common reasons of delays in emergency aid is a lack of coordination, which worsens victims' suffering. Many aid services may congregate at one disaster site, while numerous more tragedies go unnoticed (Dasaklis and Pappis, 2017). Several studies have identified a lack of coordination as a fundamental problem in humanitarian work, claiming that this challenge can result in a variety of consequences, including ineffective aid distribution, competition among actors for scarce resources, and traffic congestion at airports and local roads (Rodríguez-Espndola, Albores, and Brewster, 2018).

Lack of Transparency

The concept of supply chain transparency was thought of nearly 15 years ago, but it is now attracting the attention of middle and senior executives from a wide range of enterprises, sectors, and humanitarian aid groups (Bateman and Bonanni, 2019). Transparency in the supply chain is usually easier stated than done. Obtaining insight into the organization's humanitarian supply chains is a critical undertaking that necessitates collaboration among various stakeholders to reach a common aim. This becomes more challenging in a global and fast-paced workplace (Tsai, 2019). Transparency in the provision of humanitarian goods and supplies has significant risks, which may jeopardize organizations' ability to continue working under the intense scrutiny and restrictions imposed by donors (Baporikar and Shangheta, 2018). Commitment alone, as well as guaranteeing employee justice, may be sufficient in some cases, particularly in nations where corruption is a problem. To fulfill its goal, the organization may be compelled to pay bribes, as well as pricing manipulation and unreliable transportation, which can make satisfying demands more difficult (Dufour, Laporte, Paquette and Rancourt, 2018).

2.2 Empirical literature reviews

This section aims to assess from an analytical perspective what other researchers applied to humanitarian logistics in the disaster response.

2.2.1 Humanitarian logistics practices

The Disaster Administration Training Programmer (DMTP, 1993) mentioned transportation and communication structure as one of the barriers to successful aid delivery. The nation's framework may be degraded to the point where assistance supply is seriously jeopardized. Furthermore, disasters happen in those regions in bad condition and unable to deal with the large number of transport infrastructures refugees, military equipment and This problem was overcome with a case-by-case approach to the barrier, because of the uncertain consequences of the disasters and the infrastructure's instability .Communicating was also been mentioned as one of the challenges facing humanitarian organizations.

Adem (2017) studied the practices and problems of humanitarian logistics in Ethiopian non-governmental organizations (NGOs). The findings suggest that the rigor of government policies, as well as infrastructure problems, have an impact on humanitarian effectiveness. The findings also show that the wishes of vulnerable groups are well-known at the time of pre-response or coordination need assessments, suggesting that situation evaluations are required. The delivery of assistance at the appropriate time, in the right place, and to the right people will be hampered by a lack of warehouse space and relevant information management systems.

In accordance to (Whybark, 2007) the distribution of relief products should, be supplied without political or religious bias or ethnic preference because the purpose is to relieve the beneficiaries from their suffering and dangerous conditions. The goal is to save lives and to return beneficiaries to everyday life that can only contribute to humanitarian results. An organization that monitors its success will create and preserve information and easily display progress systematically and measurably (Whiting & Ostrom 2009).

Oloruntoba(2005) studied In the case of the Tsunami, relief efforts on their way to Banda Aceh were hampered by heavy rains, which made entry to the area impossible. Another difficulty concerning transportation in humanitarian logistics techniques was road degradation. Again, in the case of the Tsunami, a key transport route for disaster relief efforts from Medan to Banda Aceh (Indonesia) was negatively impacted and destroyed owing to overweight and large vehicles utilizing overland bridges. Flooding was another impediment to movement.

Wodaje (2019) In Ethiopia, Plan International investigated the techniques, problems, and results of humanitarian logistics. The findings indicate that before deploying supplies, humanitarian logistics must do a thorough situational analysis of security, urgency, and the level of destruction in impacted areas. For disaster response operations, the utilization of various modes of transportation to move goods and personnel to where they are needed during an emergency is acceptable. . Moreover, it is basic to utilize a prequalified list of transportation firms and different transportation optimization models to convey products. The consider moreover found that having an satisfactory and satisfactory distribution center to briefly store products is basic for more proficient and compelling help dispersion. Besides, the study's discoveries illustrated that utilizing well-established dispersion centers makes dispersion simpler and brings down working costs.

2.2.2 Challenges of humanitarian logistics practices

Japhet Baidoo (2018) carried out the study "The role of disaster relief organizations in Ghana' to ensure the effective and efficient provision of humanitarian logistical service. “The findings suggest that transport issues, inadequate coordination and delays in customs clearance and logistics processes appear to hinder the success of humanitarian organizations.

Christopher & Tatham (2011) in their study cited the need to coordinate operations across a large number of unrelated agencies; a need for volunteers with little or no training; the scope of each disaster being different and differences in how humanitarian aid is distributed.

Mbohwa (2010) talked about the obstacles, difficulties, and problems that humanitarian groups encounter while running logistical systems in Southern Africa, with an emphasis on particular systems in Zimbabwe.

Denning (2006), was describing the challenges facing humanitarian logistics practices "Hastily Formed Networks." One task is to "crypt vital infrastructures, such as communication, power and water.", " which are intended to resolve unforeseen crisis scenarios.

According to Stephenson (2005), collaboration is a difficulty for humanitarian groups. According to him, relieve performers operate in an area that would not constantly promote involvement. Coordination and management of complex supply chains is thus becoming highly significant and should be incorporated into useful supply systems.

2.3 Literature gap

As mentioned in this empirical review section, several related research conducted in humanitarian logistics and disaster response shows specific issues, such as distribution, transport, procurement, coordination, stock storage, flow of information(communication) and other humanitarian logistics practices. Despite its importance in saving lives and reducing sufferings, humanitarian logistics is an understudied issue. In Ethiopia, there are few studies on humanitarian logistics practices in disaster relief operations. As a result, this study contributes to closing the gap. In order to identify existing humanitarian logistics practices

2.4 conceptual frameworks

There are many challenges that impact the practices of humanitarian logistics. These Challenges being numerous, and having theoretical backing from past literature and Performance reports, have been proven to have an impact on humanitarian logistics practices. This study however, focuses on the humanitarian logistics practices in disaster relief operation by Catholic Relief Services Ethiopia on a few challenges as depicted in this conceptual framework. These challenges include Employee skill and motivation inadequate use of technology, coordination & information flow, Political, Economic, and Socio-cultural. The conceptual framework is a combined modification of the conceptual frameworks developed by prior studies (Yalcin, Ozpolat, & Hales, 2015). Based on this the study developed conceptual model to indicate the interconnection between dependent and independent variables.

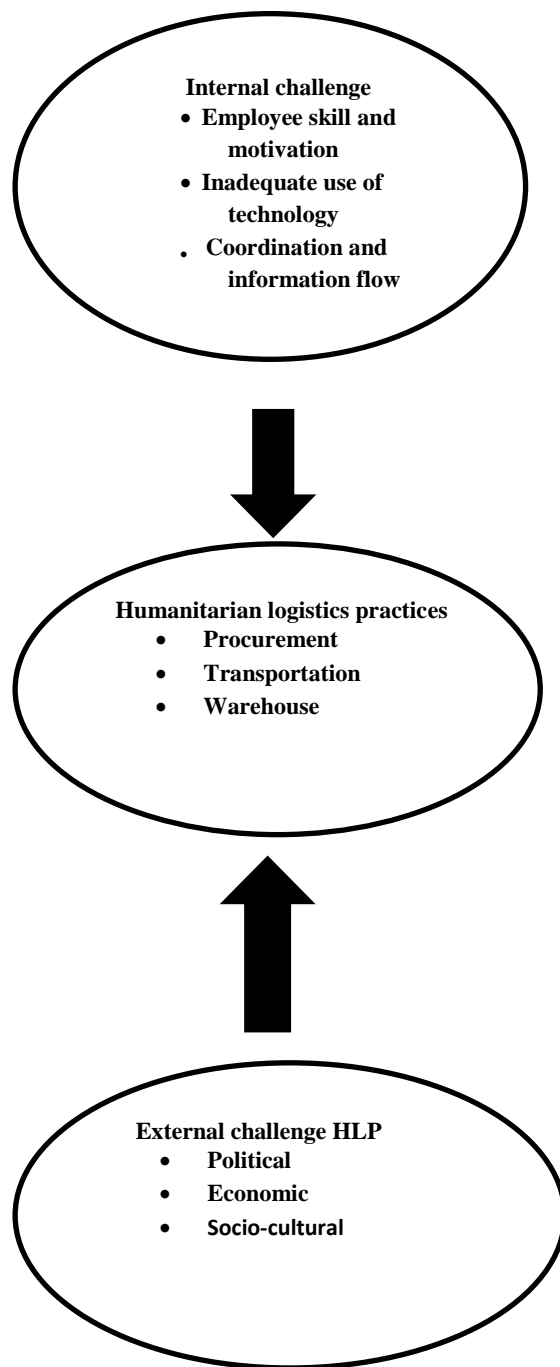


Figure .1 conceptual frameworks; develop by Yalcin, Ozpolat, & Hales, 2015.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter describes the study area, research methodology and design, population design, data source and type, data collecting technique, ethical concerns, data analysis and presentation method, validity test, and reliability test.

3.1 Description on the Study area

Catholic relief service has worked in Ethiopia since 1958, for 60 years CRS has taken lead in u to natural and manmade disaster affecting Ethiopia most vulnerable community .moving beyond emergency response ,CRS disaster mitigation and recovery project in drought and flood prone areas have rebuilt individuals and community assets through non-food aid in the form of agricultural ,livestock, health nutrition and water and sanitation assistance . CSR humanitarian work in Ethiopia also provides livelihood support to farmer and entrepreneurs promotes gender equality, mobilizing for immunization and mitigates the impacts of HIV. There program area is agriculture emergency response and recovery, heath, microfinance, water security, partnership and capacity strengthening.

3.2 Research approach

To overcome the restrictions and improve the data's quality and flexibility, the research use combination of qualitative and quantitative methods is more likely to address the problem. (Robinson, 1998). The study used a mixed-methods approach (both qualitative and quantitative). In incorporate both qualitative and quantitative approaches; a mixed research approach is used. “Mixed method research is a type of study in which a researcher or a group of researchers combine elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative perspectives, data collection, analysis, and inference techniques) for the purposes of broadening and deepening knowledge and corroboration.” (Johnson *et al.*, 2007)

3.3 Research design

The study used both descriptive and explanatory research design. Descriptive research aims mainly at describing the current condition of circumstances (Kothari, 2004). The goal of descriptive research is to provide a systematic and accurate description of the features or behaviors of a specific group. It may be undertaken to acquire basic information about the target group or to offer particular data on social problems to government agencies and other policy-making bodies. (Leary, 2012)

Descriptive research is used because it shows the current humanitarian logistics practices on procurement, transportation, warehouse and factors affecting humanitarian logistics and also descriptive research were used to fulfill the research objective in order to acquire information about it and identify important difficulties about the present status of humanitarian logistics practices. The research give insight into the problems discovered, enabling policy-makers to offer adequate solutions.

3.4 Population and sample of the study

A census inquiry is a full enumeration of all objects in the population. It may be assumed that when all objects are covered in such an investigation, no element of chance is left and the utmost accuracy is reached. It should be underlined that when the universe is tiny, relying on a sample poll is pointless (Kothari, 2004).The population is all individuals of interest to the researcher (Geoffrey, David & David, 2005). The members of the target population were all logistics staff working in the head office of the Catholic relief service. The population thus consisted of the target population of 38, which had some observable characteristics, to which the researcher intends to generalize the study's results .All CRS personnel who are directly responsible for humanitarian logistics practices on disaster relief operations are included in the targeted population as well as the data sample.

3.5 Data collection method

In research, there are two types of data that are used. Data is classified into two types: primary data and secondary data. Data gathering is an essential part of writing a research thesis. Primary and secondary data sources were employed to achieve the goals of this study. Primary data is gathered by your own development and analysis of your own outcomes. Throughout the whole analysis of this study the researcher used primary data. This kind of data is mostly useful since it is collected for the objective of the research. The researcher distributed a standard questionnaire to respondents of CRS humanitarian logistics and supply chain practitioners and professionals. The information gathered by respondents were therefore considered as primary data using standard questionnaires

In addition, an interview was used the interview was primarily concerned with evaluating the organization's logistical procedures and challenges. According to Kumar (2011), unstructured interviews are a versatile interview method with a wide range of subjects and a larger degree of flexibility in interview questions .It gives you total creative control over the structure and content of your site. It assists in the formulation of questions and the raising of concerns on the spur of the moment, based on what happens in the context of this discussion.

3.6 Data collection procedure

Data collection is the systemic method through which research is performed for observation or measurement. In this research the collection of data was developed with a questionnaire and interview, the questionnaire was distributed to the respondents, the questionnaires had been interviewed and the questionnaires distributed from the respondents were collected. For the purpose of this investigation, the measurement instrument was a quantitative method with an associated questionnaire. Closed-end surveys have been made available to groups of people at the same time since they are less costly and time consuming than other interventions.

3.7 Validity and Reliability

Validity decides whether or not a study accurately measures what it claims to be measuring. Validity determines whether the research truly measures what it intends to measure, or how truthful the research results are (Schindler, 2003)The more constant the results are throughout time and accurately reflect the whole populations under research, the more scientifically credible they are. The researcher was able to determine consistency based on the reliability of the results across different respondent groups since the study technique was uniform throughout respondents. The research advisor and subject matter experts double-checked the findings. To determine the reliability of the data gathering tools, the researchers used an internal consistency methodology called Cronbach's alpha. Cronbach's alpha is a Coefficient of reliability that gives an unbiased estimate of data generalization (Zinbarg, 2005). According to Tavakol *et al.* (2011), Cronbatch's Alpha value ranging from 0.70 to 0.95 is acceptable. The coefficient of reliability for the collected found to be 0.83. Therefore, based on test results, the instrument scored an acceptable Cronbach's alpha and the instrument is found reliable.

Table 3.1 Reliability Statistics

Variables	Cronbach's alpha	No of item
Procurement management	0.81	6
Transport management	0.80	4
Warehouse management	0.73	4
Internal challenges in disaster response	0.71	6
External challenge in disaster response	0.81	6

Source-own survey (2021)

3.8 Methods of Data analysis

The research was conducted using a mixed approach in this study. As a result, data is evaluated quantitatively as well as qualitatively. The data is presented in tables and evaluated using standard percentages. Descriptive statistics such as percentage, frequency and inferential statistics such as correlation analysis were computed to analyse the data. Through the SPSS program version 20, data acquired using questionnaires were examined. In the analysis of the demographic profile of the respondents are analyzed using frequency and percentages. In an unstructured discussion with the managers, the humanitarian logistics practiced were highlighted. These data measures and improve research on humanitarian logistics and Catholic relief services to examine the most crucial factors of humanitarian disaster problems and the effects. frequency ,percentage, mean and standard deviation were used to analyze the data.

3.9 Ethical consideration

The researcher ensured that the respondent's involvement was fully voluntary and that he or she was willing to participate in both the interview as well as the questionnaires In addition, the researcher explained the purpose of the study to the participants. By retaining all of the data, the researcher was able to protect the identities of the research participants by keeping the complete data collection secret and only used the replies for academic re, .purposes. To safeguard research participants from any difficulties, all required steps have been taken. The researcher aimed to use high methodological standards by using standardized data collection methods in order to avoid any misconceptions or misunderstandings. Furthermore, the different the books, journals, research papers, and conference proceedings utilized as references for the study were identified and cited and correctly reference. .All required safeguards were taken to safeguard the study's participants from any issues.

CHAPTER FOUR

RESULT, DISCUSSION AND INTERPRETATION

This chapter presents the data analysis and findings by using questionnaires and interviews .based on the objectives of the study the questioners were developed and this questioner were distributed to those targeted population. The collected data are presented and analyzed using SPSS software .overall this chapter is about discuss ,interpretation and also analyzing of data.

4.1 Demographic profile of the respondent

The age, sex, educational degree, experience, and department unit of respondents were all taken into account in the study.

Table 4.1 shows the respondent's demographic profile

Demographic profile	Items	Frequency	Percent
Gender	Male	22	57.9
	Female	16	42.1
Age	20-30	6	15.8
	31-40	15	39.5
	41-50	10	26.3
	>50	7	18.4
Educational level	Diploma	3	7.9
	Bachelor degree	21	55.3
	Master's degree	11	28.9
	Other	3	7.9
Job position	Procurement staff	6	15
	Program management staff	10	26.3
	Emergency management staff	7	18
	Supply /logistics	15	39.5
Year of service in the organization	1-5 year	8	21.1
	6-10 year	16	42.1
	11-15 year	9	23.7
	20 years	5	13.2

Source: survey result (2021)

Based on table 4.1 It shows that most of the responders were males, 57.9% and 42.1% were females. This indicates that this study involved more males than females. 15.8% of the respondent was between the age of 20-30 years, 39.5% were between age of 31—40 years, 26.3% were between age 41-50 and 18.4% were above 51 year. Overall, the organization contains employees of different ages, which means they have a diverse set of skills and experiences in terms of productivity and contribution to the company's goals. 7.9 % respondent had diploma, 55.3% had bachelor degree, 28.9% had master's degree and 7.9% had other. According the results, the majority of the respondents were skilled professionals who could clearly understand and give their thoughts on the study questionnaire. 21.1% of the respondent had 1 up to 5 years of work experience, 42.1% of the respondent had 6 up to 10 years of work experience, 23.7% of the respondent had 11-15% year of work experience and 13.2% of the respondent had 20 years and above work experience. The data shows that almost all respondents had good skills and experience of the field. They will therefore provide the study with reliable and specific information. Out of the total responses, 39.5% work in supply chain and logistics, 26.3 percent in procurement, 18.4 percent in emergencies, and the remaining 15.8 percent work in program departments.

4.2 Humanitarian Logistics Practices of Catholic Relief Service

On this section explores the outcome of the measure to which catholic relief service of Ethiopia is putting the three fundamental humanitarian logistics techniques into action. The organization's logistics procedures are shown and analyzed for each variable by relevant tables based on mean and standard deviation. The questionnaire was created on a five-point scale ranging from five to one, with five representing considerable practice, four well practiced, three moderately practiced, two poorly practiced, and one never practiced.

The mean range between 4.21 and 5.0 indicates that it has been extensively practiced, the mean range between 3.41 and 4.2 indicates that it has been well practiced, the mean range between 2.61 and 3.4 indicates that it has been moderately practiced, the mean range between 1.81 and 2.6 indicates that it has been poorly practiced, and the mean range between 1-1.8 indicates that it has never been practiced. (Rensis Likert, 1993)

4.2.1 Procurement Management Practices of CRS

Based on table 4.6 procurement management practice are shown that procurement professionals are competent and trained process manage acquisition has a mean value of 3.76 which indicate that it is well practiced .The mean value of procurement handles in kind adequately goods donations and

equipment purchase is 3.79 it is well practiced. The mean value of the Catholic relief service supplies need are often match with collected or donated items is 3.24 it indicate it moderately practiced . The mean value obtain relief items by preparing and delivering orders on time and at fair price is 3.87 it is well practiced. The mean value of Procurement procedures are used in catholic relief service organization is 3.76 it is well practiced. The mean value for approval strategy plan

Table 4.2 Procurement management practices of CRS(N=38)

Procurement practices	Mean	Std. Deviation
Procurement professionals are competent and trained Process Manage Acquisition.	3.76	0.913
Procurement handles in kind adequately Goods donations and equipment purchase.	3.79	0.905
The catholic relief service supplies need are often match with collected or donated items	3.24	0.883
Obtain relief items by preparing and delivering orders on time and at a fair price.	3.87	0.963
Does Procurement procedures are used in catholic relief service organization	3.76	0.852
Approval strategy plan procurement built by involvement /beneficiaries' participation	3.42	0.919
Grand mean	3.64	

procurement built by involvement /beneficiaries participation is 3.42 it moderately practiced .

Source; survey result (2021)

An interview only with company's managers confirms that the organization implement procurement policies that shows the overall procedures of units like procurement procedure which the organization use are direct purchasing comparative negative ,tendency almost all procurement procedures are used in depending on the situation analysis. The major source of the organization come from the united states of government .In procurement process there are challenges raised in each of the process step in sourcing on the suppliers problem in requesting of the information in order to prevent this kind of problem mostly the organization give prior studies on potential suppliers and this data are analyzed and also used in required time need of suppliers by further digging the current state of the supplier after all going through all the organization attempt to provide the supplier item at the right time and quantity .

The overall mean is 3.64 this indicates well practices of procurement .well procurement practices indicate that procurement procedures are effectively applied and also there are experts in whom they manage and control the procurement units effectively as well as by sharing of knowledge in the field in achieving the intended to desired outcome. Literature suggest that the anticipated amount of

goods needed to satisfy the relief requirements of the afflicted people is estimated (Thomas, 2003), as are pre-positioned supplies currently on hand in the organization's warehouses.

The relief products that must be obtained from vendors are identified (Balcik & Beamon, 2008). According to the other literature, humanitarian procurement methods attempt to guarantee that organizations want all of the goods needed to deliver effective disaster aid (PAHO, 2001).

4.2.2 Transport Management Practice of CRS

Based on descriptive statistics transport meant for humanitarian logistics services are ability to handle special products or goods has a mean of 3.58 it indicated that it is well practiced .The mean for vehicle are available whenever they are demanded for humanitarian operation is 3.53 it is well practices .The mean of there are a significant number of transportation firms that offer transportation services for emergency jobs with catholic relief service is 3.13 the moderate practiced. The mean of A catholic relief service uses several transportation optimization models to provide goods at the lowest feasible expense are 3.47 it is well practice.

Table 4.3. Transport management practices of CRS (N=38)

Transport management practices	Mean	Std. Deviation
Transport meant for humanitarian logistics services are ability to handle special products or goods.	3.58	0.889
vehicle are available whenever they are demanded for humanitarian operation	3.53	0.893
There are a significant number of transportation firms that offer transportation services for emergency jobs with catholic relief service	3.13	0.777
A catholic relief service use several transportation optimization models to provide goods at the lowest feasible expense..	3.47	0.893
Grand mean	3.42	

Source –survey (2021)

Interview with the managers of the organization verify that organization face challenges from carrying items and transport until the delivery. The major problem which have become obstacle for the organization are infrastructure, socio economic factors problem , loading and unloading problems ,unorganized structure in regional territory policies .Internal problem faced by the organization is that capacity in number of tracking which occurs due to infrastructure problem the organization has been affected by.

From the table above there are a significant number of transportation firms that offer transportation services for emergency jobs with catholic relief service mean of 3.13 is moderate practice this

shows that there are different challenges that initiate for this practiced this are infrastructure ,accessibility , securities might push the organization on delaying on time delivery .

The overall mean is 3.42 which indicate that the transportation practices are moderate in the organization. Which has to be improved since transportation is moving of facilities of good from donors, or from storage, other locations which has to carriage and deliver to the needed area. organization can improve the transportation management though by developing/improving transport strategy and by identifying factors which need to be consider based on the organization situation in developing the transportation strategy. Literature suggests that According to Masaba (2015), a robust transportation system is critical to a disaster-affected area's survival and rehabilitation.

4.2.3 Warehouse Management Practices of CRS

Based table 4.4 the descriptive analysis of the warehouse management practices shown that the warehouse site of Catholic relief services organization is very accessible for shipment has a mean of 3.84 it indicate a well practice need to improve in the location decision of the warehouse or have to improve the accessibility. The mean of Materials are positioned appropriately in specified tracing positions is 3.66 these implies that its well practices which has to be improved so that in order not to risk of damaging items. the mean for Catholic relief service organization Warehouse is sufficient/enough for the storage is 3.68which shows that there are poor practice .the major problem should be addressed . The mean for Warehousing is used by Catholic Relief Services to facilitate coordination, sorting, and packing processes in order to provide help to clients more quickly and efficiently is 3.63 it show that well practice.

Table 4.4 Warehouse Management

Warehouse management practices	Mean	Std. Deviation
The warehouse site of the Catholic relief services organization is very accessible for shipment	3.84	0.855
Materials are positioned appropriately in specified tracing positions	3.66	0.815
Catholic relief service organization Warehouse is sufficient/enough for the storage.	3.68	0.786
Warehousing is used by Catholic Relief Services to facilitate coordination, sorting, and packing processes in order to provide help to clients more quickly and efficiently	3.63	0.786
Grand mean	3.7	

Source: survey result (2021)

Clarify with the organization's managers in an interview. That organization has central warehousing which has been selected based on USID standard which is implemented in every polices of the organization.

The overall mean of warehouse management practices is 3.7 which indicate that the well practices. Catholic Relief service organization warehousing for storage is need to be improved. Warehouses should be supported by information technology, improved warehouse facilities should be used, guidelines or manuals should be implemented to safeguard commodities from damage, and expert human resources should be hired in the field.

4.3 Challenges of Humanitarian Logistics Practiced of CRS

This part looks at the outcome of the degree to which the problem of catholic relief service of Ethiopia in implementing humanitarian logistics practices. The questionnaire has been designed on five different levels ranging from five to one.; where 5 strongly agree ,4 agreed 3 normal, 2 disagree , and 1 agree.

4.3.1 Internal challenge affecting the Humanitarian Logistics Practices of CRS

Based on the table 4.5 Prevalence of high level of staff turnover affects the humanitarian logistics practices of CRS has a mean of 3.53 which indicate the respondent agree with this point. The mean of there is insufficient skilled man power for disaster operation in CRS organization is 3.29 .mean of lack of significant investment in assistive technology that facilitate information flow affects humanitarian logistics practices is 3.39,it indicate agreed. Mean of lack of Use of information technology to make the decision for operation affects humanitarian logistics practices is 3.42, it indicate agree . Mean of Weak information flow affects quality and speed of humanitarian logistics practices is 3.05, neutral .the mean for Ability to disseminate (spread widely) accurate and timely information is satisfactory is 3.24 which show neutral.

Table 4.5 Internal factor humanitarian logistics practice of CRS (N=38)

Internal challenge	Description	Mean	Std. Deviation
Employee skill and motivation	Prevalence of high level of staff turnover affects the humanitarian logistics practices of CRS.	3.53	0.979
	There is insufficient skilled man power for disaster operation in CRS organization	3.29	0.835
	Grand mean	3.42	
Inadequate use of technology	Lack of significant investment in assistive technology that facilitate information flow affects humanitarian logistics practices	3.39	0.946
	Lack of Use of information technology to make the decision for operation affects humanitarian logistics practices	3.43	0.858
	Grand mean	3.41	
Coordination and information flow	Weak information flow affects quality and speed of humanitarian logistics practices.	3.05	0.769
	ability to disseminate(spread widely) accurate and timely information affects the humanitarian logistics practices	3.24	0.998
	Grand mean	3.14	

Source- survey result (2021)

The grand mean for employment skill and motivation factor is 3.42, it indicate all of the respondent agree that this challenge has an a positive impact on in improvement of humanitarian logistics practice .The overall mean for inadequate use of technology is 3.41 which shows that all respondent agree that this factor can affect in decision in the over the management of policy. The grand mean for coordination and information flow is 3.14 shows that the respondent agree that this

factor has an impact in the operation of the organization. The overall mean of the internal factor is 3.32 respondent that this internal challenge affect in overall operation of the humanitarian logistics performance and decision.

4.3.2 Response on humanitarian logistics practiced external challenges

Based on the table under delayed Infrastructural conditions affects the humanitarian logistics operations of CRS organization has mean of 3.47, it indicate agreed. The mean of lack of many local supplier affecting a CRS organizations is 3.55, it shows the agree. the mean of insufficient technology to speed up the transfer of information between the recipients and CRS employees affecting the humanitarian logistics practices is 3.39, it indicate neutral. The mean of There is a lack of telecommunication infrastructure to support the CRS organization's humanitarian logistical activities is 3.61, indicating they agree on this problem. The mean of the distribution of supplies and operation of humanitarian CRS efforts are delayed by cultural and social considerations is 3.42, it indicates agreed. The mean incidence of staff deployment issues due to community opposition is 3.58, it indicate that the respondents all agreed.

Table4.6 analysis on the external challenges for humanitarian logistics operation

External challenge	Description	Mean	Std. Deviation
Economic challenge	Under delayed Infrastructural conditions affects the humanitarian logistics operations of CRS organization	3.47	0.830
	Lack of many local suppliers affecting CRS humanitarian logistics practices.	3.55	0.828
	Grand mean	3.51	
Technological challenge	Insufficient technology to speed up the transfer of information between the recipients and CRS employees affecting the humanitarian logistics practices	3.39	1.128
	There is a lack of telecommunication infrastructure to support the CRS organization's humanitarian logistical activities.	3.61	0.823
	Grand mean	3.5	
Socio-cultural challenge	The distribution of supplies and operation of humanitarian CRS efforts are delayed by cultural and social considerations	3.42	0.826
	Prevalence of staff deployment problems related to community resistance	3.58	1.177
	Grand mean	3.5	

Source: survey result (2021)

Interview with the managers of the organization that infrastructure problems are the organization's biggest logistical problem. A lack of infrastructure results in greater reaction times. To make matters worse, the inaccessibility of financial institutions across the impacted area presents a severe threat to logistics procedures

In general, the grand mean of economic challenge is 3.51 .the grand mean of the technological challenge is 3.5. The grand mean of socio –cultural challenge is 3.5.The overall mean is 3.5 it indicate this external challenge has an effect on the overall practices of the organization in depending on the situation analysis.

4.4 Inferential statistics

4.4.1 Correlation Analysis

Correlations quantify the linear link between two or more variables. According to Kothari (2004), a Coefficient of Correlation with the value of "r" is between and. Positive r values imply a positive correlation between the two variables, whereas negative r values suggest a negative connection. A value of 0 for "r" implies that there is no relationship between the two variables. Karl Pearson's coefficient of correlation was employed by the researcher since it is the most frequently used way of assessing the degree of link between two or more variables.

To investigate the connection between humanitarian logistics methods and disaster response operations.

According to Beldjazia and Alatou, (2016) The following points are the accepted guidelines for interpreting the correlation coefficient:

- 0 indicates no linear relationship.
- +1 indicates a perfect positive linear relationship – as one variable increases in its values, the other variable also increases in its values through an exact linear rule.
- –1 indicates a perfect negative linear relationship – as one variable increases in its values, the other variable decreases in its values through an exact linear rule.
- Values between 0 and 0.3 (0 and –0.3) indicate a weak positive (negative) linear relationship through a shaky linear rule.
- Values between 0.3 and 0.7 (0.3 and –0.7) indicate a moderate positive (negative) linear relationship
- Values between 0.7 and 1.0 (–0.7 and –1.0) indicate a strong positive (negative) linear relationship through a firm linear rule.

Table 4.7 correlation coefficient between humanitarian logistics practices and factors affecting humanitarian logistics practices

Correlation								
		Employee skill and motivation	Inadequate use of technology	coordination and information flow	Economic challenge	Technological challenge	Socio-cultural challenge	Humanitarian logistics practices
Employee skill and motivation	Pearson correlation	1.000						
	Sig.(2-tailed)	.						
Inadequate use of technology	Pearson correlation	.679	1.000					
	Sig.(2-tailed)	.000	.					
coordination & information flow	Pearson correlation	.618	.513	1.000				
	Sig.(2-tailed)	.000	.000	.				
Economic challenge	Pearson correlation	.239	.110	.026	1.000			
	Sig.(2-tailed)	.075	.255	.438	.			
Technological challenge	Pearson correlation	-.249	-.260	-.236	.425	1.000		
	Sig.(2-tailed)	.066	.057	.077	.004			
Socio-cultural challenge	Pearson correlation	.019	-.083	-.224	.581	.586	1.000	
	Sig.(2-tailed)	.454	.310	.088	.000	.000		
Humanitarian logistics practices	Pearson correlation	.449	.304	.443	.403	-.086	.208	1.00.
	Sig.(2-tailed)	.002	.032	.003	.006	.304	.105	

Source: survey result (2021)

With a Pearson correlation value of 0.4496 ($r=0.449$), the above table shows that there is a substantial positive link between employee skill and motivation and humanitarian logistics practices. This relevance indicates that there was a true link between employee competence and motivation and humanitarian logistics methods. According to the above table, there was a significant positive link between employee skill and motivation and humanitarian logistics practices, with a correlation coefficient of 0.449 ($r=0.449$). As a result, there was a true correlation between employee skill and motivation and humanitarian logistics practices.

The overall correlation result shows values between 0.3 and 0.7, which indicate a moderate positive linear relationship between Humanitarian logistics practices and factors affecting the Humanitarian logistics practices such as Employee skill and motivation, Inadequate use of technology, coordination and information flow and Economic factor. However, Technological challenge and Socio-cultural challenge has a weak negative and negative linear relationship with Humanitarian logistics practices respectively.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The major goal of this research was to analyze Ethiopia's humanitarian logistics and related issues in the disaster response operation of the Catholic relief organization. In addition, the researcher emphasizes external and interregional logistical difficulties facing the organization. The research summary of findings, conclusion, and suggestions are all discussed in this chapter.

5.1 Summary of findings

Based on the data obtained through the use of the questionnaire and interviews, the major findings of the research are summarized and presented accordingly;

- ❖ Based on the data analysis the overall mean of procurement management practice was 3.64 which indicate that the procurement management is well practiced. Analysis of the interview with the manager bodies has also state that the organization has well practiced procurement management.
- ❖ The overall mean of transportation management practice was 3.42 it means that there is moderate practice of transportation management. The lowest mean shows that there was sufficient transport service provider for the organization, analysis of the interview show that there is an insufficient transport company which has become major problem for the organization because of it obstacle the on time deliver service. This problem is only occurred on this country of the organization only on aboard borders there are sufficient transport service providers. The other problem stated by the managers was challenges in the loading and unloading of items, unstructured of regional territory polices.
- ❖ The overall mean of warehouse management practices is 3.27 which indicate that the well practices. The lowest mean shows about the catholic relief service organization warehousing for storage is need to be improved.
- ❖ The overall mean of the internal challenge is 3.32 almost all respondent agree that this internal challenge affect in overall operation of the humanitarian logistics performance and decision.
- ❖ The overall mean is 3.5 it indicate this external challenge has an effect on the overall practices of the organization in depending on the situation analysis.
- ❖ The Correlation analysis shows the overall correlation result shows values between 0.3 and 0.7, which indicate a moderate positive linear relationship between Humanitarian logistics

practices and challenge affecting the Humanitarian logistics practices such as Employee skill and motivation, Inadequate use of technology, coordination and information flow and Economic factor. However, Technological challenge and Socio-cultural challenge has a weak negative and negative linear relationship with Humanitarian logistics practices respectively.

5.2 Conclusion

The following conclusions have been obtained in response to humanitarian logistics in disaster response operations on the basis of the findings and data analysis of the research.

Based on the data and interview the following conclusion was made by the researcher on the procurement management practiced The procurement practices of the organization is well practiced even though there were factors which are obstacles for the organization .these factors are been managed by make procurement policies and going though each procurement process with the help of the experts of the organization. The experts involved use their capacity and knowledge in the problem solving process of the organization.

Conclusion was made by the researcher on transportation practice of the organization. The organization has moderate practices of transport management. But can be improved by using or developing the transportation management strategies which help in identify factors in the developing of the transportation strategies. The most common problem in faced by the organization are infrastructure ,capacity, the important one is the unstructured regional territory policy this usually affected the transportation facility in the loading unloading process, lack of transport services providers in country is has been identified .these and other problems make the transportation not easily accessible due to the lack of infrastructure.

As the findings of the study the warehouse management has a well practice. The location decision for the center warehouse of the organization was based on the USID standers which the organization follow the policy and procedure in each activity of managing the organization. policy include warehouse decision ,physical layout ,storage solution ,guideline in providing on how to manage the safety and security .the problem faced in the implementation of the standard that is due to the infrastructure .

The Correlation analysis shows the overall correlation result shows values between 0.3 and 0.7, which indicate a moderate positive linear relationship between Humanitarian logistics practices and challenges affecting the Humanitarian logistics practices such as Employee skill and motivation, Inadequate use of technology, coordination and information flow and Economic challenge .

However, Technological challenge and Socio-cultural challenge has a weak negative and negative linear relationship with Humanitarian logistics practices respectively.

5.3 Recommendations

Based on the findings humanitarian logistics practices have to enhance in disaster respond operation of the organization.

Catholic relief services needs to improvement on the procurement management, transportation management and also ,warehouse management practices of the organization since these are the main input for disaster relief operation of the organization the policy and strategies should have to properly implemented in order to achieve the expected result on disaster relief operation by using of advance technology it connect the overall organization units and provide accurate information .

Based on the findings of the study it recommended that transportation practices can be improved using multimodal transportation systems to maintain dependable modes of transportation. Meanwhile, the government might increase its spending in upgrading infrastructure in disaster-prone areas.

To enhance procurement practices, prepositioning of relief goods is highly suggested. Currently, most purchase is done after a catastrophe, which results in higher prices, less availability, and a longer response As a result; it is strongly suggested to preposition relief supplies in order to obtain high-quality items at a reasonable price. When disaster strikes, it would also make it easier to maintain a high level of its also important to train the procurement personnel properly, and to encourage the use of IT to expedite orders and assure correctness.

And also it highly recommended for catholic relief service organization to utilize information technology to assist warehouses, upgrade their facilities, create guidelines or manuals to prevent goods from harm, and recruit expert human resources in the field to enhance humanitarian logistics warehouses.

Catholic relief services should partner up with similar organization in order to request for assistance with the local and federal governments in the improvement on facilities of infrastructure, road facilities, etc. The government should have to support and establish institution which only involves on the supporting of the relief aid organization operation in providing accessibility of the organization.

5.4 suggestion further study

The study only conducted on the catholic relief service of the head office to limited its scope and also it only assess the humanitarian logistics practices in organization and factors affecting the humanitarian logistics operation in the further study can include all regional on in which CRS operate and by assessing the humanitarian logistics practices in the regional and the identifying common factors affecting performance of the regions.

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APPENDEX

I. Questionnaire

Addis Ababa University School of Commerce

Department of Logistics and Supply Chain Management

Questionnaire to be filled by employees of catholic relief service organization

Dear Respondents,

Currently, I am conducting a research on Humanitarian Logistics Practices in Disaster Response in Catholic relief service origination .For the partial fulfillment of the Masters of Art Degree in Logistics and Supply Chain Management at the Addis Ababa University; School of Commerce. Please be assured that the information acquired shall be used purely for research purpose only and will be kept strictly confidential. Your identity will be treated anonymously.

N.B Please indicate your level of agreement or disagreement by using (x) mark on the Appropriate box given corresponding to each statement, and no need of writing your name.

Part One. Demographic Profile of the Respondent

1. Gender

A. Female B. Male

2. Age

A. 20 -30 Years Old C. 41-50 Years Old

B. 31-40 Years Old D. above 50 Years Old

3. Educational Qualification

A. Diploma B. Bachelor degree

C. Master's degree D. other .

4. Years stayed at the organization

A. 1- 5 Years C. 11-15 Years E. Over 20 Years

B. 6-10 Years D. 16- 20 Years

5. Current Position /related areas

A. Procurement staff B. Program management staff

C. Emergency management staff D. Supply chain /logistics management staff

Part II Please rate your level of agreement

Section one ; humanitarian logistics practices

All the following questions below are answered based on the following score

5 represents extensively practiced, 4 well practiced, 3 moderately practiced, 2 poorly practiced, 1 never practiced,

Variable	Items	Score				
		1	2	3	4	5
Procurement practices	Procurement professionals are competent and trained Process Manage Acquisition.					
	Procurement handles in kind adequately Goods donations and equipment purchase.					
	Obtain relief items by preparing and delivering on time and fair price					
	The Catholic relief service supplies needs are often match materials collected and/or donated items.					
	Approval strategy plan procurement built by involvement /beneficiaries' participation					
	Procurement procedures are used in catholic relief service organization.					
Transportation practice	Transport meant for humanitarian logistics services are ability to handle special products or goods.					
	Equipment / vehicle are available whenever they are demanded for humanitarian operation.					
	There are a significant number of transportation firms that offer transportation services for emergency jobs with catholic relief service.					
	A catholic relief service uses several transportation optimization models to provide goods at the lowest feasible expense.					
Warehouse and management	The warehouse site of the Catholic relief services organization is very accessible for shipment					
	Materials are positioned appropriately in specified tracing positions					
	Catholic relief service organization Warehouse is sufficient/enough for the storage.					
	Warehousing is used by Catholic Relief Services to facilitate coordination, sorting, and packing processes in order to provide help to clients more quickly and efficiently					

Section two factors affecting humanitarian logistics

All the following questions below are answered based on the following score

1. Strongly agree 2. Agree 3. Neutral 4 .disagree 5. Strongly disagree

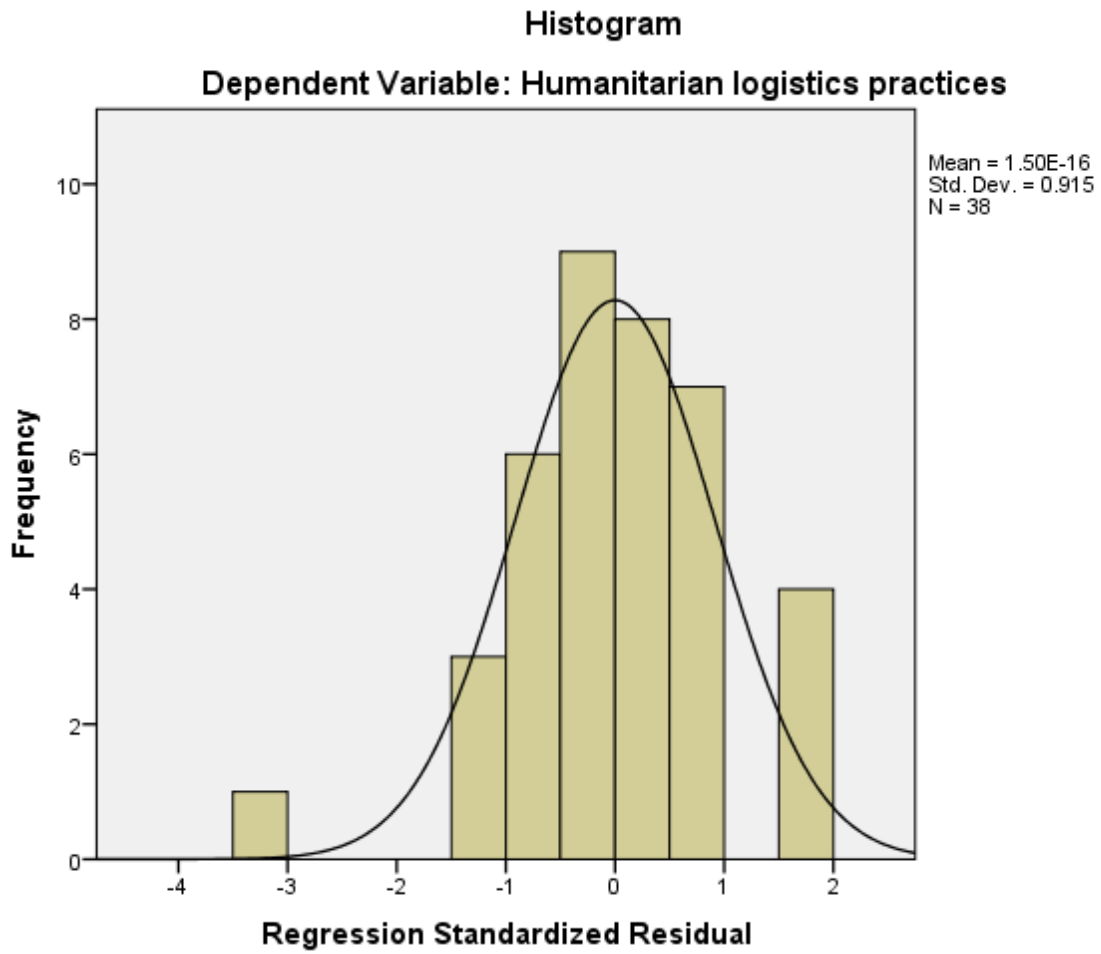
Variables	Items	Scale				
		1	2	3	4	5
Economic challenge	Internal and external factors					
	An infrastructural condition affects the humanitarian logistics operations of CRS organization.					
Technological challenge	Lack of Many local suppliers affecting CRS humanitarian logistics practices					
	Insufficient technology to speed up the transfer of information between the recipients and CRS employees affecting the humanitarian logistics practices					
Socio-cultural challenge	Lack of telecommunication infrastructure to help the humanitarian logistics operations of CRS organization.					
	The distribution of supplies and operation of humanitarian CRS efforts are delayed by cultural and social considerations					
Employee skill and motivation	Prevalence of staff deployment problems related to community resistance					
	Prevalence of high level of staff turnover affects the humanitarian logistics practices of CRS.					
Inadequate use of technology	There is insufficient skilled man power for disaster operation in CRS organization					
	Lack of significant investment in assistive technology that facilitates information flow affects humanitarian logistics practices.					
Coordination and information flow	Lack of Use of information technology to make the decision for operation affects humanitarian logistics practices.					
	Weak information flow affects quality and speed of humanitarian logistics practices.					
	Ability to disseminate (spread widely) accurate and timely information affects the humanitarian logistics practices.					

I. Interview question

- 1 What kind of procurement procedures use on relief operation?
- 2 The most common problem faced in the procurement process?
- 3 Fraud prevention method while procuring items?
- 4 Which kind of service provider commonly used in CRS?
- 5 The common problem in providing transportation service?
- 6 Warehouse decision of location is based on what?
- 7 Major problems in warehouse location problem?
- 8 Does the organization have specialty on humanitarian practices?

ANNEX

Normality test



Scatterplot

Dependent Variable: Humanitarian logistics practices

