

Addis Ababa University

School of Commerce

Department of Logistics and Supply Chain Management

ASSESMENT OF THE PERFORMANCE OF HUMANITARIAN LOGISTICS

THE CASE OF WORLD VISION ETHIOPIA

BY

Lombo Desta

Addis Ababa, Ethiopia

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By Lombo Desta

Advisor: Teklegiorgis Assefa (Assistant Prof.)

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Approved by Board of Examiners:

Advisor	**Signature**	**Date**
_____	_____	_____
Internal Examiner	**Signature**	**Date**
_____	_____	_____
External Examiner	**Signature**	**Date**
_____	_____	_____

Declaration

This research project is my original work and has not been submitted for examination to any other university.

Signature: _____

Date: _____

LOMBO DESTA

REG No: GSD/0407/07

Statement of Certification

This study, entitled ***"FACTORS AFFECTING THE PERFORMANCE OF HUMANITARIAN LOGISTICS, the case of World Vision Ethiopia"*** was carried by **Lombo Desta Tumiso** so as to obtain her second degree from Addis Ababa University School of commerce. She conducted her original thesis under my guidance and supervision. I certify that, the study is her own original work and suitable for submission of the award of MA in Logistics and Supply Chain Management.

Advisor: _____

Signature: _____

Date: _____

Dedication

To World Vision Ethiopia, working with poor and the oppressed and for Humanitarian staffs who are serving in different sectors, saving the lives of peoples and vulnerable communities.

Acknowledgments

First of all I praise God for being my wisdom, strength and all through all my ways.

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List of Abbreviations

ANN- Artificial Neural Network

ANP-Analytic Network Process

CRS- Catholic Relief Services

DEMATEL- Decision making Trial and Evaluation Laboratory

DFSA- Development Food Security Activity

DPPA -Disaster prevention and preparedness agency

DPPC- Disaster Prevention and Disaster Resilience Commission

FH- Food for the Hungry

HDRP- Ethiopia Humanitarian and Disaster Resilience Plan

HOs- Humanitarian organizations

IASC- Inter-Agency Standing Committee

IMF- International Monetary Fund

IOM – International organization for Migration

IRC- International Rescue Committee

JEOP- Joint Emergency Operation Program (JEOP)

NDRMCC- National Disaster Risk Management Coordination Commission

NGOs- Non –governmental Organizations

OCHA- United Nation Office for the Coordination of Humanitarian Affairs

PSNP- Productive Safety Net program

REST -Relief Society of Tigray

RRC - Relief & Rehabilitation Commission

SCOR- Supply Chain Operation Reference Model

SPSS- Statistical Package for Social Sciences

UN- United Nations

UNHCR/ARRA- United Nation High Commissioner for refugees /Administration for Refugee and returnee Affairs

USAID- United Sates Agency for International Development

WASH- Water, Sanitation and Health

WFP- World Food Program

WVE- World Vision Ethiopia

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Abstract

Performance in humanitarian logistics can therefore be seen as the result of the strategic reconciliation of relief organizations' enablers (resources, processes and capabilities) and the requirements of the beneficiaries. If there is unsatisfactory performance, it is assumed that relief organizations will adapt their strategies, thus dealing with the operational decision areas (allocation of resources, level of cooperation …etc.), in order to reach a strategic fit between the enablers and the requirements of the beneficiaries. Researches in humanitarian supply chain is still infant and studies made on humanitarian logistics performance for non-profit organizations operating in Ethiopia are limited. Accordingly, this study examined six factors using cross sectional study data and examined their effects through causal research design. As a result three factors were found to be correlated with the performance of humanitarian logistics such as; donor funding, information technology and adequacy of local market. Moreover, these variables were not investigated in World Vision Ethiopia context so far. So this study is the first and original in the case of the organization. Based on the findings it was recommended that World Vision Ethiopia to consider: to advance and invest on information technology to enable and ensure efficient delivery of aid services as well as goods. That will help for fast information exchange, tracking commodities and services and to control the supply line so as to increase speed of service delivery; to work on supply model strategies to attract and collaborate/be partner/ with local market suppliers specially suppliers of emergency items and establish strategies to alleviate supply challenges and to build or invest on capacity building of logistics staffs' so as to get more experienced staffs. Finally, this study has filled two important research gaps: the empirical gap and assessment of the current situation in the effect of humanitarian logistics performance and its associated factors at World Vision Ethiopia.

Key words: Humanitarian logistics, Humanitarian logistics performance, Disaster

1 CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The number of people affected by natural disasters or displaced by conflict, persecution, violence or human rights violations has been steadily increasing, doubling in a decade and reaching 141.1 million in 2017 (United Nations Office for the Coordination of Humanitarian Affairs (OCHA)), 2017. The impact of disasters and the massive scale of recent global relief efforts have brought growing attention to the need for effective and efficient disaster response. Disasters can be calamities, destructive actions, or plagues and can cause destructions that could rang for small to sever (Bethlehem & Alev, 2016). Every year there are about 500 disasters killing around 75,000 people and affecting some 200 million people (Van, Wassenhove, 2006). Natural disasters that has occurred in 2004 Indian Oceans tsunami, 2005 earthquake in south Asia (Guhasapir, Santos, & Borde, 2013) and strikes raised in different Arab countries; Yemen, Syria, Tunisia, Egypt, Libya and Bahrein are some memorable examples. Form recent examples, such as the earth quick in Haiti in 2010 and resulting nuclear disaster in Japan in 2011, show us the vulnerability of developed and emerging countries to disasters. (Nathan.K & Gerald.R 2012). The number of people affected by disasters, that is, events with negative consequences for humans, has risen at an alarming pace (Walter, 2003). The World Bank reports that the risk of death, destruction, and suffering has increased due to accelerated changes in demographic and economic trends (Kreimer & Munasinghe, 1991). More people are threatened by natural disasters than ever before, either by choice or through increased weather related incidents. The vast majority of those affected by emergencies and natural disasters live in developing countries (Jane, 2013). For example, in 2016 Ethiopia has felt the effect of worst El Niño in 50 years, in which more than 10 million people were exposed to relief food assistance, household and community resilience was eroded and which is followed by drought in south and southern eastern Ethiopia in 2017 with additional 8.5 million Ethiopians needed relief food assistance (Ethiopian Humanitarian and Resilience Plan, 2018). Small developing states are among the most vulnerable countries in the world to natural disasters and climate change. The United Nation (UN) World Risk Index, which measures exposure to natural hazards and the capacity to cope with these events across 171 countries, places small developing states at the top of its ranking. In addition to the limited capacity to respond to natural disasters, these countries are more frequently hit by extreme weather events than larger countries and their economic costs are on average much larger (IMF, 2016a).

To mitigate the effect of such disasters, humanitarian organizations (HOs) across the world are engaged on saving lives and help victims to survive in disaster-prone areas. Most of the time, such disasters require external (international) assistance. This assistance may come from the government (military, civil defense…etc.), but also from international relief organizations, which have the knowledge and resources to help the populations affected by these crises. (Nathan & Gerald 2012). The need for common definition of humanitarian logistics is given by the Fritz institute as 'the process of planning, implementing and controlling the efficient, cost-effective flow of and storage of goods and materials as well as related information, from point of origin to point of consumption for the purpose of meeting the end beneficiary's requirements' (Thomas and Mizushima, 2005). Specially for humanitarians, logistics "is the processes and systems involved in mobilizing people, resources, skills and knowledge to help vulnerable people affected by disaster" (Thomas, 2005). However the logistics function in the humanitarian sector is under-recognized, under-utilized and under-resourced (Thomas & Kopczak 2005).

And according to Horn affairs report (2015) El Nino effect is worst of the past decades for the number of people in need of relief assistance in Ethiopia had increased to 8.2 million. A widespread drought is severely impacting Ethiopia, leaving millions of people without enough food to eat. Ethiopia's worst drought in 30 years is driven by the El Niño weather pattern that has contributed to two failed seasonal rains last year. The 2018 Ethiopia Humanitarian and Disaster Resilience Plan (HDRP) identifies 7.88 million people in need of food assistance, and 8.49 million people in need of non-food assistance at a cost of $1.658 billion (OCHA). NDRMC reports, conflict along the border between Oromiya and Somali regions since late August 2017 had displaced approximately 857,000 people in the two regions as of late December. According to International Organization for Migration (IOM) report, approximately 1.3 million people remained internally displaced across Ethiopia as of October, according to International Organization for Migration (IOM) Displacement Tracking Matrix. These are caused due to displacement and natural disaster including flooding and landslides. (Ethiopian HRDP2018.)

In order to develop the relief logistics coordination in the country, humanitarian and development partners have come together under the leadership of the government of Ethiopia's National Disaster Risk Management Commission (NDRMC) to prepare Humanitarian and Disaster Resilience Plan (HDRP). The HDRP is informed by lessons from the past few years, as well as

discussions between development and humanitarian partners with Government on how to improve analysis, planning, financing and delivery modalities.

As per logistics analysis conducted by logistics cluster 2016, NDRMC is facing challenges in managing its supply chain efficiently. Some of the challenges include heavy and rigid administration burden, resource limitations, inadequate information management and reporting mechanisms, and overall lack of visibility of commodities moving through the supply chain. Further the geographic dispersion of affected populations and the magnitude of the needs make it very challenging for all actors to deliver an integrated package of support. Such basic infrastructures in many developing regions of the world are weak to begin with and get quickly overwhelmed when disaster strikes (Altay, Prasad & Sounderpandian 2009). In order to address such challenges good and more empirical researches need to be done in developing countries and by the researchers from these countries (Kovacs & Spens 2011).

1.2 Statement of the Problem

To measure the performance of humanitarian logistics different researches were conducted accompanied with case studies but a lot of studies have to be made to make them in use. And further system based software applications are required. (Bethlehem & Alev, 2016).

Performance in humanitarian logistics can therefore be seen as the result of the strategic reconciliation (Slack and Lewis, 2002) of relief organizations' enablers (resources, processes and capabilities) and the requirements of the beneficiaries. If there is unsatisfactory performance, it is assumed that relief organizations will adapt their strategies, thus dealing with the operational decision areas (allocation of resources, level of cooperation …etc.), in order to reach a strategic fit between the enablers and the requirements of the beneficiaries.

As the research in humanitarian supply chain is still infant, many researchers have paid attention on the characteristics and challenges in humanitarian logistics and supply chain management. (Kovacs and Spens, 2009) identify the challenges of humanitarian logisticians with respect to different types of disasters, phases of disaster relief and the type of humanitarian organization. And they concluded that, challenges of humanitarian logisticians depend not only on the disaster at hand, but also on the local presence of their organization. And the most emphasized challenge was the coordination of logistics activities.

A number of factors have been associated with humanitarian logistics performance in different contexts and situations. The nature of association between performance and these factors is not well documented through empirical research. (Jane, 2013). According to Kunz and Reiner (2011), study; situational factors that are identified from literature reviews; affecting the performance of humanitarian logistics are; environmental situational factors, government situational factors, socio-economic situational factors and infrastructure situational factors. In relation with this, (Mebrahtom, 2016) has also examined that supply chain challenges has negative effect on the performance of humanitarian aid organizations in the relief and emergency sectors.

(Wassenhove V, 2006) stated that many supply chain challenges have limited humanitarian organization in response to disasters. And HOs are hindered from responding timely, effectively and in appropriate manner for emergencies.

Studies in humanitarian logistics performance for nonprofit organizations operating in Ethiopia are limited. Factors affecting the performance of humanitarian logistics has been done in specific humanitarian organization; International Rescue Committee (IRC) (Demeke, 2016) and these study left further recommendation on conducting similar studies on other international non-governmental organizations that could help new emerging studies in finding baseline and supporting data. Further (Kovacs & Spens, 2011) suggested that empirical researches have to be done in developing countries because there are no adequate empirical studies carried on humanitarian logistics.

World vision Ethiopia (WVE) is one of non-governmental organization which is implementing different relief and development endeavors in Ethiopia since 1905. Through all those implementing years ; World Vision Ethiopia ‘s performance of response for emergency has been affected by different factors; like shortage of funds, delays on procurement, local market supply, staff turnover, and some gaps in information technology.

There is limited research on World Vision Ethiopia which identifies factors affecting the logistics performance of its response to emergency and relief works. This research assessed factors affecting logistics performance and association of each factor with organizational performance. In addition the research deployed empirical study and sought to fill empirical gap in literature as there is limited studies on relief organizations’ performance in Ethiopia.

The research therefore pursued to examine associated factors affecting performance of humanitarian logistics in the case of World Vision Ethiopia and finally put forward recommendations so that WVE will act on improving responses on relief and emergency activities.

1.3 Research Question

- How dose collaboration affects humanitarian logistics performance?
- What is the effect of institutional learning on humanitarian logistics performance?
- How dose donors funding affect humanitarian logistics performance?
- What is the effect of availability of logistics professionals on humanitarian logistics performance?
- What is the effect of local market suppliers in humanitarian logistics performance?
- How dose adequate use of information technology affect the performance of humanitarian logistics?
- What is the experience of World Vision Ethiopia in measuring the performance of organizational humanitarian logistics?

1.4 Research Objectives

1.4.1 General objectives

To examine factors that affect humanitarian logistics performance of World Vision Ethiopia.

1.4.2 Specific objectives

- To examine the effect of institutional learning on humanitarian logistics performance.
- To examine the effect of collaboration on humanitarian logistics performance.
- To examine the effect of donor funding on humanitarian logistics performance.
- To examine the effect of availability professional staffs on the performance of humanitarian.
- To examine the effect of local market suppliers on the performance of humanitarian logistics.
- To examine the effect of information technology on the performance of humanitarian logistics.

1.5 Significance of the Study

As this research has examined factors affecting the performance of humanitarian logistics in World Vision Ethiopia. First it gives light into how to conduct measurement of performance in humanitarian organizations in Ethiopian context. Second, it adds to the existing body of knowledge in the area. Further gave directions for further researchers who want to focus on studying on humanitarian logistics performance in Ethiopia and for other developing countries.

Further this study will have a paramount importance to the humanitarian organization by giving valuable information on factors affecting the performance of humanitarian logistics. So that HOs can design effective processes, policies, procedures and metrics on how to make minimize those factors.

1.6 Scope of the Study

The study was conducted in World Vision Ethiopia at head office and field operational and coordination offices such as; Emergency Refuge Response Program coordination office's (ERP) at Dollo Ado and Gambela; Three Development Food Security Activity (DFSA) coordination offices at East Hararge Zone, West Hararge zone and West Arsi zone and Joint Emergency Operation Program (JEOP) office's at SNNPR region. The study was conducted from February through March 2018.

1.7 Limitation of the Study

The study was carried out solely in World Vision Ethiopia and the findings may not indicate the general situation in Ethiopia. The study was conducted within short period from February to March 2018. Data collection was challenging owing to the fact that the respondents were requested to replay their response through mail and multiple call reminders. There were non-response rates encountered.

1.8 Definition of Terms

- **Disaster** is "a serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources". (WHO) UNDRO (1992, p. 14) a

- **Humanitarian logistics** is defined "as the process of planning, implementing and controlling the efficient, cost-effective flow and storage of goods and materials, as well as related information, from the point of origin to the point of consumption for the purpose of alleviating the suffering of vulnerable people." (Thomas and Kopczak 2005)

- **Performance measurement**: is the process to quantify the efficiency and effectiveness of an operation (Beamon & Balcik 2008).

2 CHAPTER TWO: LITERATURE REVIEW

2.1 Humanitarian Logistics

The main objective of humanitarian logistics is to ensure the distribution of relief items to the victims when a humanitarian disaster occur. Humanitarian logistics is defined "as the process of planning, implementing and controlling the efficient, cost-effective flow and storage of goods and materials, as well as related information, from the point of origin to the point of consumption for the purpose of alleviating the suffering of vulnerable people." (Thomas and Kopczak 2005). It is also a most expensive part of relief work. Since 80 % of the expenses in humanitarian relief organizations is consumed by logistics activities; there is strong demand for the effectiveness and efficiency in humanitarian logistics operations (Wassenhove V, 2006). On the other hand logistics is central for disaster relief because it serves as a bridge between different activates, stages and level of communication, crucial for effectiveness and speed of response and as a source of data that can be analyzed for post event learning (Thomas and Kopczak 2005). Effective performance means undertaking work in ways that are consistent with humanitarian principles; mobilizing and deploying sufficient financial, material and human resources in ways that are relevant, well managed, accountable, impartial, and durable and ensure good quality." (Bolsche, 2103).

2.2 Humanitarian Logistics performance

It is recently that humanitarian organizations such as Red Cross and the World Food Program have begun to see management of logistics as a crucial activity in relief organizations (Wassenhove V, 2006). To measure the performance of humanitarian logistics different researches were conducted accompanied with case studies. Wider concepts such as balanced score card was also used as a performance measuring tool to study humanitarian supply chains with the perspectives of customer, internal process, learning and growth, and finance (Bhagwat, R., & Sharma, M. K. 2007).In a similar manner, a process oriented approach using Supply Chain Operation Reference Model (SCOR) model was implemented to make use of the three components of process, performance, and best practices integrating organizations from different sectors (Trkman, P., McCormack, K. et. 2010).

In recent years few researches applied multi criteria decision making tools like Fuzzy logic, DEMATEL, ANN, ANP; are used for analysis and evaluation of humanitarian Logistics. This shows that a lot of studies need to be done to make use of them. And further stated that humanitarian relief supply chain evaluation is almost the untouched area with application with software based systems like the previously mentioned ones. (Bethlehem & Alev, 2016). Active Learning network for Accountability and performance in humanitarian works has driven four central requirements for performance measurement in Humanitarian actions: efficiency, effectiveness, impact, sustainability. Studies with an objective of identifying the challenges of Humanitarian logistics have been carried out (Mebrahathom, 2016) and (Demeke, 2016) and Literature reviews were also done to understand the performance challenges and to foresight the future areas of research.

Several factors have been associated with humanitarian logistics performance in different contexts and situations. The nature of association between performance and these factors is not well documented through empirical research. (Jane, 2013). External and internal performance of humanitarian logistics is mainly affected by external and internal factors of organizations. According to Kunz and Reiner (2011), study; situational factors that are identified from literature reviews that are affecting the performance of humanitarian logistics are; environmental situational factors, government situational factors, socio-economic situational factors and infrastructure situational factors. In addition, the five “pain points” raised by heads of logistics at leading humanitarian relief organizations at Geneva 2003, are nature of the funding process, organizational culture and high employ turnover, lack of institutional learning and little coordination.(Thomas and Kopczak 2005).

2.3 Factors affecting the performance of Humanitarian Logistics

Humanitarian logistics actions are characterized by unpredictability of disasters, lack of institutional learning, poor manual logistics processes, highly employee salary costs, as well as poor fragmented technology (Thomas 2008; Thomas and Kopczak 2005). There are different factors affecting the performance of humanitarian logistics, which are internal as well as situational factors. Situational factors identified from literatures are environmental situational factors, government situational factors, socio-economic situational factors and infrastructure situational factors. (Kunz and Reiner, 2011). The five “pain points” raised by heads of logistics

at leading humanitarian relief organizations at Geneva 2003, are nature of the funding process, organizational culture and high employ turnover, lack of institutional learning and little coordination. (Thomas and Kopczak 2005). And the major categories of humanitarian challenge and barriers covered in this theses will deal with coordination, Institutional learning, donor funding, Information technology, local market suppliers, and availability of professional staffs.

2.3.1 Coordination

Balcik et al., (2010) suggest that the term "coordination" is associated within the relief community, which is defined as the relationship and collaboration among different actors working with the relief environment. Coordination includes resource and information sharing, centralized decision making, conducting joint projects, regional division of tasks, or a cluster-based system in which each cluster represents a different sector area (e.g. food, water, sanitation, and information technology).

Coordination and specialization of responsibilities is required to manage the increasing number and complexity of disasters. These is not required only between the armed forces, government and privet businesses, but also between humanitarian organizations and among each other. (Van Wassenhove, 2006). Donors operating in the same disaster areas are showing interest for cooperation among humanitarian organizations to reduce duplication of effort. A single organization cannot cover all needs; collaboration is, therefore, not an option, but a necessity" (IASC). (Simatupang et al. 2002) showed that collaboration amongst independent organizations is essential to improve their processes in response to the rapidly changing conditions. Also (Kovács and Spens, 2009) also describes the importance of coordination as "The myriad of humanitarian organizations must co-ordinate their efforts in every disaster if they are to provide real relief at the point of need". However, coordination of different sectors in disaster response have many challenges. (Fenton, 2003) described that "Problems of inter-agency coordination are often most evident in the initial frantic stages of response to a humanitarian emergency when aid agencies often fail to make the effort, or simply find it too difficult to collaborate". Kampstra and Ashayeri (2006) share out that a situation where not all participants in every supply chain had embedded collaborative values and that it is difficult to collaborate with a party that lacks a genuine desire to collaborate. For example, a global survey of supply chain progress conducted in 2004 (Supply Chain Management Review and Computer Sciences Corporation) observed that

collaboration was cited as the single most pressing issue. The survey showed that 44 percent of the sample organizations had initiatives associated with collaboration; however, only 35 percent of these initiatives turned out to be even moderately successful.

H1: Adequate collaboration positively affects the performance of humanitarian logistics

2.3.2 Institutional Learning

(Thomas and Kopczak 2005) on the path forward for humanitarian sectors, described that the intensity of relief efforts, high turnover and the crisis-oriented nature of disaster response creates an environment in which there is a lack of institutional learning. Logistics data is very important for the performance of current and future operations and programs of humanitarian response. It reflects different aspects of accomplishment, like the effectiveness of suppliers and transportation providers, cost and timeliness of response, appropriateness of donated goods, and management of information. And also, it can be further analyzed to deliver post event learning. (Thomas and Kopczak 2005). One of the five pain points for leading humanitarian organizations is lack of institutional learning. Stressful nature and the nature of the professional path was the reason for high tur over of logistics professional (Chandes & Pache, 2010). This is because humanitarian heroes are assigned to the next mission or they leave the organization and the turnover of field logistics staffs are as high as 80% annually. Logistics staffs have a remarkable track record for getting the job done under the most adverse and extreme circumstances, but the lessons learned from one disaster to the next are often lost and it is not transferred to the next generation nor is it transferred from one field context to another (Thomas and Kopczak 2005).

H2: Adequate institutional learning positively affects the performance of humanitarian logistics

2.3.3 Donor Funding

Financial donor are the most important stakeholders for humanitarian organizations. Humanitarian organizations should perform according to the drive of donors. And also the operation of humanitarian organizations is greatly depends on a set of major donors. One of the influencing factors for the humanitarian actions that are funded by donors are priorities and trends in donor spending. Some among these were increased interest on funding visible emergencies, increased competition among humanitarian organizations for donor funding and an

increased demand for collaboration among humanitarian organizations operating in the same disasters or regions to reduce duplication of effort. As a result humanitarian organizations have become more aware of to use their resources strategically, to be efficient being effective and to align their operations around core competences. (Thomas and Kopczak 2005). As per (Wassenhove, 2006; Kovacs and Spen, 2007), donors prefer to spend on direct materials rather than investing on information technology, capacity building and preparedness phase.

H3: Adequacy of donor funding positively affects the performance of humanitarian logistics

2.3.4 Professional Staffs

Lack of trained humanitarian logisticians is another important factor affecting the humanitarian logistics performance. For instance, Tsunami relief supports were negatively impacted by the lack of available trained and experienced field logisticians (Fritz Institute 2005). Also for several years, humanitarian logistics lacks recognition resulting in unmet logistics requirements. For instance, logisticians are not included in planning and budgetary processes (Wassenhove , 2006). Furthermore, logisticians are often not consulted in the decision-making process (Fritz Institute 2005). It is also revealed that the need to improve logistics practices by formulating humanitarian academic partnership (Kovacs & Spens 2011).

H4: Availability of professional staff positively affects the performance of humanitarian logistics

2.3.5 Local Market Suppliers

In sudden onset of disaster, the moment a demand occurs and the point supplies are needed is usually closer to zero (Beamon and Balcik 2008, 12). The customers in a disaster supply chain include the population at the affected area, as well as intermediate customers at local or global storage facilities. Their needs change significantly according to disaster types and the phases in the disaster timeline (Jahre, and Jensen, 2010). Unlike logisticians in the private sector, humanitarian workers are always faced with the unknown: when, where, what, how much, where from and how many times; in short, the basic parameters needed for an efficient supply chain setup are highly uncertain (Wassenhove , 2006). Disaster demand forecasting is also difficult due to the lack of historical data. Even though there do exist some databases from the past experiences prepared by both NGOs and governments, they are occasionally inadequate because

of inconsistent and/or insufficient data collection and reporting problems. Inconsistencies within the process include problems initiated by poor organization, variability in lead time, and agency culture.

According to (Gary P Ramsden, 2014), the socio-economic challenges described as, uncertainty in demand and supply, uncompetitive of market economy, the absences of local suppliers, availability stiff competition, absences financial donors, the culture and language of the host country, high inventory and transportation cost and lack of trust among the supply chain partners. In the category of uncertainty, there are subcategories for unpredictable supply and demand, and inconsistent processes. Unpredictable supply problems include issues such as inconsistent quantity, quality, and lead time.

H5: Availability of local market suppliers positively affects the performance of humanitarian logistics

2.3.6 Information Technology

The success of disaster relief response greatly depends on the accuracy of the information system. IT plays a major role when it comes to improve the logistics efficiency and at the same time reduce cost. Thus information technology is vital to humanitarian efforts. In supply chain responsiveness (Christopher and Tatham, 2011), as supply chain responsiveness described that appropriate monitoring and communication are evident to promote efficiency in humanitarian relief responsiveness. Rather the challenge lies within coordination of humanitarian aid actors and inability to effectively coordinate these actors lead to confusion in disaster relief operations.

During a crisis, humanitarian agencies require information relating to the disaster situation, the affected population and the availability of resources (Gary P. Ramsden, 2014).The existence of a well- developed road infrastructure will, facilitate the logistical operations for humanitarian response. According to Long and Wood, (1995) the communications Problems categorize as, lack of standard terminology, absence of media for institutional learning and relaying best practices, and lack of information intra- and inter-agency information sharing (Long and Wood, 1995) . In addition communications problems might concern the reliability of information and poor coordination. According to Fritz institute (2005), the logistics and supply chain management of humanitarian sector is still largely manual as the majority of logisticians had no

access to any tracking and tracing software. It is clear that the speed with which the critical information is collected, analyzed and distributed by participating agencies will facilitate an effective response and hence more lives can be saved.

H6: Availability of Information Technology positively affects the performance of humanitarian logistics

2.3.7 Performance of Humanitarian Logistics

Measuring and optimizing the performance of their relief chains has become critical for all organizations involved in disaster management (Beamon and Balcik 2008,). (Bölsche, 2013) also state that "effective performance means undertaking work in ways that are consistent with humanitarian principles, mobilizing and deploying sufficient financial, material and human resources in ways that are relevant, well-managed, accountable, impartial, durable and ensure good quality".

Performance measurement is vital for nonprofit organizations because there is increasing competition among different agencies competing for the scares donor funding. (Kaplan, 2001). The main objective of performance measurement is to appraise decision making at the strategic tactical and operational level in producing quality goods, processes and services. (Gunasekaran and Kobu 2007)

2.4 Overview of Humanitarian Logistics Management in Ethiopia

Concerning the humanitarian logistics in Ethiopian, the emergence & development of humanitarian supply chain is related with the occurrence of the major food crises happened in 1950's which claimed the life of many Ethiopians affected due to drought. Since then, Ethiopia has been facing recurring drought and famine due to environmental, social and political factors which subject the large segment of the rural population to vulnerability and food insecurity to the country. This intern, necessitate the establishment & functioning of a centralized relief logistics operation system under the then Relief & Rehabilitation Commission (RRC) in June 1974.

To address both chronic & acute food insecurity the country has been receiving donations of food commodities from different organizations/ nations located in different parts of the world. Currently, the logistics unit under disaster prevention and preparedness agency (DPPA) is

responsible to coordinate the timely delivery of relief resources obtained from different multi-lateral, bi-lateral donor agencies & international & local NGOs to disaster affected localities in different part of the country.

Concerning the source from which DPPA obtained the humanitarian resources required for relief operations official government sources implied that different Western Governments, Non-government International organizations, UN & USAID (United Sates Agency for International Development are major ones. Currently USAID has been becoming the leading contributor of Emergency & Non-emergency (development) food requirements of the country.

Further Ethiopia has become the largest refugee-hosting nation in Africa (more than 852,721 refugees as of the end of August 30, 2017) where 43,433 are unaccompanied minors and separated children. The main influencing factor for having the biggest number of refugees in Ethiopia is the on-going conflict in South Sudan which came on top of an already heavy caseload of refugees coming in from Somalia, Eritrea and the Sudan.

Currently, NDRMCC, UN-WFP, and CRS led Joint-NGOs have been implementing Emergency food assistance programs in Ethiopia. According to government's official report (2015), the 2015 Meher assessment has concluded that 10.2 million people will require food assistance in 2016. The humanitarian response in 2016 will be led by the Government's National Disaster Risk Management Coordination Commission (NDRMCC), who, together with WFP, will assist a projected 7.6 million people in close to 200 woredas, while the CRS-led Joint Emergency Operation program (JEOP) will provide support to 2.6 million people in 76 priority woredas of all national regional states of Ethiopia but Afar, Gamblella, Harari & Benishangul Gumuz NRS.

Joint Emergency Operation program (JEOP) is a consortium led by Catholic Relief Services (CRS) and includes CARE, Save the Children International, World Vision Ethiopia (WVE), Food for the Hungry (FH) and the Relief Society of Tigray (REST).

2.5 Overview of World Vision Ethiopia

It is also largely involved in implementing emergency response and refugee programs in partnership with various government, UN agencies and donors. In addition, WVE also provides lifesaving emergency Water, Sanitation and Health (WASH) services in the drought affected communities, to improve access to sustainable, adequate and safe water; sanitation and hygiene practices.

World Vision Ethiopia (WVE), one of the UNHCR/ARRA implementing partners, has been on the scene since late 2011 in the Ethiopian refugee program and it is currently engaged in four refugee camps - Buramino, Hilaweyn (Somali), Kule (Sudanese) and Jewi (South Sudanese) responding to assist a total of 191,075 refugees fleeing violence and drought in their countries.

Joint Emergency Operation Program (JEOP) funded by USAID and is being implemented in partnership with the Government of Ethiopia and WFP in relief food assistance since the year 2000. It is led by CRS and includes CARE, FH, SC, WVE and REST as consortium partners. WVE's share from this pie is 17 target districts from two regions; 15 SNNP Regional State and two Oromia Regional State districts.

In addition, World Vision Ethiopia launches 2-billion-birr Development Food Security Activity (DFSA) in 6 woredas in Oromia region a project which will run from 2017 to 2022 has targeted more than 1 million direct and indirect beneficiaries. The project targets an estimated 713,891 direct Productive Safety Net program (PSNP) clients and 518,517 non-direct beneficiaries in six of the most vulnerable woredas in Oromia, from East Hararge Zone (Kurfachelle, Girawa Woredas), West Hararge zone (Chiro Zuria, Daro Lebo, and Gemechis Woredas) and West Arsi zone (Siraro Woreda)

Conceptual Framework

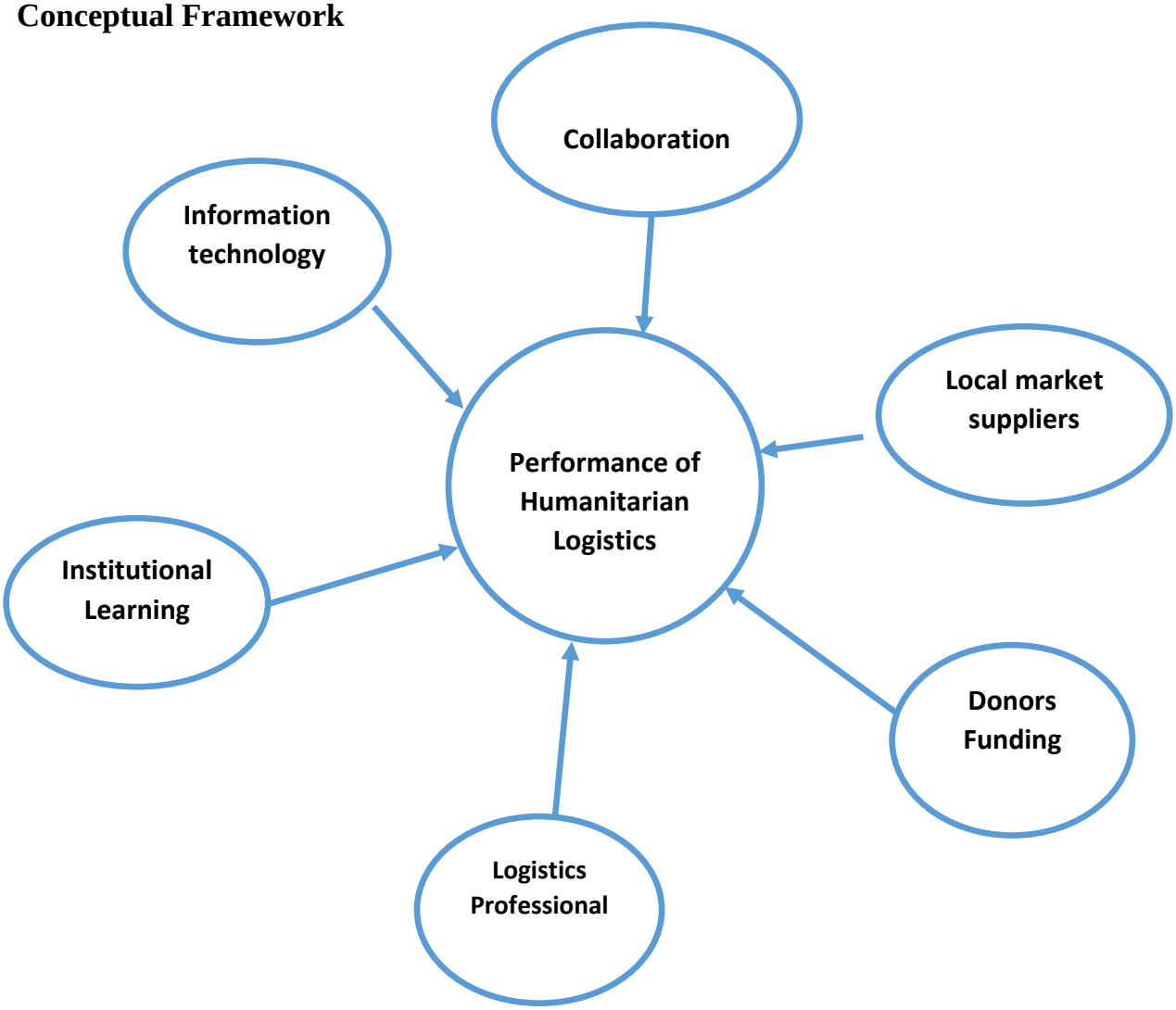


Figure 1. Conceptual frame work modified from (Demeke, 2016, Beamon & Balcik 2008).

3 CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Description of the Study Area

The Government of Ethiopia estimates that 10.2 million people require emergency food assistance to mitigate the impact of the drought due to El-Nino effect in 2016. One of the main current humanitarian concerns in Ethiopia relates to high malnutrition rates (food insecure pocket areas) and high risk of epidemics caused by recurrent drought and flash floods among others. Out of these beneficiaries, more than 1.2 million drought affected people exist in WVE operational areas, both Area Programs and Joint Emergency Operations Program districts. (WVE Unpublished situational report-2017)

Further Ethiopia has become the largest refugee-hosting nation in Africa (more than 737, 979 refugees and asylum seeker population as of the May 31, 2016 UNHCR report).

The main influencing factor for having the biggest number of refugees in Ethiopia is the on-going conflict in South Sudan which came on top of an already heavy caseload of refugees coming in from Somalia, Eritrea and the Sudan. (UNHCR report, 2016)

World Vision Ethiopia is implementing emergency response and refugee program in partnership with various government, UN agencies and donors. The Cat III emergency response had implemented integrated multi- sector activities and benefited 2.6 million drought affected people in 33 Woredas. On the other hand, Refugee Program, which is one of the UNHCR/ARRA implementing partners, has been on the scene since late 2011 in the Ethiopian refugee program and it is currently engaged in four refugee camps - Buramino, Hilaweyn, Kule and Jewi responding to assist 185,704 Somali, Sudanese, and South Sudanese refugees fleeing violence and drought in their countries.

And, Joint Emergency Operation Program (JEOP) funded by USAID and is being implemented in partnership with the Government of Ethiopia and WFP in relief food assistance since the year 2000. It is led by CRS and includes CARE, FH, WVE and REST as consortium partners. The current JEOP is under implementation within 76 districts throughout the country. WVE's share from this pie is 17 target districts from two regions; 15 SNNP Regional State and two Oromia Regional State districts.

3.2 Research Design

The research design was quantitative, descriptive and causal cross-sectional survey. Qualitative data collection was also used. Descriptive research design was used in order to describe data and characteristics about the population or phenomenon being studied, in the form of table and frequency statistics. Causal research design (multivariate regression and correlation) was used to examine the effect of factors affecting the performances of humanitarian aid organization (Kothari 2004). A cross-sectional design as a framework for the collection and analysis of data was the preferred design for this study, because it entails the collection of data at single point in time.

3.3 Population and Sample

Census survey method was used to gather the information; to give an opportunity to participate and to get more reliable and accurate data. Thus, a total of 71 staffs who has been working in relation with emergency and relief response participated in the study. All procurement staff, finance staff working on specific emergency and relief projects, staffs working at JEOP implementing regions; JEOP coordinators, JEOP Supervisors, JEOP Food monitors at 17 districts in SNNPR (Gedio, G/Gofa, Hadiya, Kembata, Sidama and Wolayta Zones), 2 districts in Oromiya (West Guji zone); are also target population. Relief staffs (coordinators and supervisors) at Dollo Ado and Gambela and all staffs working at DFSA are target population. All target population were staffs who had served World Vision Ethiopia at least for six months, and cooperative to participate in the study.

3.4 Data Sources and Types

Data were collected from primary sources that helped to directly answer and fulfill the objective of the study. A structured questionnaire, which was modified from literature sources (Demeke, 2016, Beamon & Balcik 2008), was used in the study to collect crucial information from relief staffs at head office as well as in regional offices of World Vision Ethiopia.

3.5 Data Collection Procedures

Data collection was done through sending questionnaires via email to respondents, and follow up was done with a phone call to ensure receipt of the questionnaire by the respondents. The questionnaire was self-administered, whereby respondents completed the questionnaires by themselves and submitted their responses via email. The questionnaire constituted Likert type questions grouped under seven thematic areas: Coordination, Institutional Learning, Availability of Logistics Professionals, Donor Funding, Information Technology, Local Market and Performance of Humanitarian Logistics. And qualitative data was collected from key managers by using interview guide.

3.6 Ethical Consideration

Ethical clearance was obtained from Addis Ababa University School of Commerce. And before data collection; permission was obtained to distribute the questionnaire from World Vision Ethiopia. The respondents were informed about the purpose and the benefit of the study along with their full right to refuse or completely reject participation in the study. Further the respondents have been told that their response would be kept confidential and their identity shall not be exposed.

3.7 Data Analysis

Data were entered into Statistical Package for Social Sciences (SPSS) version 24 software. The analysis was done using the same software. To test the six hypothesis of the study and examine the causal relationship of variables, Multiple Regression was run. P-value of < 0.05 was used as a cutoff point for statistical significance. To identify differences in the responses among different respondent groups, Cross tabulation was run. Moreover, the association among variables used in this study was examined using correlation analysis.

3.8 Validity and Reliability

A five-point Likert scale was used to ask respondents for scoring items ranging from 1 =To no extent to 5 = To a very great extent. The questionnaire was modified from original research articles conducted in Ethiopia and elsewhere sources (Demeke, 2016, Beamon & Balcik 2008). Cronbach's Alpha was run to test the reliability of the questions in the questionnaire. The

analysis showed results between 0.918 and 0.927 showing higher reliability. As noted by Gliem & Gliem 2003, internal consistency of the items in the scale is greater as Cronbach's Alpha gets closer to 1.0. (Gliem & Gliem, 2003).

4 CHAPTER FOUR: RESULTS AND DISCUSSION

4.1 Response Rate

The structured questionnaire was sent out to a total of 71 World Vision Ethiopia staff. 66.2% staff returned correctly completed questionnaires. No questionnaire was discarded because of incompleteness. These questionnaires 47 were found to be adequate as this number is greater than the sample size required (i.e., 30) to make statistical generalizations and hence were further treated for this study (Cooper & Schindler 2003).

4.2 Background of the Respondents

On analysis, it was identified that 38 (80.9%) were male respondents. This result shows that most of the staff working in emergency and relief response at World Vision Ethiopia were male. This result is greater than a study found out at International Rescue Committee (IRC) (Demeke, 2016). It is assumed that such staff profile can be a hindrance to successful humanitarian service provision as the views and needs of the female beneficiaries may not be well represented (Gyongyi & peter, 2010)). The age profile of the respondents showed that 24 (51.1%) of the respondents belonged to the 25-34 age group while the 35-44 age group accounted for 42.6% of respondents. This result showed that most (93.6%) of the humanitarian staff at World Vision were 44 years and younger and were able to provide proper response to the questionnaire. Moreover, two-third (66%) of the respondents were Masters degree holders while a little less than 32% of the study participants were Bachelor degree holders. The result shows that the staff had adequate educational preparations to properly carry out assigned work responsibilities and at the same time could understand the questions and provide accurate answers. Looking into current job positions of respondents, 34% and about one-third (30%) of survey respondents assumed officer and specialists/coordinator position, respectively while 17% were managers. This is a favorable result to obtain a more balanced view on the performance of humanitarian logistics in the organization. This also provided an opportunity to incorporate wider perspectives on the subject. The respondents' average total year of experience in humanitarian logistics and in World Vision was 9.45 (SD 5.027) and 7.20 (SD 5.037), respectively. This shows that the respondents had adequate years of experience in humanitarian work and in World Vision and are expected to have sufficient and detailed information about the operations of the sector.

4.3 Descriptive Statistics

4.3.1 Coordination

There were three items under this thematic area. Seventeen (36.2%) and 11 (23.4%) of the respondents felt that that World Vision works together with other NGOs or partners for joint logistics set up & implementation to a moderate extent and to a great extent, respectively. However, 7 (14.9%) and 10 (21.3%) of the respondents felt that WV works together with other NGOs or partners for joint logistics set up & implementation to no extent and to a little extent, respectively. Regarding team work, planning together or sharing plans with other departments within the WV such as between procurement and finance offices most respondents (24, 51.1%) agree to be to a greater extent. Whereas, 15 (31.9%) thought as such to a moderate extent. In relation to the third item, 17 (37.0%), 9 (19.6%), and 11 (23.9%) respondents believed that their organization culture of sharing resources such as field sites warehouses and vehicles with other NGOs or partners was to a little extent, to a moderate extent, and to a great extent, respectively.

The individual mean values for the three items under Coordination were 2.81, 3.49, and 2.57. The overall mean value for Coordination was calculated to be almost 3 showing that, in summary, the practice of coordination of humanitarian logistics was believed to be successful to a moderate extent only.

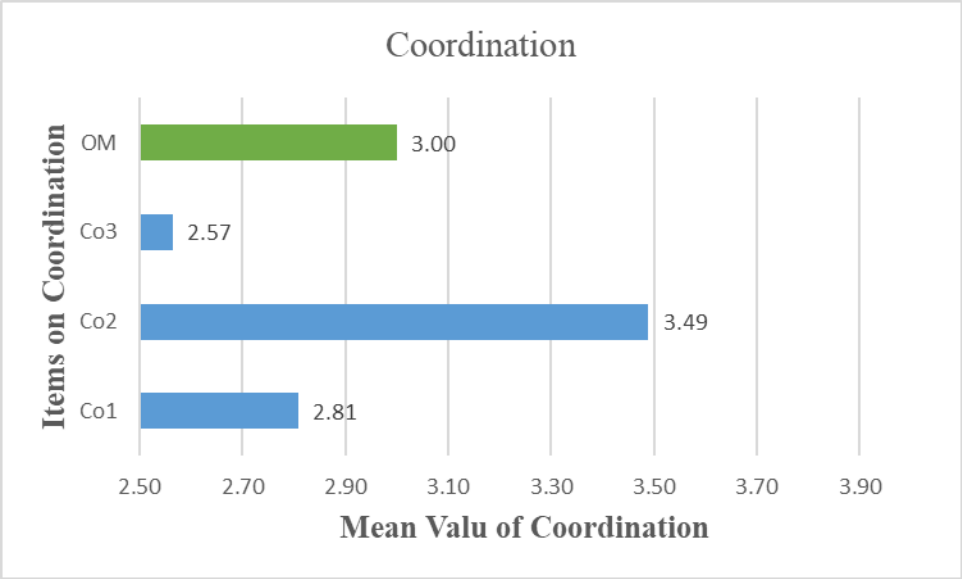
Further interview guide was used to gather more information from key managers' of working on emergency and relief responses. They replied on how they describe coordination/collaboration with their stakeholder; "*With respect to logistics, our major stakeholders are in-country freight forwarding agents. We coordinate well with them. We have contracts, formal agreements supported by letters and mail communications* "as descried by DFSA manager.

JEOP manager stated that *"We have sectors to coordinate with when we do JEOP activities. Commodity and Procurement departments are our internal stakeholders. Externally, World Vision US, CRS, Government of Ethiopia are our partners. All our activities are done through coordination. Currently, we are doing mid-year review. We assessed our coordination as good performance in terms of timely delivery of food. And there was no Woreda with delay with respect to dispatch, distribution, and meeting government targets. We achieved our 30-45 days target. As a whole, there is effective collaboration among JEOP partners*". The Emergency

Response refuge program (ERP) manager answered to the question *"We share information like key updates, challenges, action to solve challenges, experience sharing through meeting or electronically to achieve the ultimate goal of the humanitarian program in specific area and for specific target to different stake holders".*

Lack of on time response from some stakeholders, lack of providing full service as per the agreement, poor capacity of supplier, Ministry of agriculture do not respond on time for duty clearance document, transportation and demurrage issues was some of the challenges raised by managers regarding coordination .

Figure 1. Summary of Coordination



Source: Primary data from main survey, 2018

4.3.2 Institutional Learning

As described in annex I, Table 6 Institutional learning were examined with three dimensions. Equal number of respondents 13 (27.7%) replied that availability of regular humanitarian logistics workshops / refreshment trainings was to a little extent and to a moderate extent. Nine (19.1%) and 10 (21.3%) respondents believe that it is to no extent and to a great extent respectively. However, 2(4.3%) respondents agree as a very great extent. Concerning the opportunity to attend advanced filed training in humanitarian logistics 16 (34.0%) and 14 (29.8%) responded to a little extent and to no extent respectively. While 9 (19.1%) respondents

replied to a great extent and 8(17.0%) to a moderate extent. And none of the respondents (0.00%) responded to very great extent. Pertaining experience sharing, 15 (35.9%) respondents believe that experience sharing through group brainstorming sessions and regular logistics workshops as to a little extent and equal number of respondents 12(25.5%) agree to no extent and to a moderate extent. Different to this only one respondent (2.1%) believe as a very great extent.

The individual mean values for the three dimensions of institutional learning were 2.64, 2.26 and 2.36. The overall mean value for Institutional learning indicated as 2.4 which was less than 2.5 showing the extent to which institutional learning culture at World Vision Ethiopia were to a little extent.

Staffs were also requested for whether they took humanitarian logistics trainings or not within the past one year period, and found to be only 30 %. And from those who have taken the training, 69.2% of staffs took only once. Further staffs who did not took trainings for the past one year was requested for the reasons for not taking the training. As per analysis the most two prominent reasons were lack of funding specific to trainings and lack of attention for planning humanitarian trainings within the respective projects. The result found with the extent of institutional learning in the organization is to a little extent. This implies the institutional leaning in the organization is low and WVE have to plan and work on it to increase the capacity of humanitarian logistics staffs as well as to increase the overall performance of humanitarian logistics.

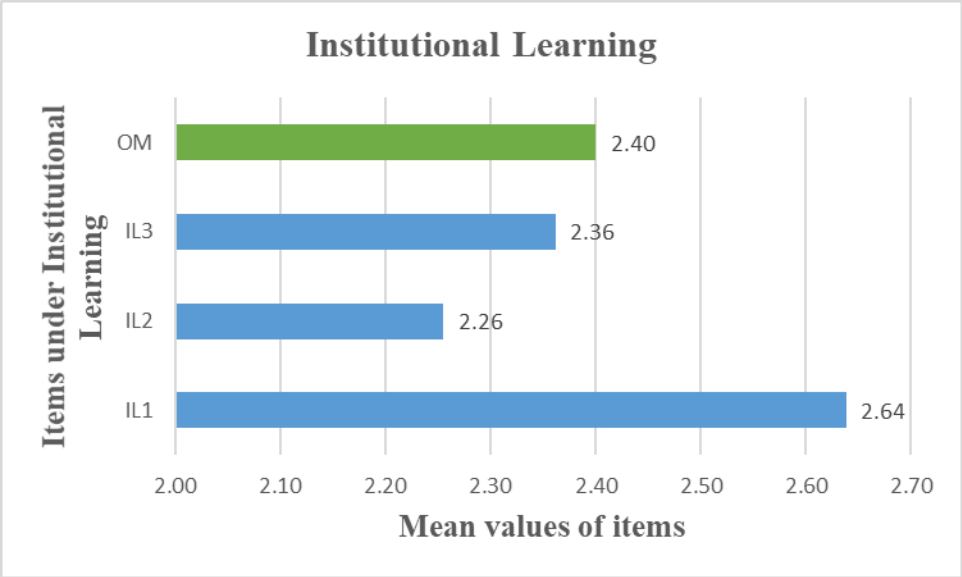
Key managers were also requested on what mechanism are used to increase institutional learning and on challenges affecting the learning process. Thus DFSA manger described that "*Dominantly we use lessons learnt: reviews on the performance of the past year and assess challenges, issues, and solutions. For example: way bills are not suitable for our records because there is no space for signature. Hence, we are proposing to use our own way bills. Sharing warehouse capacity. Generally, we learn through implementation not in a planned and deliberate way. We need to improve our IL. It is not strong*".

"We discuss best implementation status we also use emails for sharing. There are also internal controlling mechanisms, called food risk monitoring and food audit. We receive information

about of performance status and challenges and respond accordingly and also share to other implementers "as described by JEOP manager.

"*We use midterm or annual reviews, experience sharing and capacity building sessions and some of the challenges we encountered are lack of conducting capacity building regularly, lack of experienced humanitarian logistics professionals to support institutional learning*" (ERP manger)

Figure 2. Summary of Institutional Learning



Source: Primary data from main survey, 2018

4.3.3 Availability of Logistics Professionals

Three items which were extracted from (Wassenhove V, 2006) and by Fritz Institute 2005 towards presenting logistics professionals. As shown in Table 7 equivalent no of respondents 15(31.9%) believed that involvement of logistics staffs in organizational decision making process is to a moderate and a great extent. However 11(23.4%) responded as to a little extent and 4 (8.5%) and 2 (4.3%) replied as to no extent and to a very great extent respectively. As regard to involvement in strategic planning, 17 (36.2%) and 12 (25.5%) believe that involvement of logistics professional in strategic planning for humanitarian logistics were to a moderate and to a great extent respectively. Ten (21.3%) respondents replied as to a little extent. While 6(12.8%) and 2(4.3%) felt to no extent and to a very great extent respectively.

Staffs were also asked for stability of logistics staffs compared to the outgoing ones and about 24 (54.5%) said to a moderate extent. And equal no of respondents 9(20.5%) responded to a little and a great extent and similarly equivalent no of respondents 1 (2.3%) replied to no extent and to very great extent.

In general, the cumulative mean value for availability of logistics professionals in World Vison Ethiopia is nearly 3 implying that availability and participation of logistics staffs in organizational decision making were to a moderate extent.

Question on the availability of adequate number of logistic professional and how they related with humanitarian logistics was presented for the key managers. DFSA manager answered that "*There is hardly enough personnel. We use mostly the support structure. We don't have our own independent logistics unit. We depend on a support team. However, we have adequate staff for warehousing and distribution. The challenge is at central level at the procurement process. There is a lot of bureaucracy, approvals, bids, also some exceptional cases of emergency, waiver request, etc. that need extra staff".* In other hand the JEOP manger replied that *"The available staff is enough. We are also planning a junior logistics officer. But so far the work is adequately performed by the available staffs".*

The ERP manger explained that "We *do not have enough staffs. If there are no experienced logistics professionals; it seriously affect getting quality and on time Humanitarian logistics support to our program".*

Figure 3. Summary of Availability of Logistics Professionals



Source: Primary data from main survey, 2018

4.3.4 Adequate Donor Funding

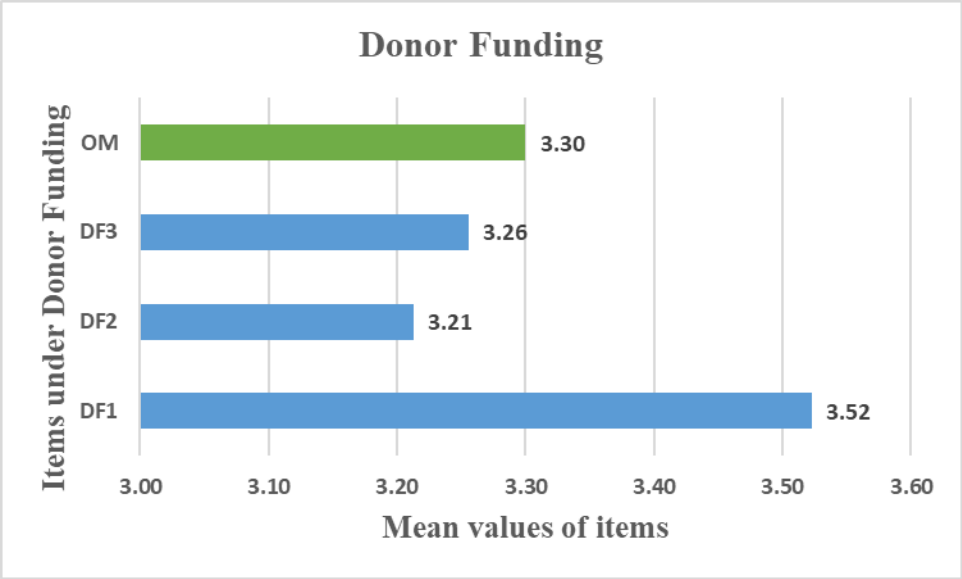
Two items were used for explaining adequate donor funding. Eighteen (38.3%) and 17(36.2%) respondents believe that sufficiency of donor funding for logistics and infrastructure and capability is to a moderate and a great extent respectively. While 7(14.9%) respondents thought as to a little extent. Regarding sufficiency of donor funding for long term disaster preparedness and response 21(44.7%) respondents felt sufficiency of donor for long term disaster is to a moderate extent. And 12(25.5%) and 10 (21.3%) felt as to a little and a great extent respectively. Intended for the third items; level of donor satisfaction, 25 (56.8%) respondents believe that the satisfaction of donor towards World Vision's funding were to a great extent. However, equal no of respondents 8(18.2%) replied as to a little and moderate extent. And 3(6.8%) felt as donor satisfaction were to a very great extent.

The individual means for the three items were 3.21, 3.26 and 3.52 in which individual values were greater than three. The overall mean for adequate donor funding indicated as 3.3 employing donor Funding in World Vison Ethiopia were to a moderate extent.

Key managers were requested on the availability of adequate funding; Both the DFSA and JEOP mangers described that there is adequate funds but in contrary there is shortage of budget to meet

basic needs of affected communities (IDPS, refugees and others affected by drought or conflict) like WASH, food, shelter, health, and education.

Figure 4. Summary of Donor Funding



Source: Primary data from main survey, 2018

4.3.5 Information Technology

As described in Table 9, Annex I availability of communication plans were said to a greater extent by 19 (41.3%) respondents. 14(30.4%) and 11(23.9%) respondents thought as to a little extent and to a moderate extent respectively. And 2(4.3%) believe availability of communication plans are to a very greater extent. Ability to disseminate /get accurate and timely information of what is in pipeline inventory was rated by 22(46.8%) and 11(23.4%) of respondents as to a moderate extent and a great extent respectively. While 8(17.0%) and 1(2.1%) of respondents believed that dissemination of accurate and timely information in their organization is to a little and a moderate extent and 5(10.6%) rated as to a very great extent. It is also revealed that 14(29.8%) and 16(34%) of respondents thought that use of automated system to increase logistics efficiency was to a little and a moderate extent respectively. However, 10(21.3%) and 1(2.1%) believes that use of automated system was to a great extent and to a very great extent respectively. Differently Six (12.8%) respondent believed that use of automated system to increase logistics efficiency was to no extent.

Regarding to access to necessary logistics information from data base of other organizations or government body was described by 11 (23.4%) and 20(42.6%) by as to a little extent and to a moderate extent respectively. Similarly accessibility of communication utilities in the organization was rated as to a little and a moderate extent by 8(17.4%) and 25(54.3%) of respondents respectively.

Sixteen (34.8%) and 19 (41.3%) respondents also believed that organizational experience in recording failure or success of past logistics experience's for post event learning was to a little extent and a moderate extent respectively.

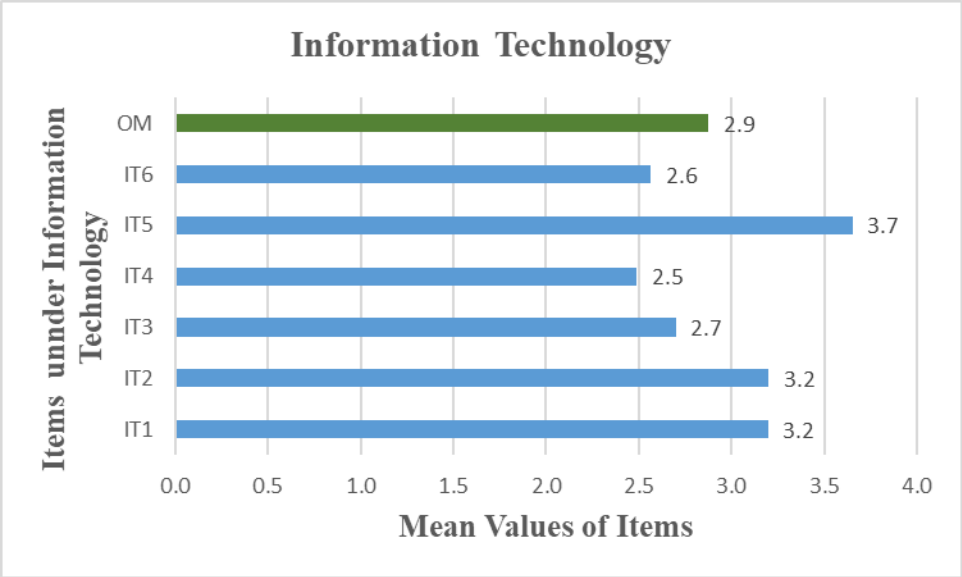
In summarizing the overall mean for use of information technology was almost 2.9 meaning the use of information technology in World Vision Ethiopia was in a moderate extent during the study period.

In addition staffs are requested to explain what method are used for updating and tracking goods and supplies. Accordingly, use of excel spread sheet was found to be (60%), manual forms (13%) and software's to 10.9%.

Further key managers were asked on the availability of adequate information technology to support the operations. Accordingly DFSA manger replied that *"This is not at an encouraging status when it comes to humanitarian logistics. Both the service providers and the company that buys the service, they don't invest much on IT. This has to do with the government, business environment. The business environment is unprofessional. It is not institutionalized in terms of IT system. Hence, we mostly use IT for communication and very limited to sharing information. We don't use it for tracking commodities or performance"*. Similarly ERP manger stated that "*We do not have IT infrastructure at the field level however relatively we have enough IT support at national office level*".

Differently, JEOP manager explained on the promising IT system; described as" *We use IT for our operations. Last Mile Mobile Solution (LMMS) for commodity distribution is implemented in two Woreda and there is plan to scale up. But there are areas where we implement manually also".*

Figure 5. Summary of Information Technology



Source: Primary data from main survey ,2018

4.3.6 Local Market

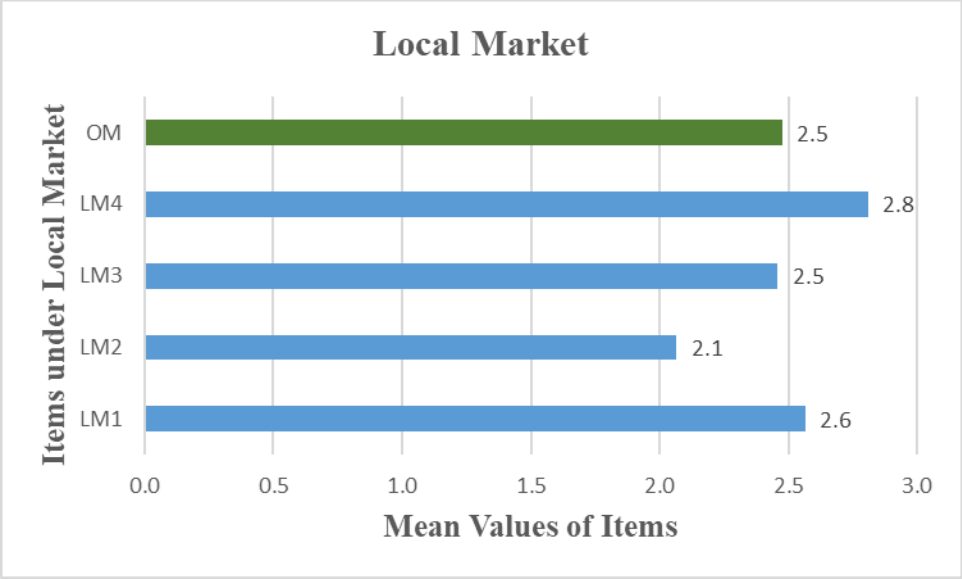
Four items were extracted form literatures representing local market from literatures (Beamon and Balcik, 2008), (Jahre.M and Jensen L.M 2010), (Wassenhove V. 2006) and (Gary P Ramsden, 2014). 19(41.3%) and 16(34.8%) respondents replied that ability of local suppliers to understand the humanitarian context and their willingness to be flexible during transaction were to a little extent and to a moderate extent respectively. While 7(15.2%) believed as a great extent. Regarding stability of pries for humanitarian goods and services, 12 (26.2%) and 21(45.7%) of respondents said stability of prices were to no extent and to a little extent respectively. However 11(23.9%) believed as a moderate extent.

Nineteen (41.3%) and 16(34.8%) respondents thought that capacity of the local market to replenish humanitarian goods and services with desired quantity and quality were to a little and a moderate extent respectively. And 6(13.0%) respondents replied to no extent. Staffs were also requested about the availability of transportation service as required and with reasonable, and 7(14.9%) believe as a great extent. While, 14(29.8%) and 21(44.7%) responded as to a little extent and to a moderate extent respectively.

Individual means' of the four items explaining local market resides between a little extent and a moderate extent. The overall mean was calculated to be 2.48 showing that the ability local market to replenish humanitarian response requirement was to a moderate extent.

As describing the capacity of local market in responding to the response of humanitarian action; DFSA manger replied that "*That is the second major issue around logistics in Ethiopia. It is disorganized and unprofessional. For example in bidding for transportation: the winners end up looking for trucks from individuals; they have low capacity, and they don't respond timely. We always have issues for transportations for all commodities. Even the way business is done such as documentation, digital communication system is poor. Even the trucks are very old, not maintained and serviced well*". Similarly JEOP manager explained his concern as "*Local market is an issue. There is debate saying instead of distributing food, people instead can be given the money and they can buy the food themselves. But local markets are not adequate in the first place. Also supply and demand doesn't match. Further, our operation woredas are those with severe food security problems; they don't have local markets. Hence, they have to transport from nearby markets and the price soars. Hence local market capacity is very low and that is what you observe in our area. We do market surveys and the local market is severely constrained".*

Figure 6. Summary of Local Market



Source: Primary data from main survey, 2018

4.3.7 Performance of Humanitarian Logistics

As it is described on Table .11. 10(21.3%) respondents said that utilization of inventory with in grant life time or before the expiry dates was a little extent. While, 15(31.9%) and 21(44.7%) of respondents thought as a moderate and a great extent respectively. Spending of money as per the budget was described as a little extent by 3(6.4%) respondents. However, 19(40.4%) and 23(48.9%) respondents replied that spending of money as per the budget is to a moderate and to a great extent respectively. Similarly purchasing of goods and services as per beneficiaries demand was described as a moderate extent by 22(46.8%) respondents and as a great extent by 18(38.3%).

Regarding to distribution of aids, 16(34.0%) and 22(46.8%) respondents thought that distribution of all aid items to beneficiaries was to a moderate and a great extent respectively. And 6(12.8%) replied as a very great extent. About 13(27.7%) and 24(51.1%) respondents believed that consistent response to unplanned requests of good and services was to a little extent and to a moderate extent. While 8(17.0%) replied as a great extent.

Eleven (23.4%) and 20(42.6%) respondents thought that organizations ability to deliver any given quantity consistently was to a little extent and to a moderate extent. As 14 (29.8%) responded as a great extent. Similarly consistent delivery of all lists of assorted items was described as a little by extent 11(23.4%) whereas to a moderate extent by 29(40.4%) respondents. Concerning speed of delivery for required commodities 12(25.5%) respondents believe that organizational performance regarding speed of delivery was to a great extent. However, 10(21.3%) and 23(48.9%) felt that speed of delivery for required commodities as to a little extent and to a moderate extent respectively.

The individual mean value for almost all items fall in range from 2.89 to 3.65. In addition, the overall mean value of performance of humanitarian logistics was fond to be 3.26 indicating that the performance of humanitarian logistics of World Vision Ethiopia was to a moderate extent.

Finally key managers was requested to rate the overall performance of humanitarian logistics in World Vision Ethiopia as well as in their operational area.

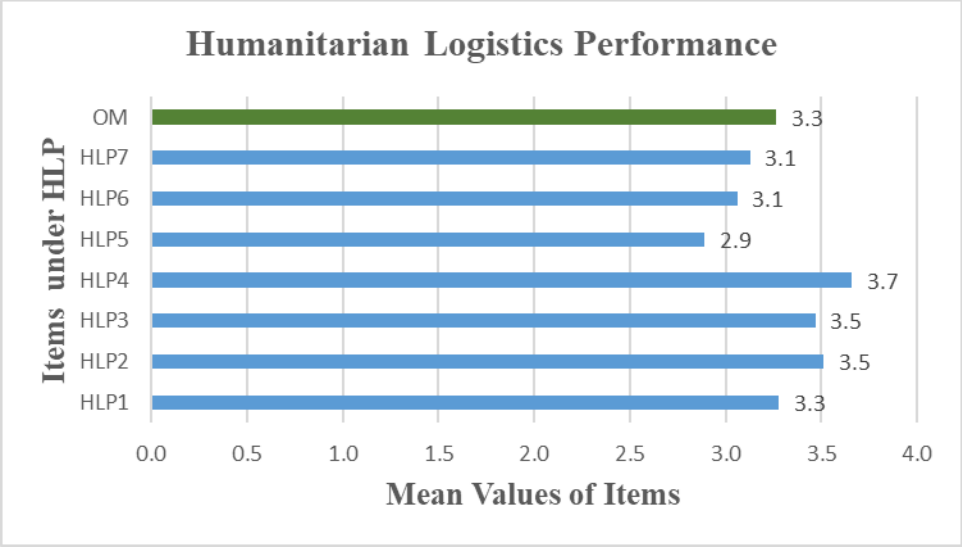
Accordingly DFSA manager described "*With all the challenges and issues, we are able to do the job and move the items to intended beneficiaries. But there are issues such as timeliness,*

efficiency, security concerns, road access at some kebeles where our big warehouses are located with limited all seasons road access. But with all the challenges, we are doing our best. In terms of improvement, government, service provider, and service users need to work together to improve things around: service delivery mechanisms, ethics, professionalism, quality of service delivery, use of ICT. My overall assessment is we have a type of service characterized by challenges and issues, and we are able to operate within this context facing the challenges, dealing with the challenges, and trying to be flexible and adaptive to the context".

Similarly JEOP manager forwarded he's view as "*Overall performance is good. As a department we believe that our performance is outstanding. Our internal and external coordination is effective and we support more than 200, 000 beneficiaries bimonthly in kind and cash worth of 10 million dollars. Accountability and efficiency is promoted in all our work*".

Finally the ERP manger explained the overall performance of humanitarian logistics as "*Generally speaking the performance of humanitarian logistic performance is relatively is not satisfactory for the following reasons such as; some humanitarian response requires responding services within 48 hours. Usually we cannot able to deliver the services within the planned schedule (high delays) due to internal procedure, lack of proper market and suppliers in the targeted locations, lack of experienced logistic personals and lack of contextualized procurement policies which incorporates lifesaving services provision ."*

Figure 7. Summary of Humanitarian Logistics Performance



4.4 Multiple Regression

This study used multivariate regression to see the unique contribution of each continuous independent variables of the study. As discussed by Gulden.K & Nese.K regression analysis is performed so as to determine the correlations between two or more variable having cause effect relationship, and to make prediction for the topic by using the relation.

In the study, step wise multivariate regression is used to predict the values of single continuous direct variable and from multiple independent variable. It assumes that the relationship between independent variable and dependent variable can be represented by the equation.

$Y= \alpha + \beta 1X1+\beta 2X2+\beta nXn+ \varepsilon$ where,

Y= the dependent variable

α =Constant

β = unstandardized regression coefficient

X= Value of the predicted coefficient

ε =is the error term

Thus in this study the following multiple equations were used to predict the level of performance of humanitarian logistics from the six independent variables.

$HLP = \alpha + \beta_1 Co+ \beta_2 IL+ \beta_3 LP+ \beta_4 DF+ \beta_5 IT+ \beta_6 LM+ \varepsilon$

Were,

Co- Coordination; IL- Institutional Learning , LP- Logistics Professionals; DF- Donor Funding; IT- Information Technology; LM- Local Market .

Accordingly Stepwise regression was conducted and the following results were found.

Table. 12. Summary of Coefficients

Excluded Variables [a]

Model		Beta In	t	Sig.	VIF
1	V_Co6.1	-.009[b]	-0.055	0.956	1.298
	V_IL9.1	-.268[b]	-1.569	0.124	1.567
	V_DF15.1	.528[b]	2.279	0.028	3.037
	V_IT18.1	.464[b]	2.457	0.018	2.056
	V_LM24.1	.359[b]	2.248	0.030	1.437
	df=46	F=6.817	R Square =.379	Adjusted R Square =0.303	

a. Dependent Variable: V_HLP28.1
b. Predictors in the Model: (Constant), V_LP12.1
c. Predictors in the Model: (Constant), V_LP12.1, V_DF15.1
d. Predictors in the Model: (Constant), V_LP12.1, V_DF15.1, V_IT18.1

Source: Primary data from main survey, 2018

As per Table 12. ANOVA result, (F (5) = 6.817, P-value= 0.012) and Coefficients of determination, at 95% confidential interval; variables which are found statistically significant were Donor funding (DF), Information technology (IT) and Local market (LM). Coordination and institutional learning were found with negative beta values which can be due to small sample size of the study. Accordingly, variables which are found statistically significant are discussed below.

Further from the analysis shown on the model summary, the adjusted R Square shows the value of R2 0.303 describing that 30.3 % of the total variability in the dependent variable is explained by the model of the study (Collaboration, Institutional Learning, Donor Funding, Information Technology And Local Market). And the remaining 69.9 % of the variability of humanitarian logistics performance can be explained by other factors which are not considered in this study.

4.4.1 Donor funding

Donor funding was found to be associated with the performance of humanitarian logistics. Holding other factors constant, a unit change in donor funding leads to an increase in performance of humanitarian logistics by 0.528 units which is greater than (0. 191 unit) study conducted on IRC (Demeke, 2016) satisfying H3. The mean value of 3.3 implying that donor funding in World Vision is to a moderate extent. Also supported by studies conducted by (Thomas and Kopczak 2005) that humanitarian organizations have become more aware of to use their resources strategically, to be efficient being effective and to align their operations around core competences.

4.4.2 Information Technology

(Christopher and Tatham, 2011), stated that appropriate monitoring and communication are evident to promote efficiency in humanitarian relief responsiveness. In this study information technology was found statistically significant and increase the performance of humanitarian logistics by .464 unit holding other factors constant; in which hypothesis (H6) was acceptable. This is also described by Fritz institute (2005), as the speed with which the critical information is collected, analyzed and distributed by participating agencies will facilitate an effective response and hence more lives can be saved.

4.4.3 Local market

Local market is another important factor associated with the performance of humanitarian logistics. According to this study a unit change in local mark will increase performance of humanitarian logistics by .359 unit holding other factors constant. This result is also supported by study conducted by (Demeke, 2016) that a unit increase in socioeconomic factors (stability of beneficiaries' demand, price stability of humanitarian needs, literacy and flexibility level of suppliers and availability of required goods & service in local market), will cause an increase in performance of humanitarian logistics by 0.123 units.

4.5 Correlation Analysis

As shown in Table 14 the relationship among the variables was examined using the correlation analysis. Correlation coefficient measures the strength and direction of linear association between two variables. It ranges from -1 to +1. The closer the value to 1, the stronger the relationship. A correlation of zero indicates that there is no linear relationship between the variables. (Karen C. 1996). The study analysis showed that most of the independent variables was correlated with the performance of humanitarian logistics. Availability of logistics professional, Donor funding, Information Technology and Local market was significant at 0.01% to 0.05% level of significance.

Donor funding was identified as correlated with performance of humanitarian logistics with (r=0.471). Donor funding was recognized to be correlate with performance of humanitarian logistics which is also supported by study made by (Thomas and Kopczak 2005) that humanitarian organizations have to more aware of how to use their resources strategically, to be efficient being effective.

The study also revealed that Information technology (r=0.486) identified to be strongly correlated with humanitarian performance logistics. It is also found to be statistically significant in which a unit increase with information technology will increase the performance of humanitarian logistics by .464 units holding other factors constant, where H6 is accepted. These results are also supported by studies made by Demeke, 2016, which the performance of humanitarian logistics increases by 0.140 units. As per (Christopher and Tatham, 2011), information technology is vital to humanitarian efforts and in supply chain responsiveness.

The third factor associated with humanitarian logistics performance was adequacy of local market which is found to be correlated with the performance of humanitarian logistics (r=0.450) which is also found to be statistically significant. As per studies conducted by (Gary P Ramsden, 2014), some of the challenges affecting the performance of humanitarian logistics are uncertainty in demand and supply, uncompetitive of market economy, the absences of local suppliers, availability stiff competition, high inventory and transportation cost and lack of trust among the supply chain partners.

Table 13. Correlation Analysis

Correlations								
		V_Co6.1	V_IL9.1	V_LP12.1	V_DF15.1	V_IT18.1	V_LM24.	V_HLP28.
V_Co6.1	Pearson Correlation	1	.388**	.479**	.332*	.400**	.314*	0.167
	Sig. (2-tailed)		0.007	0.001	0.023	0.005	0.032	0.262
	N		47	47	47	47	47	47
V_IL9.1	Pearson Correlation		1	.601**	.388**	.439**	.457**	0.047
	Sig. (2-tailed)			0.000	0.007	0.002	0.001	0.755
	N			47	47	47	47	47
V_LP12.1	Pearson Correlation			1	.819**	.717**	.551**	.363*
	Sig. (2-tailed)				0.000	0.000	0.000	0.012
	N				47	47	47	47
V_DF15.1	Pearson Correlation				1	.621**	.649**	.471**
	Sig. (2-tailed)					0.000	0.000	0.001
	N					47	47	47
V_IT18.1	Pearson Correlation					1	.506**	.486**
	Sig. (2-tailed)						0.000	0.001
	N						47	47
V_LM24.1	Pearson Correlation						1	.450**
	Sig. (2-tailed)							0.002
	N							47
V_HLP28.1	Pearson Correlation							1
	Sig. (2-tailed)							
	N							

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Primary data from main survey, 2018

5 CHAPTER FIVE: CONCLUSION AND RECOMMENDATION

5.1 Conclusion

Former studies made further researches on performance of humanitarian logistics especially on developing countries. There were some studies conducted on factors affecting the performance of humanitarian logistics on some specific humanitarian organizations. This study was the first attempt to study the effect of six factors on the performance of humanitarian logistics in the World Vision Ethiopia.

There were six independent variables studied in this study (Coordination, Institutional learning, availability of logistics professionals, donor funding, information technology and local market). As per the research finding Donor funding, information technology and local market was found to be statistically significant. The remaining independent variables coordination and institutional learning have negative relationship with dependent variable which can be due to small sample size. Thus as per the regression and correlation result finding three hypothesis (H3, H5, H6) found to be accepted.

As per the consent found from key managers and the analysis made, the following results was found on factors affecting the performance of humanitarian logistics in the case of World Vision Ethiopia,

- Humanitarian logistics performance at World Vision Ethiopia was found to be to a moderate extent.
- The adequacy of local market to replenish the requirements of humanitarian response was found between a little extent and a moderate extent.
- Use of information technology in World Vision Ethiopia was found to be to a moderate extent.
- The availability of funding for the implementation and supporting infrastructure in World Vision Ethiopia was to a moderate extent.
- The availability and participation of logistics professionals in organizational decision making was found to be a moderate extent.
- The institutional learning culture in WVE was found to be to a little extent.

- The Coordination of humanitarian logistics was believed to be successful to a moderate extent.

5.2 Recommendation

The study recommend the following

- Humanitarian organizations have to advance and invest on information technology to enable and ensure efficient delivery of aid services as well as goods. That will help for fast information exchange, tracking commodities, services and control the supply line so as to increase service delivery.
- Humanitarian organizations have to work on supply model strategies to attract and collaborate/be partner/ with local market suppliers specially suppliers of emergency items and establish strategies to alleviate supply challenges.
- Institutional learning have to be the culture of humanitarian organizations so as to provide enhanced and fastest aid responses.
- Humanitarian organization have to build or invest on capacity building of logistics staffs so as to get more experienced staffs.

5.3 Direction for Future Research

This study targeted on the organizational performance. A research study integrating beneficiaries and donors is recommended to draw conclusions from more informed point.

Since this study was organizational based cross sectional study, it is difficult to generalize the findings. Research studies including multiple humanitarian organizations in Ethiopia is recommended to see clearer picture on factors and authenticate the findings.

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ANNEX 1. TABLE of DESCRIPTIVE STATISTIS

The demographic information of the main survey sample

Table: 1 Gender of Respondents

Gender of respondent					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	38	80.9	80.9	80.9
	Female	9	19.1	19.1	100.0
	Total	47	100.0	100.0	

Table 2: Current Job Position

Current job position					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Assistant	2	4.3	4.3	4.3
	Officer	16	34.0	34.0	38.3
	Specialist/coordinator	14	29.8	29.8	68.1
	Manager	8	17.0	17.0	85.1
	Senior Manager	4	8.5	8.5	93.6
	Other	3	6.4	6.4	100.0
	Total	47	100.0	100.0	

Table 3. Age Range of Respondents

Age Range					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	25-34	24	51.1	51.1	51.1
	35-44	20	42.6	42.6	93.6
	45-54	2	4.3	4.3	97.9
	55-64	1	2.1	2.1	100.0
	Total	47	100.0	100.0	

Table 4. Level of Education

Level of education					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Certificate/Diploma	1	2.1	2.1	2.1
	Bachelor	15	31.9	31.9	34.0
	Masters	31	66.0	66.0	100.0
	Total	47	100.0	100.0	

Table 5. Coordination

Item	To no extent		To a little extent		To a moderate		To a great extent		To a very great		Total	
	No	%	No	%	No	%	No	%	No	%	No	%
Coordination: Working together with other NGOs or partners for joint logistics set up & implementation	7	14.9%	10	21.3%	17	36.2%	11	23.4%	2	4.3%	47	100.0%
Coordination: Team work / Planning together or sharing plans /with other departments within the organization e.g. between procurement and finance offices	2	4.3%	3	6.4%	15	31.9%	24	51.1%	3	6.4%	47	100.0%
Coordination: Sharing resources such as field sites warehouses and vehicles with other NGOs or partners	8	17.4%	17	37.0%	9	19.6%	11	23.9%	1	2.2%	46	100.0%

Table 6. Institutional Learning

Item	To no extent		To a little extent		To a moderate		To a great extent		To a very great		Total	
	Count	Row N	Count	Row N	Count	Row N	Count	Row N	Count	Row N	Count	Row N
IL: Availability of regular Humanitarian logistics workshops/ refreshment trainings	9	19.1%	13	27.7%	13	27.7%	10	21.3%	2	4.3%	47	100.0%
IL: Opportunity to attend advanced field training in	14	29.8%	16	34.0%	8	17.0%	9	19.1%	0	0.0%	47	100.0%
IL: Experience sharing through group brainstorming sessions & regular logistics workshops	12	25.5%	15	31.9%	12	25.5%	7	14.9%	1	2.1%	47	100.0%

Table 7. Logistics Professionals

Item	To no extent		To a little extent		To a moderate		To a great extent		To a very great		Total	
	Count	Row N	Count	Row N	Count	Row N	Count	Row N	Count	Row N	Count	Row N
LP: Involvement of humanitarian logistics staffs in organizational /project/ decision making process.	4	8.5%	11	23.4%	15	31.9%	15	31.9%	2	4.3%	47	100.0%
LP: Involvement of logistics staffs in strategic planning for humanitarian need assessment during startup of emergency & project management.	6	12.8%	10	21.3%	17	36.2%	12	25.5%	2	4.3%	47	100.0%
LP: Stability of logistics staff compared to the outgoing ones	1	2.3%	9	20.5%	24	54.5%	9	20.5%	1	2.3%	44	100.0%

Table 8. Donor Funding

Item	To no extent		To a little extent		To a moderate		To a great extent		To a very great		Total	
	Count	Row N	Count	Row N	Count	Row N	Count	Row N	Count	Row N	Count	Row N
DF: Sufficiency of donors funding for logistics infrastructure & capabilities	2	4.3%	7	14.9%	18	38.3%	17	36.2%	3	6.4%	47	100.0%
DF: Sufficiency of donors funding for long term disaster preparedness and	0	0.0%	10	21.3%	21	44.7%	12	25.5%	4	8.5%	47	100.0%
DF: Level of satisfaction of donors	0	0.0%	8	18.2%	8	18.2%	25	56.8%	3	6.8%	44	100.0%

Table 9. Information Technology

Item	To no extent		To a little extent		To a moderate		To a great extent		To a very great		Total	
	Count	Row N	Count	Row N	Count	Row N	Count	Row N	Count	Row N	Count	Row N
IT: Availability of communication plans	0	0.0%	14	30.4%	11	23.9%	19	41.3%	2	4.3%	46	100.0%
IT: Ability to disseminate / get accurate and timely information of what is in the pipeline inventory	1	2.1%	8	17.0%	22	46.8%	11	23.4%	5	10.6%	47	100.0%
IT: Use of automated systems or mechanisms to increase logistics efficiency	6	12.8%	14	29.8%	16	34.0%	10	21.3%	1	2.1%	47	100.0%
IT: Access to necessary logistics information from data base of other organizations or government body	10	21.3%	11	23.4%	20	42.6%	5	10.6%	1	2.1%	47	100.0%
IT: Availability of adequate communications utilities	2	4.3%	8	17.4%	25	54.3%	7	15.2%	4	8.7%	46	100.0%
IT: Experience of Formal records of failure or success stories of past logistics experiences for post event learning	5	10.9%	16	34.8%	19	41.3%	6	13.0%	0	0.0%	46	100.0%

Table 10. Local Market

Item	To no extent		To a little extent		To a moderate		To a great extent		To a very great		Total	
	Count	Row N	Count	Row N	Count	Row N	Count	Row N	Count	Row N	Count	Row N
LM: Ability of local suppliers to understand humanitarian context and their willingness to be flexible during	4	8.7%	19	41.3%	16	34.8%	7	15.2%	0	0.0%	46	100.0%
LM: Stability of prices for humanitarian goods and services	12	26.1%	21	45.7%	11	23.9%	2	4.3%	0	0.0%	46	100.0%
LM: Capacity of local market to replenish humanitarian goods and services with desired quantity and quality	6	13.0%	19	41.3%	16	34.8%	4	8.7%	1	2.2%	46	100.0%
LM: Availability of transportation service /trucks/ as required and reasonable cost	3	6.4%	14	29.8%	21	44.7%	7	14.9%	2	4.3%	47	100.0%

Table 11. Humanitarian Logistics performance

Item	To no extent		To a little extent		To a moderate		To a great extent		To a very great		Total	
	Count	Row N	Count	Row N	Count	Row N	Count	Row N	Count	Row N	Count	Row N
HLP: Utilization of inventory within grant life time or before the expiry dates	0	0.0%	10	21.3%	15	31.9%	21	44.7%	1	2.1%	47	100.0%
HLP: Spending of money as per the budget	0	0.0%	3	6.4%	19	40.4%	23	48.9%	2	4.3%	47	100.0%
HLP: Purchasing of goods & services as per beneficiaries demand	1	2.1%	2	4.3%	22	46.8%	18	38.3%	4	8.5%	47	100.0%
HLP: Dispensing of aids to all targeted beneficiaries.	0	0.0%	3	6.4%	16	34.0%	22	46.8%	6	12.8%	47	100.0%
HLP: Consistent response to unplanned requests for goods & services within planned lead-time or less	1	2.1%	13	27.7%	24	51.1%	8	17.0%	1	2.1%	47	100.0%
HLP: Consistent delivery of any given quantity or volume of commodity and other interventions	1	2.1%	11	23.4%	20	42.6%	14	29.8%	1	2.1%	47	100.0%
HLP: Consistent delivery of all list of assorted items for emergency and dignity kits	1	2.1%	11	23.4%	19	40.4%	14	29.8%	2	4.3%	47	100.0%
HLP: Speed of delivery /response/ for required commodities and other interventions	0	0.0%	10	21.3%	23	48.9%	12	25.5%	2	4.3%	47	100.0%

Annex 2. REGRESSION TEST RESULTS

Table 12. Coefficients

Excluded Variables[a]

Model		Beta In	t	Sig.	VIF
1	V_Co6.1	-.009[b]	-0.055	0.956	1.298
	V_IL9.1	-.268[b]	-1.569	0.124	1.567
	V_DF15.1	.528[b]	2.279	0.028	3.037
	V_IT18.1	.464[b]	2.457	0.018	2.056
	V_LM24.1	.359[b]	2.248	0.030	1.437
		df=46	Rs=.379	Adjusted R Square =0.303	

a. Dependent Variable: V_HLP28.1

b. Predictors in the Model: (Constant), V_LP12.1

c. Predictors in the Model: (Constant), V_LP12.1, V_DF15.1

d. Predictors in the Model: (Constant), V_LP12.1, V_DF15.1, V_IT18.1

ANNEX 3. CORRELATION RESULTS

Table 13. Correlation

Correlations								
		V_Co6.1	V_IL9.1	V_LP12.1	V_DF15.1	V_IT18.1	V_LM24.	V_HLP28.
V_Co6.1	Pearson Correlation	1	.388**	.479**	.332*	.400**	.314*	0.167
	Sig. (2-tailed)		0.007	0.001	0.023	0.005	0.032	0.262
	N		47	47	47	47	47	47
V_IL9.1	Pearson Correlation		1	.601**	.388**	.439**	.457**	0.047
	Sig. (2-tailed)			0.000	0.007	0.002	0.001	0.755
	N			47	47	47	47	47
V_LP12.1	Pearson Correlation			1	.819**	.717**	.551**	.363*
	Sig. (2-tailed)				0.000	0.000	0.000	0.012
	N				47	47	47	47
V_DF15.1	Pearson Correlation				1	.621**	.649**	.471**
	Sig. (2-tailed)					0.000	0.000	0.001
	N					47	47	47
V_IT18.1	Pearson Correlation					1	.506**	.486**
	Sig. (2-tailed)						0.000	0.001
	N						47	47
V_LM24.1	Pearson Correlation						1	.450**
	Sig. (2-tailed)							0.002
	N							47
V_HLP28.1	Pearson Correlation							1
	Sig. (2-tailed)							
	N							

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Department of Logistics and Supply Chain Management
Addis Ababa University School of Commerce

Assessment of performance of Humanitarian Logistics: the case of World Vision Ethiopia.

General Direction*:* The purpose of this questionnaire is to collect data on: *Assessment of the performance of Humanitarian Logistics: the case of World Vision Ethiopia*. Information you provide would be very crucial for the success of the study. Therefore, you are kindly requested to be honest toward all the items provided in the questionnaire. Your response to the questions will be kept confidential.

Dear Respondent, thank you for agreeing to participate in this assessment. Please provide your answer by putting "**X" mark** on the space provided. Please answer all questions. After completion please re-send the filled questionnaire by email to Lombo Desta using the following email address:

I. Personal Profile of Respondent

1. What is your gender?
   a. Male _____ b. Female ____
2. What is your current job position within the organization?
   a. Assistant _____ d. Coordinator/ Specialist _____
   b. Officer _____ e. Senior manager _____
   c. Manger _____ f. If Other, specify: _____
3. What is your age range?
   a. 24 & below _____ d. 45 – 54 _____
   b. 25 – 34 _____ e. 55 – 65 _____
   c. 35 – 44 _____
4. What is the highest level of education you have completed?
   a. Diploma /Certificate _____ c. Masters Degree _____
   b. Bachelor Degree _____ d. PhD _____
5. How many years have you worked in humanitarian organization/s?
   a. Total _____ (years) c. Current position _____ (years)
   b. World Vision _____ (years)

II. Please read and rate the seven categories of questions that are designed to measure performance of humanitarian logistics.

1 = To no extent
2 = To a little extent
3 = To a moderate extent
4 = To a great Extent
5 = To a very great extent

Coordination	Scale				
	1	2	3	4	5
6. Working together with other NGOs or partners for joint logistics set up & implementation					
7. Team work / Planning together or sharing plans /with other departments within the organization e.g. between procurement and finance offices					
8. Sharing resources such as field sites warehouses and vehicles with other NGOs or partners					
Institutional Learning					
9. Availability of regular Humanitarian logistics workshops/ refreshment trainings					
10. Opportunity to attend advanced field training in Humanitarian logistics					
11. Experience sharing through group brainstorming sessions & regular logistics workshops					
Availability of logistics professionals					
12. Involvement of humanitarian logistics staffs in organizational /project/ decision making process.					
13. Involvement of logistics staffs in strategic planning for humanitarian need assessment during startup of emergency & project management.					
14. Stability of logistics staff compared to the outgoing ones					
Adequate donor funding					
15. Sufficiency of donors funding for logistics infrastructure &					
16. Sufficiency of donors funding for long term disaster preparedness and response					
17. Level of satisfaction of donors					
Information Technology					
18. Availability of communication plans					
19. Ability to disseminate / get accurate and timely information of what is in the pipeline inventory					
20. Use of automated systems or mechanisms to increase logistics efficiency					
21. Access to necessary logistics information from data base of other organizations or government body					

22. Availability of adequate communications utilities					
23. Experience of Formal records of failure or success stories of past logistics experiences for post event learning					
Local Market					
24. Ability of local suppliers to understand humanitarian context and their willingness to be flexible during business transactions					
25. Stability of prices for humanitarian goods and services					
26. Capacity of local market to replenish humanitarian goods and services with desired quantity and quality					
27. Availability of transportation service /trucks/ as required and reasonable cost					
Performance of Humanitarian Logistics					
28. Utilization of inventory within grant life time or before the expiry dates					
29. Spending of money as per the budget					
30. Purchasing of goods & services as per beneficiaries demand					
31. Dispensing of aids to all targeted beneficiaries.					
32. Consistent response to unplanned requests for goods & services within planned lead-time or less					
33. Consistent delivery of any given quantity or volume of commodity and other interventions					
34. Consistent delivery of all list of assorted items for emergency and dignity kits					
35. Speed of delivery /response/ for required commodities and other interventions					

36. Have you taken any training related to humanitarian logistics in this organization in the past one year?
    a. Yes _____ b. No _____

37. If yes to Q36, how many times have you taken? _____

38. If no to Q36, what do you think is/are the reason/s:

_____

39. What methods are you using for updates and tracking good /supplies?
    a. No methods _____
    b. Manual forms/registers _____
    c. Excel spread sheet _____
    d. Software, please specify: _____

Interview Guide Questions (FOR KEY MANAGERS)

1. **Coordination**
    1. How do you describe coordination/collaboration with other organizations /Stakeholders holders/funders?
    2. Do you think that it is effective?
    3. What are challenges you face in respect to Coordination?
    4. How you do you describe the importance of coordination for effective HL
2. **Institutional Learning**
    5. What mechanism do you use for IL
    6. How do you rate?
    7. What challenges do you have?
3. **LP (Logistics professional/**
    8. Do you have enough number of logistics professionals?
    9. How do you associate performance of HL with availability of LP?
4. **DF /Donor funding**
    10. How do you describe sufficiency of fund? Do you think that there is adequate funding?
5. **Information Technology**
    11. How do you assess the value of IT in PHL?
    12. Do you have adequate IT infrastructure that support you operation?
6. **Local market /LM/**
    13. How do you describe the capacity of local market in responding for the Humanitarian action?
7. **How do you asses the overall performance of HL in WVE?**

Thank you!