



ASSESSMENT ON THE PROCUREMENT PRACTICES AND CHALLENGES OF HUMANITARIAN FOOD AID SUPPLY FROM LOCAL SOURCES: THE CASE OF SELECTED HUMANITARIAN ORGANIZATIONS IN ETHIOPIA

By

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Declaration

I, the undersigned, hereby declare that the work contained in this thesis is my own original work and that I have not previously in its entirety or in part submitted at any university for a degree.

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This is to Certify that the thesis prepared by Mr. Henok Tefera Shumete , entitled: Assessment on procurement practice and its challenges of humanitarian food aid supply from local sources : The case of selected humanitarian organizations in Ethiopia submitted in partial fulfillment of the requirements for the degree of Master of Arts in Logistics and Supply Chain Management complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

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Abstract

Procurement of locally produced food commodities from local source for food aid provides much greater net benefits both for humanitarian agencies, small-scale farmers, Farmers organizations and the host government, For humanitarian agencies such scheme could help in reducing transportation costs and other expenses that would be used to import from abroad,

This study therefore carried out to assess major internal and external challenges that affect procurement of aid food from local sources by selected humanitarian organizations. With a Specific focus on World Food Program (WFP) , National Disaster Risk Management Commission of Ethiopia (EDRMC) and Catholic Relief Service (CRS) to identify procurement practices , major internal and external challenges that affect performance of procurement of aid food from local sources

The study attempt make analysis on procurement practice and its challenge of aid food from local sources, It specifically attempted to collect information regarding challenge in locally purchased aid food grains, undertaken an analysis of the major problems and constraints in the supply chain of locally purchased aid food grains

Primary data collected using a purposive non probable sampling techniques and key informant interviewed for the sole purpose of this assessment, a mixed research approach and descriptive research design , are major methodologies employed in the study process, data analyzed to have a theoretical conclusion while each of them employs several components and process.

Findings of the study indicated that both internal and external factors have a significant impact on procurement performances of aid food from local sources

Key Words: price volatility, joint venture, speculation, integrated pest management,

LISTS OF ABBREVIATIONS AND ACCRONYMS

EDRMC -- Ethiopian Disaster Risk Management Commission

CRS -- Catholic Relief Services

WFP -- World Food Program

SNNPR -- Southern Nation and Nationalities Peoples Region

IFPRI -- International Food Policy Research Institute

ATA -- Agricultural Transformation Agency

MOARD -- Ministry of Agriculture and rural development

CSA -- Census Statistics Agency

AACSA -- Addis Ababa Chamber of Commerce and Sector Associations

EGTE -- Ethiopian Grain Trading Enterprise

USA -- United States of America

HSC -- Humanitarian Supply Chain

HSCM -- Humanitarian Supply Chain Management

P4P -- Purchase for progress

SPSS -- Statistical Package for Social Sciences

CHAPTER ONE

1. INTRODUCTION

This chapter includes the background of study and problem statement in procurement practices and challenges of humanitarian food aid supply from local sources. This will be discussed followed by outline of research questions and objectives of the study. In addition, significance of the study and scope are also included along with some limitations and organization of the thesis.

1.1. Background of the study

Ethiopia is one of the major grain producers in Africa Following South Africa as the second-largest producer of wheat in Sub-Saharan Africa, Africa is currently producing between 10 and 25 percent of its wheat production capacity, but more might simply be grown to increase food security

Despite its biodiversity, Ethiopia has a diversity of geographic and geographic landscapes agriculture and agricultural industry development potential, about 30% of the population still suffer exposure to food insecurity and the second largest refugee group on the African continent. Ethiopian government to eradicate poverty and hunger in the country Implement agricultural development and other follow-on industrialization strategies.

Despite the country's determination to achieve food self-sufficiency, the country is still dependent on foreign food aid According to a recent study by Getachew et al (2018) The spread of nationally perceived food insecurity is mainly found in Somalia (25% are urban, 31% rural), southern, nationalities, people, regional states (SNNPR) (mostly rural, 37%), Gambela. (Mostly rural, 35%) and Amhara (mostly rural, 26%) 2017/18.

Towards National Food Security and availability, humanitarian agencies like World Food Program WFP Ethiopia in line with company strategic goal and in cooperation with the Ethiopian government, implemented Various programs contributing to a more sustainable agricultural system. The program includes the purchase and distribution of a variety of crops, including cereals. (Mainly wheat, corn, sorghum), legumes, sugar, iodized salt, fortified vegetable oils, high calorie Biscuits and special complementary foods.

Explanation above illustrates that donors through humanitarian agencies committed to struggle and reduce food insecurity, in which developing countries like Ethiopia suffers a lot in food insecurity

The most important thing is that how food is sourced. Most food aid is transferred directly as a form of tied aid since food has to be purchased within the donor country, the cost is so high that beneficiaries would receive 75% more food if food was purchased locally

The focus of this article is procurement practices and challenges of aid food supplies, major internal challenges that affect performance of sourcing aid food supplies from local sources and major external challenges that impact in reducing the share of local purchase aid food supplies in contrast with international purchase, how each individual factor dealt with, in relation to increase the share of sourcing aid food supplies from local sources, Additionally explain who is affected due to low volume of locally purchased aid food supply and how local aid food supply can be improved in relation to quality and quantity

1.2. Statement of the problem

Ethiopia is one of the largest recipients of food aid in the world. The quantity has tended to increase, main agencies that procure large quantities in Ethiopia are (EDRMC) Ethiopian Disaster Risk Management Commission, WFP (World Food Program, and (CRS) Catholic Relief Service, they all are using bid procedures for procurement, even though, agencies targeted farmers cooperatives for purchase, most of the purchase are from traders who specialize in aid food supply

Cereal availability assessment has been conducted annually; main aim of the assessment is to protect food market not to be affected. However, Walker and Wand Schneider (2005), describe that quality of statistics for supply of aid food from local sources were poor, there was no agreement between the different information sources and there is challenge in coordination between food aid agencies engaged in sourcing aid foods locally

The World Food Program (WFP) is increasingly sourcing locally food for its various program's needs. WFP provides market opportunity to smallholder farmers of Ethiopia primarily through strengthening the capacity of Cooperative Unions. Procuring locally

produced food commodities for food aid provides much greater net benefits both for WFP and small-scale farmers and Farmers organizations (FOs). For WFP such scheme could help in reducing transportation costs and other expenses that would be used otherwise, while farmers and FOs could benefit from the sale of their produce at better prices. Within this context, under P4P, farmers and farmers' cooperatives in Ethiopia have been encouraged to improve their post-harvest handling practices to deliver agricultural products that meet WFP quality requirements. The increased capacity to improve product quality in turn is expected to increase supply, which calls for broadening the spectrum of marketing opportunities. Therefore, it is important to understand whether there are markets for quality produce in the country, beyond WFP to ensure the sustainability of local procurement.

To ensure appropriate food commodities available to beneficiaries in a timely manure, the volume of sourcing aid food grain locally is very low in contrast to the total volume of aid food grain requirement till now, there have been effective attempts to increase procurement of aid food grains locally, however, these attempts have yet to have any significant improvement

According to WFP Ethiopia annual country report , (WFP Ethiopia Annual Country Report 2022) the annual food transferred in 2022 is a total of 483, 023 MT of various types of food commodities ,Cereals , Ready to use food , Super Cereals (Corn soya blend) ,Pulse and salt sourced both from international and local sources , however , total quantity of aid food purchased locally in 2022 was 46,389 MT of various food commodities Cereals Ready to use food , Super Cereals (Corn soya blend) ,Pulse and salt , this contributes only 9.6% of total food transferred by WFP for the year 2022 in Ethiopia

Viewed from <https://www.wfp.org/publications/annual-country-reports-ethiopia>)

Following low volume of aid food purchase from local sources , if same quality aid food commodities imported while available in local markets impact on farmers and farmers cooperatives that will not be motivated to increase production of food grains that meet the specification of humanitarian agencies , so that, it will also have effect in reducing the quality and quantity of production ,

Beneficiaries also affected in getting food in a timely manure , food purchased from the international markets will have long lead time as compared to local sources , for any emergency emerged aid food from local sources can immediately be available for distributions despite challenges in getting right quality and quantity of supply , the host government will also be affected if aid food internationally purchased while available in local market , on one hand no adequate hard currency generated from the sale of local products on the other hand food will not be distributed from surplus to deficit areas in which surplus production might not be continue due to lack of market opportunities for farmers and farmers cooperatives as a result it affect the country economy, addressing this problem will have practical benefits to farmers directly and increase foreign currency income to the country economy as a whole

Increasing the volume of Sourcing aid food grain locally has also become an important impact for economy however, there has been little work exploring possible solutions to increase the amount of aid food grains sourcing locally

It is now becoming an area of increasing concern in Ethiopia to increase the volume of aid food grains locally ,

The objective of this study therefore is to assess procurement practices, major internal and external challenges that affect procurement performance of aid food from local sources

1.3. Research Questions/

The following research questions t are addressed by this thesis: -

- What is the procurement practice of food aid supply from local sources at the United Nations World Food Program, National Disaster and Risk Management Commission of Ethiopia and Catholic Relief Service?
- What are the major internal factors affecting procurement practices of food aid supply at the United Nations World Food Program, National Disaster and Risk Management Commission of Ethiopia and Catholic Relief Service??

- What are the major external factors affecting procurement practices of food aid supply at the United Nations World Food Program, National Disaster and Risk Management Commission of Ethiopia and Catholic Relief Service?

1.4. Research Objective

1.4.1.General Objective

The general objective of the study is to assess the practices and challenges of procurement of humanitarian food aid supply from local sources in the case of selected humanitarian organizations in Ethiopia (WFP, CRS, and EDRMC)..

1.4.2.Specific objectives

The specific objectives of the study are:

To assess the procurement management practice of food aid supply from local source at World Food Program (WFP), Catholic Relief Service (CRS) and National Disaster Risk Management Commission of Ethiopia

Identify the major internal factor affecting procurement practices of food aid supply at World Food Program (WFP), Catholic Relief Service (CRS) and National Disaster Risk Management Commission of Ethiopia,

Identify the major external factor affecting procurement practices of food aid supply at World Food Program (WFP), Catholic Relief Service (CRS) and National Disaster Risk Management Commission of Ethiopia

Major Internal Challenges

Lack of crop assessment data on availability of marketable food aid commodities, market intelligences, information, before tendering of procurement process

Suppliers lack of good knowledge of different quality standards of food commodities

Major External Challenges

Shortage of hard currency limit Local processed food suppliers' production capacity due to Shortage of imported inputs like, premixes

Price volatility affect local aid food suppliers to default contracts

Local suppliers long lead time to deliver food as per contractual agreement due to Security problems

Local aid food supplier limited capacity in handling multiple contracts at the same period , limited capacity in management of contracts

Quoting without available stock at hand and proper assessment of the market.

Having no Professional pest control service provider, for pest control service,

1.5. Significance of the study

As smallholder growers come active players on supply of aid food grains one needs to develop the institutions that enable growers, dealers, storehouse managers and processors to produce, trade and market products efficiently and cost effectively, modern trading system formerly active for export commodities as coffee and flowers. But for staple foods, similar systems are still in their immaturity. The study attempts to describes how structured trading systems work for grain similar as Corn Sorghum and beans, which is the Ethiopians most important m foods . Structured trading is a way of organizing, regulating, and backing trade in a commodity. The grain is graded according to a set of agreed norms, and it's stored safely in a trusted store. These two effects make it possible for the supplier to use the grain as collateral for a loan before it is vended. also, the grain can be vended without having to move it out of the store and it can be traded on a commodity exchange, where buyers and merchandisers can agree on a deal without having to physically check the grain. This has huge advantage for everyone involved, growers have a more assured request and can supply the grain when the price is right. Buying and selling is easier less risky and more effective Buy-ers have a further dependable supply, assured quality, and a broader range of implicit suppliers. Costs and destruction are lower; income for every-one involved can be advanced.

The assessment attempt to show those key humanitarian supply chain challenges for aid food grains and possible solutions , so that, by improving the postharvest handling and management, sharing accurate information about price and grain quality standards to grain suppliers , making suitable storage facility and strengthening inspection and certification of aid food grain can and using professional pest control service providers to fumigate aid food grain when it gets infested and able to meet requirement of humanitarian agencies ,so that the volume of local purchase will increase , therefore , numerous advantage for the countries , such as ,will generate significant amount of foreign currency to the country's economy , it will help for a quick access to appropriate food aid , Internal re-distribution from surplus to deficit areas, The promotion/support to farmers & small traders by providing markets for their commodities, etc.

1.6. Scope of the study

The benefit of improving local sourcing of humanitarian aid food grains is not well recognized, the goal of this study is to reflect challenges that prevent humanitarian organizations in particular WFP Ethiopia

Scope is limited to conducting assessments of specific humanitarian organization, with a focus on WFP office in ethiopia. The researcher plans to contact 70 volunteers supply chain staff at those major humanitarian organizations, including WFP , EDRMC , CRS as well as local suppliers of humanitarian aid food , requesting them to respond to questioners via e-mail , the completed questioners will them be collected in a one month period , the WFP Ethiopia office , CRS , EDRMC supply chain management staff and Local aid food suppliers where the key data or information will be gathered examined and evaluated .

In terms of geographic dispersion as humanitarian agencies operates in different parts of the country including remote areas, it will be difficult to access concerned personnel, therefore, supply chain staff in the head office, area office and sub office will be contacted to obtain information for the study through e-mail.

In terms of context, this assessment outlined the common supply chain management challenge of sourcing aid food grains locally, current commodity management practice of suppliers who supplied aid food to WFP, main challenge for locally purchased aid food. The study will explore

the challenges and critical factors in the supply of aid food grain within Ethiopia for suppliers to supply aid food grain effectively and efficiently to humanitarian agencies particularly to WFP Ethiopia, so that best practices could be identified and implemented to increase sourcing of aid food. However, the researcher attempts to address in this paper the practice of post-harvest practice, inspection, storage, quality and pest control practices and its impact,

1.7. Limitation of the study

Main objective of the study is to assess procurement challenge of humanitarian food aid supply from local source, in this regard, the main limitation of this assessment will be lack of well-organized secondary data specifically study on local procurement of aid food grains in Ethiopia, in addition collection of primary data using questionnaires will also be a challenge as humanitarian supply chain experts may not have sufficient time to respond questions as they are busy and usually go to field mission due to the nature of their work, hence, further assessment shall be made to compare and understand the issue in depth

Different types of aid food grain will have different response mechanism, therefore some of the findings from this assessment could be specific to grain type and specific to one humanitarian agency not a generic one

Due to disclosure policy of humanitarian agencies, getting data on the timely manner will also be a challenge, majority of humanitarian agencies require official permission to provide required data

1.8. Definition of Terms

WFP (World Food Program) It's the food aid arm of the United Nations system that uses food aid as an instrument to promote food security that acquainted towards the eradication of hunger and poverty (which ends food aid eventually) source : <https://www.wfp.org>

CRS (Catholic Relief Service) nonprofit organization provides assistance to people in need in more than 100 countries in the world without regard to race, religion or nationality <https://www.crs.org>

EDRMC (Ethiopian Disaster Risk Management Commission) Government organization of civil agency for disaster forestallment and response collaboration aims to reduce disaster pitfalls and

implicit damage caused by a disaster through a comprehensive and coordinated Disaster threat operation System in the environment of sustainable development. (<https://reliefweb.int>)

Procurement - Sourcing includes all activities involved in obtaining the goods and services a business needs to support its day-to-day operations, including sourcing, negotiating terms, make purchases, receive and inspect goods as needed, and keep records of all stages of the process. (<http://procurementmanual.unaids.org>)

Food aid- refers to providing food or cash to buy food in an emergency or to provide more permanent solutions in areas where food is lacking. Food aid can also aim to create food security – a situation where people need not be susceptible to starvation (<https://www.safeopedia.com>)

Humanitarian supply chain - the process of planning, enforcing, and controlling the effective, cost-effective inflow and storehouse of goods and accoutrements, as well as affiliated information, from the point of origin to the point of consumption for the purpose of easing the suffering of vulnerable people (Source : Thomas and Kopczak .2005))

Commodity Exchange - an open and systematized business where goods are traded. Trading is done through a system of flings (to buy) and offers (to vend), governed by a set of rules. A commodity exchange brings together numerous buyers and merchandisers, generally electronically, for a given product. This makes it easier for buyers and merchandisers to find each other and agree on prices. (Source: Eastern Africa Grain Council. 2011. Structured trading system handbook. EAGC, Nairobi)

Contract a deal between two or more persons, which is legally binding (source: Eastern Africa Grain Council. 2011. Structured trading system handbook. EAGC, Nairobi)

Forward contract an agreement on a goods exchange for grain to be supplied on a stipulated date in the future (source: Eastern Africa Grain Council. 2011. Structured trading system handbook. EAGC, Nairobi)

Grain standards These identify grain descriptions and set requirements for safety, condition of grain, and sampling and test methods. (Source: Eastern Africa Grain Council. 2011. Structured trading system handbook. EAGC, Nairobi)

Quality losses - Loss in commodity quality, commonly due to grain respiration, molds and insects.
(Source: Eastern Africa Grain Council. 2011. Structured trading system handbook. EAGC, Nairobi)

Quality requirements - These cover things that food manufacturers or consumers may be worried with, such as percentage of moisture, broken grains, diseased grains and foreign matter (source: Eastern Africa Grain Council. 2011. Structured trading system handbook. EAGC, Nairobi)

1.9. Organization of the study

The study organized into five chapters.

Chapter one - deal with introduction of the problem, background, and its approach.

Chapter two - present review of the related literature that mainly focus on local procurement of aid food grain by humanitarian agencies in Ethiopia and its performance on humanitarian supply chain performances, how information is sharing aid food grain suppliers, resources, expertise,

Chapter Three - The third chapter covers research methodology of the study.

Chapter Four - presents the Results and Discussions.

Chapter Five - The end of the assessment with summary, conclusion, and recommendation.

CHAPTER TWO

2. LITERATURE REVIEW

2.1. Introduction

This chapter made us to visualize literatures related with procurement practices, different factors that affect procurement performance of aid food supplies from local sources based on previous research done and literatures made by other scholars in the field of procurement of humanitarian aid food in conjunction with local sourcing.

Main objective of literature review is to document critical knowledge around factors that affect sourcing of humanitarian aid food locally to have the over-all overview of the concepts and with a special focus on selected humanitarian organizations, i.e. World food program Ethiopia office (WFP) , National Disaster Risk Management Commission of Ethiopia (EDRMC) and Catholic Relief Service (CRS) Ethiopia

2.2. Review of Theoretical Literature

Adriana Leirasa , (2021) made research in Humanitarian aid food supply and distribution in insecure regions: world food programme operation analysis in Ethiopia , that discuss importance of sourcing of aid food locally ,it indicate significant advantage that quantity transported decreases, will be important to save cost of delivery . Furthermore, improving procurement and advance storage of stock decisions to use local sourced of aid food and hubs storage capacities, however, deeper understanding of theory literature in humanitarian supply chain management challenge of sourcing aid food locally is crucial

Hence this assessment aims to review the complete scale of theories in procurement challenge of humanitarian food aid supply from local sourcing since last year until today

2.3. Concepts and nature of humanitarian Supply Chain Management

Supply Chain Management in a Humanitarian Context the Humanitarian Supply Chain, as well as for business purposes, includes the following conditioning preparation, planning, procurement,

transportation, storehouse, shadowing, and customs concurrence. One of the differences between force chains for business and for philanthropic conduct is the focus. In business, the focus is the final consumer, who's the input source of finances for the entire chain. In the philanthropic case, the end stoner infrequently participates in a business sale, having little control over inventories. According to (Heasip et al. 2016), when applied to philanthropic action, the force chain needs to be flexible and suitable to respond snappily to changeable events effectively (which can be the difference between life and death) and efficiently (to treat a lesser number of victims) under heavy budget constraints. According to (Smilowitz and Dolinskaya, 2010) the main challenge of philanthropic force chain operation is to establish a inflow of donations from different sources (public and transnational) which aren't always useful, timely, or applicable, with minimum waste of resources. Also, disposing of the poor quality and inviting volume of information is extremely important for the frequent opinions that need to be made. The operation of a philanthropic force chain involves the integration and collaboration of a large, dispersed group of experts with a view to icing the introductory charge of philanthropic aid" the delivery of products and/ or services to the indigent, whose immediate or long- term survival can depend on the effective prosecution of functional conditioning of logistics and force chain, including the pivotal' last fifty measures" Among the difficulties to gain the stylish performance of the force chain for philanthropic aid, we punctuate the executive and logistical backups due to poor structure for entering aid and the multi furiousness of agencies and governments buyers and merchandisers to find each other and agree on prices..

According to (Olorentoba and Gray 2006) the biggest problem in coordinating humanitarian supply chain is the political interests and military power of donor and recipient countries, the need for "free trade" and the lack of integration. He also took into account Miletus, its geographical distribution and insufficient or miscommunication between places, Fundamentals of humanitarian aid organizations and the situations of different organizations that hinder the coordination of aid.

2.3.1.Theories of (Humanitarian) Supply Chain Management

Since the 2004 Asian tsunami, the humanitarian supply chain (HSC) has become a major concern for academics and practitioners. After the 2004 Indian Ocean tsunami disaster, excess relief supplies clogged airports and warehouses in the affected areas. Human service providers must put a lot of effort into preparing needed materials and distributing them in a timely and cost-effective manner.

Before the 2004 tsunami disaster, HSCs were not as important as they are today, and most of the pre-2004 disaster relief work took place in the context of commercial products. Natural disasters are often thought of as rare events, but many disasters occur in some parts of the world each year. For example, Central America and the Caribbean are hurricane victims. Similarly, the Central Plains region of the United States known as "Tornado Alley" has been hit by tornadoes multiple times. Japan has a long history of earthquakes because it lies on the edge of a tectonic plate known as the "Ring of Fire". Disasters can also be man-made. Disasters such as chemical, electricity, road, weather, maritime accidents, and groundwater have also caused great damage and injuries. The earthquake that occurred at the Fukushima nuclear power plant in Japan in 2011 and the Chernobyl nuclear disaster that occurred in Ukraine on April 26, 1986, are examples of devastating accidents in today's human age. Even four years later, the Fukushima nuclear power plant still produces highly polluted water. Figure 1 shows how disasters have increased over the past 55 years. Thomas and Kopzak said the disaster relief industry will continue to grow due to the increasing number of disasters. It is estimated that the frequency of these disasters will increase fivefold in the next 50 years. According to this estimate, the delivery of humanitarian aid could be considered an important international business in the future. Many studies have been published in the journal Nature over the past decade. HSC's answer. They talked about this issue with different names. But their ultimate goal is to help people living in disaster areas. You can find HSC studies under different titles such as Disaster Aid, Disaster Aid, Emergency Response, Emergency Management. Humanitarian action in disasters can be divided into four phases: mitigation, preparedness, response and recovery. Pre-disaster phases include mitigation and preparedness phases. Disaster risk reduction involves taking steps to reduce the risk of disaster, such as injury and loss of life and property, as well as planning to publicize how the disaster has affected them so they can do well. Post-disaster stages include response and recovery stages. The response phase deals with the immediate threat to reduce economic and human losses, while the recovery phase promotes recovery of all damage caused by the disaster. The review of research-related information in HSC is carried out by different lists and has different purposes. The research focus of Altay and GreenIII is the damage of the life cycle. They explain all the work that needs to be done at each stage of the disaster. Simpson and Hancock take a detailed look at the use of operations research in disaster response over the past 50 years.

2.3.2. The nature of Food Supply Chain Management

A series of connections and interdependencies from farm to fork, from plow to plate. It's what's done and prepared behind the scenes for an hour each week and season, almost seamlessly, to ship our food wherever we want it, at the price we want it. The food chain is a management process and a combination of knowledge and skills that include electronics, biology, and social sciences such as economics, human behavior, and psychology. All this is set within a legal system of minimum standards and ground rules. Food chains span many disciplines. This study reveals the most important of them and aims to provide an understanding of the supply chain, to support those who manage the location of the supply chain, and to contribute to the development of research in education. Therefore, it will be of interest to students, managers, researchers, and policy makers interested in food chain management.

2.3.3. The nature of Humanitarian Food-aids Supply Chain Management

According to Balcık and Beamon, 2008). In times of disaster, humanitarian organizations can provide relief supplies from three main sources: local suppliers, international distributors, and distribution centers (pre-stocked supplies on-site) Organizations have a central warehouse where logistics personnel inspect the equipment. Initial assessments are usually made within the first 24 hours of an emergency to estimate the supplies needed to meet the needs of those affected (Thomas, 2007). Initial cash and donation requests are usually sent within 36 hours of the disaster. Everything that cannot be purchased locally or from central warehouses is provided by international suppliers through competitive bidding (Beamon and Balcık, 2008). Aid organizations often have close relationships with suppliers of goods often needed in natural disasters and often have long-term contracts with these companies. (Kovacs and Spens, 2007).

2.3.4. Dimensions or Elements of humanitarian Supply Chain

Management with particular emphasis on Food aids.

Supply chain management is a concept whose primary purpose is to coordinate and control the flow, supply and control of information using a comprehensive process perspective across multiple industries, businesses, and multiple layers of suppliers.

Sourcing, particular importance given their dependence on resource injection. The source consists of either monetary or non-monetary resource

coordination, the coordination within aid organization and outside with the other stakeholders is deemed pivotal for the success of humanitarian aid operations.

flows and distributions, three types of flows occur in a business chain (for example, goods or materials/services, information and money). The same is true for humanitarian aid chains. Mentzer et al. (2001) the information flow is bidirectional, with money flowing from customers to upstream suppliers and goods flowing from downstream to customers.

2.4. . Review of Empirical Literature

Empirical study will further explain the similar previous research, that has been used a related techniques used in this research, to use it as a reference to develop techniques in solving the problem statement in this assessment

According to balick and beamon (2008), humanitarian organizations can source aid food locally and/or globally. Each option has its advantages and disadvantages, in terms of expected logistics costs, such as weather and availability of supplies, although local supplies may not be available in quantity. and quality needed, local sourcing requires shorter delivery times and lower logistics costs. However, strong post-disaster demand and competition for local supply could boost the local market prices, thereby increasing the unit cost of local supplies. Challenges of global sourcing in post-disaster environments stem primarily from the time-consuming processes involved (e.g.: tendering and customs clearance) and carrying capacity requirements for transportation Bulk supplies bulk supplies. Relief items can also be purchased in kind (non-cash) donations, often available after a disaster. Donate in kind, especially if unwanted, can mess up the rescue chain.

According to (Erin Lentz, 2015) Cash, vouchers, and local and regional delivery Ready-to-eat foods (PRLs) are now commonplace, while traditional foods, Transoceanic food aid deliveries are decreasing. Some Potential benefits of forgoing food aid as a fact Responses include faster delivery, lower costs, more local food accepted by respondents, supporting the local market and improving nutritional results. Are these new forms of food aid? no hidden risks: traders can default to local supply; Local foods may not meet quality and safety standards such as transatlantic food aid; resources may be shared unfairly family; and local foods may be less fortified or nutritious. Any food assistance can have negative effects, depending on the local context.

Biniyam, T. (2017) Key points for market performance assessment: Case study by United Nations World Food Programme on purchase for progress under Addis Ababa - P4P program. According to the research questions, what did he say about the internal capacity issues (storage, transportation, and location) that caused the farmers' prices to be uncompetitive He concluded that lower prices could be a way to create a competitive advantage for companies. Especially unnecessary products in domestic corn production bring additional cost to the average price.

He emphasizes those internal capacity issues of cooperative unions have strong impact on the price, the different location of cooperative unions who supplied products to long distance and has impact increasing the price besides warehouse management on the other hand found potential enough to affect the quality of product produced that leads product of cooperative union uncompetitive

2.4.1. Studies on Supply Chain Management Practices and challenges

Supply Chain Management (SCM) is a business process that involves planning, utilizing, and controlling the movement and storage of goods, services, and information to meet customer needs efficiently. (Council of Supply Chain Management Professionals, 2013)

Ma. Gloria V. Talavera* (2015) The purpose of this study is to analyze supply chain practices in the following SCM pillars: demand management, supply management, and managing shipping, and the results show that, despite differences in business context and SCM practices adopted, they do exist. It turns out that the supply chain is integrated in ensuring the competition it faces. The problems in demand, supply and logistics management in the four sectors also seem similar.

2.4.2. Studies on Humanitarian Supply Chain Management Practices

It is the responsibility of the humanitarian supply chain to distribute humanitarian supplies to people in areas affected by natural disasters. Understanding and managing the various challenges in the human supply chain is one of the most important aspects of Human Supply Chain Management (HSCM).

Humanitarian supply chain management practices and challenges vary across different contexts, different types of disasters, and the evolution of disaster management systems.

2.4.3. Studies on Food Supply Chain Management Practices and challenges.

In order to develop and maintain customer trust, the management of the food chain and different practices in the industry and many recent food-related events in the food industry need to be strengthened. More and more consumers need information about the quality of food, its history, and the sustainability of its production and distribution. The food crisis has made consumers more aware of how food production, processing and transportation affects public health.

Before reaching the final consumer, food must transit through farmers, wholesalers, distributors, shippers, warehouses, processors, and distributors as well as be produced, picked, processed (in warehouses, packing, and other processes), transported, distributed, and sold again. However, this excursion nearly always remains an unnoticed component of food purchasing (Ahlmann, 2018). According to Kummu et al. (2012), the loss of food items may be broken down into five categories: harvest, post-harvest, operation, distribution, loss of C, and consumption. Article

According to (Aung & Chang, 2014) food loss often termed as a farm -fork damage, food loss is a global challenge in developed and developing nations (de Lange & Nahman, 2015 ,

According to United Nations Food and Agriculture Organization (FAO) around 40 percent of the food produced is lost or wasted throughout the entire food chain (Warker, 2018). This percentage is even higher in developing countries.

Food supply chain challenge, due to the perishability of the product, there are uncertainties in the food supply chain. Additionally, one of the main causes of food fraud is "information asymmetry" between the stakeholders (Mao et al., 2018; Galvez et al., 2018). There is hence a requirement for Sharing of information is hindered by theft, ineffective transactions, and other factors that cause mistrust between supply chain parties. Traceability of food is becoming a key differentiator in the agri-food industry, making it essential for organizations (Saber et al., 2019). In order to maintain information connection across all stakeholders, it is crucial to establish a centralized and efficient traceability system (Galvez et al., 2018; Fatorachian & Kazemi, 2018).

2.4.4. Studies on Food-aid supply chain management practices and challenges.

It includes activities such as top human resource management, stakeholder management, master planning and evaluation plans during the relief operation to facilitate a quick and efficient response. One of the first problems charities face is finding the food they need from large numbers of donors. Therefore, the effectiveness of the effort depends on the use of the most effective materials management techniques, so donations should be sent to the affected areas in a timely manner.

According to (Dubey et al., 2017). The framework for Aid food supply chain management is the basis for the production, processing and transformation of raw materials and semi-finished products from key activities agriculture, livestock engineering, finishing, etc. To determine the relationship between different items, an interpretive structural model (ISM) was used to establish a hierarchical framework (Faisal and Talib, 2016). This framework helps users understand the interactions between logistics operators in the food supply chain. The ISM framework has also been used to assist in risk management by identifying and explaining the interdependence between risks in the food supply chain at different levels such as primary supplier, logistics need a third party (3PL) etc. (Colin et al., 2011). As observed, this framework has proven to be a useful method for structuring risk in aid food supply chain management through a step-by-step process through multiple production steps. Information plays an important role in making the food supply chain management more effective. To assess information risk management, to quantify information risk and ISM to understand interrelationships in food supply chain management (Nishat Faisal et al. 2007). While

the global Food supply chain management emerges with international cooperation, the ISM-supported framework is limited to explaining causal relationships or transitional links between different stakeholders. The fully interpretive structural model was then introduced to analyze some of the support and barrier factors of food supply chain management (Shibin et al., 2016)

According to (Adriana Leirasa □, Paulo Gonçalves .2021) , Food Aid Delivery and Distribution in Unsafe Areas: the findings indicate that policies humanitarian supply chain policy should focus on easing the law regarding customs clearance for humanitarian supplies; strengthen local markets to increase local sourcing; implement tools to enhance security; and monitor distribution to minimize the impact of corruption.

2.5. Gaps of Empirical studies

Previous research has mostly focused on humanitarian supply chain management practice and challenge of sourcing aid food from abroad, however , Insufficient research has been done to sufficiently evaluate procurement challenge of humanitarian food aid supply from local source , few have been empirically tested, this assessment will provide a new investigation about the procurement practice and its challenges of humanitarian aid food supplies from local source the case of WFP CRS and EDRMC . by addressing the gaps. The study looks at the effects of major Internal challenges, major External challenges on procurement of humanitarian aid food supplies from local sources .

2.6. Measurements of Humanitarian Food aid Supply Chain Management Challenges

Humanitarian supply chains must be effective if humanitarian organizations need to respond and recover from catastrophes and provide timely and essential relief to people in need. however, there are several problems that must be recognized, the main challenges of humanitarian aid food supply chain management are Lack of investment in technology and communication, difficulties with transportation and accessibility, poor information integration, high uncertainty in demand , and ambiguity of activities are among the factors that make it difficult to manage humanitarian supply chains and measure the success of humanitarian efforts.

2.7. Procurement practice of food aid supply from local sources

Since 2005, prices of three crops have seen prices increase and fluctuation. From 2011/12 world prices of sorghum and maize a decline trend although slight increase in 2018. In general, world prices for some cereals shows a positive trend. The five-year outlook for world cereals seems that more and more possibilities to see higher prices in future. International price trends for selected crops are determined by both supply and demand factors. on the one hand, production devastations such as continued adverse weather conditions in those main countries contribute to price increases. On the other hand, the growing global demand for These crops push prices even higher. In terms of domestic prices, there is a positive trend. Prices of wheat, sorghum and beans declined sharply in 2011 but increased abruptly the following year. Again, in 2015, the price of maize and sorghum declined. Corn prices continued to fall until 2016., prices of wheat, corn and sorghum have increased since 2016. In general, domestic prices have positive trend and is expected to increase in following years.

Domestic price of three crops (maize, wheat and sorghum) are higher than world prices partly due to low productivity of local producers, which can be interpreted to higher production costs and price. But this statement only be work in a well-managed local sourcing of aid food i.e. have an adequate local supply base, so that it does not cause the price to rise proportionally with serious negative effects on food security of vulnerable populations. In general, cost of aid food from local sources must not be exceed the cost of importing aid food in kind.

Source: Amha et al., 1997) “local purchase experience”

Shortage of marketable surplus production: limitation of marketable surplus production of crops with the required quality is one of the major challenges faced by both traders and institutional investors. . More than half of the traders surveyed (52% of wheat traders, 57% of corn traders and 61% of sorghum traders) said limited supply of marketable product was the biggest challenge they faced in 2017/18. The shortage of quality seeds was also the challenge. Furthermore, after discussions with institutional buyers, the poor quality of locally grown plants and lack of sufficient supply from local sources are the main challenges faced in locally sourcing, lack of clear quality standards and the production challenges described above can affect the availability of marketable surplus products.

It is expected that sourcing aid food locally will have a beneficial effect on development compared to a similar amount of in kind aid, since it makes a much larger net contribution to rural and urban livelihoods in the countries .

2.8. Internal and External challenge of procurement food aid supply from local sources

Market assessments show that between 50% and 73% of traders in wheat, corn, sorghum, and red kidney beans have limited access to finance to harvest and supply the crops surveyed. It turned out that there is More than one in four retailers surveyed also reported access to warehouses. suggests that it is difficult for WFP to locally purchase crops outside of the main harvest season. It is important for grain suppliers to know the quality standards of crops they supply, and more importantly to implement grain quality verification mechanisms. In this regard, the results showed that most suppliers were unaware of standard requirements. Additionally, the research team was unable to find any concrete evidence that could verify the quality of crops purchased by suppliers. means that the supplier is having difficulty delivering inspected crops to required standard levels. Therefore, the capacity of local supplier is expected to be a challenge in sourcing of the 2018/19 crops surveyed by WFP in the field.

According to interviews with suppliers of the plants surveyed, prices for these crops increased by \$4,444 and are characterized by high volatility. Price volatility is also reported by institutional buyers of 4,444 of the cultures surveyed due to challenges in sourcing the cultures locally. In addition, 82% of traders and 93.3% of processors responded that faced price volatility in crops surveyed. For 2018/19, assumes that 4,444 government interventions could be triggered for price stabilization if the volatility is too great. Fluctuations in food prices affect marketing and sourcing decisions made by traders, posing high risks for producers and traders. As a result, food grain supplies become volatile and unpredictable, aggravating price volatility. Therefore, Humanitarian agencies should prepare for these events.

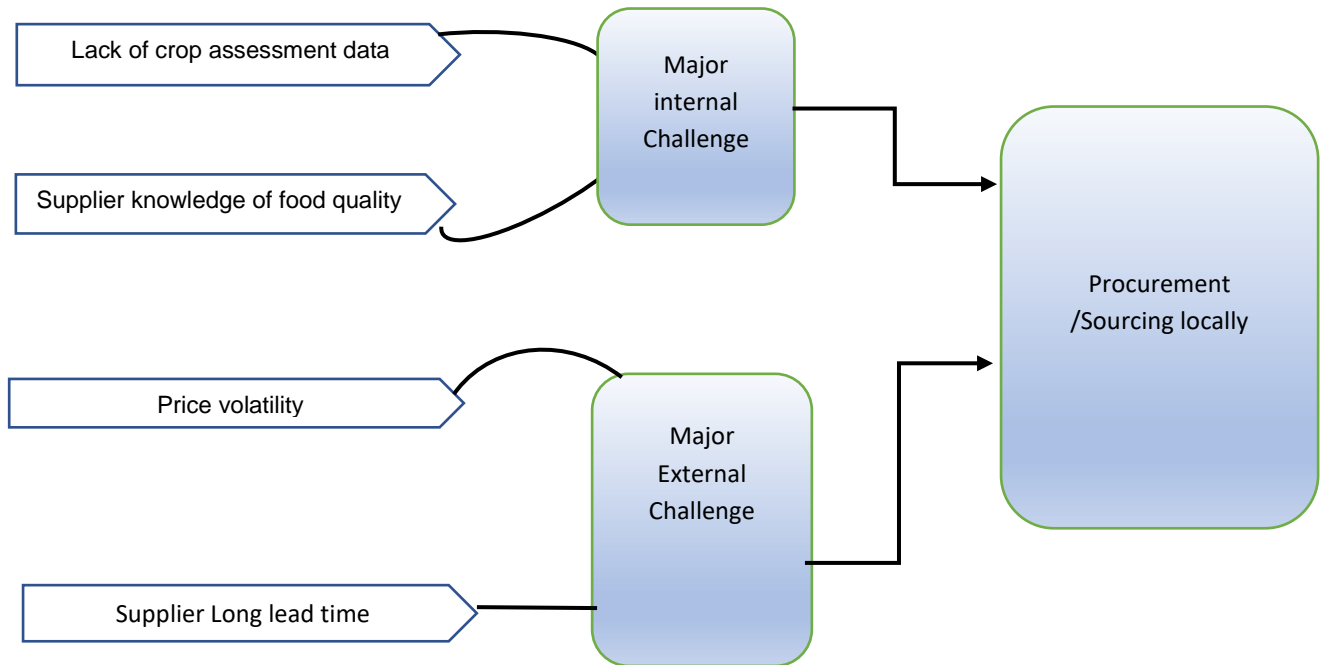
Access to surplus production areas was mentioned as one of the challenges traders face in collecting food crops. Interviews with traders revealed that 21-25% of them cited poor access to surplus areas as one of their biggest challenges. This is due to the lack of road infrastructure and inadequate transport services. As a result, these suppliers had difficulty delivering crop to buyers on the agreed

dates. Whether WFP chooses to buy directly from producers or from traders, poor infrastructure and inadequate transport service providers are likely to be challenges in 2018/19.

Grain production and marketing in Ethiopia have several challenges, as implied for WFP to source aid food locally. On the production side, there is lack of input, strong dependence on rain performance, unpredictable pricing, limited access to services (credit) and The country's infrastructure and security situation is expected to affect the number of salable products in the market. surplus will be available in the market. On marketing challenges, the lack of market surplus, limited local commercial capacity, price fluctuations, transportation problems Food grains and the security situation in the country is expected to negatively affect how traders collect, store and deliver food grains to their customers in 2018/19. (Source: Crop Production and Surplus Market Assessment in Ethiopia Draft Report)

2.9. Conceptual framework of the Study

Based on a review of the literature in procurement challenge of aid food supplies from local sources the areas of major internal challenges that includes, Lack of crop assessment data for availability of marketable production , discrepancy in aid food quality specification between humanitarian agencies standard and Ethiopian standard and knowledge of Local aid food suppliers of different quality standards of food commodities, and The major external challenges that includes limited Processed food production due to foreign currency , Price volatility that will led to default contract limited capacity of suppliers to deliver as per agreed time , suppliers limited capacity to multiple contracts , suppliers quoting without available stock , Lack of food quality and safety professionals ,suppliers Stored mixed items in one store efficiently addressing those challenges will increase the share of local sourcing of humanitarian aid food supply as compared to international .



Source: self-developed

Figure 2.1 Conceptual framework

Hypothesis

H1 – Major internal challenge (Lack of crop assessment data on availability of marketable food aid commodities and supplier lack of knowledge on food quality and safety) positively and significantly affects sourcing of aid food locally

Ho - Major internal challenge (Lack of crop assessment data on availability of marketable food aid commodities and supplier lack of knowledge on food quality and safety) doesn't affect sourcing of aid food locally

H2 - Major External challenge (price volatility and Local suppliers long lead time to deliver food as per contractual agreement due to Security problems) positively and significantly affects sourcing of aid food locally

Ho - Major External challenge (price volatility and Local suppliers long lead time to deliver food as per contractual agreement due to Security problems) doesn't affect sourcing of aid food locally

CHAPTER THREE

3. Research Methodology

3.1. Introduction

In this chapter the researcher outlines the research methods used in this study, The study design, the target audience, the methods, and tools used for data collection and the methodologies to be used for data analysis are just a few of the topics

3.2. Description of the study area/Setting

The main food aid procurement organizations in Ethiopia are the world Food Program (WFP); National Disaster Risk Management Commission of Ethiopia (EDRMC) and Other International NGOs, like Catholic Relief Services (CRS) all of which conduct competitive bidding processes. Comparing local sourcing to a comparable amount of tied aid, one would anticipate that local sourcing would have a positive development impact because it significantly increases net contributions to rural and urban livelihoods in the nations. Although, this claim works if there is sufficient local/regional supply, preventing a price increase that would have a severe negative impact on access to food. Ethiopia is the largest regular recipient of food aid in the world. The amount has tended to rise, and the average yearly amount from 2000 to 2004 was over 900,000 tones, mostly of cereals. Since that time, about 25% of Ethiopia's food aid has been obtained locally in the form of maize, wheat, and sorghum, which is about equivalent to 12% of Ethiopia's marketed surplus for these crops.

According to WFP workers, there are several problems with imported food because of bureaucracy during transit through other countries. But in many instances, aid bureaucracy negates this benefit. These findings support the need for better local purchasing management rather than the continuation of tied aid.

The reason why those three humanitarian organizations selected for this assessment is that local sourcing of aid food by humanitarian agencies have a substantial economic benefit for the country besides will help humanitarian agencies for prompt disaster response those selected humanitarian organization WFP , EDRMC and CRS are the main aid food

procurement organizations in Ethiopia

For this assessment data collected from selected humanitarian organizations in Ethiopia. WFP, NDRMC and CRS,

According to the website of WFP, the world's largest humanitarian organization fighting hunger, the United Nations World Food Program (WFP) distributes food to more than 100 million people each year and distributes about 3.5 million tons of food worldwide. In Ethiopia, WFP's business is complicated by geographic constraints, political conflicts, natural disasters, and lack of infrastructure.

The logistics and supply chain experts of humanitarian organization in Ethiopia WFP, CRS and NDRMC, working in the head office, and different field offices, participated in the assessment.

3.3. Research Approach

For this assessment, the research is mixed: qualitative and quantitative methods are used, qualitative methods are used to determine or confirm the presence or absence of something in the study. In contrast, quantitative methods are used when scientists try to determine how many elements are present. Quantitative methods use advanced analytical techniques, while qualitative methods use open-ended questions and direct comments. Researchers can conduct qualitative research using semi-structured interviews and use statistical methods to test hypotheses for quantitative research. Both lead researchers to deepen their understanding of relationships

Mixed research enables policy analysts to better understand and explain complex processes. Interdisciplinary approaches to policy research can better understand the complexity of our social world, view the world through different lenses, and can be applied to the diversity of many stakeholders who respond to policy issues better than a single method or research.

For this thesis research planned to use mixed research approach because the information planned to be collected will have both qualitative and quantitative natures, some of the challenges of humanitarian supply chain management for sourcing aid food grain locally may not be quantified

The mixed research approach used to understand complex nature of those humanitarian supply chain management challenges of sourcing aid food locally qualitatively as well as to explain through numbers, charts, and basic statistical analyses.

3.4. Study Design

For this study a descriptive research design used to understand and scientifically describe humanitarian supply chain management challenges of sourcing aid food grain locally the case of World Food Program ,(WFP) ethiopia , National Disaster Risk Management Commissions of Ethiopia (EDRMC) and Catholic Relief Service (CRS) Ethiopia . The design will be selected to identify the most influential variables that affect performance of procurement of aid food from local sources

According to John W. Creswell, research design is the research plan and process, including decisions from general hypotheses to detailed data collection information and analysis. The plan has many resolutions, it doesn't have to be in the order that introduces and presents. The overall decision includes which design should be used to study the issue. The input to this decision should be the worldview that the researcher develops in this work: the research process (called strategy); and specific methods of data collection, analysis, and interpretation. The choice of research design also depends on the nature of the research question or problem to be solved, the personal experience of the researcher, and the target audience of the study.

The three types of designs are quality, quantity, and combination. Admittedly, these three methods are not as disjointed as they seem at first glance. Quality and diversity should not be seen as opposites or opposites; instead, they represent different parts of a continuum (Newman & Benz, 1998). Research is often better than more and vice versa. Mixed research is at the center of this continuum as it provides an overview of qualitative and quantitative methods.

Quantitative research is an objective test of theories by examining the relationship between variables. In contrast, variables are measured. Usually, data is a set of properties so that statistics can be used to analyze it. Qualitative research is a method for investigating and understanding the importance of people or groups of people to social or humanitarian problems. Research methods, problem solving, and methods mainly involve collecting data around the participants, inductive data analysis from detail to general principles, and the researcher's interpretation of the data.

3.5. Population and sampling

3.5.1. Population of the study

The logistics and supply chain staff in those three big humanitarian organizations world Food Program (WFP) , Catholic Relief Service (CRS) , National Disaster Risk Management Commission of Ethiopia (EDRMC) and managers in big local aid food grain suppliers based in Adama and Addis Ababa considered as a target population for this assessment, as their work is directly or indirectly related with the research topic ,

3.5.2. Sampling Design

since the size of a non-probability sample cannot be calculated in advance using a statistical method. Because this study used a non-probability sampling technique, the sample size was chosen by practical considerations such the influence on time, money, and resources. Undoubtedly important that sample be representative of the population therefore , the population size for this assessment is small and planned to take purposive sampling of 45 logistics and supply chain staff member from WFP , 13 logistics and supply chain staff members from EDRMC 7 logistics and supply chain staff members from CRS , managers from 5 big local grain suppliers based in Adama and Addis Ababa , majority of staff members under logistics and supply chain management unit in those three selected humanitarian organizations will have a relevant work experience with the research Topic

3.5.3. Sample Size

The sampling tool deployed in this research is purposive sampling method form nonprobability sampling technique. Methods involving judgement are sometimes referred to as purposive selection, judgement selection, or non-probability selection the logistics and supply chain management staff in those three selected humanitarian organizations and 5 managers of local aid food grain suppliers will be considered, this will give the sample size of 70 respondents

3.6. Data sources and collection procedures

For this assessment both the primary and secondary data planned to be collected, the primary data will be collected from staff members of selected units from WFP, EDRMC, CRS and Local aid food suppliers . The secondary data will be collected through review of documents related to the assessment.

Questioners prepared and shared to each of the selected respondent, primary Data will be collected, sorted and analyzed accordingly. To better understand procurement challenge of humanitarian aid food supplies from local source, intensive literature review will be made from the internet, books, workshop proceedings, proclamations etc.

3.7. Data Analysis plan

Researchers will use statistical methods to analyze quantitative data collected from surveys, which are descriptive statistics. Statistical information includes frequency distribution analysis, mean trend, data variance, and correlation to data analysis. . The data collected from the questionnaire were coded and entered the Statistical System for Social Sciences (SPSS) program. Responses are coded using different symbols such as 1, 2, 3, 4, 5, and the number 999 represents all values not related to the respondent. The advantage of this method is that the collected data can be accessed quickly, and it is easy to further analyze the data to generate various statistics. Analyze the data from the interview, explaining and emphasizing the main points of the interviewees. Researchers triangulate quantitatively and qualitatively using data from two sources to ensure consistency of results.

3.8. Ethical considerations

Before conducting interview and distribution of questioners , written permission need to be granted from those main humanitarian organizations , a written letter from Addis Ababa University School of commerce about the Ethical clearance will also be obtained before the start of data collection , so that letter will be attached on each questioners describing main objective of the assessment, the collected information will be strictly confidential and will not be shared to any one , and respondent will voluntarily participate in providing information for this assessment

3.9. Data Reliability and Validity

Based on the reliability statistics test result Cronbach Alpha value of 0.747 has been found, this indicate that this research is reliable as the result is greater than 0.6, according to George and Mallery (2003) provided the rules of thumb: “ $\alpha > .9$ – Excellent, $\alpha > .8$ – Good, $\alpha > .7$ – Acceptable, $\alpha > .6$ – Questionable, $\alpha > .5$ – Poor, and $\alpha < .5$ – Unacceptable

Table 4:2 Reliability Statistics for total

Cronbach's Alpha	N of Items
.747	45

Table 4:3 Reliability Statistics for three major variables

Category	Cronbach's Alpha	N of Items
External challenge	0.708	17
Internal challenge	0.673	18
Procurement practice	0.626	19

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1. Introduction

collected data is analyzed and summarized to achieve the purpose or objectives of the study. As mentioned earlier, this study was conducted to evaluate Procurement practice and its challenge of humanitarian food aid supply from local sources. Therefore, demographics of respondents, procurement of aid food from local sources being practice, major internal challenges that affect procurement of aid food from local sources, major external challenges affecting procurement of aid food locally and other related sub-topics are analyzed in detail. Final, Summary results followed by the study's conclusions are presented.

4.2. Response rate

Response rate is the ratio of total number of responses to total number of questioners distributed, Hence, the response rate of the study was found to be 67% (47/70), the 67 % completed response were considered in the study. sample were considered as a representative to proceed with based on the suggestion made by (Cooper & Schindler 2003) and the study sample size of 30 and above is statistically sufficient for generalization.

4.3. Demographic profile of Respondents

To view the demographic profile of the sample population, questioner started with demographic profile of the respondents. Too much information regarding the individual and demographic status of the respondents were not required in this part. Therefore, the following response variables have been summarized and described in the following chart. These variables include Gender, age, education, position, and the organization

Educational Qualification:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	second degree and above	20	42.6	43.5	43.5
	First degree	23	48.9	50.0	93.5
	college diploma	3	6.4	6.5	100.0
	Total	46	97.9	100.0	
Missing	System	1	2.1		
Total		47	100.0		

Table 4.1 Demographic characteristics of respondent Source: survey result ,2023

93 % of the respondent participated for the study have first degree and above, 43.5 % of the respondent have a second degree and above and only 7 % of the respondent have Diploma.

Years of experience in your organization:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	over 15 years	16	34.0	35.6	35.6
	10-15 years	17	36.2	37.8	73.3
	5-10 years	11	23.4	24.4	97.8
	below 5 years	1	2.1	2.2	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

Table 4.2 Respondent years of experience in humanitarian sector Source: survey result ,2023

All respondent have adequate experience in humanitarian sector, from the total respondent only one (2%) has less than 5 years' experience in humanitarian sector, however , 98 % have 5 years and above experience in humanitarian sector , therefore , respondent have a good knowledge and experience of the research topics

Current position of Respondent in their Organization

Current position in organization:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Supply chain officer or manager	4	8.5	8.7	8.7
	procurement officer	5	10.6	10.9	19.6
	Logistics officer	5	10.6	10.9	30.4
	procurement associate	1	2.1	2.2	32.6
	Food technologist or quality controller	4	8.5	8.7	41.3
	Logistics associate	14	29.8	30.4	71.7
	warehouse operator	13	27.7	28.3	100.0
	Total	46	97.9	100.0	
Missing	System	1	2.1		
Total		47	100.0		

Fig 4.3 Position of respondent

Source: survey result ,2023

As per table representation above regarding current position of the respondents. 30.4 % of the respondent have a Logistics associate position, 28.3 % of the respondent have warehouse operators ,10.9 % have logistics officer, 8.7 % of the respondent have a supply chain officer, Procurement associate and Food technologist 2.1 % of the respondent have procurement officer and logistics officer position. according to position of respondent in their organization respondent have adequate knowledge and experience of the research topics

Respondent organization:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	WFP	34	72.3	73.9	73.9
	EDRMC	5	10.6	10.9	84.8
	CRS	7	14.9	15.2	100.0
	Total	46	97.9	100.0	
Missing	System	1	2.1		
Total		47	100.0		

Age category of the respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	55-64 years	11	23.4	23.4	23.4
	45-54 years	14	29.8	29.8	53.2
	35-44 years	17	36.2	36.2	89.4
	25-34 years	5	10.6	10.6	100.0
	Total	47	100.0	100.0	

Source: survey result ,2023

Gender of respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	36	76.6	76.6	76.6
	Female	11	23.4	23.4	100.0
	Total	47	100.0	100.0	

Source: survey result ,2023

Considering gender distribution of participant in this study, (36) 76.6 % were male and 11 (23.4 %) female , unfortunately no female participant from EDRMC , The selected Supply chain staff members from three humanitarian organization were participated in this study ,from total respondent (46) , WFP covers 34 (73.9 %) , EDRMC 5 (10.9 %) and CRS covers 7 (15.2 %)

4.4. Result Finding Interpretation and Discussion

The result and in-depth analysis of the findings are provided in this section. Descriptive statistics and a correlation test were used to analyze the primary data, and the results were properly interpreted and presented. Graphs and percentiles were used to analyze and discuss the results of secondary data.

4.5. The Practices of Procurement of Humanitarian Food Aid from Local Sources of Selected Humanitarian Organizations in Ethiopia based on the Perceptions of their Employees

Likert scales are useful when you want to quantify how your respondent feels about the questions. Since the questions are usually easy to understand by participant, many participants answer them, Quantitative feedback can be useful because you can compare it to tangible results.

The five points Likert scales is considered an interval scales, that ranges from Strongly Disagree to strongly Agree to the survey questioners, range of calculated mean value against corresponding implication summarized as below, 0.8 is a limit for each measurement, it is a result dividing the difference between maximum (5) and minimum (1) by maximum score of the questions (5) .

Table 4.3 five points Likert scale

Strongly Disagree	1 - 1.8
Disagree	1.8 - 2.6
Neutral	2.6 - 3.4
Agree	3.4 - 4.2
Strongly Agree	4.2 - 5.0

Source: survey result ,2023

During analysis of data standard deviation has been used, Standard deviation is important because it helps in understanding the measurement how the data is distributed , large standard deviation indicate the data points are far from the mean and small standard deviation indicates that data are grouped closely around the mean value ,if the standard deviation value is close to zero it indicate that the data are very close to the mean.

In general statisticians have determined value no greater than plus or minus 2SD represent measurement that are closer to the true value than those that fall in the area greater than plus or minus 2SD

Table 4.4 Descriptive Statistics

	N	Mean	Std. Deviation
procurement practice	47	3.5717	.28632
Internal challenge	47	3.4472	.38781
External challenge	47	3.6155	.31646
Valid N (listwise)	47		

Source: survey result ,2023

The mean for all above three variables, procurement management practice for food aid supply from local sources, major internal challenges affecting the procurement practice of food aid supply from local sources and major external challenges affecting the procurement practice of food aid supply from local sources were found in a category to agree to ideas of the questioner.

The standard deviation of three variables above is low it indicates that group of data are very close to the mean and consistent, the lowest standard deviation value 0.28632, procurement practice and its challenge shows more consistent and closer to the mean

Procurement practice and its challenge

Grain production and procurement in Ethiopia has several challenges, identified by literature review, some of the challenges of production and procurement of grain sourcing locally presented as follows,

Shortage of input: providing fertilizer and seeds is essential missing inputs to improve productivity. Improved seed accessibility was reported by 72% wheat producers, 75% maize producers, 66% sorghum producers and 72% kidney bean producers

Grain producers as one of the key challenges of the 2017/18 production season. look forward to this challenge will continue to affect farmers in the next production season, which will negatively affect production affecting quality and quantity of excess in the market in 2018/19.

Rain fall performance – (Belg and meher) Ethiopian agriculture is vulnerable to rainfall. Especially during Meher season and other disturbances. Uneven rainfall and possible Occurrences of natural disasters such as pest and disease outbreaks in 2018/19 will have a direct impact. And it has an immediate adverse effect on production, affecting commodity surplus.

Unpredictability of Price – wheat and corn price volatility is another issue that flunce the production decisions. Unexpected price fluctuations make wheat and corn production a risky business for grain producers. price volatility and associated risks hinders the use of improved seeds and necessary investments in the production process such as introduction of improved seeds, adoption of expensive farming practices. This will negatively impact food grain supplies.

Source: TAK-Innovative Research and Development Institute PLC (2019) Crop Production and Surplus Market Assessment in Ethiopia

Table 4.5 Descriptive Statistics procurement practice and its challenge

	N	Mean	Std. Deviation
sourcing humanitarian supplies from local market	47	4.04	1.062
Use Ethiopian quality Standards	46	3.93	.879
suppliers delivered food commodities within agreed time	47	3.30	1.041
suppliers meet the packaging requirement	47	3.57	.950
weigh bridges are not calibrated in a timely manner,	47	3.49	1.120
conduct a crop assessment,	47	3.62	.990
certain food commodities are considered strategic	47	3.96	.721
check, if vendors have awareness on food quality and safety procedures	47	4.49	.748
Benefit the country in injection of foreign currency.	45	4.51	.757
will help in distribution of aid food from surplus to deficit area.	47	4.30	.548
collaboratively work in strategic sourcing of food aid commodities.	47	3.60	.798
it Will benefit key local aid food suppliers to grow	46	4.09	.890
Seasonality has no impact on availability	47	1.68	.594
purchased aid food commodities locally at the right season	47	3.40	.851
local aid food suppliers can compete with international suppliers	47	2.68	1.105
Price of aid food locally is higher than imported.	47	2.38	1.074
Demand high price from humanitarian agencies	47	3.40	.970
Local aid food suppliers have limited capacity in quantity and quality.	47	3.89	.914

Source: survey result ,2023

As indicated in above table , overall mean score value on procurement practice and its challenge ranges from minimum 1.68 ,Seasonality has no impact on availability and price of sourcing local food aid commodities , it is the only variable among 18 variables in above table mean value indicate that majority strongly disagree against questioner to maximum 4.51, that Local Sourcing of aid

foods by humanitarian Agencies will benefit the country in injection of foreign currency , where majority of respondent strongly agree with questioner , the remaining is in between , 2.38 mean value of Price of aid food locally is higher than imported found to be disagree by respondent , two variables of mean value 2.68 and 3.3 found in a neutral category , local aid food suppliers can compete with international suppliers and suppliers delivered food commodities within agreed time respectively . respondents agree with questioners for eleven variables in the above table, mean value ranges from 3.4 to mean value 4.02. Strongly agree on three variables mean value ranges from 4.3 to 4.51 ,in which the Local Source of aid foods by humanitarian Agencies will help in distribution of aid food from surplus to deficit area , During Local Source of processed foods by humanitarian Agencies , it is important to check, if vendors have awareness on food quality and safety procedures and Local Sourcing of aid foods by humanitarian Agencies , will benefit the country in injection of foreign currency , in ascending order .

The standard deviation values in above table ranges from the minimum value 0.548 scored by Local Source of aid foods by humanitarian Agencies will help in distribution of aid food from surplus to deficit area.to the maximum 1.120 indicated weight variation observed during the receipts of locally sourced aid food. Usually weigh bridges are not calibrated in a timely manner,

Higher standard deviation result above 1SD score value showed for four variables , Procurement policy of Humanitarian Agencies for purchase of aid food is through competition, local aid food suppliers can compete with international suppliers in price, quality, and volume of supply , Compared with import parity prices Price of aid food locally is higher than imported , and Sourcing humanitarian supplies from local market is low as compared to international market are in a descending order , that indicate value relatively far from the mean

Lower standard deviation result less than 1 SD showed in 12 variables. Seasonality has no impact on availability, certain food commodities are considered strategic, check, if vendors have awareness on food quality and safety procedures, Benefit the country in injection of foreign currency, collaboratively work in strategic sourcing of food aid commodities , purchased aid food commodities locally at the right season, Use Ethiopian quality Standards, it Will benefit key local aid food suppliers to grow, Local aid food suppliers have limited capacity in quantity and quality , suppliers meet the packaging requirement , Demand high price from humanitarian agencies ,

conduct a crop assessment, in the ascending order and indicate that values very close to the mean and consistent

Internal procurement challenge

There are several internal challenges that will affect procurement of aid food supply from local sources some of the challenges are mentioned as below

Access to services and infrastructure – Access to credit is also one of the main problems farmers faces when growing crops. Producers also reported being unable to access storage and irrigation systems. infrastructure. Limited access to storage exposes producers to seasonal price fluctuations that leads to instability, reduced production, and farm income

Security- currently the country is undergoing major political changes, it creates some instability both in surplus and in deficit, Local conflicts have also resulted in large-scale displacement of people. Although the situation appears to be under control, the outbreak of the dispute is expected to affect production in following years. This affects the entire production cycle, especially in overproduction areas.

Any instability affects not only the yield of the crop but have a determinantal effect on marketing especially closer to the main roads that connect to market, areas of oversupply or undersupply to key markets will directly be affected. Any social unrest close to major road is expected to have an impact for movement of crops.

Source: TAK-Innovative Research and Development Institute PLC (2019) Crop Production and Surplus Market Assessment in Ethiopia

Internal Challenges of Humanitarian Local Procurement of Food Aids of Selected Organizations in Ethiopia as perceived by their Employees”

Table 4.6 Descriptive Statistics Internal Procurement Challenge

	N	Mean	Std. Deviation
looks forward to increasing the share of local sourcing	47	3.19	.970
Discrepancy between humanitarian agencies and Ethiopian standard.	47	3.21	1.082
suppliers usually fail to meet free from infestation and moisture content	47	3.60	1.136
Good knowledge of different quality standards	47	2.68	1.002
Inland transporters usually deploy uncleaned trucks	47	3.60	.993
Transporters usually deploy trucks with proper Tarpaulin,	47	2.91	1.039
Supplier faces additional cost if cargo rejected	47	4.11	.914
Usually, Local aid food suppliers stored mixed items in one warehouse	46	4.30	.662
Valid N (listwise)	46		

Source: survey result ,2023

The mean for local aid food suppliers stored mixed items in one warehouse is the highest score value 4.3, found in a category of strongly agree and has also lowest standard deviation of the other variables, it indicate that data are closer to the mean and more consistent as compared from others. lowest mean score value is Local aid food suppliers have a good knowledge of different quality standards of food commodities which is 2.68 found to be in a category of neutral together with one other variable i.e. During delivery of locally sourced aid food Transporters usually deploy trucks with proper Tarpaulin, to protect food from any contaminants its mean score value 2.91, where standard deviation value for both is above one 1.002 and 1.039 respectively, it indicates that data dispersed relatively far from the mean. other variables are in between, found in a category of agree in which the same with questioner.

External procurement challenge

There are also several external challenges that affect procurement of aid food supply from local sources, some of the challenges mentioned below,

Transportation – access to surplus production area was mentioned as one of the challenges that aid food suppliers are facing. poor accessibility is One of their main problem, This is due to lack of road infrastructure. Inadequate transport services. As a result, aid food suppliers struggled to transport grain on the agreed time to buyer

Price -price of crops is increasing and characterized by high fluctuation that affect food marketing and storage decision, that will have high level of risk for producers and traders. This results in unstable and unpredictable grain supplies, which further aggravate price volatility

Capacity of Traders -. access to storage facility a challenge for traders, it is difficult for humanitarian agencies to purchase grain outside the main harvest season, it is important for aid food suppliers to to be aware of quality standard of the grain they supply it is also more important to have a system to check quality of the grain they supply. in this regard most of the supplier do not have standard technique and requirement of the trade, they usually purchase food grain by only checking quality in a traditional way, therefore, it will be difficult for suppliers to deliver food that meet the requirement of the humanitarian standard, capacity of local traders is expected to be a challenge for humanitarian agencies during procurement

Source: TAK-Innovative Research and Development Institute PLC (2019) Crop Production and Surplus Market Assessment in Ethiopia

Table 4.7 Descriptive Statistics external procurement challenge

	N	Mean	Std. Deviation
suppliers stored mixed items in one warehouse	46	4.30	.662
Supply quantity of local aid food commodities limited	47	3.62	.898
Shortage of hard currency will limit processed food production capacity	47	3.98	.794
Price volatility will not affect local aid food suppliers to default contracts	47	2.02	.766
suppliers unable to deliver as per contractual agreement	47	3.47	.952
Poor handling will led to poor quality of food	47	4.23	.786
Suppliers have limited capacity in handling multiple contracts	46	4.00	.699
Suppliers are quoting without available stock at hand	47	3.77	.865
Suppliers have implemented integrated pest management,	47	2.89	1.005
Suppliers have a standard quality and quantity control equipment's	47	2.68	.980
suppliers have food quality and safety professional staff	47	2.62	1.012
suppliers do not meet the shelf-life requirements	47	2.96	1.083
Suppliers work as joint venture, to get knowledge, technology transfer,	47	4.30	.931
suppliers, Work with international companies as a joint venture, to reduce risks	46	3.98	.931
Suppliers' linkage with research institute, may help to improve quality and safety	47	4.38	.922
suppliers' linkage with research institute, to improve agricultural practice	47	4.51	.547
suppliers' linkage with research institute, help to reduce total production cost	47	4.04	.806
food producing industries have a limited capacity to meet quality standard	47	3.91	.905
food producing industries have limited capacity to meet the international standards of packaging	47	3.72	.949
suppliers are not using a Professional pest control service provider	47	3.62	.990
Valid N (listwise)	44		

Source: survey result ,2023

As clearly depicted in above table, Lowest mean score value under external procurement challenge is Price volatility will not affect local aid food suppliers to default contracts which is 2.02 that lies

under disagree category , and the highest mean score value of variable is that Food suppliers linkage with research institute, help to improve agricultural practice and reduce post-harvest losses with mean score value 4.51 respondent strongly agree with questioner with the lowest standard deviation that describe majority of the response are close to the mean and consistent , other mean score values are in between where four variables under categories of neutral that are , suppliers have food quality and safety professional staff Mean score value 2.62 Suppliers have a standard quality and quantity control equipment's mean score value 2.68 , Suppliers have implemented integrated pest management, mean score value 2.89 and suppliers do not meet the shelf-life requirements mean score value of 2.96 . following ten variables found under categories of agree with questioners , that are ; suppliers unable to deliver as per contractual agreement mean score value 3.47 , suppliers are not using a Professional pest control service provider and Supply quantity of local aid food commodities limited both mean score value 3.62 , food producing industries have limited capacity to meet the international standards of packaging mean score value 3.72 , Suppliers are quoting without available stock at hand mean value 3.77, food producing industries have a limited capacity to meet quality standard mean score value 3.91 , suppliers, Work with international companies as a joint venture, to reduce risks mean score value 3.98 , Suppliers have limited capacity in handling multiple contracts mean score value 4.0 and suppliers linkage with research institute, help to reduce total production cost mean score value 4.04 . only four variables found in a s strongly agreed category with questioner, whose mean score values 4.23 Poor handling will led to poor quality of food ,mean score value 4.3 for both Suppliers work as joint venture, to get knowledge, technology transfer and suppliers stored mixed items in one warehouse, mean score value 4.38 Suppliers' linkage with research institute, may help to improve quality and safety, and the highest mean value mentioned above .

Except three variables remaining 17 variables of standard deviation value are below one that indicate response are very close to the mean and consistent however standard deviation of the three variables; suppliers do not meet the shelf-life requirements $SD = 1.083$, suppliers have food quality and safety professional staff $SD= 1.012$, and Suppliers have implemented integrated pest management, $SD=1.005$, that shows relatively response are far from the mean

4.6. Correlation analysis

Correlation analysis examined the strength of relationships between variables under study, according to Marczyk, DeMatteo & Festinger (2005) correlation is the most useful measurement of relationship between variables. therefore, correlation value of the study found in the range of 0.01 to 0.30 is considered as small, the correlation value found in a range from 0.3 to 0.70 is moderate, value range from 0.70 to 0.90 is large and value ranges from .90 to 1.00, considered very large.

In statistics every confidence interval has a percentage associated with it called confidence level, as per (Mark Saunders, Philip Lewis, and Adrian Thornhill, 2009). level of significance of the correlation analysis of two variables a P value 0.05 (5 % probability of coincidence) accordingly when significance level become 95% and more considered for interpretation

H1 – Major internal challenge (Lack of crop assessment data on availability of marketable food aid commodities and supplier lack of knowledge on food quality and safety) positively and significantly affects sourcing of aid food locally

Ho - Major internal challenge (Lack of crop assessment data on availability of marketable food aid commodities and supplier lack of knowledge on food quality and safety) doesn't affect sourcing of aid food locally

H2 - Major External challenge (price volatility and Local suppliers long lead time to deliver food as per contractual agreement due to Security problems positively and significantly affects sourcing of aid food locally

Ho - Major External challenge (price volatility and Local suppliers long lead time to deliver food as per contractual agreement due to Security problems doesn't affect sourcing of aid food locally

		internal challenge	external challenge
procurement practice	Pearson Correlation	.289*	.421**
	Sig. (2-tailed)	0.049	0.003
	N	47	47

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

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

Pearson’s coefficient of correlation conducted to evaluate relationship between internal challenge and External challenge with Procurement practice of aid food locally, it is found that the relationship between internal challenge and procurement practice is significant at $P < 0.05$. however, relationship between External challenge and procurement practice is significant at $P < 0.01$. it indicates that both internal and External challenges positively and significantly affect sourcing of aid food locally

4.7. Regression analysis

Regression analysis has become one of the most widely used statistical tools for analyzing multifactor data. it is appealing because it provides a conceptually simple method for investigating functional relationship among variables (Rudolf J. Freund, William Wilson, 2006)

Coefficients						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	10.194	2.703		3.771	.001
	internal challenge	.010	.166	.008	.061	.951
	external challenge	.410	.103	.542	3.988	.000

a. Dependent Variable: procurement

As table above external challenges has a significant relationship at p value is .000, which is below 0.05 , the null hypothesis of Major external challenges rejected (*i.e. , suppliers stored mixed food in one store that will affect quality of the product ,limited capacity of suppliers to import inputs for production of processed food , price volatility affect suppliers to default contracts , if suppliers not able to deliver as per agreed time , limited capacity to handle multiple contracts , quoting without available stock at hand during tendering and lack of food quality and safety professionals*) does not affect sourcing aid food supplies locally

As the p value of internal challenge is .951 which is above 0.05, therefore , there is no sufficient evidence to reject null hypothesis, that Major internal challenges does not affect sourcing aid food supplies locally

4.8. Qualitative Data Analysis (key Informants result)

Interview conducted with key informant to get more justification that support the finding of survey questioner with regards to procurement practices and challenges of aid food supplies from local sources in world food program (WFP) , National Disaster Risk Management Commission (EDRMC) and Catholic Relief Service (CRS) in Ethiopia

Five key informants were engaged in the interview process from the three selected humanitarian organizations

S/n	Position /Title	Organization
1	Supply chain officer	WFP
2	Logistics Manager	CRS
3	Quality Assurance officer	WFP
4	Branch Manager	EDRMC
5	Quality Control Expert	EDRMC

Source: self-developed

As shown above, the key informant in those three humanitarian organizations hold a senior position and have impressive knowledge and long year experience in humanitarian sectors, the response summarized as below

They were requested to explain how the procurement practice and challenges of aid food supply from local sources in their respective organization. They all replied almost the same , during planning to purchase aid food locally, there are factors to be considered such as ,they conduct crop assessment availability of the intended commodity type locally ; (Maize ;Bean ;Wheat Flour; Maize Flour ;Super Cereals; Super Cereal Plus; RUSF (Plumpy nut, Plumpy sup ; High Energy Biscuits; Iodized salt; Sugar) ; the also check if surplus marketable production available in the country; check If the big purchase of intended commodity type is allowed by government ensure the market will not be disturbed ; Certain food commodities are considered strategic that the government does not allow big purchase that may disrupt the normal market , wheat was one of the commodity banned for big purchase until recently therefore sometimes important to get permit from government ; they also check If the quality of locally sourced aid food complies to Ethiopian standard or humanitarian Agencies requirement ; key informant stress the price of aid food from

local sources is competitive with the regional and international market ; check If quality and safety aware and internationally approved food manufacturers are available in the case of processed food purchase

During aid food purchase from local aid food suppliers the contract agreement mainly includes Commodity type (Cereal, Pulse, Processed foods etc..) quality specification either the Ethiopian standard or organization standard; the Quantity to be purchased and price also checked against import parity; the delivery period; packaging requirement and term of contract (INCOTERMS) to use are part of the contract agreement

The key informants were also requested to describe and explain major internal challenges that affect procurement of aid food from local sources specifically relevant to humanitarian agencies

Several internal challenges were itemized by key informants that support the findings of the survey questionnaire. Consequently, the most common internal challenges as indicated by the informants were. unavailability of all types of Commodities ; some of local aid food suppliers default the contract and unable to supply the agreed quantity of aid food ; some suppliers not able to meet the quality requirement of humanitarian agencies and/or Ethiopian standard ; supplier demand high price as compared to import parity that is also a challenge for local purchase, that could be due to high cost of agricultural inputs ; Delivery Period also a challenge some suppliers unable to deliver aid food purchased as per contractual agreements; the key informant further describe challenges from humanitarian agencies side that a late procurement tender ; sometimes tender not issued at the right season ; there is also a packaging problem as per humanitarian agencies packaging standard , there are not enough number of capable packaging manufacturers available ; also they mentioned transport related challenges that Transporters usually deployed not a suitable trucks for transportation of locally sourced aid food that lead to affect food quality ; there is also knowledge gap of local aid food suppliers that stored mixed items in one warehouse and have no proper stacking, that will affect quality of food and face additional cost for warehouse rent, re-fumigation, re-inspection after fumigation that lead to high price of commodities

The key informants were asked further question in relation to major external challenges that affect procurement of aid food supply from local sources and their response summarized as below

crop failure; pests and diseases that lead to shortage or total crop failure in which required quantity not available ; insect infestation also a challenge that led to quality related issue and rejection by humanitarian agencies ; Shortage of main ingredients for processed food (premixes) due to hard currency shortage that supplier unable to produce processed food as per contractual period ; Price volatility affect local aid food suppliers exposed to loss and contract default ; key informant further explain the challenge of Security that supplier unable to deliver foods as per contractual agreement ;bad weather especially during rainy season contribute delay in delivery; supplier capacity in handling multiple contracts and unable to manage contracts well ; the key informant itemized coping strategy for the challenges that includes :- implementation of integrated pest management, preventive and control measures during storage of aid food ; segregate storage of food and nonfood items ; raw material and finished product to improve quality of aid food supply that meet humanitarian agencies requirements ; Local aid food suppliers to have a professional food quality control expert to implement modern commodity management practices ; aid food suppliers to work with international companies as joint venture, to get knowledge, technology transfer, and to be competitive against international suppliers ; supplier to Work with international companies as a joint venture, to reduce risks associated with political, legal and regulatory environment in the local market ; suppliers to have linkage with research institute to help them to improve quality and safety of the products ;Local aid food suppliers to use a Professional pest control service provider, for pest control service is also a coping strategies mentioned by the key informants

4.9. Discussion of Major Findings

Finding revealed that major external challenges such as , suppliers stored mixed food in one store that will affect quality of the product – local aid food suppliers do not make ready a separate store for storage of raw materials, whenever food purchased from farmers or farmers’ cooperative suppliers stored new arrival raw material together with finished products , as the new arrival food not processed , (cleaned and disinfested) , it affect the quality by cross infestation and cross contamination of the finished products that led to re-inspection and refumigation and later will have impact in higher the price of aid food from local sources and also deteriorate the quality that may not meet specification of humanitarian agencies ;; the study also noted that local aid food suppliers have limited capacity to import inputs for production of processed foods ,like premixes due to shortage of hard currencies that make local aid food suppliers not competitive with the international market ; the study also support the theory of price volatility that affect food marketing and storage decision of local aid food suppliers later supplier default contracts ,the study .also revealed that suppliers not able to deliver aid food as per agreed time due to security ; limited capacity of local aid food supplier to handle multiple contracts will impact supplier competitiveness ; it has also evident that local aid food suppliers quoting without available stock at hand during tendering and lack of food quality and safety professionals are the major external challenges of procurement of aid food from local sources which can be resolved by aid food suppliers working with international companies as a joint venture, and local aid food suppliers to create linkage with research institute to help them to improve quality and safety of the products and also Local aid food suppliers to use a Professional pest control service provider, for pest control services

Finally, further directions for future research are identified. Procurement of the different types of aid food supply from local sources requires further in depth investigation across the supply chain

CHAPTER FIVE

5. SUMMARY, CONCLUSION AND RECOMMENDATION

5.1. Introduction

The objective of the study was to assess procurement challenges of food aid supply from local sources with a particular reference to selected humanitarian agencies, those factors having strong effect on performance of procurement from local source, summary of finding and conclusion provided, , subsequently conclusion part will provide possible generalization based on analysis.

The general objective of the study is to assess procurement challenges of food aid supply from local sources with a particular reference to selected humanitarian agencies

5.2. Summary of major findings

Following assessment conducted on Procurement practices and its challenges of humanitarian aid food supply from local sources identified major challenges that affect local sourcing of aid food, tried to show opportunity for humanitarian agencies can leverage from, to build confidence of humanitarian agencies to revise and redefine sourcing of aid food strategy.

primary data was collected from purposely selected 47 supply chain management professionals from three different humanitarian organizations, 67 % responded from 70 questioners distributed.

The overall findings indicates that major internal challenges contribute the reduction of share of sourcing aid food from local source as compared to international , among the internal challenges *Discrepancy between Ethiopian and international standards* 68 % of the respondent agreed that discrepancy of Ethiopian and international standard but 27 % disagreed in which local aid food suppliers mostly not able to meet requirements of humanitarian agencies that uses the international standards , certain quality parameters in the international standard, for example :- aflatoxin content of the international standard is less than or equal to 10 PPB whereas Ethiopian standard says less than or equal to 20 PPB, Quality control (QC) plan for raw and packaging materials, process and finished product (details on parameters, limits, frequency and test methods , Packaging material technical data sheet (information related to composition and barrier characteristics for primary and secondary packaging) ,

Having no crop assessment data ;- 70 % of the respondent agreed on crop assessment data collected before procurement, it is very crucial to have crop assessment data, to estimate availability of marketable surplus quantity for specific aid food type that humanitarian agencies plan to purchase locally, the price of food tend to drop after harvesting season during meher harvest season which is in November -December as expected higher decrease in price of the crop in the month of February. However, having no crop assessment data will have a big impact in decision making when and how much to purchase locally and at what price

Lack of knowledge on food quality and safety issues by suppliers; - 48 % of the respondent disagree on local aid food suppliers have good knowledge of food quality and safety issues only 28 % of the respondent agreed that local aid food suppliers have knowledge on food quality and safety the remaining are neutral. Having no adequate knowledge on food quality and safety is a big challenge to meet humanitarian agencies requirement and difficult local aid food suppliers to be competitive with the international suppliers,

Major external challenges will also affect in decreasing the volume of purchase of aid food from local sources such as: -

suppliers stored mixed food in one store, more than 93 % of the respondent agreed that local aid food suppliers stored mixed food commodities in one store, storage of mixed food commodities in one store will have big impact on food quality and safety issues, for instance if there is infestation on the food in one of the batch it will cross infest the sound food stored together apart from cross contamination of food will also be challenging for traceability of products finally the food commodity will fail to meet quality and safety requirement by humanitarian agencies. ***price volatility affects suppliers to default contracts***; - More than 82 % of the respondent agreed that volatility of price affect local aid food suppliers to default contract, as mentioned earlier price of crops is increasing and characterized by high fluctuation that affect food marketing and storage decision, that will have high level of risk for producers and traders. This results in unstable and unpredictable grain supplies, which further aggravate price volatility, and aid food suppliers forced to default contract. ***Suppliers have limited capacity to handle multiple contracts***, more than 80 % of local aid food suppliers agreed that suppliers have limited capacity to handle multiple contracts it is very crucial that suppliers to have adequate capacity to manage multiple contracts at the same time without compromising quality and quantity of products that he supplied, as mentioned earlier

it is difficult for humanitarian agencies to purchase grain outside the main harvest season, it is important for aid food suppliers to have capacity in delivering food commodities as per contractual agreement , suppliers need to be aware of quality standard of the grain to be supplied , it is also more important to have a system to check quality of the grain . in this regard most of the supplier do not have standard technique and requirement of the trade, they usually purchase aid food grain from farmers by only checking quality in a traditional way, therefore, it will be difficult for suppliers to deliver food that meet the requirement of the humanitarian standard, capacity of local traders is expected to be a challenge for humanitarian agencies during procurement that strongly affect in the share of sourcing aid food supplies locally ,

More than 89 % of the respondent agreed that local aid food suppliers can build capacity, get better knowledge and technology transfer and competitive if they work with international companies as joint venture

Marehan 91 % of the respondent agreed that linkage with research institute, will be beneficial for Local aid food suppliers to improve quality and safety of local products

More than 75 % of the respondent agreed that it is possible to reduce risks associated with political legal regulatory environment in the local market if local aid food suppliers work with international companies as joint venture

More than 85 % of respondent agreed that local aid food suppliers can reduce total production cost if they have created linkage with research institutes

More than 66 % of the respondent agreed that local aid food suppliers are not using professional pest control service providers for any of pest control action

5.3. Conclusion

During planning stage to purchase aid food supplies locally, it is very important to conduct prior crop assessments about availability of the intended commodity type locally, for sourcing decision which season is best for which type of aid food commodity to get the right price and right quantity if surplus marketable production available in the country, it is also important to check If the big purchase of intended commodity type is allowed by government that do not disturbing the local market , quality of the product has to be complies to Ethiopian standard or humanitarian agencies standard , the price of product that will be sourcing locally should also be competitive with the international market

Under the internal challenges, there is lack of uniformity between humanitarian agencies standard and Ethiopian standard for food specification, aid food suppliers should be able to check the quality of aid food they purchase from farmers as it has an implication for supplier to deliver aid food at the required standard level. Thus, the capacity of local traders is anticipated to be a challenge

Food handling management capacity and managing contractual agreement of local suppliers are the main area that need to be improved to increase the share of local sourcing

Local aid food Suppliers speculate price by quoting without available stock at hand and proper assessment of the market.

5.4. Recommendation

Based on the findings of the research, the following recommendations are forwarded

Recommend Local aid food suppliers work with international companies as joint venture to get better knowledge, technology transfer, and to be competitive against international suppliers,

Recommend local manufacturer of proceed food work with international companies as joint venture to reduce risks associated with political, legal, and regulatory environment in the local market.

Recommend local aid food suppliers create linkage with research institute, to improve quality and safety of local products

Recommend local aid food suppliers to use Professional pest control service provider, for any pest control service, to avoid quality deterioration of product and aid food supply to meet requirement from international or national standards

5.5. Recommendations for future research

One of the Limitation of this study is no adequate literatures found specific to the topic procurement practice and its challenge of humanitarian aid food supplies from local sources, the research could have been excellent, if it includes all factors affecting sourcing of aid food locally starting from farm inputs

As farm practice and agricultural inputs have a substantial contribution to make local product be internationally competitive the researcher recommends further in-depth study to identify and mitigate all factors across the supply chain of aid food supplies so that local product can meet international standards

5.6. References

Altay, N. and Green, W.G. (2006) OR/MS Research in Disaster Operations Management.

Amin, T., Suhaiza, Z., T. Ramayah & Ala, P. (2018) "Coordination of efforts in disaster Relief supply chains: the moderating role of resource scarcity and redundancy", International Journal of Logistics Research and Applications. Available from: <http://www.tandfonline.com/loi/cjol20>[Accessed 8th December 2018]

Balcik, B., & Beamon, B. M. (2008). Facility Location in Humanitarian Relief. International Journal of Logistics Research and Applications, 11, 101-121.

Barrett, Christopher B. (2002) wrote research about food aid and commercial international food trade

biniyam, t. (2017) assessment of critical factors of inbound logistic performance: the case of un-wfp white maize procurement under purchase for progress

Cooper & Schindler (2003) and the study sample size of 30 and above is statistically sufficient for generalization.

Crop Production and Surplus Market Assessment in Ethiopia Draft Report)

Dr. Koppiahraj Karuppiah (2021) Food aid supply and distribution in insecure regions

General Trading P.L.C Value Chain Study on Wheat Industry in Ethiopia

John W. Creswell (2018) , Research design. For all three research approaches,

Kovács and Spens (2007) define two main streams of humanitarian logistics: disaster relief and continuous aid work.

Marczyk, DeMatteo & Festinger (2005) correlation is the most useful measurement of relationship between variables

Ma. Gloria V. Talavera* (2015) study was conducted to study the supply chain practices of four supply chains

Mark Saunders, Philip Lewis, and Adrian Thornhill, (2009). confidence level

Mentzer et al. (2001) describe several SCM activities such as integrated behavior, mutually sharing information

Monczka et al. (1998) ... The impact of buyer-supplier communication on performance:

Newman, I. and Benz, C. (1998) Qualitative-Quantitative ...Oloruntoba and Gray (2006) argue for the need to build agility in humanitarian supply chain networks, to move relief materials ...

RJ Freund, WJ Wilson, P Sa - 2006 - books.google.com)

Smilowitz, Karen; Dolinskaya, Irina · Corporate Creators: Northwestern University

5.7. Appendix I

**Addis Ababa University
School of Commerce
Department of Logistics and Supply Chain Management
Questionnaire to be filled by Employees of WFP , EDRMC & CRS Ethiopia**

QUESTIONNAIRE

Dear respondent

You have been chosen to complete this questionnaire to collect primary data that will be used for research entitled “**procurement practice and its challenge of humanitarian food aid supply from local sources**” for the partial fulfilment for Master of Arts in Logistics and Supply Chain Management, from the Addis Ababa University, School of Commerce. The information obtained from this questionnaire will remain confidential and will not be used for any other purposes except for academic purpose

Thank you in advance for taking time to honestly respond all the questions in this questioner

For any clarification or comments related to this questionnaire, Tel No 0911317574 or via e-mail:

Henock.teferra@wfp.org or henok946@gmail.com

Please click the link below to go to the questioner

<https://forms.gle/e6b9sW93qovDR92g6>

Kind regards

Henok Tefera

Name of the organization: UN/WFP , CRS , EDRMC

Gender/Sex:

Female Male

Age:

25-34 35-44 45 to 54 55 to 64

Educational Qualification:

Secondary School Completion Certificate College Diploma

First Degree Second Degree and above

Years of experience in your organization:

Below 5Years 5-10 Years 10-15 Years Over 15 Years

Years of experience in other humanitarian/non- humanitarian organizations:

Under 5Years 5-10 Years 10-15 Years Over 15 Years

Current position in organization:

Supply chain Officer/Coordinator/Manager

Logistic Officer Procurement Officer

Logistics Associate Procurement Associate warehouse operator

Please indicate your level of agreement by putting the tick mark (✓) on the appropriate cell that best describes your opinion.

Where; 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.

No.	Item Description	Scale				
		1	2	3	4	5
I.	How procurement management is being practiced for food aid supply from local sources at WFP, EDRMC & CRS					
1	Sourcing aid food locally have benefit to the country in injection of foreign currency and distribution of aid food from surplus to deficit area					
2	Humanitarian agencies can source aid food commodities, Cereals, pulse and processed foods, (RUSF, CSB) locally.					
3	Humanitarian Agencies performs a study on availability of food aid commodities, market intelligences, information, before tendering during procurement process					
4	Humanitarian Agencies source aid food commodities locally at the right timing, (during the harvesting season)					
5	Procurement policy of Humanitarian Agencies to buy through competition, local aid food suppliers can't compete with international suppliers					
6	Price of aid food sourcing locally is high as Compared with import parity prices					
7	Humanitarian Agencies engaged collaborative strategic sourcing					
8	WFP Ethiopia established alliances with key aid food local suppliers.					
9	Local aid food suppliers have no adequate capacity to meet requirement of humanitarian agencies in quantitative and qualitative					
10	Local aid food suppliers demand high price to sale their product to humanitarian agencies than any other buyers					
II.	What are the major internal challenges affecting the procurement practice of food aid supply from local sources at WFP, EDRMC & CRS					
1	Sourcing Cereals, pulses, and processed food from local markets by humanitarian agencies is very low					
2	From locally Sourcing aid food by humanitarian agencies, Cereal constitutes more than 75 %					
3	Humanitarian agencies looks forward to increasing the share of local sourcing of aid food as compared to imports of food					
4	There is discrepancy in aid food quality specification between humanitarian agencies standard and Ethiopian standard.					
5	Usually weigh bridges are not calibrated timely, weight variation observed during the receipts of locally sourced aid food.					
6	Transporters deploy uncleaned trucks for transportation of locally					

	procured aid food, that lead to affect food quality and rejection by buyer					
7	Transporters usually deploying trucks for transportation of locally sourced aid food with no proper Tarpaulin, that lead to affect food quality and rejection by buyer					
9	If cargo rejected by buyer the local aid food supplier faces additional cost for warehouse rent, re-fumigation, re-inspection after fumigation					
10	Local aid food suppliers store mixed items in one warehouse and no proper stacking, that will affect quality of food					
11	Local aid food suppliers are not using a Professional pest control service provider, sometimes part of the stock fumigated while part not in the same warehouse that led to cross infestation and affect quality					
12	Most of Local aid food suppliers do not have suitable warehouses for storage of raw material, finished product for aid food, that affect proper sampling and proper pest control action					
III.	What are the major external challenges affecting the procurement practice of food aid supply from local sources at WFP , EDRMC & CRS					
1	Local aid food Suppliers are quoting without available stock at hand and proper assessment of the market.					
2	Most of Local aid food suppliers have good commodity management practice, use pallets for stacking aid food, acceptable stack size, suitable for inspection and pest control action					
3	Most of Local aid food suppliers have implemented integrated pest management, preventive and control measures during storage of aid food					
4	Most of Local aid food suppliers have a standard quality and quantity control equipment's to control during purchase of raw materials and selling finished products					
5	Most of Local aid food suppliers have a professional food quality control expert					

6	Local aid food suppliers meet the shelf-life requirements of humanitarian agencies for processed food					
7	It will be beneficial If Local suppliers work with international companies as joint venture, to get knowledge, technology transfer, and to be competitive					
8	It will be beneficial If local processed food suppliers Work with international companies as a joint venture, to reduce risks associated with political, legal and regulatory environment in the local market.					
9	if Local aid food suppliers have Linkage with research institute it will help them to improve quality and safety of the products					
10	If local suppliers create Linkage with research institute, it will help them to improve agricultural practice and reduce post-harvest losses					
11	If local suppliers create Linkage with research institute, it will help them to reduce total production cost of the product					
12	Most of Ethiopian food producing industries have a capacity to meet the standard of Humanitarian Agencies.					
13	Most of Ethiopian food producing industries meet the international standards of packaging for humanitarian agencies					

Thank you so much for your time

5.8. Appendix II

Correlations

		procurement practice	internal challenge	external challenge
procurement practice	Pearson Correlation	1	.289*	.421**
	Sig. (2-tailed)		0.049	0.003
	N	47	47	47
internal challenge	Pearson Correlation	.289*	1	.610**
	Sig. (2-tailed)	0.049		0
	N	47	47	47
external challenge	Pearson Correlation	.421**	.610**	1
	Sig. (2-tailed)	0.003	0	
	N	47	47	47

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

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

5.9. Appendix III

Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.544 ^a	.296	.262	1.77347

a. Predictors: (Constant), external challenge, internal challenge

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	54.206	2	27.103	8.617	.001 ^b
	Residual	128.953	41	3.145		
	Total	183.159	43			

a. Dependent Variable: procurement

b. Predictors: (Constant), external challenge, internal challenge

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.194	2.703		3.771	.001
	internal challenge	.010	.166	.008	.061	.951
	external challenge	.410	.103	.542	3.988	.000

a. Dependent Variable: procurement