

Pre-positioning of food aid in Humanitarian Logistics: Case: Djibouti Humanitarian Base

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Bachelor's Thesis
Degree Programme in
International Business
2015



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Degree programme Degree Programme in International Business	
Report/thesis title Pre-positioning of food aid in Humanitarian Logistics: case: Djibouti Humanitarian Base	Number of pages and appendix pages 59+15
<p>This study examines the possible benefits provided and challenges encountered by the World Food Programme in prepositioning food items in the Horn of Africa. As the World Food Programme (WFP) enters into its final phase of developing a Djibouti Humanitarian Logistics base for the Horn of Africa, it is crucial the organization is entirely prepared. This study also investigates the role the local community will have in contributing to the facility and in disaster management in general. The objective of the research is to present the World Food Programme with recommendations to assure the success of the Djibouti facility.</p> <p>The theoretical issues discussed consist of concepts, theories and models related to supply chain and logistics management, humanitarian supply chain and logistics, disaster management, disaster preparedness, stock pre-positioning and, briefly, the concept of participation and engagement in disaster relief.</p> <p>Primary and secondary resources were used to answer the research questions. The research was completed in two qualitative phases, by qualitatively interviewing three experts closely related to the subject and carrying out a rigorous desktop research.</p> <p>The study showed that there are quite many benefits and challenges linked to the pre-positioning of food items in the Horn of Africa. Some benefits uncovered were the reducing costs for the WFP while delivering more quickly to an area of high demand. Some of the challenges identified included the high costs of warehousing and the obstacles of land ownership in some parts of the region. Also uncovered were some ways the local community can contribute to the World Food Programme and the Djibouti facility, as well as the overall beneficial outcomes of local community participation. Lastly, the absolute need to engage local populations in disaster management was uncovered.</p> <p>Recommendations specific to the pre-positioning of food items and local population participation were presented based on the information uncovered in the two stages to ensure the success of the WFP's Djibouti Humanitarian Logistics base.</p>	
Keywords World Food Programme, Horn of Africa, drought and famine, pre-positioning food aid, supply chain management, logistics management, humanitarian logistics, disaster management, humanitarian partnerships and collaborations, disaster preparedness, local population participation and engagement	

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1 Introduction

Every year disasters both natural and man-made impact the livelihood of people worldwide, more often than not resulting in the deaths of thousands of people. These disasters, combined together with a number of other developing threats and trends, have left more and more people vulnerable and inflicted considerable damage, loss, and disruption on humanity worldwide. (IFRC 2010, 1).

The most recent devastation has been the 7.8 magnitude earthquake in Nepal on April 25th of 2015. During the earthquake, relief organisations played a major role in rescue operations by providing food, medicine and shelter for the victims. The aid that comes in within the first weeks is of a crucial nature, as this is usually the period when the local capacity is very low. Survival is heavily dependent on national and international relief agencies; preparedness is critical in humanitarian relief operations. As humanitarian agencies begin to completely understand the absolute need for speed and agility in humanitarian relief - they are moving towards inventory pre-positioning – the placing of needed supplies in areas of high and frequent demand (Duran 2011). Speed in humanitarian relief is costly and dependent “on the ability of logisticians to procure, transport and receive supplies at the site of a humanitarian relief effort” (Thomas 2003, 4). In a time of growing food shortages and high prices, humanitarian agencies have begun exploring methods to respond to emergencies more quickly. Pre-positioning food aid closer to where it is needed to save both money and time is one idea gaining ground.

1.1 Case introduction

The Horn of Africa has recently been challenged with rapid population growth, ecological degradation, climate change impacts, conflict, political instability and mismanagement and many more issues that have contributed to the vulnerability of the region. (United Nations Environment Programme 2011). Most recently local authorities of the Horn of Africa along with international humanitarian actors were heavily criticized in the aftermath of the 2011/2012 hunger crisis, for their inability to respond timely and effectively (Seal & Bailey 2013). In an effort to break the cycle and prevent another food crisis in the region the World Food Programme along with the backing of the government of Djibouti and other donors have embarked on a collaborative effort. Together these parties are supporting the development of a humanitarian logistics base situated in Djibouti to better facilitate movement of food assistance throughout the Horn of Africa. The storage facility is anticipated to improve response time and reduce vulnerability of the people of the region of the Horn of Africa. (Foreign Affairs Canada 2013.)

According to the World Food Programme the Horn of Africa constitutes of countries such as Somalia, Ethiopia, Eritrea, Djibouti and Kenya, however neighboring countries of Sudan, South Sudan and Uganda are also considered as part of the Greater Horn of Africa. The Horn of Africa has been ravaged by many serious issues over the last couple of decades – wars, droughts and extreme famines. Most recently in 2011/2012 the region experienced what has been described by the United Nations as the worst drought in more than 60 years igniting a severe food crisis, mass migration and disease outbreaks. (United Nations 2011.)



Figure 1. Countries of the Horn of Africa - Djibouti, Eritrea, Ethiopia, Kenya and Somalia (IFRC) also Sudan, South Sudan and Uganda (World Food Programme)

1.2 Research purpose and research questions

To prevent another food crisis in the region the World Food Programme along with the various donors are in the process of developing a humanitarian logistics base situated in Djibouti to better facilitate movement of food and non-food assistance throughout the Horn of Africa. Construction on the Djibouti humanitarian base began in 2013 and is now entering into the later phases of development.

The purpose of the present study is to explore the benefits and challenges that may arise from having pre-positioned food items in the Horn of Africa so that the World Food Programme may prepare accordingly. In addition, this paper aims to investigate the role of the local community in contributing to the Djibouti facility. It is of special importance that the local population steps forward into a role of responsibility “for their own survival and future, with competencies and aspirations” (Groupe Urgence Réhabilitation 2003, 7). Based on the information discovered the first part of the research recommendations will

be made to ensure the success of the Djibouti humanitarian base. The research question and the investigative questions are as described below:

Research Question

How to ensure the success of the World Food Programme's Djibouti Humanitarian base?

Investigative Questions

1. What are the benefits and the challenges of pre-positioning food items in the Horn of Africa?
2. How can the local population contribute to disaster management and to the Djibouti humanitarian base?
3. What recommendations can be made to ensure the success of the Djibouti humanitarian logistics hub?

1.3 Key concepts

In this chapter the author will provide definitions for the terminologies that will be frequently used in this research paper. The author will also thoroughly examine the characteristics of the humanitarian supply chain which set it apart from the business supply chain.

Capacity:

"The combination of all the strengths, attributes and resources available within a community, society or organization that can be used to achieve agreed goals." (United Nations 2009)

Capacity development

"The process by which people, organizations and society systematically stimulate and develop their capacities over time to achieve social and economic goals, including through improvement of knowledge, skills, systems, and institutions." (United Nations 2009)

Disaster

Is a "serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources." (United Nations 2009, 9)

Disaster Engagement and Participation:

For this research paper the terms participation and engagement will be used interchangeably. Participation in humanitarian action is understood as the engagement of affected populations in one or more phases of the project cycle: assessment; design; implementation; monitoring; and evaluation. This engagement can take a variety of forms. . . . Far more than a set of tools, participation is first and foremost a state of mind, according to which members of affected populations are at the heart of humanitarian action, as social actors, with insights on their situation, and with competencies, energy and ideas of their own (ALNAP and URD 2003: 20).

Disaster Preparedness

“The knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions.” (United Nations 2009)

Disaster Resilience

“The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.” (United Nations 2009)

Drought:

“The naturally occurring phenomenon that exists when precipitation has been significantly below normal recorded levels, causing serious hydrological imbalances that adversely affects land resource production systems.” (United Nations Convention to Combat Desertification)

Famine:

Lack of food over large geographical areas sufficiently long and severe to cause widespread disease and death from starvation (Chambers Encyclopedia)

Many experts say that there must be evidence of three specific outcomes before a famine can be declared:

- At least 20 percent of households face extreme food shortages with limited ability to cope.
- The prevalence of global acute malnutrition must exceed 30 percent.

- Death rates must exceed 2 deaths per 10,000 people per day.(World Food Programme)

Horn of Africa:

For the purpose of this research paper the Horn of Africa includes countries as follows: Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan, Sudan and Uganda

Humanitarian logistics

“The process of planning, implementing and controlling the efficient, cost effective flow and storage of goods and materials as well as related information from the point of origin to the point of consumption for the purpose of alleviating the suffering of vulnerable people. The function encompasses a range of activities, including preparedness, planning, procurement, transport, warehousing, tracking and tracing, customs and clearance” (Thomas & Kopczak 2005, 2)

Local population:

Local population for the purpose of this research refers to the populations inhabiting the countries of the Horn of Africa

Pre-positioned Stock:

“The strategic positioning of inventory in the relief network in preparation for disasters, through the integration of facility location, inventory management and transportation decisions, while taking into account the key factors affecting it, to improve the response and efficiency of the relief network.” (Richardson, de Leeuw & Vis 2010, 150)

1.4 Stakeholders

Broadly speaking this thesis can be beneficial to a variety of groups, namely:

- The World Food Programme
- The United Nations
- The people of the Horn of Africa
- Governments
- International NGOs
- Local NGOs
- All other stakeholders directly or indirectly involved in disaster relief management in the Horn of Africa and worldwide

1.5 Delimitations and scope

Disaster preparedness through pre-positioning of food supplies in the Horn of Africa will be the focus of this research paper. This paper will examine the development of a humanitarian logistics hub being constructed in Djibouti by the World Food Programme with the support of the government of Djibouti as well as many other donors. The WFP will manage the pre-positioned stock facility to improve the effectiveness and efficiency of humanitarian activities in the region of the Horn of Africa – namely Djibouti, Eritrea, Ethiopia, Kenya and Somalia as well as neighboring countries of Sudan, South Sudan and Uganda. The paper will also examine the local populations participation is measures of preparedness and the contribution to the Djibouti facility.

1.6 Research structure

This paper is comprised of 5 chapters seen in the illustration below in Figure 2. The topic along with the purpose and research question will be presented. The key terminology and the stakeholders will be defined followed by the outlining of the delimitations and the scope of the research. In the second chapter of the research paper the theory required to understand the topic and answer the research questions will be explored. The research methodology and strategy will be discussed and revealed in chapter 3. The case along with the findings will be presented next in chapter 4, prior to producing the recommendations and finally drawing the conclusions in chapter 5.

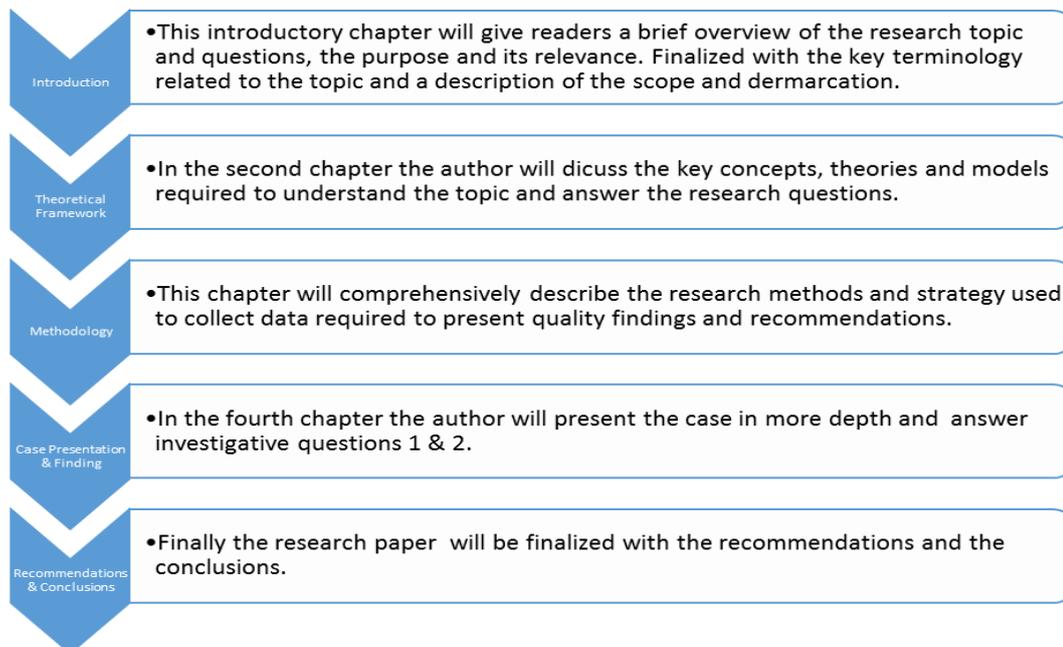


Figure 2. Research structure

2 Theoretical framework

2.1 Supply chain and logistics management

2.1.1 Supply chain management

Supply chain management allows companies and organizations to optimize their logistical performance at inter-organizational levels. (Tomasini & van Wassenhove 2009, 2.) Supply chain management can be extensive and intricate or simplistic and straightforward; nevertheless the process is made up of certain key elements which are crucial in moving products to their final destinations. Although the concept of supply chain management has been around since the early 1900s and is evident in the development of the assembly lines, the term was first introduced in the Financial Times in 1982 (Choudhary, Ansari, Ahmed & Hammayun 2014, 75). Despite more than 30 years having passed since that interview in which Keith Oliver coined the term “supply chain management” there is yet to be a widely agreed upon definition for the term (Stock & Boyer 2009). Although there are very many definitions for SCM, the Council of Supply Chain Management of Professionals define it as:

“Supply chain management encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third party service providers, and customers. In essence, supply chain management integrates supply and demand management within and across companies” (Kovacs & Spens 2012).

Supply chain management encompasses all of the combined activities that take products from their origin to the market for customers for consumption. Furthermore SCM represents the managing and controlling of the various activities such as planning, coordinating, cooperation and regulating movements of materials, components and ultimately the final products from the suppliers to the customers. Supply chain management is based on the notion that a single outlined plan for the flow of products, services, information and finances is imperative to the success of a business operation. The supply chain essentially develops into a business model which presents all the steps from the point of origin to the point of consumption of a product and their relationship along the way. The end goal is to have merchandise produce in the right quantities and distributed at the right time and to the right locations to minimize system wide costs while satisfying end customers. (Simchi-Levi, Kaminsky & Simchi-Levi 2007, 1)

The developing of a business model is not only a matter of visualization as it functions to track and manage all internal and external activities linked to a company. All activities of the supply chain are closely monitored by all organizations from parts to product to minimize delay and obstruction, subsequently gaining a competitive advantage (Choudhary 2014, 75). When a business connects all operations required to produce an output through establishing a network of suppliers, manufacturing plants, factories, warehouses, distribution centers and retailers it can result in immense benefits for all parties involved.

2.1.2 Logistics management

Logistics is an inseparable part of any supply chain activity. Logistics management is defined by the Council of Supply Chain Management Professionals as “[the] part of supply chain management that plans, implements, and controls the efficient, effective forward and reverses flow and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customers’ requirement” (CSCMP 2011). Activities such as transportation management both inbound and out-bound, handling of material – warehousing, order fulfilment, inventory, stock management, forecasting of supply and demand and several of other functions within the supply chain (CSCMP 2011).

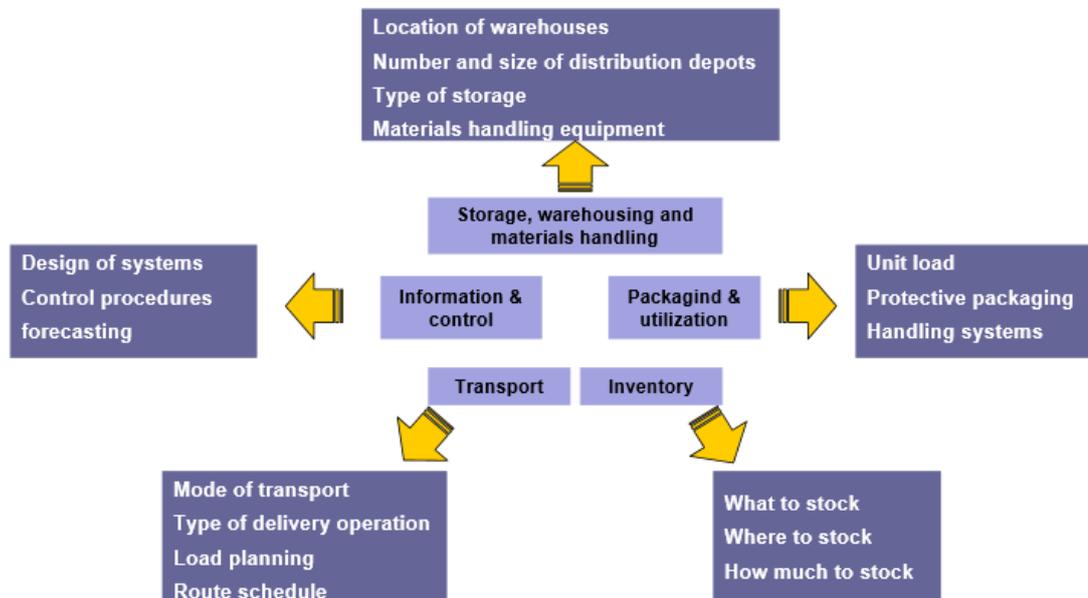


Figure 3. Key components of logistics (Rushton, Croucker & Baker 2006)

2.1.3 Logistics network

Fundamentally logistics management relates to the flow of resources and their movement – such as transportation, distribution and manufacturing (Axelsen 2013). “In other words,

you can consider logistics activities as the operational component of supply chain management.” (USAID 2011, 1.)

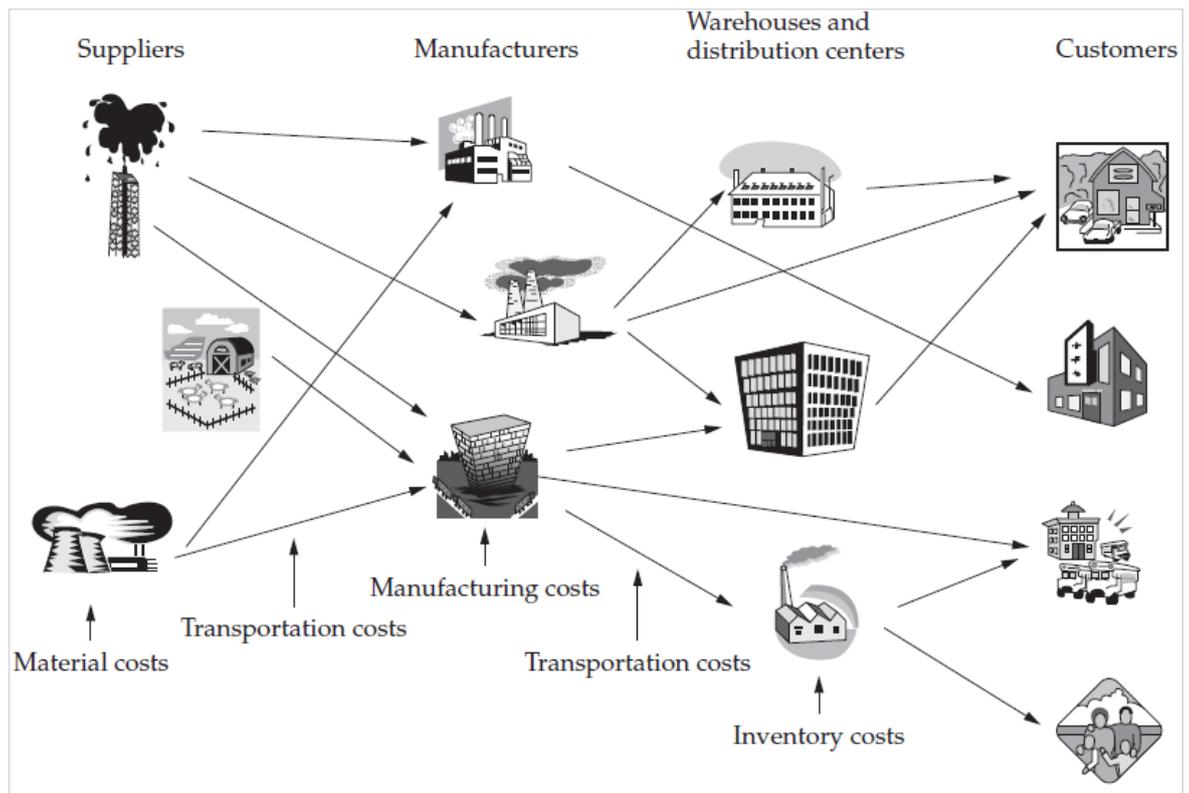


Figure 4. The logistics network (Simchi-Levi, Kaminsky & Simchi-Levi 2007, 2.)

2.2 Humanitarian supply chain and logistics

Humanitarian logistics is a branch of logistics which “encompasses a range of activities, including preparedness, planning, procurement, transport, warehousing, tracking and tracing, and customs clearance, local transportation, warehousing and last mile delivery” (Thomas 2004). Humanitarian logistics is an extension of logistics in supply chain management that focuses on delivering relief to areas of disasters or emergencies and to victims of disasters. More specifically humanitarian logistics has been characterized as “the process of planning, implementing and controlling the efficient, cost effective flow and storage of goods and materials as well as related information from the point of origin to the point of consumption for the purpose of alleviating the suffering of vulnerable people” (Thomas & Kopczak 2005, 2). In humanitarian relief, logistics is the biggest factor that determines whether an operation is a success or a failure (van Wassenhove 2006, 475-476). “Since disaster relief is about 80 % logistics it would follow then that the only way to achieve this is through slick, efficient and effective logistics operations and more precisely, supply chain management” (van Wassenhove 2006). Humanitarian organizations are just beginning to understand the vital strategic role of logistics in relief chain management.

Before this realization the humanitarian field has long considered logistics as just another basic expense (Beamon & Kotleba 2006; van Wassenhove 2006).



Figure 5. Supply chain for humanitarian relief (Thomas 2003, 3)

2.2.1 Humanitarian supply chain

The humanitarian supply chain is cyclic and involves nine steps beginning with assessment all the way through to monitoring and evaluations. All stages pertain to the movement of food and nutrition items except for cold chain which is the storage of supplies such as vaccines, and test which require cold freezers and boxes.



Figure 6. Humanitarian supply chain (Logistics Cluster 2013)

Assessment & Planning include activities such as: preparedness planning, surveying and collecting data for analysis and interpretation, forecasting, reporting & monitoring and evaluation. (Logistics Cluster 2013)

Procurement phase should occur in a total of 4 steps; needs identification; specification; sourcing, awarding and placing orders; supplier management to facilitate timely delivery. (Logistics Cluster 2013)

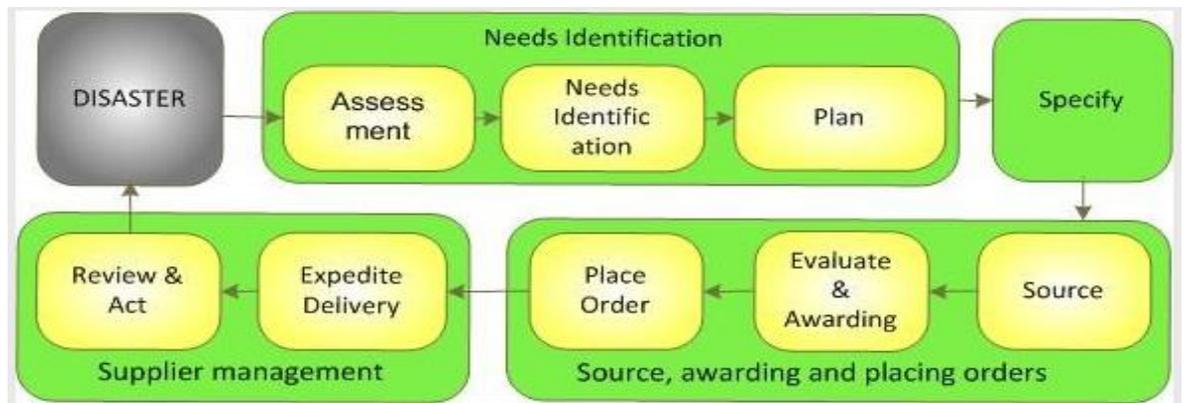


Figure 7. Procurement process (Logistics Cluster 2013)

Warehousing and Inventory is a key component to humanitarian relief and some of the activities that take place include; receiving and issuing of supplies, storage of goods, quality control or verification; documentation flow; detecting and dealing with stock losses (Logistics Cluster 2013)

Transportation is one of the most complex activities in the supply chain depending on the severity of the disaster. Transportation may be from the suppliers to storage or pre-positioned destinations and finally to the end beneficiaries. (Logistics Cluster 2013.)

Fleet Management activities include: acquisition process, insurance, vehicle leasing (internal & external), fleet management systems, vehicle usage, complying with legislature and security requirements and drivers (Logistics Cluster 2013).

Customs could be one of the most complicated stages for humanitarian relief organizations due to their limited time and the delays and congestion that results at borders – disturbing the movement of goods (Logistics Cluster 2013).

Distribution may not be completely handled by humanitarian organizations depending on the distribution plan it could be at the country level, at the secondary level (provinces) or at the tertiary level (Logistics Cluster 2013).

Monitoring & Evaluation can be completed in qualitative and quantitative measurements and to “provide information to users on the service level they can expect; make an objec-

tive evaluation of services and activities; identify problems in the supply chain; determine what measures are needed for improving services; understand the need to increase or decrease resources; motivate logisticians.” (Logistics Cluster 2013).

2.2.2 Humanitarian material flow

Flow of supplies in humanitarian logistics is considerably similar to that in commercial logistics. Although the humanitarian logistics chain is dependent on the type of disaster and the capacity of the organization, there is a general flow. The flow of material as illustrated below shows activities pre and post-emergency. Including activities such as supply acquisition and pre-positioning in the disaster preparedness phase and distribution and transportation in the response phase. (Balcik, Beamon, Krejci, Muramatsu & Ramirez 2010, 24.)

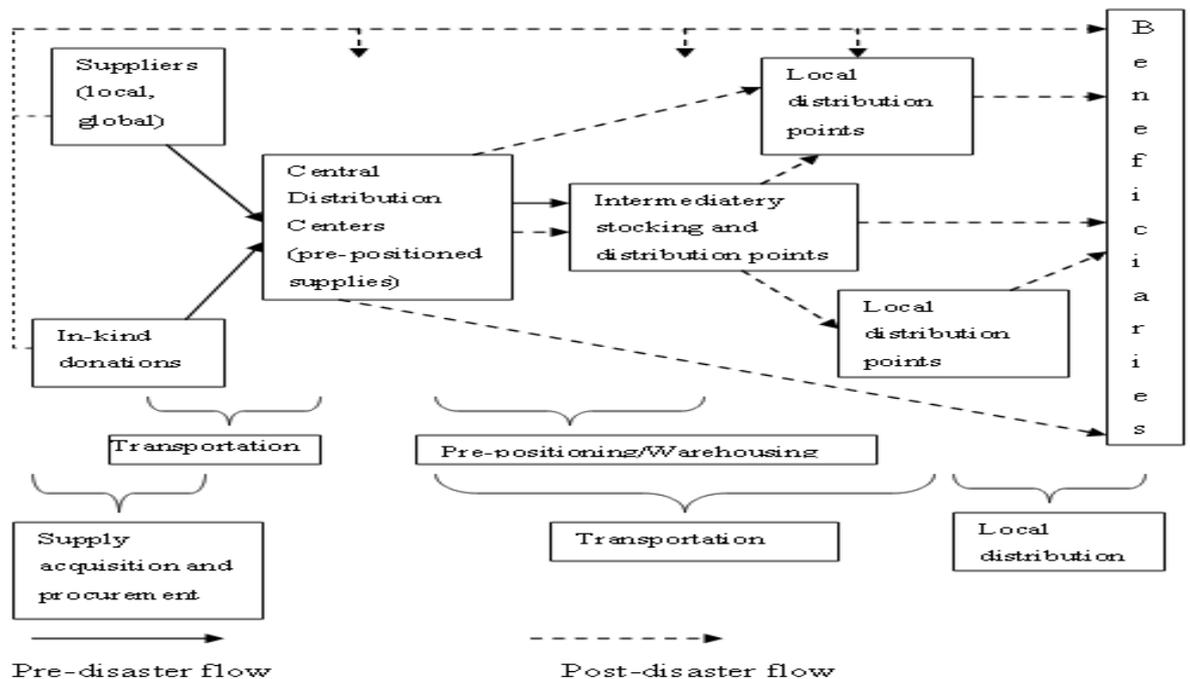


Figure 8. Humanitarian logistics chain structure (Balcik, Beamon, Krejci, Muramatsu & Ramirez 2010, 25.)

2.2.3 Humanitarian logistics versus commercial logistics

The four main distinct characteristics of humanitarian logistics that are not quite prevalent in commercial logistics are the:

- unpredictability of demand, in terms of timing, location, type, and size;
- suddenness of the occurrence of demand in large amounts but with short lead-times for a wide variety of supplies;
- high stakes associated with the timeliness of deliveries; and

- lack of resources in terms of supply, people, technology, transportation capacity, and money (Balcik & Beamon 2008, 102)

When compared with business logistics, humanitarian relief encounters many more uncertainties as “They do not know when, where, what, how much, where from and how many times. In short, the basics for setting up an efficient supply chain.” (Kovacs 10 April 2015). These uncertainties can be disasters ranging from tsunamis, hurricanes, earthquakes, droughts, famine to war and conflict just to name a few (Kovacs 2009, 508.) The commercial sector aims to satisfy paying customers while maximizing profits for the company (Balcik & Beamon 2005.) whereas humanitarian organizations are not seeking any economic gain but rather aim to improve or restore everyday life for the people impacted by calamities. The objective is to respond rapidly to disasters by delivering the necessary supplies (Balcik & Beamon 2005). Humanitarian organizations have to quickly develop an entire supply chain from the ground up in order to deal with the aftermath of a disaster (van Wassenhove 2006.) Therefore the humanitarian logistics system deals with a far more diverse group of stakeholders “beneficiaries, donors, implementing partners, host governments, militaries, suppliers” and many more. There are many aid agencies both internationally and regionally – all with different missions and operating styles working towards restoring vulnerable people. Humanitarian logistics unlike the private sector lacks standardization (Christopher & Tatham 2014). Arguably the most crucial difference lies in the aspect of time. During and in the aftermath of a disaster time often means life or death for the victims. (McLachlin & Larson 2011.)

Table 1. Commercial logistics vs humanitarian logistics (McLachlin & Larson 2011)

Aspect	Logistics Context	
	Commercial	Humanitarian
Purpose	Economic profit	Social impact
Context	Uninterrupted	Interrupted
Perspective on time	"Time is money"	Time if life (or death)
People Served	Paying customers	Beneficiaries
Source of funds	Paying customers	Donors
Workforce	Paid Staff	Volunteers; Staff

Other essential differences include the lack of technology available in the humanitarian field resulting in information being “unreliable, incomplete or non-existent” for the most part; the fixed distribution network that exists in private business with predetermined fixed locations for distribution centers; the private sector enjoys a typical inventory control whereas in humanitarian logistics there are “high variations in lead time and demand locations; in the private sector performance measurements are based on “maximizing profits

while minimizing costs” whereas the humanitarian field measures by factors such as “re-
 sponse time and the ability to meet the needs of the disaster. (Balcik & Beamon 2005.)

Although there are some very evident differences between humanitarian and business logistics there are a lot of commonalities as well (Thomas 2004). “I have to say, the prob-
 lem is that they always like to look at the differences. The same logistical concepts still
 apply. Of course, the financial flows are very different in the humanitarian area” (Kovacs
 10 April 2015.) The same challenges of uncertainty and turbulence that humanitarian log-
 isticians face in operations are now quite common in the “modern commercial supply
 chain” due to the current global business environment. The private sector supply chain
 needs to be highly responsive and agile more than ever. (Christopher 2011.) Efficiency
 and effectiveness in business has always boiled down to successfully managing infor-
 mation in order to ensure that “the right goods are available, in the right place, at the right
 time, in the right quantity and quality, at the right cost, humanitarian logistics is no different
 (Tatham & Christopher 2014.) Due to the very many similarities between humanitarian
 and business logistics there is plenty of opportunity for cross-learning. Standardization
 and branding efforts are just simply two of the ways humanitarian logistics can learn from
 the private companies. van Wassenhove (2006) suggests that agency logos be visible to
 news cameras through branding efforts, ultimately resulting in satisfied donors. On the
 other hand the private sector can take away the importance of agility and adaptability es-
 pecially in difficult business environments. (van Wassenhove 2006)

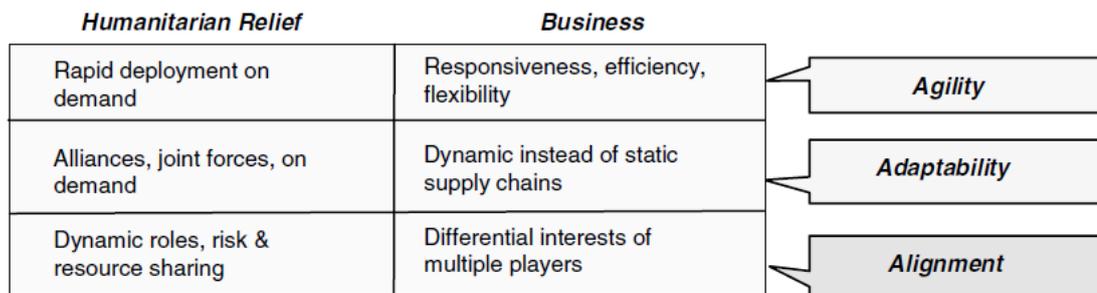


Figure 9. Strategy to win (Lee 2004)

Though humanitarian logistics is not at all a new concept, in the last 10 years it has managed to attract greater visibility academically and in practice. The field is growing rapidly and very much evolving (Kovacs & Spens 2007.) The humanitarian logistics field is relevant more than ever due to the number of disasters both natural and man-made that have occurred and have been predicated to occur in the near future. The 2004 Indian Ocean Tsunami which resulted in a death toll of more than 200,000 was a monumental event that

highlighted the problems of relief operations and the imperative need for logistical improvements in humanitarian operations for the world. (Goncalves 2009, 7.)

It is crucial that we understand the importance of logistics in relief management and investigate ways to make it more efficient. There has been great academic development and contribution to humanitarian logistics management, some renowned publication journals include; the Journal of Supply Chain Management, International Journal of Logistics Management, Journal of Humanitarian Logistics and Supply Chain Management. Theorists on the topic include Luk van Wassenhove and the INSEAD Institute, the Fritz Institute and the Humanitarian Logistics and Supply Chain Research Institute.

2.2.4 Humanitarian actors and collaborations

The humanitarian relief community has expanded extensively since World War Two. The United Nations now has branches such as the High Commission for Refugees and the World Food Programme collaborating with a wide variety of other NGOs both at the national and international levels (Therien & Lloyd 2000; Oloruntoba & Gray 2006, 115). “In a humanitarian disaster, there is always a need for coordination in order to maximize the efficiency and effectiveness of the humanitarian effort to meet the needs of affected communities” (Humanitarian Coalition 2015). Humanitarian logistics is a rather new and developing field however it has become an important topic in governments, in the private sector and non-profit organizations as exposure to disasters increases heavily due to “climate change, rapid and unplanned urbanisation, demographic pressure, construction and more intensive land-use in hazard prone areas, biodiversity loss and eco-system degradation.” (Kovacs & Spens 2009, 506; European Commission 2014). As humanitarian operations become more widely discussed it has attracted a diverse number of actors such as parties from the private sector which are interested in collaborating and contributing to disaster management. (Maspero & Ittmann 2008). Humanitarian organizations are also working together to improve their overall results “Logistics coordination between NGOs has improved in recent humanitarian operations (van Wassenhove and Samii 2003) with shared equipment, assets or resources such as aircraft, trucks, food stocks, forklifts etc., and with some agencies or even individuals designated as having the best local knowledge and contacts” (Oloruntoba 2007).

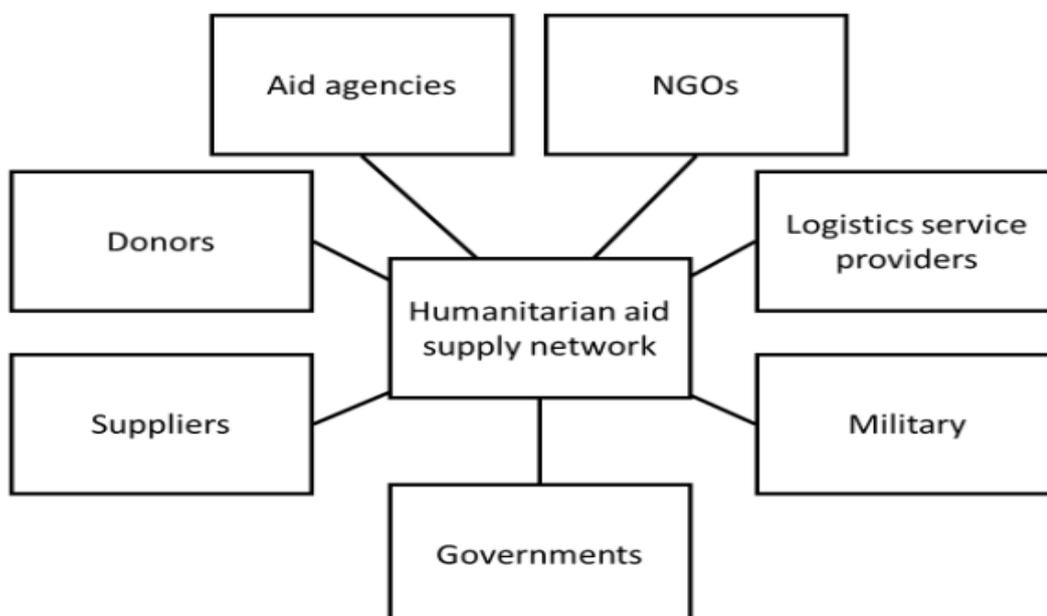


Figure 10. Humanitarian aid supply network (Kovacs & Spens 2008, 223)

There are plenty of humanitarian actors, governmental, non-governmental, local, international, faith based agencies and now, more than ever, even actors from the business sector. Although the overall objective of these actors is to make a difference in alleviating the suffering of the impacted population, they all have different methods, principles and capabilities. The large number of actors with different operation capacities can alleviate the suffering of those impacted by natural disaster more effectively and efficiently (IFRC 2007.) Partnerships and collaborative efforts are intended to maximize the overall effectiveness and have less to do with moving aid from one location to another. Reducing costs, improving performance, knowledge sharing and cancelling redundancies are some of the few benefits of the collaborative approach (Thomas 2004.)

Table 2. Humanitarian actors and their roles (Sheppard, Tatham, Fisher & Gapp 2013)

Governments	National governments from many countries provide bi-lateral and multi-lateral aid funding	Focus on risk reduction, preparation and response, with donations for bilateral and multilateral programmes and emergency appeals often ear-marked
Donors	International organisations (UN), national governments, private sector organisations, general public, philanthropic individuals	Donations often ear-marked – often have their own agendas – assistance delivered by other agencies eg NGOs
International and Regional Organisations (Inter-Governmental IGO)	UN Agencies involved in humanitarian activities, International banks and International organisations	Includes UN Agencies such as the World Food Programme (WFP), and UN High Commissioner for Refugees (UNHCR); World Bank; International Federation of Red Cross and Red Crescent Societies (IFRC)
Non-Government Organisations	International/national NGOs	Rely on funding from international organisations, governments and public donations – some involved in development as well as disaster response
National Police and Armed Forces	National police and international military and armed forces	Mobilised in early post disaster phase, life saving and quick response for efficient communications, medical assistance, transport – trained logisticians
Media	Electronic and print media	Can influence level of donations – coverage can be determined by political considerations – used by some NGOs to publicise their own causes
Commercial and Private Sector Organisations	International and national commercial organisations such as TNT, DHL	International organisations partner with UN agencies such as WFP - Private sector Small and Medium Enterprises (SMEs) – local and external – part of Corporate Social Responsibility (CSR) programmes
Local Populations	Local military, emergency services and national police forces. Commercial and private sector organisations. Church organisations. Local Government Units (LGUs), General population	First responders, involved in rescue and evacuation – suffer from lack of resources particularly in poorer areas

With disasters on the rise impacting more people than ever, more collaborative efforts are required to decrease complexities. Collaborations with governments and militaries are crucial, however partnerships with the private sector have become just as important. The desire to implement corporate social responsibility strategies has cultivated a path way for collaborative efforts within the humanitarian field. (van Wassenhove 2006, 487) Although there is still very much distrust between the humanitarian and business companies, the private sector can participate in the role of donors, collectors and providers for humanitarian organizations. (van Wassenhove 2006, 486; Cozzolino 2012, 14) Partnerships in the humanitarian field are crucial as no one group can effectively respond to and overcome a disaster singlehandedly. Using all the available collaborations, consultations as well as local capacities and knowledge bolsters the ability to respond to disasters of all types and enhances preparedness (Logistics Cluster 2013.)

2.2.5 Logistics of famine relief

Logistics of famine relief in the developing world forces international humanitarian organizations to overcome and function in areas where infrastructure and conditions are less

than optimal. Logistics related to famine have been identified as: demand forecasting, sourcing, packaging, managing of inventory, warehousing and storage, route selection, documentation and transportation. However, the most important logistical factor in preventing consequences of drought is information management.

Causes of food insecurity are not necessarily related to lack of food, often it is more associated with flawed political, social and economic structures within the community. (Herring, 2011.) Threats of food security can be any of the following: patterns of rainfall, degradation of land, population density, infrastructure development, insecurity and conflicts, food prices and poverty. In the famine of 2011-2012 in southern Somalia almost all the reasons listed applied. (World Food Programme, 2015).

Interventions in food security mainly consist of food items, non-food items such as nutritional programs and rehabilitation programs for the agricultural infrastructure. (Groupe Urgence Réhabilitation 2003, 231). Although there were sufficient early warning signs of a risk for famine in Southern Somalia as early as 2010 the necessary preventive measures were not taken to avert it. This resulted in high mortality and displacement. (Bailey & Seal 2013.)

2.3 Disaster relief management

“Disaster Management can be defined as the organization and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies, in particular preparedness, response and recovery in order to lessen the impact of disasters.” (IFRC) In simple terms disaster management refers to all the efforts that aim to avoid and/or reduce loss from a tragedies such as earthquakes, floods and even droughts and/or famines, ensuring that the community is quickly responded to during disasters and bringing about effective recovery. (Warfield.)



Figure 11. Disaster relief management (IFRC)

The four stages of a disaster relief cycle include the following; prevention and mitigation, preparedness, response and recovery. The latter three phases are the areas which are most closely related to logistics and supply chain management and the three compose the humanitarian logistics stream. (Cozzolino 2012, 8-9)

Table 3. Disaster management cycle and activities (Global Alliance for Disaster Reduction)

Phases of Disaster Management	Activities
Mitigation	Minimizing the effects of disaster; Examples: building codes and zoning; vulnerability analyses; public education, research
Preparedness	Planning the response Examples: preparedness plans; emergency exercises/training; warning systems
Response	Minimizing the effects of the hazard created by the disaster Examples: search and rescue; emergency relief
Recovery	Restoring normal life for the community Examples: temporary housing; grants; medical care.

2.3.1 Disaster relief

Generally one disaster leads to the outbreak of more disasters – droughts can lead to severe famine if not swiftly addressed, which may result in loss of lives, displacement, mass migration, disease outbreaks etc. When a disaster occurs it is critical that there be no delays in responding to the areas affected to ensure minimal suffering of those impacted. The first 72 hours after a disaster occurs are the most critical (van Wassenhove 2006.) Therefore humanitarian agencies whether they be international or local, governments and the general local population must take precautionary measures to avoid the catastrophes that ensue after disasters. The UN’s International Strategy for Disaster Reduction defines “disaster” as

“a serious disruption of the functioning of society, posing a significant, widespread threat to human life, health, property or the environment, whether caused by acci-

dent, nature or human activity, and whether developing suddenly or as a result of complex, long-term processes” (United Nations 2009, 9)

	Natural	Man-made
Sudden-onset	Earthquake Hurricane Tornadoes	Terrorist attack Coup d' Etat Chemical leak
Slow-onset	Famine Drought Poverty	Political crisis Refugee crisis

Figure 12. Classifications of disasters (van Wassenhove 2006, 476)

Van Wassenhove (2006, 476) also defined disaster very widely as “a disruption that physically affects a system as a whole and threatens its priorities and goals.” Disasters have been categorized either as instigated by human actions such as wars and conflicts or through a natural processes like earthquakes and droughts. They are also categorized depending on their onset whether they be sudden or slow - referring to how much warning time was available before the disaster occurred. (van Wassenhove 2006, 476). Most of the emergencies that occur on the African continent are described as embodying the characteristics of a slow onset disaster. Whereas countries such as New Zealand, Japan and Iceland which frequently experiences earthquakes exhibit the patterns of sudden onset disasters. (Kovacs & Spens 2009, 509) The case study to be examined is comprised of natural slow onset disasters of drought and famine, however much of the consequences were intensified by man-made elements such as conflict

2.3.2 Disaster preparedness

The preparation phase incorporates together learnings from pervious disasters with a revised outlook on challenges and disaster to come. This is intended to develop methods to minimize the impact of disasters. (Cozzolino 2012, 8-9.) Disaster preparedness is a vital component in minimizing the impact of disasters globally. (IFRC) The level of planning in humanitarian relief operations is very weak and evident in the common overspending, congestion created by deliveries that are unplanned and the overall inefficiencies that are relief agencies experience (Byman, Lesser, Pirnie, Benard & Waxman 2000.) Disaster preparedness represents the protective actions taken prior to a disaster that are aimed to increase resilience to the emergency therefore resulting in an enhancement of safety for the population involved. (IFRC 2000, 6) Although in most cases disaster cannot be prevented from occurring, to a degree the damages can be decreased. (Hossain 2013, 160). Preparedness in relation to emergency relief is defined as:

“The leadership, training, readiness and exercise support, and technical and financial assistance to strengthen citizens, communities, state, local, and tribal governments, and professional emergency workers as they prepare for disasters, mitigate the effects of disasters, respond to community needs after a disaster, and launch effective recovery efforts” (Haddow, Bullock & Coppola 2008, 185.)



Figure 13. Disaster Management Continuum (Public Safety Canada 2010; modified 2014)

Preparedness is a fundamental element in improving the response and recovery stages of disaster relief. (IFRC) Studies reveal that global natural disasters are increasing in frequency and intensity worldwide. “Severe flooding, prolonged droughts, heat extremes, reduced food and energy, and even islands inundated with seawater.” (World Bank 2013). Disaster preparedness is central in measures of reducing impacts of these inevitable catastrophes. “Relief organizations engage in preparatory activities that enhance their logistics capabilities in responding to emergencies.”(Baclik & Beamon 2008, 102) Preparedness methods include educating local populations, training of staff, making pre-arrangements with local customs to reduce import procedures have been vital in overcoming obstacles. One proactive measure is pre-positioning disaster relief supplies to more swiftly alleviate the suffering of the crisis impacted population. (Kunz, Reiner & Gold 2000) Disaster preparedness also involves emergency activities “that protect property and contain disaster damage and disruption, as well as the ability to engage in post-disaster restoration and early recovery activities” (Sutton & Tierney 2006, 3.) Academics and humanitarian logisticians have recognized the great importance of disaster preparedness in in-

creasing effectiveness therefore decreasing the impact of disasters and are therefore actively calling for better disaster preparedness practices. (Kunz, Reiner & Gold 2000)

2.3.3 Stock pre-positioning

Standard method of transporting aid supplies include the movement from point of origin - the suppliers to the agencies and further on to the beneficiaries. The objective for all involved in humanitarian relief is to save lives and ease the suffering of those affected by disasters. This is to a degree dependent on the quickness of the response by relief organizations. (van Wassenhove 2006; Campbell, Vandebussche, Hermann 2008) In the aftermath of an emergency, the rate time in which relief supplies arrive to the affected region is very much related to the survival of the community. Therefore it is of the utmost importance that the supplies arrive as quickly as possible. (Campbell, Vandebussche, Hermann 2008, 2) A study conducted in 2014 by the U.S. Agency for International Development showed that pre-positioning of food supplies could save up to 41 days from U.S ports to the port of Djibouti. (U.S. Agency for International Development 2014, 8) Inventory pre-positioning is defined as

“The strategic positioning of inventory in the relief network in preparation for disasters, through the integration of facility location, inventory management and transportation decisions, while taking into account the key factors affecting it, to improve the response and efficiency of the relief network.” (Richardson, de Leeuw & Vis 2010, 150)

Table 4. Types of Pre-positioning include the following (Logistics Cluster 2013)

Types of Pre-positioning	Description
Framework Agreement	Long term agreement that facilitate easy entrance of relief items
Supplier Stock	Suppliers also strategically Pre-position stock
Governmental Stock	Managed by governments
Organizational Stock	Humanitarian agency stockpile
Local Agreements	Agreements with local suppliers
Strategic Pre-positioning networks	Collaborative facility that many organizations can work from

There are several ways of pre-positioning stock, some of which are described above. Framework agreements allow organizations to enter into countries with a pre-specified lists

of relief items. These facilities can be either regional or international. Suppliers are also pre-positioning in areas of demand to better respond to the needs and requests of the humanitarian organizations. This could be done on a monthly basis or quarterly. Government stocks are used as a protective measure for if and when a situation occurs. Like that of the United States – with their Federal Emergency Management Agency. Organizational stocks are common and can be located either overseas, regionally or nationally. They are pre-positioned in warehouses to ease the mobilization process and to allow for them to more swiftly deliver in emergencies. Local Agreements are between local suppliers and humanitarian agencies which grant them quick access to basic relief supplies. Strategic pre-positioning Networks allow relief organizations to all collaborate from a response depot. These facilities allow for a number of organizations to gather and mobilize from one central location. Inter-agency collaboration is becoming more common - such as the United Nations Humanitarian Response Department and International Federation of Red Cross and Red Crescent Societies. (Logistics Cluster 2013.)

Table 5. Benefits and Challenges of Pre-positioning are as listed in the table below (Logistics 2013; Kovacs 10 April 2015; Duran, Gutierrez & Keskinocak 2011, 1 ; Balland & Sobhi 2013, 2; Balcik & Beamon 2007; (Bozkurt 2011 ,7-8; Human Rights Watch 2015)

Benefits of Pre-positioning	Challenges of Pre-positioning
Improved overall response	Unpredictability of disasters
Reduced lead time	Limited financial resources
Supplier Preparedness	Identifying optimal warehouse locations
Right location	High costs of warehousing
Right time	High costs of transportation
Right place	Specific regional or national policies
Right products	Large scale shipments – higher costs
No sourcing congestion	Security
Reduced costs with pre-negotiated agreements with suppliers	

The inventory pre-positioning strategy facilitates for a more rapid and agile response of items such as medical items and food by storing them close to the locations that are highly prone to disasters. (van Wassenhove 2006) pre-positioning aid inventory has become a measure that allows agencies to increase their effectiveness while cutting down on delivery times. Pre-positioning also enhances procurement planning. (Bozkurt & Duran 2012, 2864) Pre-positioning aid inventory, although highly expensive for humanitarian organization, allows for them to mobilize and deliver more quickly to the disaster zones. (Balcik &

Beamon 2008, 101) “Pre-positioning food can increase the cost of emergency food aid because of additional warehouse, shipping, and commodity costs” (U.S. Agency for International Development 2014) Studies have proven that although there are quite many beneficial reasons for inventory pre-positioning they come at a high cost. (Kunz, Reiner & Gold 2000) Pre-positioning has proven to be an effective strategy for UNICEF in allowing response teams to reach the vulnerable victims of sudden onset disaster. (UNICEF 2005) In July of 2010 Pakistan experienced flooding, USAID was immediately able to send out food aid from its warehouse in Djibouti. This allowed for USAID to respond in 2-3 weeks compared to average shipment time period of 3 months. (USAID 2010.)

2.4 Local population participation

Local population’s ability to contribute to logistics preparation and response in disaster relief has been extremely underestimated and underutilized, especially at the community levels. (Sheppard, Tatham, Fisher & Gapp 2013.) Many organizations are now strategically focusing on community based disaster preparedness and management. IFRC presented a framework under Strategy 2020 which states that it would identify regions that are at high risk for natural disasters such as climate change, food security and other hazards. Upon identification, the organization wants to focus on promoting to these communities a practice of community safety and resilience through preparedness. (IFRC 2010, 3). Community preparedness is defined as - the participation of a community at the grassroots and community based organization level ability to respond to disasters with a through plan. The community recognizes how to react in disaster situations and knows where to go when warnings are issued. (The University Corporation for Atmospheric Research 2011, 2.) Participation in humanitarian relief is known as “the engagement of affected populations in one or more phases of the project cycle: assessment; design; implementation; monitoring; and evaluation. This engagement can take a variety of forms.” (Groupe Urgence Réhabilitation 2003, 20.) Participation is described as a state of mind and therefore it is not something that can be forced upon a community, they have to want to take action. Community participation leads various groups of people to work together for a common benefit. (Hossain 2013, 161).

In this research paper local population participation is specific to the preparing, planning and implementing of programs that improve food security in the Horn of Africa and enhance the stockpiling of food items at the Djibouti base. Engagement includes 5 key components; participation, accountability, communication, information provision and consultation. There are three approaches to participation – instrumental, collaborative and supportive. The instrumental method involves local populations very limitedly and the com-

munity is mostly regarded as a means of achieving organizational objectives. The collaborative requires joint efforts by the organizations and is founded on a mutual exchange of resources. Lastly in the supportive participation the community recognizes their capacity, designs and carries out the initiatives and aid organizations only play a supportive role. (Groupe Urgence Réhabilitation 2003, 153.)

A community preparedness program should contain the following three components;

- Raising public awareness and effecting behavioral change in the areas of mitigation and preparedness
- Deployment of stable, reliable, and effective warning systems
- Development of effective messaging for inducing favorable community response to mitigation, preparedness, and warning communications (The University Corporation for Atmospheric Research 2011, 3.)

Table 6. Types of participation in humanitarian action (Groupe Urgence Réhabilitation 2003, 22)

Type of participation	Description
Passive participation	The affected population is informed of what is going to happen or what has occurred. While this is a fundamental right of the people concerned, it is not one that is always respected.
Participation through the supply of information	The affected population provides information in response to questions, but it has no influence over the process, since survey results are not shared and their accuracy is not verified.
Participation by consultation	The affected population is asked for its perspective on a given subject, but it has no decision-making powers, and no guarantee that its views will be taken into consideration.
Participation through material incentives	The affected population supplies some of the materials and/or labour needed to operationalise an intervention, in exchange for a payment in cash or in kind from the aid organisation.
Participation through the supply of materials, cash or labour	The affected population supplies some of the materials, cash and/ or labour needed to operationalise an intervention. This includes cost-recovery mechanisms.
Interactive participation	The affected population participates in the analysis of needs and in programme conception, and has decision-making powers.
Local initiatives	The affected population takes the initiative, acting independently of external organisations or institutions. Although it may call on external bodies to support its initiatives, the project is conceived and run by the community; it is the aid organisation that participates in the population's projects.

It's important that local communities work to reduce their vulnerability to disasters by moving from a position of being passive participants to taking on more active roles especially in pre-disaster periods. Overall the benefits of engaging the local population would be:

- Increased security
- Supporting and increasing local capacity
- Giving a voice to traditionally marginalized groups and individuals
- Improving program quality
- Reducing cost in moving international aid workers
- Indigenous expertise
- Reducing international worker turnover
- Earlier disaster warning signals

(Groupe Urgence Réhabilitation 2003, 24-26; Sheppard, Tatham, Fisher & Gapp 2013.)

2.5 Theory summary

It is important to provide a concise summary of the theory covered in this chapter so that one may comprehend clearly the theory structure used in this paper. The illustration below shows the links between supply chain management, logistics management and humanitarian logistics. Figure 14 clarifies the relationship between supply chain management, logistics management and humanitarian logistics. Humanitarian logistics is an extension of logistics management and logistics management is an extension of supply chain management.

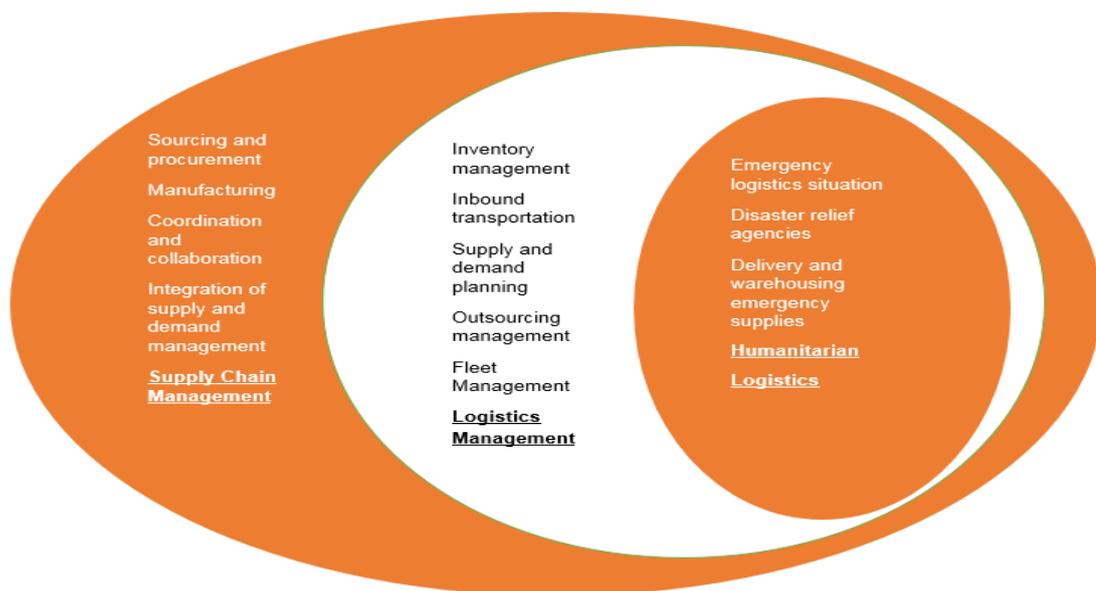


Figure 14. Relationship between supply chain management, logistics management and humanitarian logistics (United States Army Logistics Management College; modified by author 2015)

Furthermore within **humanitarian logistics** there is disaster management and one of the phases of it being **disaster preparedness**. Disaster preparedness involves a variety of actors from different sectors and these actors **collaborate** to minimize the complexities of disaster relief. One common measure of preparing for disasters such as drought and famine is by **pre-positioning** food and non-food items near areas prone to disasters. This research also paper seeks to uncover ways in which the **local population** of the Horn of Africa can participate in the preparing and management for disasters related to food security, specifically related to contribution to the Djibouti humanitarian base.

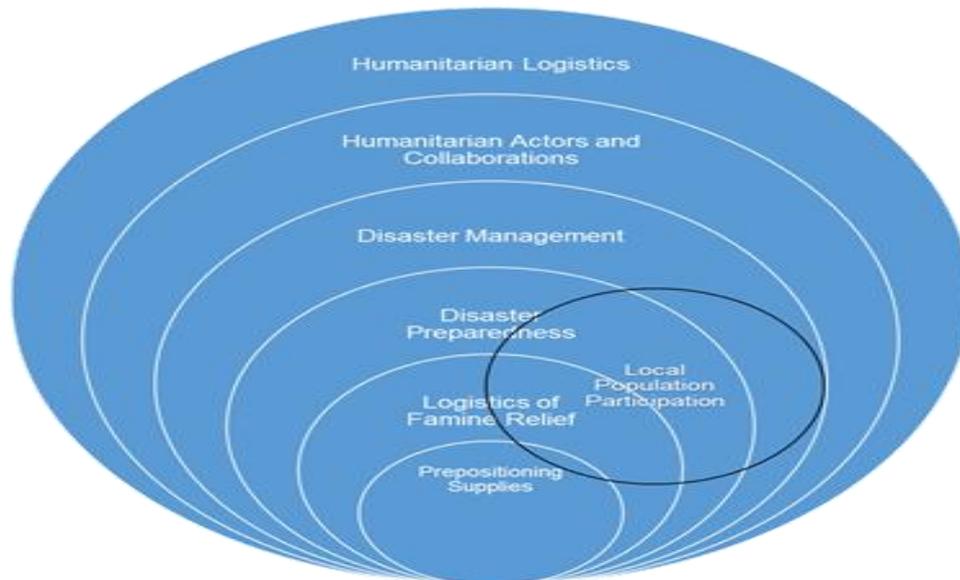


Figure 15. Linkage between theories and concepts

The illustration below demonstrates the relationship between the theories and concepts used in the study. Within humanitarian logistics there's a need for a various actors and collaborative work to enhance the effectiveness and efficiency of the relief process. How the local population can contribute to disaster management is one of the investigative question specifically in the preparedness phase, to avert calamities such as famines from occurring. In addition local population participation is described as engagement at least one on the 4 phases. In this particular study the research is focusing especially during the preparedness phase and in detail a preparedness method of stock pre-positioning.

3 Methodology

3.1 Research approach

The study was in an inductive format thus starting with collection of data and then moving to analysing the information uncovered for themes and answers to the research questions. This research paper will be a qualitative study in the form of a case study examining the Djibouti Humanitarian logistics base and the local community's ability to contribute to disaster management. This research paper consists of a real life case examined using qualitative techniques such as interviewing (Dul & Hak, 2008; p.4). A qualitative research focuses on obtaining and analysing the objectives for attitudes, behaviour and experiences, which grant the researcher ability to interpret without numerical measurement resulting in new and meaningful discoveries (Zikmund, 2010). Robson (2002:178) defines a case study as a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence'

3.2 Research design

The research process was in multiple stages involving a variety of experts in humanitarian logistics, a WFP representative and a researcher familiar with years of experience in Horn of Africa issues.



Figure 16. Research design

3.3 Data collection

As this research paper is a bachelor's degree thesis it is important that it is comprised of all the necessary data to reach a conclusion without it being exhaustive. Although there is quite an extensive amount of secondary research on the topic it is essential to have an expert's perspective to enhance the value and quality of the findings. Therefore the research approach is conducted in two stages; desktop research and a face-to-face interview with an expert in humanitarian logistics. An interview style allows for researcher to pursue information on the topic more in-depth (McNamara, 1999). Semi-structured interviewing is considered the most common of the various types of interviews. This form of interview was chose to allow flexibility so that important information result (Saunders, Lewis & Thornhill 2009, 320). Semi-structured interviewing style is considered one of the most common interview techniques. The researcher sets out to obtain specific information that can be used to compare and contrast the data collected during interviews. (Dawson 2011.)

3.4 Primary data

The primary data collected was in the form of a semi-structured face-to face interview with Gyöngyi Kovacs a professor in humanitarian logistics at the Hanken School of Economics. Second interview was with Jacques Higgins of the World Food Programme holding a position as Country Director for Djibouti. And Marja Tiilikainen a researcher at the University of Helsinki and editor of a trilingual, electronic journal Afrikan Sarvi (Horn of Africa Journal), published by the Finnish Somali Network.

3.4.1 Kovacs interview questions

The author conducted an in depth interview with Gyöngyi Kovacs a professor in humanitarian logistics at Haken University. Kovacs serves as the Director of the Humanitarian Logistics and Supply Chain Research Institute. Kovacs is the founder and co-editor of the Journal of Humanitarian Logistics and Supply Chain Management and has published a great volume of academic research on the topic. She has been working in the humanitarian logistics field since 2005 (Kovacs 2015). Gyöngyi previously served as the European regional editor for the International Journal of Physical Distribution & Logistics Management (IGI Global).

The interview was conducted on the 10th of April 2015 mid-afternoon at Hanken School of Economics campus. The following are the questions prepared for the interviewee, however during the interview process the order was slightly changed:

1. What are some of the differences between humanitarian logistics and private business logistics?
2. Are you familiar with the region of the Horn of Africa – and their specific challenges?
3. What are some benefits and challenges of pre-positioning food supplies? (Related to storage, delivery and distribution)
4. Some benefits and challenges specific to the region of the Horn of Africa (storage)
5. How do you think these challenges can be overcome?
6. What challenges do you foresee the WFP experiencing in the region?
7. What measures can the local population take to minimize the effects of disasters such as droughts, famine and hunger crisis?
8. What is your thought on the level of participation of local communities (village level or the governmental level) – is enough being done
9. How Important is local participation – what hinders can it bring about?
10. What are some ways the local communities can participate in the Djibouti Base?
11. What can the WFP do to better facilitate opportunities for community engagement?
12. What can governments do to encourage preparation and participation?
13. Do you have any recommendations for the WFP to ensure the success of the facility?

3.4.2 Higgins interview questions

The second interview was conducted through email with Jacques Higgins the Country Director for Djibouti representing the WFP. After many months and attempts to speak with logistics staff members at the WFP, Mr. Higgins responded and answered briefly the questions I sent via email. The questions sent are as list below:

1. What are the benefits of pre-positioning food items in the HOA?
2. What are the challenges of pre-positioning food items in the HOA?
3. Is the Djibouti Humanitarian Base mentioned in this news release (<https://www.wfp.org/news/news-release/wfp-lays-foundation-stone-humanitarian-logistics-base-djibouti>) up and running and if so what beneficial outcomes has come of it? If not yet ready for use when will it be? And will the storage be for both food and non-items as mentioned in the release?
4. How can the local population of the HOA participate in disaster preparedness specifically related to stockpiling?
5. How can the local population of the HOA participate in disaster preparedness in general? What is the WFP currently doing to promote community participation in HOA?

3.4.3 Tiilikainen interview questions

The third interview was conducted on the 11th of May 2015 through email with Marja Tiilikainen. Marja Tiilikainen is an academy research fellow, PhD, at the Department of Social Research, University of Helsinki. She is also Executive Director (voluntary work) of the Finnish Somalia Network and editor in chief of Afrikan Sarvi journal. Some of her most recent publication include the following:

- Looking for a safe place: Security and transnational Somali Muslim families in 2015
- Musliminuoret ja uskonnollinen radikalisoituminen in 2015
- Depressive Symptoms and Their Psychosocial Correlates Among Older Somali Refugees and Native Finns in 2014

Since Tiilikainen has many years of experience with the people of the Horn of Africa and Somalis in particular the question related to local population participation was the only one appropriate to ask. The question asked to Tiilikainen was:

1. How can the local population of the Horn of Africa contribute to their own disaster management, disaster preparedness and their own disaster resilience in general (specific to drought and famine)?

3.5 Secondary data

Secondary data can include journals, books and data such as organizational and governmental information and reports previously gathered. (Saunders, Lewis & Thornhill 2009, 257-259). In the present study the researcher used a variety of sources from the WFP database, meeting minutes, reports, a few European Union publications, governmental publications and a wide range of academic reports of high esteem. Quality daily newspapers such as the Economist, Reuter and the Harvard Business Review were used to obtain substantial amount of data related to the subject.

3.6 Research validity and reliability

The researchers need to examine and ensure the validity and reliability of the data presented in their work. Validity refers to whether the findings are “really what they appear to be about” and answering whether the study answered the questions intended to. On the other hand reliability deals with the data collection techniques specifically to what extent

the same outcome is produced if study were to be repeated. In other words it refers to the consistency of the study. (Saunders, Lewis & Thornhill 2009, 156-157)

In this study data collected was from sources both in primary and secondary format that were able to directly answer and fulfil the objective of the present study. Furthermore since the secondary sources were closely related to the topic and the experts interviewed were are at the top of their fields, the same results were most definitely to be generated.

3.7 Analysis methods

Analysing of data requires a few key steps; once the data is attained a researcher must familiarize themselves with it, decipher between fitting and unfitting data, categorize the information, identify patterns and connections and then move forward to interpret the data obtain. (Powell & Renner 2003, 2-5). Data retrieved through the interview process with Kovacs, Higgins and Tiilikainen are attached in transcript format. The information collected was categorized and appropriately used to answer the research question upon interpretation.

4 Case presentation and findings

4.1 Drought and famine in the Horn of Africa

The Horn of Africa has had many experiences of disasters such as drought and famine due to the land being very dry in nature. The region is characterized as semiarid and regularly experiences droughts (DEC). The HOA has experienced several droughts which have resulted in famine previously, however in recent years the frequency and severity has drastically increased as well as a heightened dependency on aid. Studies show that the regions increased vulnerability is directly associated with climate change as well as social, political issues such as conflict and corruption and overall mismanagement. The 2011/2012 HOA hunger crisis was the worst record for the region since 1982–84. Kenya recorded food emergencies have also significantly increased, reports show that in 6 out of 8 years the country was in need of food assistance.

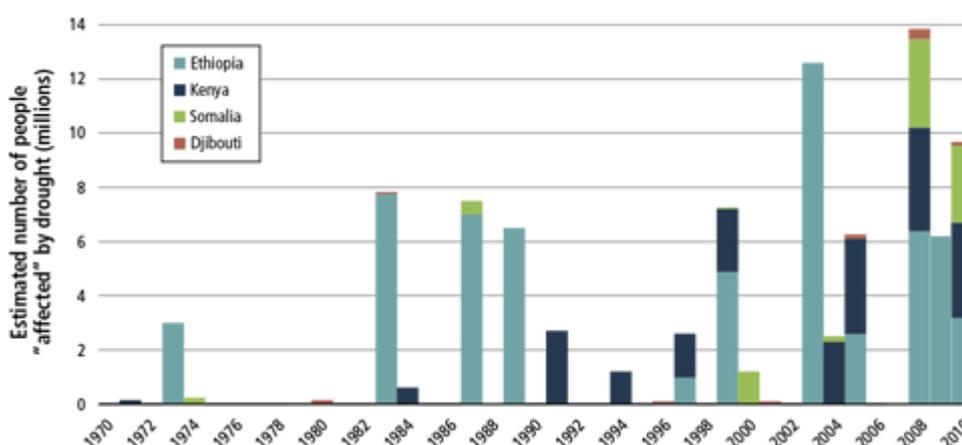


Figure 17. Record of drought and population affected (OCHA 2011)

“Scientists don’t know how to predict drought a month or more in advance for most locations. Predicting drought depends on the ability to forecast two fundamental meteorological surface parameters, precipitation and temperature.”(National Drought Mitigation Center). "In 2006, the United Nations said it expected Africa to be the continent most affected by climate change" – not necessarily due to direct horrific impacts of climate change but more so due to the continents inability to cope with the aftermaths. (United Nations 2006) Underdeveloped countries have proven to be the most vulnerable when disasters strike (Kovac & Spens 2007). Since the region is susceptible to natural disasters such as droughts, it is essential that logistical measures be taken to avert possible consequences of famine and food insecurities from taking place in the future.

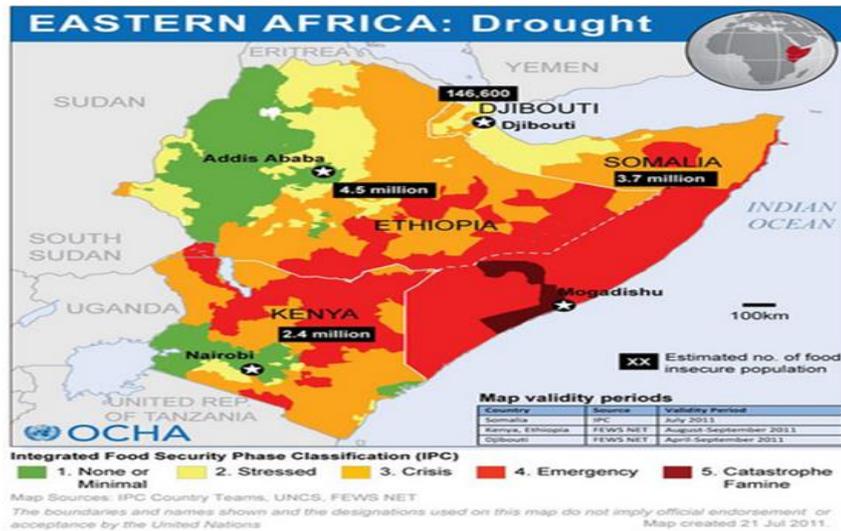


Figure 18. Impact of 2011/2012 drought in the Horn of Africa (OCHA 2011)

Every year in the area rainfall is scheduled between October and December; however in 2010 no rainfall was recorded. In the spring of 2011 there was an insufficient amount of rainfall which heavily impacted the growing season and resulted in a shortage of food for both humans and livestock. South Central Somalia was heavily impacted by a severe drought and famine resulting in the deaths of more than 260,000 people just in the last four years. Although South Central was most intensely impacted, the whole HOA was afflicted with the disaster leaving more than 13 million in need of emergency response. The area has experienced a cycle of drought and famine in the last century resulting in the deaths of millions of lives. (World Food Programme). The food crisis resulted in thousands of deaths especially among infants and children as well as severe malnutrition and cross-border displacement which were all further aggravated by the conflict in the region and the political controversies (OCHA 2011.) Being that southern Somalia was most heavily impacted; the neighbouring country of Kenya experienced a large inflow of refugees (World Health Organization 2011, 6). Overall the crisis was recorded as being one of the worst droughts recorded in the last 60 years. (United Nation Refugee Agency).

4.2 Djibouti humanitarian logistics base

The Djibouti Humanitarian Base is a collaborative effort with donors, governments and the United Nation's World Food Programme. A storage facility expected to contain 40,000 metric tons of bulk food and 12, 0000 break bulk foods is currently under construction. The base will store up to "25,000 metric tons of traditional bagged food storage, 2,500 square meters of non-food items storage, and a 200 unit container yard". In facility will ease the World Food Programme's ability to warehouse, load and unload, handle all incoming and outgoing products with highly advanced infrastructure and services. The base

will also be comprised of container yard terminals, offices and meeting rooms. The program is anticipated to increase the efficiencies of the WFP's humanitarian supply chain while improving contributions to the region. Secondly responses will greatly improve for the region of the Horn of Africa through pre-positioning of food and non-food items. The optimally situated base will allow for deliveries to reach "Ethiopia, Somalia, North and South Sudan, and Kenya by road and Yemen by sea, all within eight to ten days." The third objective is to create better synergy between the WFP and the Government of Ethiopian and their national food reserve. Lastly the humanitarian base is expected to contribute to the business sector in Djibouti – namely the logistics sector and as a result enhance the economy of the country. The "WFP and the Government of Djibouti will work closely on capacity development and skills transfer for the Djiboutian logistics sector." The Djibouti humanitarian base four strategic objectives include:

- enhanced efficiencies of supply chains in the Horn of Africa;
- augmented regional humanitarian response capabilities;
- alignment of port operations with Ethiopia's expanding strategic reserves; and,
- strengthened logistics systems and capacities in Djibouti Port (World Food Programme)



Picture 1. Future outlook of the Djibouti Humanitarian Logistics base (World Food Programme 2013)

The hub will be in full operation by March 2016. The project was originally launched in January 2011 with a budget of US\$19.4 million dollars and a 19 month construction period. However, since then there have been a few delays – namely late donor contributions and the tendering period that have caused the project's finalization to be revised. A winning

tender was selected January 2015 and has outline a 10-12 month period was completion. (Higgins 5 May 2015; World Food Programme 2015.)

4.3 The WFP and contributors

The World Food Programme is a branch of the United Nations that focuses on fighting hunger and promoting food security worldwide. The idea for the program was first proposed by then United States president Dwight Eisenhower to the UN General Assembly. Soon after in 1961 George McGovern, who was the director of the US Food for Peace Programme recommended a 3 year long multilateral food assistances experimental program. “WFP was up and running before it could walk. An earthquake hit Iran in September 1962, followed by a hurricane in Thailand in October; meanwhile, newly independent Algeria was resettling 5 million refugees: food was urgently needed, WFP supplied it, and it has never stopped since then.” (World Food Programme)

Today the WFP is the largest humanitarian agency working to combat hunger in more than 75 countries every year. Spreading to more than 80 million people with about 11,500 employees “directly serving the hungry poor”. The WFP mission is simply stated are;

- Save lives and protect livelihoods in emergencies;
- Support food security and nutrition and (re)build livelihoods in fragile settings and following emergencies;
- Reduce risk and enable people, communities and countries to meet their own food and nutrition needs;
- Reduce under nutrition and break the intergenerational cycle of hunger. (World Food Programme)

The WFP headquarters is in Rome, Italy and is headed by Ertharin Cousin – the Executive Director who was appointed in 2012 for a five year term by the UN Secretary General and the Director of the UN Food and Agriculture Organization. The Executive Board of the WFP has 36 member all of which are required to meet three times a year to discuss and review “humanitarian and development food aid activities”. (World Food Programme)

Another key partner and contributor in bringing this base into fruition is the Djiboutian government. The port of Djibouti is a crucial transit location for almost all cargo that enters and exits Ethiopia and is also a key commercial transport route for the greater Horn of Africa. The port facilitates effective and efficient flow of humanitarian aid for a variety of organizations. In just a three year period it has been stated that up to four million metric tons of relief goods have passed through Djibouti destined for neighboring countries. The

Djibouti government has donated 40, 000 square meters of land for the storage facility to be built. "Nearly four million metric tonnes of relief cargo have passed through Djibouti in just the past three years. The government of Djibouti has donated to the WFP 40,000 square meters of land to construct a base that will offer storage for both food and non-food items. There are many other financial contributors from very many countries and backgrounds. (World Food Programme.)

4.4 WFP's partnerships

Table 7. Continuum of collaborative relationships in the WFP (Word Food Programme 2014, 9)

Transactional	←————→	Partnership
One party decides on the programme based on their knowledge and experience	↔	Decision co-generation based on joint knowledge and experience
One party purchases a service from – or donates to the work of – another	↔	Partners bring together complementary resources
Fixed contractual arrangement, with clear activities and outputs decided at beginning	↔	Collaboration agreement, with agreed outcomes; flexibility over how to get there
Limited engagement with parties outside the contractual arrangement	↔	Engagement and commitment beyond the contractual arrangement
Partners stay in their comfort zones – each doing what they normally do	↔	Partners create new ways of working
One-way accountability	↔	Mutual accountability
Significant trust and transparency not essential	↔	Requires mutual trust and transparency

The World Food Programme has a diverse number of partners as they recognize that they alone cannot undertake the enormous challenge of food and nutrition security worldwide. In fact the WFP has a new corporate partnership strategy for expanding until 2017 with the slogan "We deliver better together". Under this new strategy the WFP outlines the importance of establishing key partners that are within the wider field that will contribute to common objectives. The organization understands that the challenge will be in determining the roles and identifying actors that will create value and deliver results. WFP views partnerships are a "means to an end", therefore success of partnerships can be evaluated based on "their contribution to specific goals." Partnerships should allow the WFP to access greater resources, expertise and network to strengthen the WFP's ability to carry out its missions. (World Food Programme 2014, 2-8.) The WFP's definition of partnerships is:

"Collaborative relationship between actors that achieve better outcome for the people we serve by; combining and leveraging complementary resources of all kinds; working together in a transparent, equitable and mutually beneficial way and; sharing risks, responsibilities and accountabilities." (World Food Programme 2014, 8)

The WFP seeks to partner with other UN agencies, NGOs, local populations and the private sector. Partners in various fields such as logistics, food security, telecommunications

and other cluster groups to make certain the success of their food and nutrition missions worldwide. They will pursue partnerships by following the policies, agreements and guidelines produced by the Board to ensure accountability and facilitate responsible partnership development. These partners should be on a global, regional and country level to assure that WFP's goals and key principals are executed. (World Food Programme 2014, 7)

Table 8. Advantages of different forms of collaborations (World Food Programme 2014, 9)

Transactional ←	→ Partnership
Well-defined and manageable commitment	Stronger potential for innovative and transformational solutions
Lower management and administration costs – requires significantly less investment in relationship building	Scope to identify improved approaches
Clear decision-making authority and narrowly defined contractual relationship	Decision-making is participatory and more fully informed
Predictable procedures and outcomes	Partners willing to commit additional resources
Clear lines of authority and accountability	Wider potential for influence and advocacy
	Potential for stronger overall accountability
	Greater potential for mutual learning

The beneficial outcome the WFP seeks to achieve are as listed:

- to increase overall effectiveness
- reduce cost – through allocating resources better, avoid duplication of activities
- increased access to people skills and knowledge – wider pool of expertise, experiences and skills
- innovation – different ways to solve problems
- generate long-term sustainability and,
- enhance reputation and credibility (World Food Programme 2014, 7)

The World Food Programme seeks to establish three types of crucial partnership. Multi-lateral partnerships with government, international non-governmental organizations (NGOs), and with other UN agencies. Multi-stakeholder and catalytic partnerships which would include regional and triangular organizations where partners sign a multiparty memoranda of understanding. And finally an open and networked partnerships' which aim to align over shared objectives, not involving anything formalized. (World Food Programme 2014, 15)

Table 9. Wide Array of WFP's Relationships (World Food Programme 2014, 15)

Legend: B – Bilateral partnerships; M – Multi-stakeholder and catalytic partnerships; O – Open and networked partnerships										
	Host governments	Donor governments	NGOs	Private sector	United Nations	IFIs	Academia think tanks	Governing bodies	Media	Affected populations
Resource partners <i>Human, financial, and technical resources</i>	B	B M	B	B	M	B M				
Knowledge partners <i>Information, evaluation and analysis</i>	B M	B M O	B M O	B M	B M O	B M O	B M O	M		
Policy and governance partners <i>Policies, governance, regional and country hunger and nutrition policies, and hunger and institutional governance</i>	B M	M O	M O		M O	M O	O	M		
Advocacy partners <i>Support for publicity work</i>	B M	B M O	B M O	B M	B M O	B M O	B M O	M	O	O
Capability partners <i>Design and implementation of programmes and operations</i>	B		B M	B M	B M					O

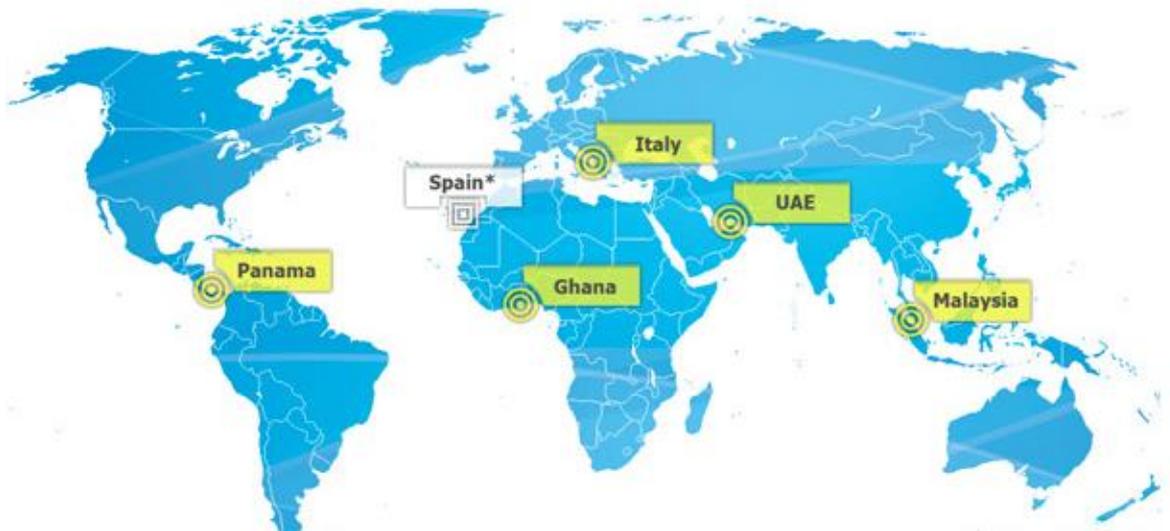
4.5 WFP's pre-positioning worldwide

The World Food programme manages the United Nations Response Depots, which are strategic storage facilities to effectively contribute to the regional community in need of humanitarian assistance. The UNHRD works with governments, international organizations, NGOs as well as other UN agencies to increase effectiveness and efficiency of disaster response. The UNHRD represents a preparedness mechanism that promotes strategic pre-positioning humanitarian inventory to enhance communities worldwide. The UNHRD maintains six facilities – stockpiling “medical kits, shelter items, ready-to-use foods, IT equipment and operational support assets.”

Table 10. Benefits of the UN Humanitarian Depots (World Food Programme)

Immediate mobilization	Staging areas
Cost efficiency	Harmonization of relief items
Turnkey solutions and support	A “One-stop-shop” customer service
Training facilities for humanitarian organizations and workers	

The six locations currently include Ghana, UAE, Malaysia, Panama, Italy and Spain. These humanitarian bases have been strategic positioned near areas with high demand and that are prone to disasters. All locations are either within airport ground, near sea ports and major roads. The facilities are all “designed to strengthen and enhance organizational response efforts at the onset of an emergency.”



Picture 2. Six United Nations Humanitarian Response Depots (World Food Programme)

The UN Humanitarian depots are a proactive measure in disaster preparedness. Relief supplies can be delivered within 24 to 48 hours from these locations in the aftermath of an emergency. Other beneficial outcomes are that the single network – procuring, hosting and deploying supplies – minimizes overall costs. They are used as a centralized support office to facilitate all activities from procurement to delivery. Quality standards are maintained throughout the marketplace allowing all relief agencies to be able to borrow items from each other. There is one entry point for the entire network. Main entry points facilitate easy access to disaster impacted areas and grant a more rapid flow of aid. Lastly these depots operate as training facilities to all the humanitarian agencies and their employees.

4.6 WFP's local population engagement

The WFP seems to have very little activities involving local population. During the 2011/2012 Horn of Africa hunger crisis they had difficulties serving the people in need due to the Somali government's resistance to foreign nationals. This could have been avoided by staffing more nationals in areas of decision and management. The world food programme believes in a people centred participatory approach which is defined as:

“Participation involves women and men, allowing them to influence their food security through processes of empowerment. These processes increase knowledge and skills, and thus self-reliance. At a minimum, this implies consultation, knowledge exchange and equitable arrangements for the sharing of benefits.”

					Self-mobilisation
				Interactive Participation	
			Functional Participation		
		Consultative Participation			
	Information-Giving				
Passive Participation					

Figure 19. WFP’s participation process (World Food Programme 1991, 14)

Although there are a variety of booklets on participatory approaches and techniques there is not much concrete evidence to show actual implementation. The World Food Programme recognizes the importance of using participatory tools in all their missions and activities. The organization acknowledges the beneficial outcomes that arise from community participation on all levels; emergency relief operations, protracted relief operations, recovery operations and in development operations as well. The organization realizes participation of local population (local governments, local NGOs, community representative and leaders) offers the greatest chance for successful interventions and programmes. The WFP aims to enhance and broaden the decision making framework of women and “strengthen the voice of the most vulnerable” in each community. The WFP also recognizes that challenges that could arise from pursuing the implementations of participatory approaches are techniques.

Table 11. WFP’s Benefits and Challenges of Participation (World Food Programme 2001, 16-23)

Benefits of Participations	Challenges of Participation
Leads to more effective programmes	Attitudes take time to change
Leads to more efficient programmes	Institutional structures may not allow it
Leads to more equality in resource distributions	Time to build skills and communicate
Empowers people	Financial cost of participation perceived too high
	Difficult in areas that are “unsafe”

4.7 Research questions answered

4.7.1 Benefits of pre-positioning in the Horn of Africa

Benefits of the HLB will generate a number of benefits for all involved. Some of the expected beneficial out of the base include cost savings, increase storage capacity and enhanced logistics developments. The Djibouti Hub will improve the efficiency and cost-effectiveness of food assistance provided by the World Food Programme in the Horn of Africa. Specifically, the Djibouti Hub allows for faster delivery times for food assistance to a region with a high demand. By storing food in bulk silos, the Djibouti Hub will also allow for cost savings, thereby allowing for the provision of food assistance to a larger number of beneficiaries. Since the land was donated to the humanitarian community it eases the burden tremendously as their financial resources can be used in the development and management of the facility. "Food and relief items stored in the HLB will be able to travel by road to reach a large geographical area, including Ethiopia, Sudan, South Sudan and Somalia, and by short sea voyages to Yemen and other ports" (World Food Programme 2013). Some of the expected beneficial out of the base include cost savings, increase storage capacity and enhanced logistics developments.

Table 12: Benefits of Pre-positioning in the Horn of Africa (World Food Programme)

Cost Savings	Pre-positioning capacity	Additional logistics corridor	Capacity building and systems development
Reduced storage costs	Greater flexibility	Improved access accessed from one country to another	WFP and GoD are full partners
Reduce truck bottleneck	Strategic location	Route is more economical	Skills transfer
Expanded storage capacity	Both inland and sea shipments	Viable, concrete alternative in routing	Develop Djibouti into a more competitive commercial logistics hub
Prioritized imports and exports	Offset congestion at Mombasa		Commitment to further fundraise

Increase off-take capacity	Increase the silo and bonded storage options		
Underperforming vessels and equipment eliminated	Serve as a WFP Forward Purchasing Facility		

4.7.2 Challenges of pre-positioning in the Horn of Africa

The HOA is very diverse and is comprised of countries of different sizes, populations, languages, religions, history and economy. Challenges of pre-positioning are dependent of the particular country and vary from one to the other. The eight countries of the region have an estimated population of more than 160 million and is rapidly growing. (Headley 2011). As the population increases under harsh social, political and economic constraints it will only make the WFP's missions and interventions more difficult due to the large demand of the region. The following table includes some of the challenges the World Food Programme may encounter with the pre-positioning of food supplies in the HOA.

Table 13. Pre-positioning challenges in the Horn of Africa (Kovacs 10 April 2015; Headley 2011; Balcik & Beamon, 2008, 102)

Diversity of region	Land ownership
Political issues	Terrorism
Conflict	Climate change
Security	Resistance to foreign nationals
High costs of warehousing	Large demand of the region
Financial uncertainty	

In Ethiopia there are issues of owning land, therefore ownership of warehousing space would be a considerable obstacle. Leasing would be the only alternative for humanitarian organizations such as the WFP. (Kovacs 10 April 2015.) In Somalia there are specific challenges that make it difficult for foreign nationals representing humanitarian agencies to enter into the country. In fact they were responsible for the removal of many non-nationals during the height of the hunger crisis. "Somalia also did not allow any foreign national of any humanitarian organization to enter the country. Who was allowed or who could actually enter the country and could potentially transport anything was very limited." (Kovacs 10 April 2015). When unresolved political issues arise in times of disasters such as in this particular case it will most definitely impact the humanitarian agencies ability to respond. The government of Somalia has been accused of making it difficult for the WFP to react to the crisis. Certainly security in the entire region overall is a major challenge –

from the Mediterranean to Somalia. (Kovacs 10 April 2015.) Currently there are multiple ongoing conflicts in the region, one being the conflict in Somalia between civilians, the government and terrorist groups. The conflict in nearby Yemen which started early 2015 has created another humanitarian crisis in the region. The WFP relies heavily on financial donors and in fact their delay in contributing has already resulted in problems for the development of the Djibouti facility. (World Food Programme.) Moving forward the WFP's dependence on donors will always be a risk and a challenge to overcome.

4.7.3 Local population engagement

The social, economic and ecological issues in the HOA are the main causes of overall ineffectiveness in the region. The Horn of Africa has "suffered decades of neglect, political marginalization and the undermining of indigenous knowledge and traditional mechanisms of self-organization, along with a lack of appropriate education, information provision and capacity-building support." (Tilstone, Ericksen, Neely, Davies, & Downie 2013, 2) Lack of peace has contributed greatly to the broken social, economic and ecological systems. "The population's resilience to these stressors has become thinner and thinner with the years. The loss of resilience has a direct negative effect on malnutrition, and in turn, malnutrition has a negative effect on resilience." (Higgins 5 May 2015.) The definition of disaster resilience is

"The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions. (United Nations 2009)

When humanitarian logistics expert Kovacs was asked during the interview (9 April 2015) her thoughts of local population participation she replied "I guess a lot of it boils down to willingness of participation, including communities in decision-making and including communities to set up their own systems." Disaster preparedness and contribution from local populations is heavily dependent on active involvement from the local population. (Australia's National Emergency Management Committee 2009, 15). The frequency of droughts in the region has been predicated to be on the rise due to the effects of climate change. Therefore the underlying issues of "poverty, degraded ecosystems, conflict and ineffective governance" have to be resolved and overcome in order to prevent a repeat of the crisis of 2011/2012. (USAID 2012, 1.)

The World Food Programme has set aside a budget of US\$ 700,000 that is expected to towards capacity development in the region of the Horn of Africa. Training of nationals in areas of truck driving, forklifting and warehousing management. The training and capacity development seems specifically tailored to Djibouti nationals as part of the WFP's initiative to contribute to the Djibouti workforce and economy. "With a project of this scale, capacity development is an important component." The WFP will train a total of 60 truck drivers, 60 forklift divers and 30 warehouse managers all nationals. However, not much effort seems to be allocated by the WFP towards capacity building and development in areas of disaster preparedness and resilience. (World Food Programme 2013)

Marja Tiilikainen is a researcher at the University of Helsinki, in the area of Somali women's' experiences on health as well as an editor in chief at the Afrikan Sarvi (Horn of African Journal) stated that peace with the region would be most important. A peaceful environment would facilitate for the local population opportunity to engage in disaster preparedness measures. With peace in the region farmers could return to cultivating their lands as usual. She also emphasized the absolute importance of educating local populations with the measurement of water conservation. "Water harvesting should be learned and implemented; when the rain comes, it often comes in plenty and it should be harvested and stopped in certain places." Tiilikainen believes that the food security situation in the HOA should be improved through local food production – specifically local produce that can thrive during water scarce periods. Interventions such as Agroforestry which has been a success in Sudan have now been introduced to areas of Somalia. A project that has been administered by the Finnish Somali Network and "implemented jointly in collaboration of several NGOs + Viikki Tropical Resources Institute VITRI" aims to reverse the quick depletion of plant life in the region. Tiilikainen additionally recommends that the local population stop cutting trees and move towards the use to energy saving stoves in order to reduce the consumption of wood and charcoal. (Tiilikainen 11 May 2015.) Over all educating the local population of all these measure it's the key to disaster preparedness and resilience. The local population can only participate and contribute to their own resilience through education.

Generally and until more recently participation of local populations in emergency relief has been viewed as impossible and even unnecessary, especially in food aid programs. This often results in the undermining and handicapping of local capacity. The very large demand and the many standards and protocols limit local participation from taking place. However relief agencies are beginning to understand the positive outcome that could arise from such participation, some which are; "more relevant and culturally-appropriate choices of foods and target groups, enhanced time and cost-effectiveness and efficiency of distri-

butions, and establishment of a relationship between the aid organizations and the population that is built on mutual respect and confidence.” (Groupe Urgence Réhabilitation 2003, 236). Local population participation is important and essential in all steps of the process:

- assessment;
- design;
- distribution;
- monitoring; and evaluation

Participation of local population is vital and can immediately eliminate wastefulness and redundancies. Controversies such as the one that occurred in Zambia in 2002 can be avoided. When the food crisis affected southern Africa – Zambia refused American donations of genetically modified corns and soy. (The Economist 2002) This could have been easily avoided if the donors and relief agencies went through the four stages properly with local participation – at the government, municipal and village levels. Communities can better identify their own risks and vulnerabilities along with capacities and available resources as well as their own needs.

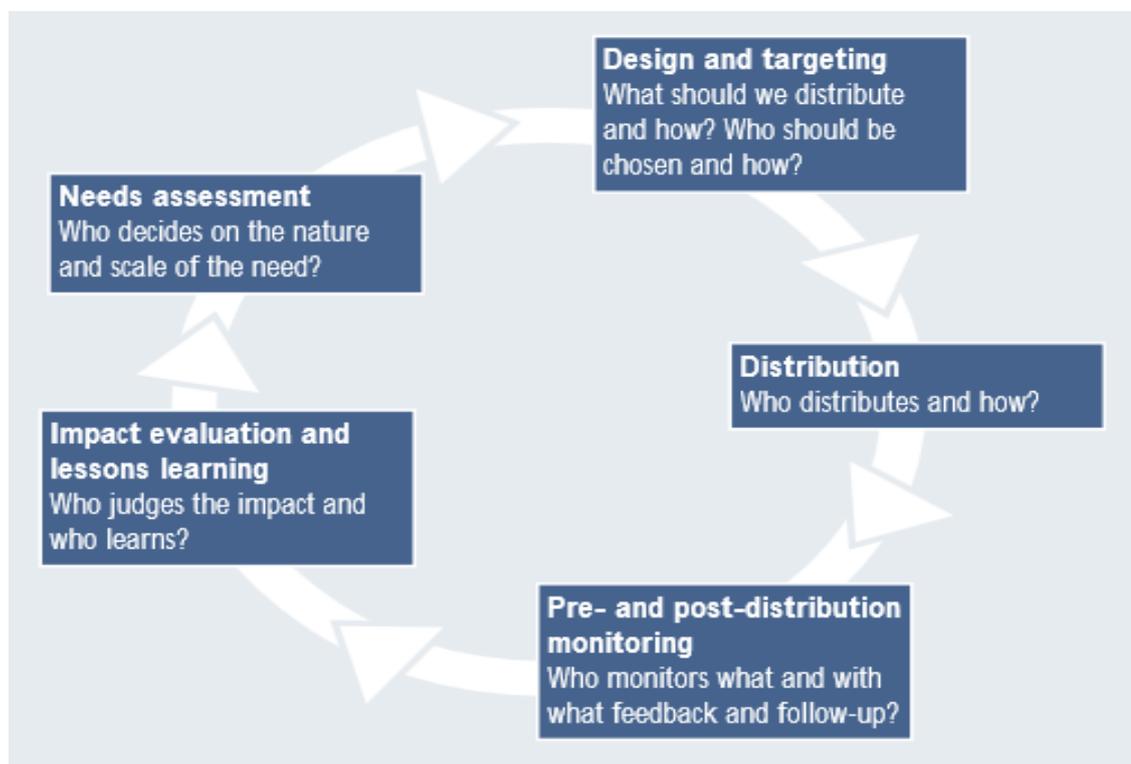


Figure 20: Participatory Cycle Management (Groupe Urgence Réhabilitation 2003, 237)

There are plenty of ways the local population can participate in disaster management and contribute to the Djibouti base. The humanitarian base should staff members of the local population and promote operation decision making by the locals to ensure success of missions. The World Food Programme should implement a collaborative and supportive approach of participation. More responsibility should be transferred to the local population to allow for capacity building and development. "Mobilizing a community to help one another. That kind of community resilience, if that's built up, a lot of the disasters never escalate." (Kovacs 10 April 2015) The following are just some of the roles the local population of the HOA can play in contributing to the WFP's Djibouti Humanitarian base:

- Assessment of needs
- Staffing member of the base
- Operation Decision Making
- Security
- Knowledge
- Local Private Businesses (financial, mobilization)
- Sending warning signals

Overall there are plenty of reasons why participation of local population is important and a variety of ways it can be implemented. Community involvement improves better decision making and promotes resilience and accountability while enhancing quality of humanitarian assistance. (Groupe Urgence Réhabilitation 2003, 7)

5 Conclusions

5.1 Recommendations

The WFP is the largest food assistance program worldwide which mainly addresses hunger by delivering food convoys to places of need. Although the work that they do is undoubtedly necessary, they also need to support and develop programmes and mechanisms that promote pre-disaster interventions. The development of the Djibouti Humanitarian base is one step forward in that direction. The pre-positioning of food items will significantly reduce lead time and therefore aid more people in the region more quickly in times of need. Through this research process the author has identified a few recommendations for the WFP, the parties involved and for the people of the HOA to assure the success of the Djibouti base. The Horn of Africa is a prime location for the pre-positioning of humanitarian aid as it is a strategic location between the Mediterranean Sea and the Indian Ocean. Therefore WFP food items at the Djibouti facility can be directed to other areas of need within the African continent such as the region of Sahel or across the ocean as “floating aid”. This food can be redirected to other areas in need during emergencies. Employing more nationals will eliminate challenges such as those faced by the organization in the 2011/2012 hunger crisis in the HOA. As humanitarian logistics expert Kovacs stated (10 April 2015) “One of the things that of course a lot of the organizations have done, they have hired nationals of different countries who would be able to then enter, and who would then be able to organize things. That is probably the best counter-measure to any of these political games.” The WFP can set up smaller warehouses within each country of the region with government support. Governments can offer free warehouse storage spaces and logistical support to the WFP and other international organizations. The WFP can develop pre-position networks with other international organizations that also work from the facility. Therefore by sharing the storage space they would reduce their overall costs. (Duran, Gutierrez & Keskinocak 2011, 3) Another suggestion would be to procure food items as locally as possible so that the farmers are supported, although Kovacs mentioned that in drought and famine situations this could result in a food price hick up leaving more of the population exposed to famine. “You buy from the region where you don't have the famine. Close enough, but not that you disrupt- You don't want to make the situation worse.” (Kovacs 10 April 2015).

Some other effective ways to overcome challenges of hunger and food insecurities is by empowering the community to confront distributions in to their social, economic and ecological systems. Although Somalia is currently challenged with conflict and instability in many aspects there are the self-declared regions of Somaliland and Puntland that can be

supported in areas of water management, sanitation and food harvesting. This can only be done through enabling the community with the right tools and education through actively engaging the communities. Supporting small farmers and encouraging pastoralism by enabling access to financial services and market information. It is crucial that local communities are educated about diversification, water conservation and alternatives. Educating local NGOs and community leaders in recognizing early warning signals of disaster is important as governments cannot always be relied upon to share this information with the international world. A further step would be to facilitate opportunities for decision making at the governmental, municipal and village levels so that programmes become more efficient and effective.

5.2 Intended contribution

The researcher intends to contribute overall to supply chain and logistics management and more specifically to the field of humanitarian logistics and further on to disaster management through pre-positioning and local engagement. Being that humanitarian logistics is a fairly new topic in research it is important that researchers continue to produce material to enhance the field forward. The research aimed to improve the overall effectiveness and efficiency in the pre-positioning of food items in the HOA by the WFP. The researcher also set out to uncover approaches to promote local population contribution to disaster management and specifically to the WFP's Djibouti humanitarian base. Through this research process the author has come to understand the importance of enabling local communities with the necessary tools to facilitate community resilience, responsibility and accountability. There has been some brilliant research on pre-positioning of items, however very little for the continent of Africa. This research paper is designed to broaden the scope of the field in that manner. Higgins (11 May 2015) of the United Nations stated in the email interview that he could not think of any major challenges that could arise from pre-positioning food items in the HOA. This research however has uncovered a number of real possible challenges that the WFP may face in the region. There has been very little research on local community engagement in disaster management and preparedness, which has been disappointing and frustrating for the overall research. This research paper has shed light on the very many ways local population can contribute and the beneficial outcomes that can result from it.

The research is intended to contribute great value first to the World Food Programme by providing fresh ideas and results to the research question on pre-positioning of food and engagement of local communities. The researcher anticipates this paper will enhance the humanitarian relief, the WFP policies regarding pre-positioning of foods and local commu-

nity engagement. Furthermore the author wishes to inspire future logisticians from the Haaga-Helia's Global Supply Chain Management specialization to engage in the humanitarian field through research contribution and future careers. Up until this year research conducted on humanitarian logistics has been non-existent. Furthermore, being that the author is originally from the Horn of Africa, it is a personal mission for her to prevent such horrific disasters like that of 2011/2012 from ever occurring again.

5.3 Research quality

Much effort has gone into ensuring the quality of the overall research; mainly through the early development of the methodology. This is a crucial part of ensuring that the results produced are of the highest quality and from quality sources. A variety of theories were used to develop a strong theoretical framework. The authors of the many theories used in this research paper are at the top of their field namely Kovacs, van Wassenhove and Thomas. The use of multiple sources and interviews (of various types) with a leading humanitarian logistics expert and professor of the field, the WFP's Country Director for Djibouti and also an interview with longtime researcher of the people of Somalia as well as the editor in chief at the Afrikan Sarvi Journal (Horn of Africa Journal) adds to the credibility of the research.

5.4 Limitations

There have been a few hurdles during the research process, however they were resolved in time. The World Food Programme's initial hesitation to participate created some challenges and in the end their participation was limited to an email interview with rather brief responses. Therefore the researcher was compelled to desktop research for further information pertaining to the WFP and their operations. However, the author discovered that the WFP's external database was extreme vast compensating greatly for the limited participation of the WFP staff members. The Djibouti humanitarian base was originally scheduled to be fully operational a few years ago and due to financial complications it has been delayed. If the facility was up and running there would be more information to access and therefore analyse. The researcher would then also be able to determine the actual benefits and complications faced if the base was fully functional, as originally scheduled. Other limitations include the authors limited interviewing skills and experience. The research process and outcomes may have been more effective had the author been equipped with better research skills.

5.5 Suggestions for further research

The WFP's Djibouti humanitarian base is now scheduled to be fully operational by March 2016. Further research can be conducted on the benefits and challenges that are actually experienced by the parties involved once it has been in use for some time. The WFP should also have a participatory and partnership guideline specific for the Djibouti base and the people of the HOA.

5.6 Self-evaluation

This research was a great challenge, however it was also a rewarding process for the researcher. The researcher was unfamiliar with the humanitarian logistics field all together prior to November 2014. This process has been personally transforming and an enormous learning experience for the author. In fact the research process has completely redirected the author's career goals. The author now seeks a career pathway in humanitarian logistics. This research process allowed for the researcher to delve into an area of logistics that combines the author's love for contributing to greater society with her Global Supply Chain Management specialization. The researcher intends to further study the field of humanitarian logistics at Hanken School of Economics, where an English Master's Degree Programme in Humanitarian Logistics is offered.

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Attachments

Attachment 1. List of abbreviation

HOA – Horn of Africa

IFRC – International Federation of the Red Cross

NGOs – Non-governmental organizations

SCM – Supply chain management

UN – the United Nations

UNHRD – United Nations Humanitarian Response Depots

WFP – World Food Programme

Attachment 2. Overlay matrix

Research Question	Investigative Questions (IQs)	Theoretical Framework	Measurement Methods	Results
How to ensure the success of the World Food Program's Humanitarian Base in Djibouti	IQ1 What are the benefits and the challenges of pre-positioning food aid in the Horn of Africa	1.Humanitarian logistics Specifically related to pre-positioned inventory	Desktop research Expert Interview (Qualitative)	Benefits & Challenges specific to the HOA
	IQ2 How can the local population of the Horn of Africa participate in disaster preparedness and contribute to the Djibouti base?	1.Logistics Management 2.Humanitarian logistics 3.Disaster Preparedness & Management 4.Pshychology of participation	Desktop research Expert Interview (Qualitative)	Beneficial outcomes of local population participation
	IQ3 What recommendations can be made to ensure the success of the Djibouti base?	1.Humanitarian logistics 2.Disaster Preparedness & Management	Desktop research Expert Interview (Qualitative)	Recommendations

Attachment 3. Qualitative interview framework

Qualitative Interview Frame		
Thematic Category	Questions	Questions – Additional and Assisting the Interviewer
Introduction	<ol style="list-style-type: none"> 1. What are some of the differences between humanitarian logistics and private business logistics? 	What is your background in humanitarian logistics and how you got into humanitarian logistics?
Topic 1: Benefits and Challenges of Pre-positioning in the Horn of Africa	<ol style="list-style-type: none"> 1. What are some benefits and challenges of Pre-positioning food items? 2. Some benefits and challenges specific to the region of the Horn of Africa 3. What challenges do you foresee the WFP experiencing in the region? 	<p>Are you familiar with the region of the Horn of Africa – and their specific challenges?</p> <p>How do you think these challenges can be overcome?</p>
Topic 2: Local Population Participation	<ol style="list-style-type: none"> 1. What measures can the local population take to minimize the effects of disasters such as droughts, famine and hunger crisis? 2. What is your thought on the level of participation of local communities (village level or the governmental level) – is enough being done 3. How Important is local participation – what hinders can it bring about? 4. What are some ways the local communities can participate in the Djibouti Base? 5. What can the WFP do to better facilitate opportunities for community engagement? 6. What can governments do to encourage preparation and participation? 	
Topic 3:	<ol style="list-style-type: none"> 1. Do you have any recommendations for the WFP to ensure the success of the facility? 	

Attachment 4. Kovacs interview transcription

- Student: My first question would be, what are some of the main differences between humanitarian logistics and private-sector logistics or private logistics?
- Kovacs: I guess the operational challenges are different. Of course the not-for-profit aim is a big one. On that, you'll find a lot of literature already. That's [cross-talk 00:00:45] I have to say, the problem is that they always like to look at the differences. Also in literature, you'll find a lot of these kinds of, the uncertainty of demand, the unpredictability of demand, and the scarcities versus da da da da da. There are a lot of those things coming up. In fact, logistically, it's pretty simple.
- Kovacs: The same logistical concepts still apply. You don't have- Of course, the financial flows are very different in the humanitarian area. Whether you want [inaudible 00:01:33] military inventory or Pre-positioning or whatever, that's the same.
- Student: My second question would be, I guess I've already asked, are you familiar with the region of Horn of Africa and their specific challenges? What are some of the challenges as far as Pre-positioning food supplies? What challenges may arise from the Horn of Africa
- Kovacs: I would say that that differs quite a bit depending on the particular country you're in in the Horn of Africa. There are some real challenges in Ethiopia about being able to actually own warehouse space, own buildings or the land for buildings and some warehouses. The only thing you can do is just to lease something. That's a regulation that is very specific there. There are specific problems in Somalia when it comes to foreign nationals entering the country. If you're not Somali, they ... Somali government has had their on and off with kicking out foreign nationals, almost kicking out foreign nationals. That's kind of one of the issues there. Of course, then, the war zones. Anything from Mediterranean to Somalia to wherever. Typical security issues and challenges of that, I'd say.
- Student: Mm-hmm (affirmative). Since there have been reoccurring droughts in the region for a pretty long time, and I think that region is kind of susceptible to droughts, what would some of the benefits of Pre-positioning the food be? Would there be more benefits as compared to challenges?
- Kovacs: Of course, Pre-positioning always has the whole aspect of being able to prepare for eventualities. In this case, of course, when it comes to food, it would be all the famines that you are talking about. The region is susceptible to droughts. It's not new that it is susceptible to droughts. One drought doesn't necessarily cause a famine. It's more- Once you have two consecutive droughts, then you start talking about having situations and then you'll also see the impact. The whole idea of Pre-positioning food, of course, be to be close to an area that has large demand or potential large demand. It doesn't mean that you want to have pre-position all the time, it doesn't mean that you want to pre-position in regions that are unstable. That's one of the big issues. Pre-positioning and humanitarian logistics very often assess, also, the regional stability and the accessibility of regions. Any kind of decision needs to be backed up if that location- actually managing to reach out to the places you want to go.

- Student: Okay. I don't know if you're aware, but there have been some criticism as far as how the world food programme has dealt with the most recent crisis in Somalia in 2011-2012, as far as who they were getting their- who they were allowing to transport the foods and foods gone missing and not necessarily ending up to the actual vulnerable peoples.
- Kovacs: Yes. At the same time, Somalia also did not allow any foreign national of any humanitarian organization to enter the country. Who was allowed or who could actually enter the country and could potentially transport anything was very limited. That's a political game. That's a political game that is one and off. It comes every now and then. If it collides with a drought situation or a famine situation, of course, it will impact on how the aid is going to be distributed. I wouldn't necessarily want to say that this is an issue that the World Food Programme has caused, nor would it be unique to the World Food Programme. Once it impacts, it impacts on every humanitarian organization and on the distribution of any kind of humanitarian aid.
- Student: Mm-hmm (affirmative). Okay. How do you think- What would you recommend- Once again, you said it's political, but what sort of recommendations do you think you could make so that they don't face that same political issues with ... ?
- Kovacs: One of the things that of course a lot of the organizations have done, they have hired nationals of different countries who would be able to then enter, and who would then be able to organize things. That is probably the best counter-measure to any kinds of these political games. It's just, typically in a war situation it's very difficult to find, then, people who could be the nationals of a particular country but be accepted by every tribe, by every fraction, by every- It poses other kinds of problems that an outsider sometimes can go through it and suddenly, if you're from the wrong tribe, you can't. If you're from the right tribe, you can go through but certain other people can't. It's always very difficult to find the right personnel.
- Student: Okay. Speaking- going right into hiring nationals, one of my questions is actually specifically related to how the local population can be mobilized and engaged. What measures can the local population take to minimize the effects of disasters? In measures of preparedness.
- Kovacs: That will depend on the region a lot. The types of disasters you face will have an impact on which measures you want to take. To give you an example, I'm from Austria originally. We have avalanches. We are preparing for avalanches a lot, but they're not prepared for drought or famine. Of course, when it comes to the Horn of Africa and it comes to droughts and famines, water management is one of the biggest issues. Water and sanitation in general. Then, climate change adaptation, partly, would be a thing. When it then really comes to those parts where you have full-fledged wars, war-zone-like situations, I'm at a loss what you can do if you don't have peace. If you cannot even just plant and harvest in peace.
- Student: Mm-hmm (affirmative). Okay. What are your thoughts on the level of participation in the local communities, at the village level or even at the governmental level? Is enough being done to engage the local population? I know there's some regions, obviously, where there's conflict and they're just surviving, basically, then there's regions like Djibouti where they're sort of thriving. How can other groups of people that are not in war zones participate?

- Kovacs: I guess a lot of it boils down to willingness of participation, including communities in decision-making and including communities to set up their own systems. For example, even payment schemes and microfinance schemes to access basic services, so to say. That could be a well that could be helping each other with harvests. Mobilizing a community to help one another. That kind of community resilience, if that's built up, a lot of the disasters never escalate. A lot of the things then ... For example, when I said that the first drought usually doesn't cause a famine. Once you have a first drought and you have a first crop failing, most people rely on the social networks and their extended families and so forth. On basic aid or moving somewhere or sending your kids to an aunt or whatever. It's only when the second drought comes in, when the crop again has failed and not even the social network has any kind of back-up, when your resilience fails to cope with any kind of nutrition situations. In that sense, it's really this community resilience and the social networks that cope first.
- Student: Okay. In that first phase, aside from the government taking action and letting the world know that they're facing this first phase of the drought that could possibly lead to a famine, what could the village-level individuals do besides moving from one place to another? What sort of-
- Kovacs: [inaudible 00:11:23] just very basic things, also, of having a community silo and community preparedness of stock when it comes to food items, which is being done all over the world.
- Student: Is it being done in the Horn of Africa?
- Kovacs: It depends a lot on the community. In some of the communities it would be done. The same kind of in some of the Ethiopian communities that have [inaudible 00:11:47] systems of how to pay for water and how to maintain water points and things like that. It depends on where exactly you are. It's not a full-fledged same type of system for every community in the Horn of Africa. There are very good examples of how it can work, too.
- Student: In Ethiopia?
- Kovacs: In Ethiopia, mostly. Those parts of Ethiopia, again, that are not in conflict.
- Student: Okay. In which ways do you think the local community can participate, specifically in the Djibouti base? I know that the World Food Programme is obviously in charge of managing the facility.
- Student: As far as- from the information I have, it's the World Food Programme that's in charge of management.
- Kovacs: Usually- The World Food Programme manages, actually, also UNHCR. In that sense, yes. If it's really a big hub that they want to establish, then it would be- Yeah. The United Nations Humanitarian Response Depot network. If it's smaller and it's only World Food Program-specific, then of course it can be just World Food Program. That's what I'm saying. I'm not really familiar with what exactly they want to do there.
- Kovacs: How can communities involved in that help? Typically, it's local personnel that is involved first. The World Food Program, when it comes to this nutrition items for emergencies, that's not the basic foods that you would store.

There you have ready-to-eat, therapeutical foods. Usually it's some sort of IUTF. Ready-to-eat, therapeutical foods. Ready-to-eat meals and high-energy biscuits. It's medicine. If it was bags of rice, then of course you could store it- anybody else could have stored it. When it comes to food, you store different items. As a government, typically, you store in silos the extras from harvests or collect whatever is the- whether it's now wheat or rice or depending on which crop you have in which particular region. You would have silos of those. Then when it comes to emergency food, that's not the typical thing that you are storing. There you pre-position the ready- it is practical nutrition items for emergencies, for malnutrition. For severe malnutrition, acute malnutrition, all sorts of levels of that. You also do not administer them. You don't just give it out to people, administer them at health clinics.

Student: Okay. Only by need basis, I guess.

Kovacs: Yes, and then you give it to patients. Its doctors or nurses who would see which level of malnutrition a child, for example has, or an adult has. Based on that, they would give them these food items. That's the typical thing that you pre-position as a humanitarian organization. Then of course the World Food Program, but they also do, when it comes to famines, they sometimes just bring in the bags of rice and so forth. That's not typically what you would want to pre-position. The items that you would collect from the community is not the thing that you would have there.

Student: Okay. I actually didn't know that at all. I imagined that it would be rice and- I know, being from the Horn of Africa, from my little bit of knowledge, I'm from Somaliland. I don't think we have- We don't really have any measures as far as saving extras from harvest and things like that.

Kovacs: No. Somaliland wouldn't have. Somalia wouldn't either. Ethiopia, too. Depends on the region and the territory. I don't think, no. It really so totally depends on where you're from. The saving the extra of harvests that would be the typical measure that, for example, Kenya already would do. You don't have to go very far.

Student: Okay. Okay. My last few questions are, what the World Food Programme can do to better facilitate opportunities for community engagement. I think you've sort of gone over that a little bit. What can the government do- What could these governments do to encourage preparation and participation besides what the World Food Programme would be?

Kovacs: The role of the two is quite different. What governments could do is of course encourage the saving up from the harvest. Many governments do that. One that is quite famous for it is Zambia. They are famous and infamous for it. They save up a lot from their harvests. Then of course, when the food is about to go bad, they dump it all over the markets and impact on food prices with many of the other countries, which is not always a positive thing. In any case, that would be more of the government's role, typically, to ensure that these kinds of mechanisms work. That saving up for- That you're encouraged to save up I don't know which proportions depending on which kind of crops you are talking about. The other thing that governments can do a lot with is to encourage different types of farming techniques, encourage changes in the types of crops that you are farming depending on the aridity of the land and how it's exposed to climate change, how it's exposed to different things. That would be really the governmental

things. When it comes to humanitarian organizations, whole agricultural and food monitoring and changes in agricultural techniques. That's what the FAO is for, Food and Agricultural Organization. They do a lot in that. The World Food Program, on the other hand, what they do, they deliver emergency food. They only come in once there is a famine. You would usually monitor, for example, to determine even an emergency. You would monitor admissions to clinics with different degrees of malnutrition. How many cases of severe malnutrition did you have in kids of zero to five versus older kids versus adults? How many of acute malnutrition did you have? If you're starting to have an escalation, then you start activating the supply chain to bring in the foods.

Student: Okay. Last thing, what do you think about the- I know, obviously, now that I understand what the World Food Programme does a little bit more and it's more once it occurs and nutrition-

Kovacs: They monitor and based on this data they do start activating before it really hits.

Student: Of course. What do you think about procuring from locals? For example, if Kenya is much better off in their farming and there's a lot of harvest left, what you think about procuring from the local population.

Kovacs: That's what you usually do.

Student: Do they? I've been reading that there's a lot of information out there about procuring from locals, but it's not really fact on the ground. I don't know if that's...

Kovacs: A fact on the ground, it depends what [inaudible 00:20:42]. Usually you try to do it from the region. The thing is, if you have a famine situation, and famines are quite different to the medical emergencies. If you have a famine situation, then you have a scarcity of food in the region, which means that if you then buy from the very same locals, the only thing that you do is that you impact on food prices to hike up and more people are exposed to the famine because they can't afford food anymore. You don't buy from locals in that situation. You buy from the region where you don't have the famine. Close enough, but not that you disrupt- You don't want to make the situation worse. Then you have, with other things, like for example when it comes to an earthquake and you want to have building materials, then you can buy much more locally because that doesn't necessarily disrupt people's everyday lives and everyday need to purchase food. It depends on the type of emergency you're dealing with what you buy really locally versus in the region versus farther away. The other thing that happens is that globally, you get a lot of food donations. If you- The 2011 drought famine was just a really big one. There, you could not have potentially procured anything on the ground, because it also hit too many countries in the region. The only thing you could do is to then globally ship in from different continents. It's the size of it, too. You always make an assessment of the local economy and how you will impact on the local economy if you buy locally versus regionally versus from farther away.

Student: Okay. Okay. One thing that I've actually forgotten to ask, if I could just- What is- Just a little bit about you and your background and how you got into humanitarian logistics ... Just a little bit about you.

Kovacs: I'm a professor in humanitarian logistics. I've been working in humanitarian logistics for about- with humanitarian logistics and all sorts of research projects with it since 2005. The last ten years, about. The projects differ a lot in terms of level of expertise. I actually just had a nutrition project in Kenya. We are just still analysing the data of it. That's with WFP, UNICEF and the Ministry of Health in Kenya. I visited all of the warehouses and stuff like that there. We teach warehousing inventory management to UNICEF globally.

Kovacs: On the inventory management side, you can ask me whatever. Djibouti in particular, I'm not that side that familiar with the situation.

Student: Okay. Thank you very much for meeting with me, especially on such a short notice. Thank you very much.

Attachment 5. Higgins interview responses

1. What are the benefits of pre-positioning food items in the HOA?

The main benefits of Pre-positioning is to be able to save time and money. Commodities can be bought at any time during the year, at times when prices are more favorable. With the four silos to be constructed at the hub, we'll be able to store 40,000 mt in bulk, in addition to the 25,000 mt we'll be able to store in bags. In times of crisis, such as during the severe regional drought in 2011, commodities can be dispatched much quicker if they are already pro-positioned.

2. What are the challenges of pre-positioning food items in the HOA?

No major challenge that comes to mind.

3. Is the Djibouti Humanitarian Base mentioned in this news release (<https://www.wfp.org/news/news-release/wfp-lays-foundation-stone-humanitarian-logistics-base-djibouti>) up and running and if so what beneficial outcomes has come of it? If not yet ready for use when will it be? And will the storage be for both food and non-items as mentioned in the release?

The hub will be fully operational (with silos) by March 2016. We will be able to store 65,000 mt (of which 40,000 mt in bulk and 25,000 mt in bags). It will also be used for non-food items.

4. How can the local population of the HOA participate in disaster preparedness specifically related to stockpiling?

Please see below on disaster preparedness.

5. How can the local population of the HOA participate in disaster preparedness in general? What is the WFP currently doing to promote community participation in HOA?

I would say that disaster preparedness in general is enhanced through resilience-building. Partly due to climate change, shocks/stressors in the region (especially droughts) are more frequent and severe. The population's resilience to these stressors have become thinner and thinner with the years. The loss of resilience has a direct negative effect on malnutrition, and in turn, malnutrition has a negative effect on resilience. In Djibouti, ac-

cess to water is central to resilience. Crises (droughts) in the region will always occur. What is important is to manage these crises in a way that doesn't further erode the population's resilience and increase malnutrition. Emergency preparedness is about being to help the local population to adapt/bounce back when crises occur. And what needs to be done really differs in each context. In the case of Djibouti, it goes through ensuring sustainable access to water, emphasis on preventive nutrition, and small-scale micro-gardening (where possible).

Attachment 6. Tiilikainen interview response

1. How can the local population of the Horn of Africa contribute to their own disaster management, disaster preparedness and their own disaster resilience (droughts & famine)

At least I think that food security should be improved: to increase local food production, species that can be locally produced and that resist in water scarce environment. Agroforestry has been mentioned as one good way to improve productivity; it has been practiced in other Horn of Africa countries like Sudan and now also introduced in Saxansaxo project in Somalia (a project against desertification, administered by Finnish Somalia Network and implemented jointly in collaboration of several NGOs + Viikki Tropical Resources Institute VITRI). In addition, water harvesting should be learnt and implemented; when the rain comes, it often comes in plenty and it should be harvested and stopped in certain places. Cutting the trees should also be stopped, and energy saving stoves used in order to decrease the consumption of wood and charcoal. Of course also peace is also important, so that people may stay in their farming lands.

Attachment 7. WFP's principles of partnerships and good practice guidance

Principle	Application in practice
<p>EQUITY Equity requires mutual respect between members of the partnership irrespective of size and power. The participants must respect each other's mandates, obligations and independence and recognize each other's constraints and commitments. Mutual respect must not preclude organizations from engaging in constructive dissent.</p>	<ul style="list-style-type: none"> ✓ Understand and value the resources that each partner brings, regardless of its size and status. ✓ Provide all partners with a voice in decision-making, consistent with the time available to take decisions. ✓ Respect differences in focus and methods but strive for a common vision around a shared objective. ✓ Agree on clear procedures for reconciling disagreement and resolving conflict.
<p>TRANSPARENCY Transparency is achieved through dialogue (on equal footing), with an emphasis on early consultations and early sharing of information. Communications and transparency, including financial transparency, increase the level of trust among organizations.</p>	<ul style="list-style-type: none"> ✓ Freely share information on resources, objectives and expectations at the outset ✓ Establish clear procedures and channels for communication between partners ✓ Use partnership agreements to record and clarify communication procedures ✓ Demonstrate reliability and consistency in adhering to these procedures.
<p>RESULTS-ORIENTED APPROACH Effective development and humanitarian action must be reality-based and action-oriented. This requires result-oriented coordination based on effective capabilities and concrete operational capacities.</p>	<ul style="list-style-type: none"> ✓ Agree on achievable and measurable objectives and outcomes. ✓ Ensure that available resources from all parties are compatible with these outcomes. ✓ Use partnering agreements to establish procedures for measuring outcomes and responding to challenges. ✓ Put in place appropriate procedures for review and evaluation of both the partnership process and its outcomes. ✓ Agree on a clear exit strategy based on a mutual understanding of what will constitute completion (or abandonment) of the partnership.
<p>RESPONSIBILITY Organizations have an ethical obligation to each other to accomplish their tasks responsibly, with integrity and in a relevant and appropriate way. They must make sure they commit to activities only when they have the means, competencies, skills and capacity to deliver on their commitments. Decisive and robust prevention of abuses committed by humanitarians must also be a constant effort.</p>	<ul style="list-style-type: none"> ✓ Provide partners with an unambiguous statement of WFP's ethical standards and principles of partnership. ✓ Review human resources to ensure that WFP and its partners can supply and support individuals with appropriate skills. ✓ Provide strong leadership from Headquarters and regional bureaux to support those in field-level operations. ✓ Respect international and national standards on modes of working with local communities.
<p>COMPLEMENTARITY The diversity of the humanitarian community is an asset if we build on our comparative advantages and complement each other's contributions. Local capacity is one of the main assets to enhance and on which to build. Whenever possible, humanitarian organizations should strive to make it an integral part in emergency response. Language and cultural barriers must be overcome.</p>	<ul style="list-style-type: none"> ✓ Provide potential partners with a clear statement of WFP's strengths and the value it contributes to partnership. ✓ Gather data on potential partners to provide insight into knowledge, skills and scope complementary to those of WFP. ✓ Recognize the need to balance WFP values and operational modalities with principles and procedures determined by local culture. ✓ Plan for the long-term need to develop local capacity and to empower national organizations to assume responsibility for food security.

Attachment 8. List of figures, tables and pictures

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Figure 6. Humanitarian supply chain

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