

Table of Contents

Acknowledgement	i
Abstract	i
1 Introduction	1
1.1 Background	1
1.2 Problem Discussion	2
1.3 Research Purpose	3
1.4 Report Structure	4
2 Frame of Reference	5
2.1 Humanitarian Context	5
2.2 Humanitarian Relief Actors	6
2.2.1 Presentation of the Different Actors	6
2.2.2 A Focus on UN Aid Agencies	6
2.2.3 A Focus on LSPs	8
2.3 Humanitarian Logistics	8
2.4 Humanitarian Logistics vs. Commercial Logistics	9
2.5 Disaster Relief Operations	10
2.5.1 Disasters, Types and Consequences	10
2.5.2 Phases of Disaster Relief Operations	11
2.6 Logistics & Disaster Relief Operations	13
2.7 Collaboration & Coordination	13
2.8 Form a Relationship: The Partnership Model	14
2.9 Form a Relationship: Effective Relationships	16
2.10 Synthesis – Research Model/Conceptual Framework	17
2.11 Research Questions	18
3 Methodology	19
3.1 Research Design	19
3.2 Research Strategy	20
3.3 Data Collection	20
3.3.1 Conceptual framework	21
3.3.2 Semi-Structured Interviews	21
3.3.3 Development of Interview Questions	22
3.4 Analysis Process	22
3.5 Evaluation	23
3.5.1 Reliability	23
3.5.2 Validity	23
3.5.3 Limitations	24
3.6 Research Ethics	24
4 Empirical Findings	25
4.1 Case Background	25
4.2 UNICEF	25
4.3 WFP	26
4.4 UNICEF Mozambique – Management Level	26
4.4.1 Drivers and Outcomes	26
4.4.2 Facilitators	26

4.4.3	Constraints.....	27
4.4.4	Components.....	28
4.5	UNICEF Mozambique – Logistics Level.....	29
4.5.1	Drivers and Outcomes	29
4.5.2	Facilitators.....	29
4.5.3	Constraints.....	30
4.5.4	Components.....	31
4.6	UNICEF Mozambique – Anonymous Informant.....	31
4.6.1	Drivers and Outcomes	32
4.6.2	Facilitators.....	32
4.6.3	Constraints.....	32
4.6.4	Components.....	33
4.7	WFP Mozambique – Logistics Level.....	33
4.7.1	Drivers and Outcomes	33
4.7.2	Facilitators.....	34
4.7.3	Constraints.....	35
4.7.4	Components.....	35
5	Analysis.....	37
5.1	Influence of the Drivers and the Outcomes on the Relationship between UNICEF and Its LSPs.....	37
5.2	Influence of the Facilitators on the Relationship between UNICEF and Its LSPs	38
5.2.1	Compatibility of Corporate Culture	38
5.2.2	Compatibility of Management Philosophy	39
5.2.3	Complementarity of Capabilities.....	39
5.3	Influence of the Constraints on the Relationship between UNICEF and Its LSPs	40
5.3.1	Sudden Massive Workload and Findings	40
5.3.2	Need for Trust among the Actors and Findings	41
5.3.3	Political Interests of the Different Actors and Findings	41
5.4	Influence of the II Components on the Relationship between UNICEF and Its LSPs.....	41
5.4.1	Time to Build.....	42
5.4.2	Contact Intensity.....	42
5.4.3	Contact Familiarity	42
5.4.4	Degree of Formality	42
5.4.5	When to Build	42
5.4.6	Groups Joined/Formed	42
5.4.7	Degree of Simplicity	43
5.4.8	Adherence to Principles.....	43
5.4.9	Symmetry of Players.....	43
5.4.10	Compatibility	43
5.4.11	Complementarity	43
5.5	The Conceptual Framework after Research.....	43
5.5.1	The Conceptual Framework Modified.....	43
5.5.2	Summary of the Components.....	44
6	Conclusion.....	45

6.1	Research Conclusion.....	45
6.2	Theoretical Contributions	46
6.3	Final Reflections.....	46
6.4	Managerial Contributions	46
6.5	Suggestions for Future Research	47

List of References	48
---------------------------------	-----------

Appendix A – Interview Questions UNICEF	53
--	-----------

Appendix B – Interview Questions WFP	55
---	-----------

Appendix C – Confidential Agreement Form.....	57
--	-----------

List of Figures

FIGURE 1 HUMANITARIAN SPACE AND PRINCIPLES SOURCE: TOMASINI AND VAN WASSENHOVE 2004	5
---	---

FIGURE 2 HUMANITARIAN ACTORS AND THEIR RELATIONSHIPS SOURCE: COZZOLINO 2012 .	6
---	---

FIGURE 3 THE SUPPLY CHAIN FLOWS SOURCE: TOMASINI AND VAN WASSENHOVE 2009.....	9
---	---

FIGURE 4 PHASES OF DISASTER RELIEF OPERATIONS SOURCE: KOVACS AND SPENS 2007.....	11
--	----

FIGURE 5 THE FOUR MAIN PHASES OF A DISASTER MANAGEMENT SYSTEM SOURCE: NIKBAKHSH AND FARAHANI 2011	11
---	----

FIGURE 6 THE PARTNERSHIP MODEL SOURCE: LAMBERT AND KNEMEYER 2004	15
--	----

FIGURE 7 CONCEPTUAL FRAMEWORK ON BUILDING EFFECTIVE RELATIONSHIPS DURING DISASTER RELIEF OPERATIONS SOURCE: BALLAND AND SOBHI 2013	18
--	----

FIGURE 8 EVOLUTION OF THE LOGISTICS SERVICES USAGE MADE BY UNICEF MOZAMBIQUE DURING AN EMERGENCY SOURCE: BALLAND AND SOBHI 2013	38
---	----

FIGURE 9 FRAMEWORK FOR AN EFFECTIVE RELATIONSHIP BETWEEN TWO HUMANITARIAN ACTORS SOURCE: BALLAND AND SOBHI 2013	44
---	----

I Introduction

In this chapter, the reader will be introduced into the area of humanitarian relief organizations, its background and the associated problem discussion. This problem discussion, presented at the end of the chapter, will narrow down the topic and be the foundation for the purpose of the thesis.

I.1 Background

Nowadays, humanitarian relief organizations are more and more present in people's lives. Disasters are occurring more often than they used to 100 years ago and the number of people they affect has increased continuously (EM-DAT, 2013). Recent studies point towards the fact that, in the next fifty years, disasters occurrences will be multiplied by five, mainly due to climate change developments, environmental degradation and rapid urbanization (Thomas & Kopczak, 2007; Schulz & Blecken, 2010; Nikbakhsh & Farahani, 2011). Additionally, it is reported that the total number of recorded natural disasters has multiplied more than sixfold over the last 30 years (Hoyois, Below, Scheuren, & Guha, 2007; Schulz & Blecken, 2010). This actually confirms the trend that humanitarian relief organizations will have to face tremendous work in the near future. Hence, a need for an even more effective international disaster response has emerged (Schulz & Blecken, 2010).

Interestingly, the results of the different actions humanitarian relief organizations conduct are uneasy to precisely assess, both measurably and quantifiably (Tomasini & Van Wassenhove, Humanitarian Logistics, 2009b). It is argued that performance measurement within the humanitarian sector presents some unique characteristics. Services provided in humanitarian relief operations are intangible and hard to quantify, outcomes are unknown, the performance of each mission is hard to quantify, interests and goals between the different actors differ, and accuracy and reliability of available data is not satisfactory (Nikbakhsh & Farahani, 2011).

Nevertheless, the main goal humanitarian relief organizations have consists in saving lives as well as alleviating peoples' suffering caused by disasters (Balcik B. , Beamon, Krejci, Muramatsu, & Ramirez, 2010; Balcik & Beamon, 2008). According to Tomasini & Van Wassenhove (2009) humanitarian relief organizations are driven by the supply (donors), whereas for-profit organizations are driven by the demand (customers). This unique specificity affects the way humanitarian logistics is thought, managed and measured.

Humanitarian relief supply chains seek a balance between speed and cost, before focusing on profit (Tomasini & Van Wassenhove, 2009a). It has been emphasized that the speed of reaction after a disaster strikes is of the utmost importance, especially since the first 72 hours can save a maximum of lives (Tomasini & Van Wassenhove, Humanitarian Logistics, 2009b). Since humanitarian relief organizations must cope with a numerous number of actors that have to be coordinated and managed, we do not talk anymore about having a logistic approach only, but rather about a supply chain management approach (Oloruntoba & Gray, 2006). Therefore, the specificities that humanitarian relief organizations present regarding their supply chains must be highlighted. Firstly, objectives are most of the time ambiguous and unclear. Secondly, resources are scarce and uneasy to gather, both in terms of human capital, financial resources and adequate infrastructures. Thirdly, they evolve in an environment that is particularly uncertain. Fourthly, urgencies are actually part of their daily job. Fifthly, they focus on acting as fast as possible, therefore sidelining any profit-oriented vision. Finally, they evolve in an environment that is particularly sensitive to political concerns (Tomasini & Van Wassenhove, Humanitarian Logistics, 2009b).

In addition to those specific characteristics, humanitarian relief logistics present capacity issues. Organizations that intervene in the humanitarian area tend to have employees that lack depth in professional knowledge because they tend to present backgrounds that reflect the objectives of the corporate world. Moreover, funds are biased on short-term responses, thus tying into the uncertainty of the environment in which those organizations have to cope with daily. Lastly, limited financial resources coupled with uncertainty restrain investments in logistics services and infrastructure, such as in information technology (IT). Therefore, those services are often transferred or delegated to logistics service providers (LSPs) (Gustavsson, 2003).

The need to integrate logistics service providers into humanitarian relief operations has been recognized. Authors advocate that “*humanitarian logistics, the function that is charged with ensuring efficient and cost-effective flow and storage of goods and materials for the purpose of alleviating the suffering of vulnerable people*” (Thomas & Kopczak, 2005, p. 1) received positive, public acknowledgement in regards to the role of logistics in effective relief, after the 2004 Asian Tsunami. An overabundance of relief goods that had to be sorted, stored and distributed as well as flight capacity, warehousing, bottlenecked transportation pipelines and infrastructure were only a few critical issues to deal with at that time. Nevertheless, Doctors Without Borders called for “supply managers without borders” in order to effectively ensure the flow of goods to the victims of the disaster. Therefore, the role of logistics service providers is imperative to the effectiveness and speed of response to victims of disaster (Thomas & Kopczak, 2005).

Humanitarian logisticians are not often recognized as being a critical support function to the success of relief efforts, whose roles are under-utilized and only confined to executing decisions after they are made. Consequently, this places an enormous burden on logisticians who have not been given an opportunity to articulate and coordinate the physical constraints in the planning process. Moreover, tensions arise when the actors within the disaster relief operations cannot understand delays and breakdowns in the supply delivery process (Thomas A. , 2003).

In their concluding remarks, McLachlin & Larson (2011) state that relationship building efforts and complementary services would lead to better relationships, which in turn would lead to better coordination and effectiveness within humanitarian supply chains. For only a handful of aid agencies, prioritizing the creation of high-performing logistics and supply chain operations is lacking during disaster relief (Thomas & Kopczak, 2005). As a result, building a relationship between humanitarian organizations and logistics service providers could accommodate better performance.

1.2 Problem Discussion

It is known that successful supply chains only emerge when the different actors involved are capable of working efficiently all together (Tomasini & Van Wassenhove, Humanitarian Logistics, 2009b). Unfortunately, no single actor has sufficient resources to respond effectively to a major disaster (Bui, Cho, Sankaran, & Sovereign, 2000). Post-disaster relief environment, the large number and variety of actors involved in disaster relief, and the lack of sufficient resources are a few factors contributing to coordination difficulties in disaster relief operations (Balcik et al., 2010). Rey (2001) indicates that coordination efforts are a fundamental weakness of humanitarian action (cited in Balcik et al., 2010). Additionally, humanitarian relief organizations find it difficult to collaborate, thus failing to make the effort (Fenton, 2003; Balcik et al., 2010). The inability to coordinate often leads to an increase in

inventory costs, lengthy delivery times, and negatively effects service to the beneficiaries (Simatupang, Wright, & Sridharan, 2002).

Studies advocate there exist two types of risk that affect the effectiveness and the efficiency of humanitarian supply chains: the disruption risk and the coordination risk (Tomasini & Van Wassenhove, Humanitarian Logistics, 2009b). Whereas the disruption risk relates to complexity and geographical dispersion, the coordination risk refers to ensuring both demand and supply match with each other, despite the *“pressures of cost-conscious lean and leaner designs”* (Tomasini & Van Wassenhove, Humanitarian Logistics, 2009b, p. 13). In order to eliminate the coordination risk and achieve economies of scale (Schulz & Blecken, 2010) suggest the use of collaboration amongst key actors, such as between service providers and humanitarian relief organizations. Mason, Lalwani, & Boughton (2007) support as well this idea, namely that improving transport and supply chain performance often involve various forms of collaboration. Unless humanitarian actors learn how to collaborate and co-manage relief chains, performance may not be enhanced, thus leading to dramatic consequences for stricken populations (Chandes & Pache, 2010).

Schulz & Blecken (2010) emphasize the lack of inter-organizational cooperation and coordination within humanitarian relief supply chains. In order to improve or even maintain the level of assistance to those victims affected by disaster, efficiency and effectiveness of the response must be improved in terms of cost, time and quality. The logistics function can constitute a main improvement lever in this regard because it accounts for up to 80 percent of the total funds spent in disaster response (Trunick P., 2005; Van Wassenhove, 2006; Schulz & Blecken 2010).

Although the humanitarian relief logistics subject is relatively new, it has received a large interest from many researchers since 2005 (Natarajarathinam, Capar, & Narayanan, 2009). However, the literature lacks particular attention concerning the coordination roles and objectives between humanitarian relief organizations and LSPs during disaster relief operations (Tomasini & Van Wassenhove, Humanitarian Logistics, 2009b).

ReliefWeb (2013) published on their website an overview of a flooding disaster in Mozambique that had occurred on January 12, 2013 and escalated to higher measures of emergency just 10 days later. By February 20, 2013, at least 113 people had been killed and the floods had displaced over 185,000 people. In a situation report UNICEF Mozambique (2013), the government of Mozambique called for *“ongoing service provision to accommodation centers for displaced families and children until conditions enable a return to normalcy”*. This request depended on the successful coordination of disaster relief operations, namely between UNICEF and its logistics service providers (LSPs).

1.3 Research Purpose

As such, it is important to understand the elements that drive, facilitate, constrain and affect the relationship UNICEF has with its LSPs.

The purpose of this study is to explore the relationship between UNICEF and its LSP(s) during disaster relief operations.

By fulfilling their purpose, the authors of this research will contribute to the existing literature on the topic of humanitarian logistics. Furthermore, they will provide their readers and audience with a clear understanding of the similarities and the differences that exist between a UN organization and its logistics service provider(s). As a result, humanitarian relief organizations will be given the elements that drive, facilitate, constrain and affect the ef-

fectiveness of their relationships with their LSPs when intervening in disaster relief operations.

I.4 Report Structure

The structure of this report is as follows: chapter two will contain the frame of reference, while chapter three will present the methodology. In chapter four, the empirical findings will be presented. The analysis of the empirical findings and their connections with the theories will be discussed in chapter five. Finally, chapter six will contain the research conclusion, research contributions and suggestions for future research.

2 Frame of Reference

In this chapter, the authors will present the relevant theories surrounding the purpose of the research. The first section concerns humanitarian context, its definitions and its principles. The next section presents some of the different actors involved in humanitarian relief operations. The third section highlights the characteristics of humanitarian logistics, while the fourth section compares humanitarian logistics and commercial logistics. The fifth section presents the nature of disaster relief operations and its phases. The sixth section emphasizes the connection that exists between logistics and disaster relief operations, while the seventh section presents basic principles of cooperation and collaboration within humanitarian logistics. A model on how to form an effective relationship is then presented, followed by a conceptual framework. Finally, the research questions are presented.

2.1 Humanitarian Context

The humanitarian term imposes a specific space/environment in which the actors are allowed to evolve (DeChaine, 2002). Those are commonly referred to as humanitarian relief organizations that are in charge of completing as best as they can the mission as follows: to aid people in their survival (Kovacs & Spens, 2007). Humanitarian relief organizations have many rights, duties and responsibilities that limit their actions. They live by three important principles: humanity, neutrality and impartiality (Tomasini & Van Wassenhove, 2009b). This means that the different actors that take part in a relief supply chain must comply with those three principles too.

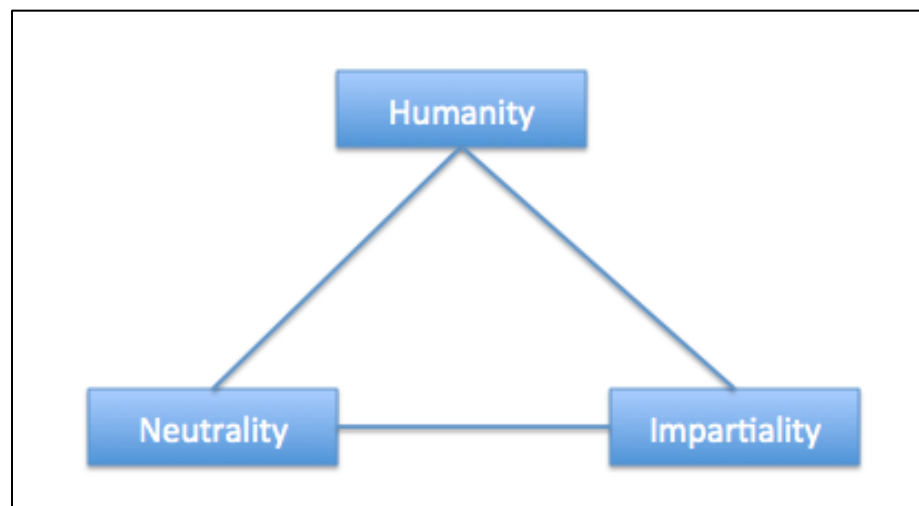


Figure 1 Humanitarian Space and Principles Source: Tomasini and Van Wassenhove 2004

One common problem that humanitarian relief organizations face is that whereas they are often perceived as being a “zone of tranquility” by the ones that received their help, they have to be really careful with the environment they evolve in. In other words, their actions must not be interpreted as favoring one side over the other, especially in tensed political contexts. It is advocated that humanitarians “cannot judge the conflict but they can only judge the extent to which the conflict is affecting civilians” (Van Wassenhove, 2006, p. 479).

Since the beginning of the XXI century, donors have asked for more transparency in order to measure the actions of the ones they subsidize, namely humanitarian relief organizations. In order to complete their mission efficiently, those organizations are in charge of carrying out various processes. They can either provide the services themselves or contract them throughout a third party. Among those processes, the logistics need now occupies a central

position that forces humanitarian organizations to become more result-oriented than they used to be (Van Wassenhove, 2006).

2.2 Humanitarian Relief Actors

2.2.1 Presentation of the Different Actors

When engaging in humanitarian relief operations, a range of players with different cultures, purposes, interests, and mandates have to closely work together (Hilhorst, 2002). Alessandra Cozzolini (2012) advocates that there are seven main actors interacting at the same time when conducting relief operations. The following model presents the different relationships that exist between those distinct actors.

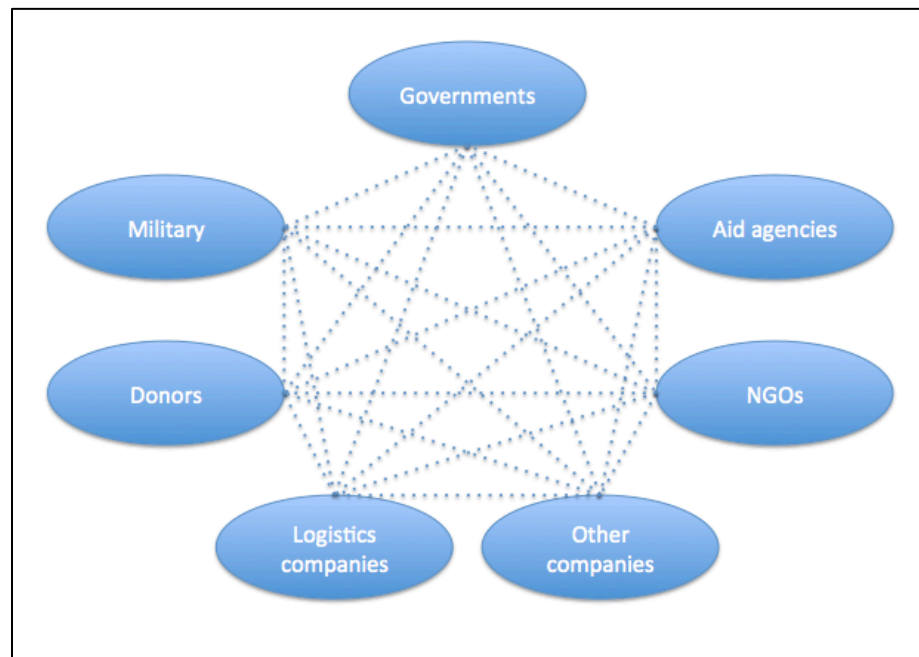


Figure 2 Humanitarian Actors and Their Relationships Source: Cozzolino 2012

Host governments authorize and activate humanitarian logistics stream after a disaster strikes. The military can provide resources and primary due to its historical logistics and planning capabilities. Donors represent the sources of funding through donations, either in-cash or in-kind. Since in-kind donations tend to always come from the private sector, donors fund relief operations throughout financial means. Aid agencies are “*actors through which governments are able to alleviate the suffering caused by disasters*” (Cozzolino, 2012, p. 13). For instance, one of the most important is World Food Program (WFP) that highly contributes to relieving many disasters, especially in terms of logistics. Logistics and other companies in the model represent those companies that come from the private sector, and are increasingly growing within the humanitarian relief environment. Lastly, non-governmental organizations (NGOs) actually include several and disparate actors. Some can even be temporary players that are created just because of certain needs triggered by the disaster (Cozzolino, 2012).

2.2.2 A Focus on UN Aid Agencies

According to UN (2013), after WW2, 51 countries committed to maintaining international peace and security, developing friendly relations among nations and promoting social progress, better living standards and human rights. Thus, the United Nations (UN) was born

as an international organization to be the center for harmonizing the actions of nations to achieve these goals. Currently, there are 193 Member States from all over the world.

The UN (2013) can take action on a wide range of issues, mainly due to its unique international character and the powers vested in its founding Charter. Additionally, a forum through the General Assembly, the Security Council, the Economic and Social Council and other bodies/Committees is provided where the current, 193 Member States can express their views. The UN is well-known for peacekeeping, peace building, conflict prevention, and humanitarian assistance. The Organization is also known for working on a broad range of fundamental issues such as sustainable development, environment and refugee protection, and disaster relief to promoting human rights, democracy, and governance. The Organization works proactively in these aforementioned areas in order to coordinate efforts and to achieve its goals for a safer world for the current and future generations.

According to UN (2013), 189 Member States of the UN gathered for one of the largest gatherings of world leaders in September of 2000 to discuss their future. Increased and ever-growing globalization, higher living standards and new opportunities tied these Member States together. Commonality across the States was unevenly distributed and disparate in regards to their citizens' lives. For example, while some States grew upwards in prosperity and global cooperation, other States had endless conditions of poverty, conflict and a degraded environment. As a result, the convened leaders of the summit established a series of collective priorities for peace and security, poverty reduction, the environment and human rights known as the Millennium Declaration. *"Human development is the key to sustaining social and economic progress in all countries, as well as contributing to global security"* (UN, 2013). These steps were considered essential to the advancement of human kind as well as the immediate survival for a large portion of it.

According to UNICEF (2013a), to further aid the priorities of the world community, a blueprint for a better future was laid out, known as the Millennium Development Goals (MDGs). It was agreed that by 2015, the world and its leaders would achieve measurable improvements in the most vital areas of human development. The MDGs set priorities for children, even though the goals are for all humankind. This is because six of the eight goals relate directly to children, meeting the goals is most critical for children, children have rights, and reducing poverty starts with children. They are the most vulnerable when people lack essentials such as food, water, sanitation and health care. Additionally, they are the first to die when basic needs are not met. Thirdly, each child is born with the right to survival, food, nutrition, health and shelter, and education, and to participation of equality and protection. All of these factors were established in the 1989 international human rights treaty known as the Convention on the Rights of the Child. In order to meet the goals of this treaty, the MDGs must be realized. Lastly, by helping children reach their full potential, investment in humanity is directly related. This is because the first years of a child are considered crucial and make the biggest difference in a child's physical, intellectual and emotional development. Moreover, investing in children equates to achieving MDGs faster, especially since children make up a large percentage of the world's poor.

Working for the UN and assisting in the accomplishment of the established MDGs are several UN organizations, each designated to a particular task. One of those UN organizations is UNICEF, which is the only intergovernmental agency devoted exclusively to children. It is mandated by the world's governments to promote and protect children's rights and their well-being. In addition to other UN agencies and global partners, UNICEF has taken the MDGs as part of its mandate. Each UNICEF action is proactively works toward

a MDG – from working with local policymakers toward health care and education reform to delivering vaccines.

2.2.3 A Focus on LSPs

Langley, Coyle, Gibson, Novack, & Bardi (2008) define logistics service providers (LSPs) as a provider of logistics services that performs the logistics functions on behalf of their clients. Those functions typically include warehousing, inventory management, and transportation.

Lieb, Millen, & Wassenhove (1993) define them as “*the use of external companies to perform logistics functions that have traditionally been performed within an organization. The functions performed can encompass the entire logistics process or selected activities within that process*”. From a strategic point-of-view, Bagchi & Virum (1996) have developed the following definition:

“A logistics alliance indicates a close and long-term relationship between a customer and a provider encompassing the delivery of a wide array of logistics needs. In a logistics alliance, the parties ideally consider each other as partners. They collaborate in understanding and defining the customer’s logistics needs. Both partners participate in designing and developing logistics solutions and measuring performance. The goal of the relationship is to develop a win-win relationship”.

Other literature indicates that LSPs are enablers, or used as “tools”, in achieving supply chain integration (Fabbe-Costes, Jahre, & Roussat, 2008). Bolumole (2003) suggests that the role of a logistics service provider is subject to its observable activity and behavior. It is largely dictated by the external constraints of the underlying structure of the client-LSP relationship in addition to other client requirements. Organizations generally have defined and distinctive roles. Skjoett-Larsen (1999) concludes in his research that the role of LSPs is not merely a means to cost efficiency, but also as a strategic tool for creating competitive advantage through increased service and flexibility.

As such LSPs have become increasingly influential in the context of supply chains, which is reflected in the trend to outsource logistic activities (Panayides & So, 2005). Panayides & So (2005) suggest that those logistics functions undertaken will influence effectiveness and performance in the supply chain. In order to improve the supply chain process, a close understanding and collaboration is required with their clients in order to understand their business. Through their conceptual model and six research hypotheses tested, studies show a positive influence on key organisational capabilities (e.g. organisational learning and innovation), thus promoting an improvement in supply chain effectiveness and performance when a closer relationship between LSPs and their clients is formed. Ultimately, the competitiveness of LSPs creates value for their clients through cooperation.

2.3 Humanitarian Logistics

Humanitarian logistics can be defined as “*an umbrella term for a mix array of operations*” (Kovacs & Spens, 2007, p. 99). Logistics refers to getting the right goods to the right place delivered to the right people at the right time (Ballou, 2007). Several authors have advocated that in the case of disaster relief operations, more than 80% of the actions humanitarian organizations take are related to logistics (Trunick, 2005). Therefore, humanitarian organizations are now aiming for a “*slick, efficient and effective way of managing their operations*” (Van Wassenhove, 2006, p. 475). This is often commonly referred to as creating a need for effective and efficient supply chain management (Beamon & Kotleba, 2006).

An efficient supply chain encompasses the five B's: boxes, bytes, bucks, bodies and brains (Tomasini & Van Wassenhove, Humanitarian Logistics, 2009b). These five elements represent the different flows of a supply chain. Boxes make reference to the flow of products and goods, whereas bytes represent information flows. Bucks represent the financial flows that occur all along managing a supply chain, and bodies are portrayed throughout all the manpower that is deployed within the different processes. Finally, brains refer to the flows of abilities and skills people have, so as to be able to adapt to any supply chain in any situation.

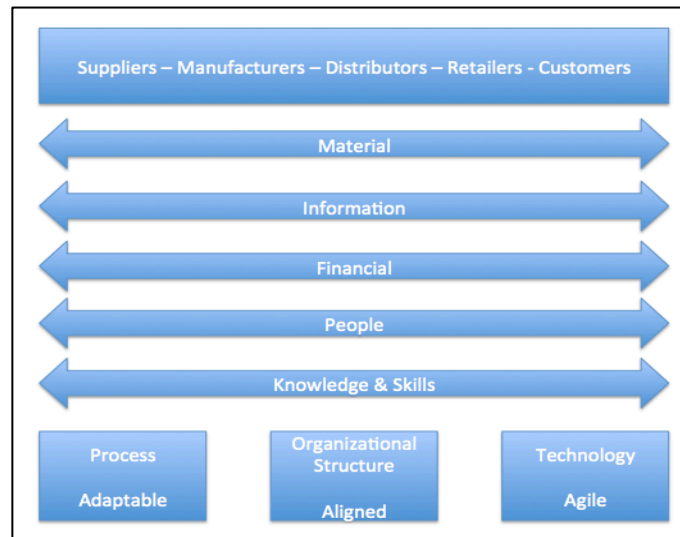


Figure 3 The Supply Chain Flows Source: Tomasini and Van Wassenhove 2009

Quite a long time ago, the private sector realized how critical a supply chain could be to its success. However, it is often advocated humanitarian relief organizations lag well behind that point. Managers are now realizing little by little the importance a supply chain can represent to the completion of their mission. Moreover, the logistics function has been perceived for ages as being a back-office function that was not given proper attention, while logistics skills remained underdeveloped. Additionally, authors advocate that given that logistics represents an expensive part of any relief operation, this function highly influences the failure or success of the operation itself (Pettit & Beresford, 2009).

2.4 Humanitarian Logistics vs. Commercial Logistics

A sharp difference exists between the way the logistics is perceived between the business sector and the humanitarians. On the one hand, the business sector sees the function as a planning framework for the management of material, service, information and capital flows that includes complex information, communication and control systems (Van Wassenhove, 2006; Langley et al., 2008). On the other hand, humanitarians seem to lack a clear definition of what logistics entails. The Fritz Institute highlighted this fact in the beginning of the XXI century when the question was raised amongst humanitarians (Van Wassenhove, 2006). A common definition given by humanitarians presents logistics as *“the processes and systems involved in mobilizing people, resources, skills and knowledge to help people affected by disasters”* (Van Wassenhove, 2006, pg. 476). Consequently, we see here that the perception of the logistics function differs between humanitarian organizations and its for-profit partners.

The private sector takes advantage of the competitive market in which it evolves, where performance is mainly rewarded throughout internal incentives and increases in revenues

and profits (Murphy & Jensen, 1998). However, humanitarians evolve in a “market” where there exists no “real” competition, since the main objective is to save lives. Additionally, the environment that surrounds the two markets is clearly distinct. In the humanitarian context, organizations have to deal with constant pressure, a volatile climate, complicated operating conditions, many stakeholders and high staff turnover (Van Wassenhove, 2006). In relation to high staff turnover, an example that perfectly illustrates this situation is the fact that each year, about one in three field staff quits because of burnout (Gustavsson, 2003).

Capabilities between the two worlds are completely different. Whereas the humanitarian sector often works “*under high levels of uncertainty in terms of demand, supplies and assessment*” (Van Wassenhove, 2006, p. 477), the private sector can gain advantage using previous sales and/or forecasts to develop and implement an efficient supply chain. This is where the challenge resides for humanitarian organizations: it is uncertain when, where, and how a disaster will occur, as well as the number of people it will affect. Although this situation seems uneasy to handle, humanitarians have actually developed specific skills that allow them to overcome most challenges disaster relief operations impose on them.

Tomasini and Van Wassenhove (2009) define the special capabilities of humanitarian logistics as being the three A’s: agility, adaptability and alignment. Agility refers to the ability to respond quickly to short-term changes. Adaptability refers to the ability to adjust the supply chain design to cope with the conditions the environment imposes. Lastly, alignment refers to the ability to exchange quickly and efficiently between all actors that compose the relief operation, which is quite often perceived as being the most difficult part to handle. This fact highlights the differences in terms of goals and objectives that exist, which unevenly pressure the different actors. Even though differences exist between private sector and humanitarian professionals, the two parts can still learn a lot from each other (Charles, Lauras, & Van Wassenhove, 2010).

2.5 Disaster Relief Operations

2.5.1 Disasters, Types and Consequences

Humanitarian logistics can be applied to two distinct cases: disaster relief operations and continuous aid operations (Kovacs & Spens, 2007). The main difference resides in the fact that continuous aid operations evolve in quite a stable environment, where planning is possible. However, disaster relief operations consist of man-made disasters and/or natural disasters that occur in an unstable environment.

Van Wassenhove (2006, pg. 476) defines “*disaster*” as “*a disruption that physically affects a system as a whole and threatens its priorities and goals*”. He also distinguishes four classifications of disaster as natural, sudden onsets (e.g. hurricanes, tornadoes, earthquakes), human-made, sudden onsets (e.g. terrorist attacks, coups d’état, industrial accidents), natural, slow onsets (e.g. famines, droughts, poverty), and human-made, slow onsets (e.g. political and refugee crises). Kovacs & Spens (2007) notate that a distinction can be determined between man-made disasters and natural disasters within disaster relief. Disaster relief is often associated to sudden catastrophes such as natural disasters whereas man-made disasters are categorized as continuous aid work, which is spread out over a course of time (Kovacs & Spens, 2007).

Nikbakhsh & Farahani (2011) suggest that disasters, whether natural or human-made, have various consequences, including loss of human lives, destruction of infrastructures, and

ruptured socioeconomic conditions. In other words, any event that endangers or devastates human life, properties, and the environment can be considered a disaster as it can create extensive pain and discomfort for human beings and disrupt a society's normal day-to-day activities (Nikbakhsh & Farahani, 2011).

Long & Wood (1995) define “relief” as being a “*foreign intervention into a society with the intention of helping local citizens*”. Therefore, the core focus of disaster relief operations is to “*design the transportation of first aid material, food, equipment, and rescue personnel from supply points to a large number of destination nodes geographically scattered over the disaster region and the evacuation and transfer of people affected by the disaster to the health care centers safely and very rapidly*” (Barbarosoglu, Özdamar, & Cevik, 2002, p. 118).

The main goal of disaster relief organizations is to alleviate peoples’ suffering disasters create (Maon, Lindgreen, & Vanhame, 2009). Consequently, since natural disasters are often unpredictable, the demand for goods is unpredictable (Cassidy, 2003; Murray, 2005) therefore, making it difficult to plan or prepare goods and the transport of those goods in a timely, efficient manner.

2.5.2 Phases of Disaster Relief Operations

Lee & Zbinden (2003) discuss three phases of disaster relief operations as being: preparedness, during operations, and post-operations.

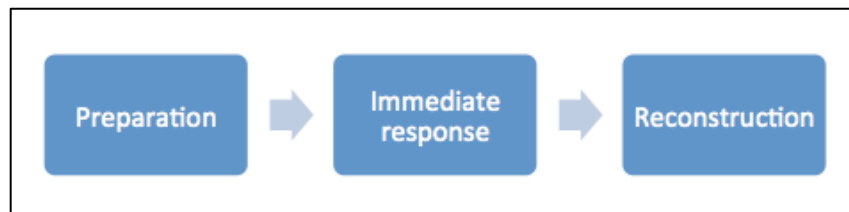


Figure 4 Phases of Disaster Relief Operations Source: Kovacs and Spens 2007

With each phase, there are different operations, in which Kovacs & Spens (2007) distinguish as the preparation phase, the immediate response phase, and the reconstruction phase. In order to prepare for emergency projects, strategic planning is necessary throughout the first two phases whereas actual project planning is required when disaster strikes (Long D. , 1997).

Nikbakhsh & Farahani (2011) suggest an additional phase prior to the first phase of preparation as indicated by Kovacs & Spens (2007), which is called mitigation.

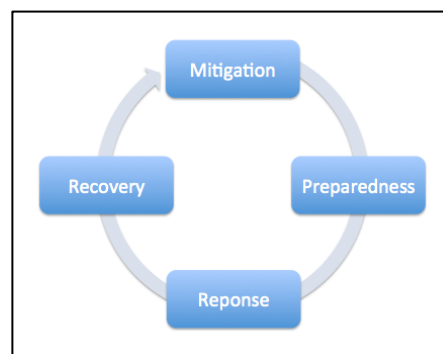


Figure 5 The Four Main Phases of a Disaster Management System Source: Nikbakhsh and Farahani 2011

This initial phase tries to prevent hazards from turning into disasters or to reduce their destructive effects. It differs from the other three phases in that it requires long-term planning and investment, thus making it the most important and effective phase against disaster effects. Measures in this phase are categorized as structural and nonstructural. For example, structural measures technological advancement e.g. flood levees, strengthening existing buildings, and strengthening crucial links bridges in transportation networks in order to mitigate the disaster effects. Nonstructural measures include legislation, land-use planning, and insurance.

Throughout each of the phases of disaster relief operations, different resources and skills are required (Kovacs & Spens, 2007). Since natural disasters are often unpredictable and difficult to prevent, preparation becomes uncertain for all actors involved in humanitarian aid. However, areas that are more prone to natural disasters such as earthquakes, volcanoes, and hurricanes can actively prepare for these possible risks based on previous experiences (Kovacs & Spens, 2007). Consequently, Murray (2005) indicates that preparation and training are often neglected since donors typically prefer that their money go directly to help victims and not to finance back-office operations. As a result, disaster relief logistics is often overlooked in emergency preparedness plans (Chaikin, 2003).

Transportation is a major component of disaster relief operations (Balcik et al., 2010). The existence of transport infrastructure e.g. roads and airports and the availability of vehicles and fuel are just a few challenges that humanitarian organizations face when disaster strikes. Kovacs & Spens (2007) emphasize the need for logistical support before disaster strikes, particularly in prevention and evacuation-related measures, as well as in instant medical and food relief procedures once a disaster strikes. Relative to the above statement, Nikbakhsh & Farahani (2011) add that the preplanning of the logistics of relief operations, establishing communication plans, defining the responsibilities of each participating relief organization, coordinating operations, and training relief personnel are of equal importance and a necessity to be taken into consideration in the preparation phase.

In the immediate response phase, Nikbakhsh & Farahani (2011) describe it as requiring the immediate dispatching of the necessary personnel, equipment, and items to the disaster area. This generally consists of a combination of medical units, police or military forces, firefighters, and search units with the necessary vehicles and equipment, depending on its intensity and extent. The following step involves backup human resources and equipments for the aforementioned groups as well as necessary supplies, voluntary forces, and other actors.

According to Nikbakhsh & Farahani (2011), the preparation of an effective response plan for coordinating relief forces and operations is critical to success. Unfortunately, Long and Wood (1995) indicate that humanitarian organizations assume the needs of disaster victims based on very limited information in the immediate response phase. These assumptions include the type and quality of supplies needed, the times and locations of demand, and the nature of the potential distribution of these supplies to any point of demand (Long and Wood, 1995). Coordinating supply, the uncertainty of demand, transporting necessary and vital items to disaster victims are the main problem areas within the immediate response phase (Long, 1997; Long and Wood, 1995).

The reconstruction/recovery phase is described as *“restoring the areas affected by disasters to their previous state”* (Nikbakhsh & Farahani, 2011, p. 299). It is mainly concerned with secondary needs of people such as restoring and rebuilding houses and city facilities, but other activities include providing disaster debris cleanup, financial assistance to individuals and gov-

ernments, sustained mass care for displaced people and animals as well as rebuilding roads, bridges, and key facilities. Kovacs and Spens (2007) indicate that funding is often allocated and focused solely on the short-term of this phase. Thus, the long-term phase of reconstruction is overlooked such as enhancing infrastructures and conditions of the affected areas (Nikbakhsh & Farahani, 2011).

2.6 Logistics & Disaster Relief Operations

Through research conducted by the Fritz Institute, Thomas (2003) suggests three main reasons explaining the importance of logistics specific to disaster relief operations. First, it links the preparation phase to the immediate response phase of disaster relief operations by way of effective procurement procedures, supplier relationships, prepositioned stock and knowledge of local transport conditions. Kovacs & Spens (2007) indicate that humanitarian organizations often form relationships with their suppliers and have long-term purchasing agreements because of commonly needed items amongst natural disasters. Second, the ability of logisticians to procure, transport and receive supplies at the site demanding humanitarian relief depends mostly on the speed of response which involve health, food, shelter, water and sanitation interventions. Third, the data received after every stage of previous relief efforts is documented by the logistics department and therefore play a crucial role in post-event learning. The success or failure of a disaster relief operation heavily depends on the accuracy of an information system (Long, 1997). Therefore, information technology is crucial to humanitarian efforts. Whereas it is known that IT does play a major role when it comes to improving supply chain efficiency, and at the same time reduce costs, we begin to see here all the benefits for-profit organizations can actually provide to humanitarian organizations.

The challenge lies within coordination of all humanitarian aid actors as each have their own roles and structure. The inability to effectively coordinate these actors leads to confusion in disaster relief operations. Thus, collaborative platforms and coordination software are being developed in order to eliminate this confusion/challenge and ultimately, succeed in disaster relief operations. Accordingly, logistic service providers such as DHL and TNT have entered the humanitarian aid arena of disaster relief operations through partnerships with the UN (Kovacs & Spens, 2007).

2.7 Collaboration & Coordination

Russell (2005) states that humanitarian relief organizations frequently use the terms collaboration and coordination interchangeably. The terms can be differentiated and distinguished more specifically based on the strength of the relationship among actors involved. Balcik et al. (2010) suggest that the term “coordination” is more often associated within the relief community, which is defined as the relationship and interaction among different actors operating with the relief environment. To coordinate suggests resource and information sharing, centralized decision making, conducting joint projects, regional division of tasks, or a cluster-based system in which each cluster represents a different sector area (e.g. food, water, sanitation, and information technology).

There are two types of coordination: vertical and horizontal coordination. Vertical coordination refers to *“the extent to which an organization coordinates with upstream and downstream activities”* (Balcik et al., 2010, pg. 23). An example would be by Balcik et al. (2010) is a traditional coordinating with a logistic service provider. In direct comparison, horizontal coordination is defined as, *“the extent to which an organization coordinates with other organizations at the same level”*

within the chain”, such as one humanitarian relief organization coordinating or collaborating with another humanitarian relief organization.

Tomasini & Van Wassenhove (2009a) state that coordination is not meant to be another layer of bureaucracy in the humanitarian system, rather it is meant to enable interaction and exchange of information. For example, the United Nations Joint Logistics Center (UNJLC) was responsible for the logistics coordination and not actual management of logistics assets (e.g. warehouses, trucks or aircrafts) during the Afghanistan crisis in late September 2001. The logistics assets were the responsibility of each individual humanitarian relief organization. The UNJLC established a neutral forum where discussion of logistic issues, task resources, and to set priorities were made. The goal of the UNJLC was to help humanitarian relief organizations reduce cost and volume as well as maximize the use of limited resources. In the end, coordinating *“the capacity to achieve synergies and efficiency”* (Tomasini & Van Wassenhove, Humanitarian Logistics, 2009b, p. 66) were unlimited. Humanitarian priorities were taken into account as well as interference with the humanitarian relief organizations well-established chartering agreements were avoided. As a result, *“the general consensus was that the humanitarian community obtained significant benefits by coordinating”* (Tomasini & Van Wassenhove, Humanitarian Logistics, 2009b, p. 66) such as consolidation of purchasing power in obtaining better deals with their service providers, maximizing the use of space in aircraft, keeping their inventory low, improving their planning and forecasting throughout the supply chain, minimizing competition for resources among partners, and increasing their service level to beneficiaries in need.

Characteristics impacting the planning and coordination aspect of relief operations are the number of diversity of actors, donor expectations and funding structure, competition for funding and the effects of the media, unpredictability, resource scarcity/oversupply, and cost of coordination (Balcik et al., 2010).

2.8 Form a Relationship: The Partnership Model

Using partnership within a supply chain seeks to find and maintain a certain competitive advantage (Mentzer, Soonthong, & Zacharia, 2000). Within the humanitarian sector, cooperation between the different actors is of extreme importance to the effectiveness of the disaster relief operations (Stephenson, 2005).

This research uses a relationship model suggested by Lambert & Knemeyer (2004). It is composed of four distinct parts: drivers, facilitators, components and outcomes. The combination between drivers and facilitators triggers the decision to create or adjust a relationship. The terms *relationship* and *partnership* are here used interchangeably.

Drivers refer to the different reasons that encourage two parties to form a partnership. Facilitators refer to the supportive environmental factors that enhance a partnerships growth. Components refer to the different processes and activities that are concerned. They build and sustain the relationship. Lastly, outcomes are the results from the formed relationship. Ideally, expectations are met (Lambert & Knemeyer, 2004).

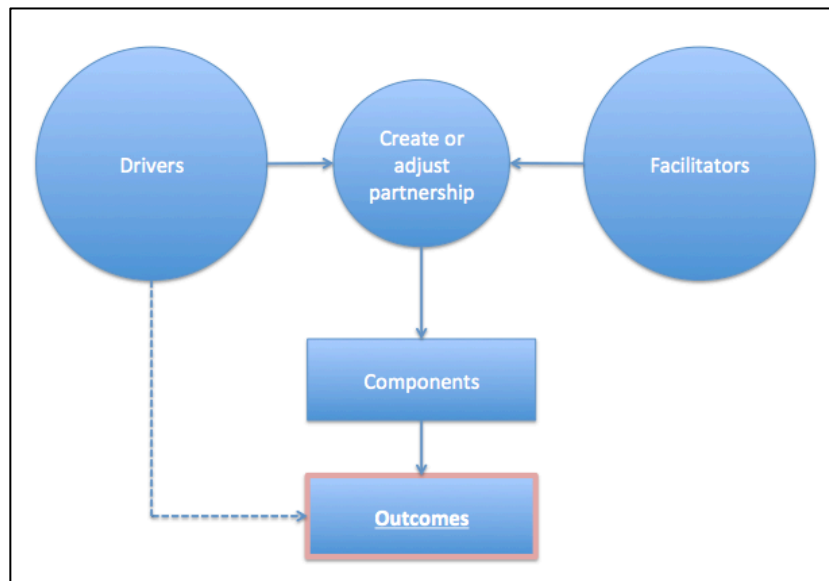


Figure 6 The Partnership Model Source: Lambert and Knemeyer 2004

Lambert & Knemeyer suggest (2004) that four facilitators are responsible for enhancing a partnership: compatibility of corporate cultures, compatibility of management philosophy and techniques, a strong sense of mutuality, and symmetry between the two parties. Additionally, Larson & McLachlin (2011) suggest that a fifth element is vital: complementarity of capabilities. In this study, the researchers have decided to use only three facilitators that are considered as essential for the creation of the conceptual framework: compatibility of corporate culture, compatibility of management philosophy, and complementarity of capabilities. Strong sense of mutuality and symmetry between the two parties were perceived as they would overlap with the other facilitators stated.

Compatibility of corporate culture and management philosophy do not refer to sameness, but rather to what differences can be identified and actually create problems between the two parties involved in the partnership. Corporate culture, which can be written as a mission statement or simply spoken, is defined the ways a company's owners and employees think, feel and act (Entrepreneur, 2013). Management philosophy and techniques refer to a set of beliefs that are used by an individual, or an organization, in a management position to guide the decision making process (Business Dictionary, 2013). Complementarity of capabilities can be described as the way two parties involved in a relationship complement each other. This proposal can be illustrated throughout the fact that most humanitarian relief organizations have to contract logistics service providers in order to acquire logistics services they cannot provide themselves. This is where complementarity comes into play: one part provides a service that the other cannot handle alone.

Although it is reckoned that forming a relationship often leads to accessing knowledge and gaining advantages, some barriers can at the same time hinder the feasibility of a partnership (Maloni & Benton, 1997). Taking this element into consideration, the researchers have decided to add such an important element to the current partnership model. Therefore, a part called Constraints representing the barriers to forming a partnership has been added.

Within the humanitarian context, three constraints are pointed out: the sudden and massive workload following a crisis, the need for trust among the actors, and the political interests of the different actors (Seybolt, 2009). The sudden and massive workload following a crisis refers to the massive work that humanitarian actors have to undertake when a disaster

strikes (Banatvala, Roger, Denny, & Howarth, 1996). The need for trust among the actors refers to the need in terms of trust that is needed to increase the effectiveness of disaster relief operations (Stephenson, 2005). Political interests refer to the crucial role that those interests play in humanitarian crises (Olsen, Carstenesen, & Høyen, 2003).

The driver section refers to the element(s) that motivate two parties to engage in forming a relationship. For instance, in the case of humanitarian relief organizations, one clear driver is to aid people in their survival (Kovacs & Spens, 2007). However, drivers from commercial parties remain partly unknown at this stage.

The components part will be replaced by different elements that are known to be responsible for enhancing the effectiveness of relationships between humanitarian relief organizations (McLachlin & Larson, 2011). Those elements are described in the next section of the thesis.

2.9 Form a Relationship: Effective Relationships

As a basis for gathering primary data, a model suggested by Larson and McLachlin (2011) is used. It is composed of 11 distinct components, which delimit the extent to which relationships can be built in terms of effectiveness within humanitarian supply chains.

The 11 components are presented in the spreadsheet as follows:

Property		Dimensional Range		
E01	Time to build	Little time	.....	Much time
E02	Contact intensity	Few contacts	.....	Many contacts
E03	Contact familiarity	Familiar	.....	Unfamiliar
E04	Degree of formality	Informal	.....	Formal
E05	When to build	Pre-disaster	.....	Post-disaster
E06	Groups joined/formed	None	.....	Many
E07	Degree of simplicity	Simple	.....	Complex
E08	Adherence to principles	Compromising	.....	Uncompromising
E09	Symmetry of players	Equal size	.....	Unequal size
E10	Compatibility	Incompatible	.....	Highly compatible
E11	Complementarity	Low	.....	High

Time to build refers to the time the two parts involved in the relationship are willing to allocate to forming the relationship. Contact intensity refers to contact frequency between the two parts. Contact familiarity refers to if the two parts know each other due to past relationships. Degree of formality refers to the level of formality between the two parts. When to build refers to when the relationship is built, meaning pre-disaster or post-disaster. Groups joined/formed refers to if one part or the two are more willing to join an already formed/existing groups. Degree of simplicity refers to the level of complexity of the relationship. Adherence to principles refers to the willingness of one or the two parts to

transgress some of their principles. Symmetry of the players refers to the size of the two players forming the relationship. Compatibility refers to the level of compatibility, meaning their ability of working together without user intervention or modification. Finally, complementarity refers to the ability of the two actors to work together using their core competences so as to complement each other.

Larson and McLachlin (2011) advocate that relationships between humanitarian relief organizations are more effective when:

<u>Property</u>		<u>More effective when</u>
E01	Time to build	More time is spent on it.
E02	Contact intensity	The focus is on a reasonable number of contacts.
E03	Contact familiarity	The initial contact is on familiar contacts.
E04	Degree of formality	The process is relatively formal.
E05	When to build	It occurs before a disaster happens.
E06	Groups joined/formed	It is supported by forming or joining a larger number of groups.
E07	Degree of simplicity	The process is kept simple.
E08	Adherence to principles	Organizations avoid compromising their humanitarian principles.
E09	Symmetry of players	The players are of relatively equal size.
E10	Compatibility	The organizations are highly compatible.
E11	Complementarity	The capabilities of the players are highly complementary.

2.10 Synthesis – Research Model/Conceptual Framework

By definition, a conceptual framework is an assumption derived from a literature review (Sandwell, 2011). The conceptual framework is tested in this study.

The partnership model now incorporates a new section next to Drivers and Facilitators called Constraints. The Components section is replaced by the 11 components Larson and McLachlin (2011) presented as being responsible for enhancing relationships effectiveness.

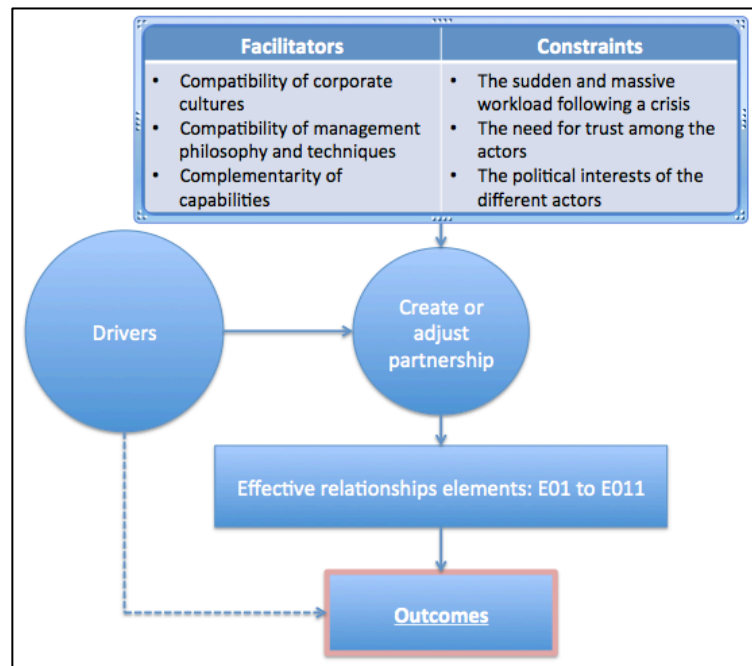


Figure 7 Conceptual Framework on Building Effective Relationships During Disaster Relief Operations
Source: Balland and Sobhi 2013

2.1.1 Research Questions

The focus of this research is to firstly explore the different drivers and expected outcomes that motivate UNICEF to work together with LSPs when disasters occur.

RQ1: What are the potential drivers and expected outcomes to forming an effective relationship between UNICEF and its LSPs during disaster relief operations?

Different facilitators enhance and encourage UNICEF to contract services provided by LSPs when disasters strike.

RQ2: What are the potential facilitators to forming an effective relationship between UNICEF and its LSPs during disaster relief operations?

Nevertheless, some constraints can actually prevent UNICEF and LSPs to work together when disasters affect people.

RQ3: What are the potential constraints to forming an effective relationship between UNICEF and its LSPs during disaster relief operations?

Lastly, the 11 components Larson and MacLachlin (2011) present have distinct impacts on the effectiveness of the relationship between UNICEF and its LSPs.

RQ4: Why and to what extent do the 11 components presented by Larson and MacLachlin (2011) match in creating an effective relationship between UNICEF and its LSPs during disaster relief operations?

3 Methodology

In this chapter, the reader will be provided with the methodological choices the authors made, their impact on the research, and how they were applied. First, the research design will be discussed, then the research strategy presented, shortly followed by the development of the research questions, data collection, analysis process, evaluation of the research, and research ethics.

3.1 Research Design

According to Saunders, Lewis, & Thornhill (2012), there are two types of research design to choose from when formulating the appropriate approach that is most relevant and suitable to the researchers purpose and research questions: quantitative and qualitative. One way of differentiating quantitative research from qualitative research is *“to distinguish between numeric data (numbers) and non-numeric data (words, images, video clips and other similar material)”* (Saunders et al., 2012, pg. 161). To be more specific, quantitative data collection techniques and data analysis procedures generate numerical data whereas qualitative data and analysis processes generate non-numerical data.

Saunders et al. (2012) suggest other distinctions between the two research designs. For example, quantitative research examines relationships between variables, which are measured numerically and analyzed using a range of statistical techniques. This approach integrates control factors in order to ensure the validity of data, usually in an experimental design. On the other hand, qualitative research studies participants’ meanings and the relationship between the using a variety of data collection techniques and analytical procedures, which develops into a conceptual framework. The qualitative approach accommodates a research process that is both naturalistic and interactive through the use of non-standardized data collection.

The purpose and research questions were taken into consideration in the methodology selection process as it is interrelated. The researchers seek to understand the relationship between a UN Agency and its LSP from a broad perspective or in other words, to get the big picture. Therefore, a qualitative approach is the most appropriate as it aims to offer an in-depth understanding of a phenomenon being studied (Saunders et al., 2012) such as the flooding disaster that occurred in Mozambique in January 2013. Whereas with quantitative research, which is associated with generating numerical data, this approach limits the overall in-depth understanding of the relationship, especially since data is collected in a standard and highly-structured manner (Saunders et al., 2012), thus not allowing the flexibility to probe new and existing findings.

In recognition to the nature of our research design, studies are often divided into three groups: exploratory, descriptive, and explanatory (Saunders et al., 2012). These principles are defined as follows:

- Exploratory – *“a valuable means to ask open questions to discover what is happening and gain insights about a topic of interest”* (Saunders et al., 2012, p. 171). It is especially useful if one seeks clarity to the understanding of a problem.
- Descriptive – *“to gain an accurate profile of events, persons or situations”* (Saunders et al., 2012, p. 171).
- Explanatory – *“to study a situation or problem in order to explain the causal relationships between variables”* (Saunders et al., 2012, p. 172)

As our study seeks to explore the elements of successful coordination/collaboration between UN Agency and LSP, the exploratory approach will be utilized. Since there is not much context relating to our topic, an exploratory approach will allow the researchers to gain in-depth insights into the relationship. Therefore, an exploratory approach best suits the fulfillment of our purpose.

In addition to fulfilling our purpose and research questions, it is important to note that our research will be conducted as cross-sectional and not longitudinal. We have focused on a flooding disaster in Mozambique that occurred in January 2013 in a real-life context. Since our study is of a particular phenomenon at a particular time, a cross-sectional approach is the most appropriate whereas, the longitudinal approach is to study change and development over a long period of time (Saunders et al., 2012).

3.2 Research Strategy

Saunders et al. (2012) describes a research strategy as a *“plan of how a researcher will go about answering her or his research question”* (pg. 173). Depending on the choice of research design, the type of research strategy is principally linked. As there are numerous types of research strategies to consider, a case study strategy is the most appropriate as it *“explores a research topic or phenomenon within its context or within a number of real-life contexts”* (Saunders et al, 2012, pg. 179). It is relevant to the researchers’ purpose in that we wished to gain a rich understanding of the real-life context and the processes being enacted (Eisenhardt & Graebner, 2007). In other words, the researchers aimed to fully understand the circumstances surrounding the coordination/collaboration efforts between UNICEF and its LSP when disaster strikes. Additionally, the case study strategy is most suitable in yielding answers to the question “why?” as well as the “what?” and “how?” questions, which is the type of questions we used in order to answer our research questions.

A case study strategy can incorporate multiple cases, especially if the focus of the research is to determine if findings can be replicated across all cases (Saunders et al, 2012), however a single case study represents a critical or unique case. Our case study is unique in that the events surrounding our study occurred at exactly the point in time we began our research focus, therefore our data is not only current, but it is parallel with live data. Additionally, it is a critical case in that it incorporates the well-being of humanity, specifically children. Therefore, we saw the recent flooding disaster operation in Mozambique as *“an opportunity to observe and analyze a phenomenon few have considered before”* (Saunders et al, 2012, pg. 179), meaning we explored the relationship between a UN Agency, specifically UNICEF, and its LSP during a natural disaster occurrence. .

3.3 Data Collection

Our data collection is twofold. First, through a comprehensive frame of reference, we have derived a conceptual framework that states the different elements that compose an effective partnership/relationship. Second, data for the primary research was collected through semi-structured interviews, which was facilitated by the first method. Each interview was tape-recorded and transcribed.

Organization	Position of the respondent	Date of interview	Interview method	Duration of interview	Approved
UNICEF Mozambique	Management level	10 April 2013	Phone	51 minutes	✓
UNICEF Mozambique	Logistics level	10 April 2013	Phone	53 minutes	✓
UNICEF Mozambique	Confidential – Anonymous informant	11 April 2013	Phone	1 hour 13 minutes	✓
WFP Mozambique	Logistics level	19 April 2013	Phone	59 minutes	✓

3.3.1 Conceptual framework

As a conceptual framework in research consists of possible courses of action or to present a preferred approach to an idea, the researchers utilized the relationship model used by Lambert & Knemeyer (2004) as a basis and adapted it using additional literature in order to accommodate a broader perspective. This enabled the researchers to thus, explore the categories having an impact on the effectiveness of the relationship between UNICEF and its LSPs. These categories, namely drivers/outcomes, facilitators, constraints, and components for an effective relationship during disaster, and therefore imbedded into the focus of our research questions. From these categories, elements are presented and incorporated into our interview questions.

3.3.2 Semi-Structured Interviews

According to Saunders et al. (2012), there are three categories of interviews: structured, semi-structured, and unstructured. Structured interviews are often standardized and commonly used in quantitative studies, whereas unstructured interviews are informal and non-directive. However, semi-structured interviews are a combination of the two, thus allowing flexibility, with some direction, and exploration of the subject. Here, the researchers listed categories derived from the conceptual framework and asked open-ended questions. Although there were a large number of questions to be answered, the majority of questions were covered from these categories. Moreover, the order of the questions remained consistent from interview to interview.

The semi-structured interview is suitable for our research because each answer from the respondents will vary, thus giving us a an opportunity to “probe” answers and gain significance and depth into the data we obtained. Additionally, discussion led to areas that we had not previously considered but which were significant to our research. These areas are discussed in the analysis part of this paper as well as recommendations for further study.

Our interviews were conducted through telephone due to access, speed and lower cost. As most of our respondents are in Mozambique, telephone was the most practical because of distance and costs.

3.3.3 Development of Interview Questions

In order to fulfill the purpose, the research questions were developed. The four questions were the basis for the interview questions.

RQ1: What are the potential drivers and expected outcomes to forming an effective relationship between UNICEF and its LSPs during disaster relief operations? The first research question poses the basis of the relationship, namely discover what motivated the two parties to form a relationship in the first place. During the interviews, the respondents were asked to explain what elements motivated their interventions in Mozambique and why.

RQ2: What are the potential facilitators to forming an effective relationship between UNICEF and its LSPs during disaster relief operations? The second research question was the basis to discover whether or not the elements found in the frame of reference were correct, and to which extent they were important to the two parties. During the interviews, the respondents were presented with the different facilitators found in the frame of reference. They were then asked to explain why and how those facilitators could affect the relationship.

RQ3: What are the potential constraints to forming an effective relationship between UNICEF and its LSPs during disaster relief operations? The third research question was the basis to discover, on the other hand, what were the constraints that could hinder the forming of a relationship. Those constraints were extracted from the frame of reference. During the interviews, the respondents were presented with the different constraints found in the literature. They were then asked to explain why and how those constraints could affect the relationship.

RQ4: Why and to what extent do the 11 components presented by Larson and McLachlin (2011) match in creating an effective relationship between UNICEF and its LSPs during disaster relief operations? Lastly, the fourth research question dealt with the role exerted by the 11 components on the relationship. During the interviews, the different respondents were asked to comment on each component's influence on the effectiveness of the relationship.

3.4 Analysis Process

A conceptual framework and existing theory has been established in our thesis. We have tested the adequacy of the framework as a means to explain our findings from the data collected through the semi-structured interviews. Through this, we have utilized a pattern matching analysis technique that involves predicting a pattern of outcomes based on theoretical propositions to explain what we expect to find from analyzing our data (Saunders et al., 2012).

Therefore, if the pattern of our data matches that which has been predicted through the conceptual framework, we will have our answers to our research questions. Additionally, conclusions are made and a newly derived conceptual framework is created. However, Yin (2009) suggests that if we reveal one or more outcomes that have not been predicted by our explanation, we will need to seek an alternative one thus, recommendations for further research.

3.5 Evaluation

Evaluation is defined as *“the process of judging materials or methods in terms of their accuracy and internal consistency or by comparing them against external criteria”* (Saunders et al., 2012, p. 619). The researchers have shown this ability by constructing a reliable and valid frame of reference as well as a conceptual framework that guided our collection of empirical findings, analysis and conclusion.

3.5.1 Reliability

Lincoln and Guba (1985) suggest that reliability is often interchangeable with words such as dependable, consistent, and predictable. This means reliability is a key characteristic of research quality (Saunders et al., 2012) and is usually tested by replication (Lincoln & Guba, 1985). Any careless act in the measurement or assessment process could threaten the reliability of any research through instrumental decay, by length of time or intensity, or by any ambiguities of various sorts.

In qualitative research, interviewer bias can be considered a concern. In order to refrain from this concern, we avoided imposing our beliefs through the questions we asked. In order to strengthen our reliability from the semi-structured interviews, each interview question was asked in order consistently as well as tape-recorded and transcribed.

Lincoln and Guba (1985) state that reliability is typically demonstrated by replication or consistency, meaning if two or more repetitions of the same inquiry processes under similar conditions yield essentially similar result or findings, then the purpose of reliability has been established. We conducted our interviews with the same interview questions and under the same setting as a telephone call. Therefore, the empirical findings gathered throughout all telephone interviews yield similar context that is explored in the analysis section of this paper. As the responses of our respondents vary, this means the findings may not be replicated; however the consistent nature of the questions can be replicated.

3.5.2 Validity

Whilst reliability is necessary, it is not sufficient by itself to ensure good quality research (Saunders et al, 2012). Moreover, *“reliability is not prized for its own sake but as a precondition for validity”* (Lincoln and Guba, 1985, pg. 292)

According to Lincoln and Guba (1985), validity is defined as being both internal and external. Internal validity is the extent to which variations in an outcome variable can be attributed to controlled variation in an independent variable. This is often associated with quantitative research and can have threats such as history, maturation, testing, and other factors. Credibility enhances or strengthens internal validity. Having a range of interviewees from different departments within the UNICEF Mozambique disaster enhances our credibility as we received different perspectives regarding the situation, which enhances our interpretation.

Our respondents were official representatives with the appropriate titles relevant to our research.. In other words, each person interviewed from UNICEF Mozambique work directly with logistics service providers and the logistics service providers interviewed work directly with the individuals we interviewed at UNICEF Mozambique. Therefore, their findings are both credible and trustworthy.

3.5.3 Limitations

Upon conducting the interviews, all of the respondents to a degree informed the researchers of the impractical ability of reaching local logistics service providers that were used by UNICEF before the host government called for action aid. The main constraints that hindered the researchers' ability to interview local LSPs are distance, language and cultural barriers, regional differences, and lack of technological infrastructure. Therefore, this weakens the reliability of our research as it only includes the perspective and insight of one LSP used by UNICEF. However, WFP is the main logistics service provider once the host government calls for action aid and therefore, strengthens the reliability of the research.

3.6 Research Ethics

In this particular case, an existing contact in the field of humanitarian work notified the researchers of the flooding that had occurred in January 2013 in Mozambique. Saunders et al., (2012) suggest familiarizing oneself with the characteristics of the organizations and events surrounding the case before making contact. After further investigation amongst the researchers, it was decided that it was a case that suited our focus of study. As a result, contact was made with the selected respondents at UNICEF Mozambique. Their contact information was gathered from secondary data published online in a situation report (UNICEF, 2013b). Initially, emails were sent inviting the respondents to be interviewed for the purpose of our study. Hesitations occurred, thus a second email was sent along with a confidentiality agreement form attached. This form indicates that their contact/name information would remain anonymous throughout our research and that their transcriptions would not be sent to the other party. Approvals to conduct the interviews were received, thus trust had been established.

At the start of each interview, our respondents were informed that we would record and transcribe the interview in which they could review for further approval. After the interviews were complete and transcriptions made, each of their own transcriptions were emailed to each of the respondents, which were later approved with only a few minor adjustments, mainly further clarification on certain subjects discussed at the time of the interview. This information was updated within each of the transcriptions, which are available upon request.

Furthermore, one of our respondents requested to be anonymous and did not want to be recorded. This request was granted as we were allowed to make notes of the conversation that are presented in the empirical findings.

4 Empirical Findings

In this chapter, the authors will present the empirical findings that were collected throughout primary and secondary data. The primary data was collected using articles as well as online sources. The secondary data was collected from UNICEF Mozambique, WFP Mozambique, with respondents that had distinct positions within these organizations.

4.1 Case Background

The flooding that affected Mozambique occurred on January 12, 2013 (ReliefWeb, 2013). The reinstallation of the people in their original residences was basically completed by April 2013. In terms of figures, 150,000 to 200,000 people were displaced (ReliefWeb, 2013). Most of the affected people were located next to the Zambezi River. The flood itself was expected since it had rained a lot in Zimbabwe and Botswana. Therefore, the government along with the different organizations expected the Zambezi River to overflow and a lot of rain to pour this year.

Floods are very seasonal and common in Mozambique since the country is prone to cyclones and floods. Mozambique is known for “*rapid onset emergencies*” such as floods and hurricanes between the months of December and April, as explained in the frame of reference (Van Wassenhove, 2006). Usually, the rain season runs from November/December until March/April. Additionally, the country seems to be “*protected*” somehow by Madagascar since cyclones hit first the island and then continue. Sometimes it even happens that cyclones just hit Madagascar. Due to flooding occurrences, Mozambique people have adopted a proactive behavior: as the Zambezi River regularly overflows, schools and crops for instance are placed in the valley.

4.2 UNICEF

UNICEF serves a big role as its objectives closely correlate with the Millennium Development Goals (MDGs) set by the United Nations State 2000. “Of the 48 indicators of progress towards the Goals, UNICEF is chiefly responsible for progress in 13” (UNICEF, 2013a).

According to UNICEF (2013c), UNICEF’s mission began in 1946 as a relief organization for children after World War II. UNICEF prioritizes the intrinsic rights of children to a basic quality of life as stated under the rights of the Convention on the Rights of the Child treaty. Its work consists of interrelated, strategic areas such as young child survival and development, basic education and gender equality, HIV/AIDS and children, child protection, as well as policy analysis, advocacy and partnerships for children’s rights.

Under young child survival and development area, UNICEF works toward comprehensive child health care in the earliest years, as according to MDG number 4 – reducing child mortality, and MDG number 6 – malaria control. It gives financial and technical support to national and community based education as well as intervention programs on health care and nutrition. Major areas of priority include immunization, preventing and controlling malaria, controlling and treating diarrheal and respiratory diseases, eliminating guinea worm and preventing anemia. Their financial support provides vaccines to children in developing countries and the technical support provides the complicated process of delivering them. As a result, millions of children are protected from diseases such as measles, polio, diphtheria and tuberculosis. Additionally, UNICEF is often the first on the ground in declared emergencies to deliver this support along with other life-saving interventions, such as fresh

water and basic medical supplies.

UNICEF collaborates with countries, donor governments and other UN agencies to promote, fund and facilitate universal primary education and gender equality, in support of MDG 2 and 3 (UNICEF, 2013d).

4.3 WFP

The World Food Program (WFP) was first established in 1961. The program is part of the UN agencies span and strives to eradicate hunger as well as malnutrition (WFP, 2013).

As a result of the reform that took place in 2005, the cluster system was put in place between the different humanitarian actors. Hence, and due to WFP's expertise and extensive capacity in humanitarian logistics, the organization accepted the role of Lead Agency of the Logistics Cluster (WFP, 2013).

In Mozambique, the main organization WFP Mozambique serves is UNICEF Mozambique. WFP Mozambique provides common services such as processing orders, helps facilitate the receipt of shipment as well as aligning with customs and the government for customs exemption. The cluster remains activated all-year-round in order to ensure there are active logistic members prepared for any emergency.

4.4 UNICEF Mozambique – Management Level

The respondent was interviewed on the phone on April 10, 2013 during 51 minutes. The respondent occupies a central position within UNICEF Mozambique at a management level. The respondent has been working for UNICEF for several years in different countries on the African continent.

4.4.1 Drivers and Outcomes

The involvement of UNICEF in the flooding disaster of January 2013 in Mozambique was motivated by the mandate of UNICEF. UNICEF has a “tradition” of being involved in emergencies. Historically, the organization was created after the Second World War in order to take care of the children that had been affected by the war. The respondent added that it was “relatively normal” for UNICEF to get involved in such a disaster. Also, UNICEF had already been massively involved in the flooding of 2007 in Mozambique.

In regards to the nature of their LSPs, the respondent said that UNICEF does not have one single LSP in Mozambique. The respondent explained to the researchers the way UN responses were structured concerning disasters management. The different organizations within the UN lead different clusters. In the researchers' case, the logistics cluster is led by WFP. Therefore, and in theory, the WFP acts as the main LSP for UNICEF. In reality, media exposure affects significantly the funds WFP receives. In other words, if WFP receives funds immediately after the disaster they can act quickly as UNICEF's LSP. If not, and during the first hours/days of the emergency, UNICEF has to handle its logistics operations on its own using local logistics providers.

4.4.2 Facilitators

The respondent highlighted that local logistics providers just do the job they are being paid for. However, the respondent acknowledged that sometimes those same logistics providers could give priority to transporting supplies from UNICEF. Nevertheless, those kinds of favors only happen as long as prioritizing UNICEF supplies does not engender financial

losses for the local logistics providers. The respondent reckoned that apart from priority possibilities, transporting UNICEF suppliers is like transporting any other supplies. Nevertheless, the fact that UNICEF helps children seems to ease negotiations.

In regards to the management philosophy, the respondent stressed that it depends a lot on the individuals. UNICEF has a reputation of being relatively fast, and well-deserved, according to the respondent. Therefore, this fact is likely to influence the relationship with the logistics providers. In other words, LSPs indirectly know that UNICEF puts a lot of emphasis on the rapidity, the quality of the service, and the capacity to react to changes quickly.

Concerning the capabilities, the respondent put forward how complementary a LSP could be to UNICEF. The reason being is that UNICEF does not specialize in logistics. They do not own any kind of fleet, trucks or warehouses. Therefore, the ability of a LSP goes beyond the ones UNICEF possesses in terms of logistics. Additionally, the respondent stated the fact that decision-making process was rather decentralized, providing a significant advantage in terms of management to the UNICEF representative.

Lastly, the respondent pointed out the fact that UNICEF could not do anything without having the consent of the government of the country where they wish to intervene in.

4.4.3 Constraints

The respondent stated that the emergency complexity of the flooding of January 2013 was not that important this time. Nevertheless, the respondent highlighted that bigger emergencies could trigger some issues that are uneasy to handle, like capacity issues. Also, the location of the flooding (a three-hour drive North from Maputo on a “normal road”) eased the process of delivering the suppliers in the affected area. Being closed to Maputo also helped having access to many LSPs. However, the situation was different for the people that were located next to the Zambezi River. Many people were affected this time, and the camps that were receiving the displaced people were difficult to reach. On top of that, in the area where the displacements took place, there were not so many LSPs that could help and transport the different supplies. Transporting them from Maputo was not an option since it was very expensive. Although some items were prepositioned four hours away from the place of displacement, it was not useful since some capacity issues quickly arose among the LSPs.

In regards to trust, the respondent reckoned that UNICEF’s reliable and trustworthy reputation played in their favor. However, the existence of a tendency to be slow in terms of paying invoices from UNICEF was known. This was mainly supported throughout the fact that many people within the organization need to “*receive, verify and certify*”. Trust had been established, with the different LSPs, prior to the occurrence of the flooding disaster. However, and when problems of capacity issues arise, new LSPs that have not been scrutinized before need to be contracted. This was likely to trigger delays and various problems since no previous commercial relationships existed. The respondent stated that LSPs were selected based on the different services they offer and their associated prices. It was stated that UNICEF tends to opt for the best value for money. A preexisting list of potential LSPs is created before a disaster strikes, and the ones that suit UNICEF’s expectations in terms of services and prices are contacted when needed.

Political interests were reckoned to exert a major influence on the different UN organizations, especially in regards to the funds received. However, according to the respondent, the LSPs coming from the private sector had no political interests since they were relatively

small. As long as they get paid, having the media around does not affect the way they behave towards UNICEF. The respondent stated an example of Sudan and the effects media had on its work. On the one hand, having the media around meant having different obligations, such as meeting with various foreign ministers. On the other hand, having no media around meant that some work “*on the ground*” could be done, and requests from the headquarters to please various visitors were very little, or none.

4.4.4 Components

Concerning the time dedicated to building the relationship, the respondent stressed the fact that in most cases relationships between UNICEF and their LSP(s) had already been built. However, in the case of a complex emergency, obviously additional relationships would have to be built. In that specific case, time was not at their disposal, engendering potential problems of trust.

In regards to contact intensity, no additional contacts were needed as long as standards agreements had been reached prior to the emergency through different contacts. In the case of an emergency triggering the necessity to contact and contract new LSPs, obviously there would not have been contacts whatsoever before the disaster stroke.

In terms of contact familiarity, in most cases the different people working for the LSPs are known, as long as no new LSPs need to be contracted.

Concerning the level of formality, the respondent highlighted that although relationships were not completely formal, they were not completely informal either. It was put forward that informal relationships were better. Nevertheless, a certain degree of formality had to be kept in place since economic interests were coming into play. Moreover, a certain degree of formality had to be maintained in order to avoid suspicions in terms of corruption.

The respondent clearly stated that it was preferable to build the relationship prior to the disaster. Failures in doing so occurred when LSPs faced capacity issues because of the unpredictable size of the emergency. Contracting new LSPs directly adds an additional layer in terms of complexity.

In regards to joining a group already formed, the respondent highlighted that for UNICEF it is preferable to use WFP so that all UN agencies can benefit from the services WFP provides. One objective of the UN is actually to make sure that all its agencies work efficiently together. Working with each other was actually encouraged in order to reduce transaction costs for instance. In reality, this meant that each organization had to be willing to modify and/or adapt its own rules and regulations. This was difficult to achieve since each agency had its own mission.

In regards to the level of simplicity of the relationship, the respondent indicated that simple is better. Some emergencies even pushed UNICEF to take shortcuts and make the rules simpler in order not to complicate things unnecessarily.

In terms of compromising principles, the respondent stated that it could be interpreted through different perspectives. Some principles cannot be compromised, for instance the principle of honesty or the principle of opting for the best value for money. However, and because of the emergency situation, transgressing the rules and/or taking shortcuts can be accepted. This is possible as long as the person in charge explains why he/she is doing so, what the benefits are, and that he/she takes a full responsibility over his/her actions.

In terms of symmetry, the respondent stated that obviously the different players were of unequal size. For instance, UNICEF cooperated with WFP, but also with LSPs that are relatively small. According to the respondent, no symmetry is actually achieved.

In regards to the size of the players, the respondent indicated that this criterion was not important, as long as compatibility and complementarity of the players matched. More specifically, the respondent emphasized that complementarity as well as complementarity were needed. Taking into consideration the size of the LSPs they contract, and even though they can sometimes face capacity issues, they know the local language, the local market, and they can be very helpful to organize the transportation. Personally, the respondent preferred to rely on local players to distribute their supplies “*on the ground*” since they know the local market, instead of relying on multinational LSPs that are better at providing other kind of services.

4.5 UNICEF Mozambique – Logistics Level

The respondent was interviewed on the phone on April 10, 2013 for 53 minutes. The respondent holds central position at UNICEF Mozambique within the logistics department.

4.5.1 Drivers and Outcomes

The respondent pointed out UNICEF tries not to get involved. One of UNICEF’s objectives is to assist governments in setting up a response mechanism and make sure that the different supplies are available, people are trained, and response plans are ready. In this year’s flooding, this explains why UNICEF waited a bit before intervening. Additionally, UNICEF cannot get involved on its own. Therefore, this year the request came from the government. In other words, UNICEF tries to build the capacity and give the government the means to respond.

In regards to their LSPs, the respondent mentioned that UNICEF Mozambique did not have one specific LSP. As a matter of fact, WFP was the entity responsible for their logistics. Moreover, the respondent mentioned that it was actually easier for UNICEF to just piggyback onto something that is already functioning. In a way, their main LSP is actually WFP. Then, different local companies act as their LSPs. In the case of the flooding of January 2013, several LSPs were actually used. Depending on the context and the situation, UNICEF tries to contract and utilize the different services. For instance, in the case of a half-loaded truck, UNICEF would rather cooperate with WFP to send a truck fully loaded instead of contracting a local logistics provider that would send a truck half-loaded. In terms of chronology, during the early stages of the emergency private LSPs are used first. Then, once the cluster is ready to be used, UNICEF switches to WFP.

4.5.2 Facilitators

According to the respondent, the corporate culture can influence the relationship. However, this was connected with the UNICEF’s mandate. Since UNICEF is present and intervene within many countries, their mandate is known by many people. In addition, the respondent stressed that the way they behave has also a lot to do with what they actually do within a certain country. UNICEF works not only on disaster response, but also in disaster reduction and disaster prevention. The respondent stated that “*the better prepared you are, the better you can hope to respond*”.

In regards to the influence of management philosophy, the respondent highlighted the importance of working together, since the different organizations are responsible for accom-

plishing different tasks. Although the different organizations try to coordinate as much as they are capable of, reality then comes into play. The different mandates that the different organizations have influence the outcome(s). The respondent reckoned that sometimes some shortcuts needed to be taken in order to respond faster. However, the respondent felt that those decisions did not affect whatsoever the relationship. The respondent also stated that by *“working together you can do better than on your own”*. Additionally, the stress and demand level for services from WFP will greatly affect the outcome. Contacting directly certain people within the organization can affect the priority level of a response. The respondent highlighted the importance of personal relationships. For instance, using LSPs in nonemergency times can benefit the whole process once a disaster strikes, since a relationship already exists. Most relationships are actually built, ideally, prior to a disaster. Services such as transporting, but also warehousing, are the main activities UNICEF contracts.

The respondent reckoned that UNICEF did not have the capacity and the need to run its own fleet of trucks. Therefore, complementarity of their LSPs and WFP became crucial. It is better for UNICEF to outsource all the different services of transportation and/or warehousing to competent organizations and/or private companies. Moreover, another argument that was put forward to justify this outsourcing was the financial aspect: logistics services are needed during some specific times. They are not needed all the time. Therefore, it would not make sense for UNICEF to have to manage its own logistics services. However, advantages of owning those services are also reckoned: a total control over them can be exerted, whereas outsourcing is often associated with losing control.

4.5.3 Constraints

The main problem the sudden and massive workload created was related to supply and demand. If the demand was high and the supply low, then previous agreements did not come into play anymore and the different private companies providing logistics services tended to prioritize the ones that pay the more. This was also another problem agencies could encounter: they tended to increase prices by competing against each other since each of them wanted to provide their aid assistance. And this was where coordination became crucial. The cluster approach helped with this situation since using WFP is prioritized. Agencies are unified, and attempts to play against each other are reduced. In a certain way, the market becomes more controlled.

Talking about trust and its effects on the relationship, the respondent connected trust with information. Information had to be accurate and reliable. This was actually crucial in order to solve any problem that may have arisen. In other words, a problem could not be solved if information was incorrect.

In regards to the political interests, the mandates of the agencies played important roles. Within the UN organizations, the different mandates are known. The respondent highlighted that the cluster approach was probably the best approach to tackle the different problems of political interests. It helped avoid having agencies that go on their own. However, the respondent reckoned that agencies also want to be seen, and therefore those problems of political interests may arise. Such a situation could harm the willingness to work together. The commercial side is known for providing their services as long as they get paid. Therefore, problems are more likely to arise between agencies. Political interests are not likely to arise with the local LSPs since they are local, relatively small, and consequently have no need to have their name on TV.

4.5.4 Components

Time was presented as being both important and essential. The reason behind this was that the longer a relationship exists, the better. This is also why existing relationships and long-term agreements are important, since a relationship is already in place. It creates a certain routine and the different systems used are known. As a final statement, the respondent stated *“the more time you have together, the better”*.

In regards to contact familiarity, the respondent stressed the fact that *“the more familiar you are with the people you work with, the better”*.

The same applied to contact intensity, where *“the more contacts you have, the better”*. The respondent grouped the three elements time, intensity, and familiarity together.

In terms of formality, the respondent pointed out that the more familiar the less formal you have to be. However, it was also emphasized that a certain degree of professionalism must be kept. The more important point is actually to be professional. The relationship that is created with the LSP(s) has to yield to the promised and expected results.

Preferably, the relationship is built prior to the disaster so as to have the different systems ready, even though the needs are not necessarily present when the relationship starts to form. The respondent highlighted the fact that an emergency should have everything already in place. Apart from very sudden emergencies (e.g. earthquakes), most of them can be predicted.

In regards to joining a group that is already formed, the respondent highlighted the fact that the logistic cluster led by WFP is a permanent cluster. Therefore, it is easier for UNICEF to use WFP's services rather quickly.

Concerning simplicity, the respondent simply stated that *“the more simple, the better”*. Emergencies are already complex enough with many actors involved and a certain lack of information. Therefore, simplicity is always helpful, and every action needs to be straightforward.

The respondent pointed out that their principles could not be compromised.

Concerning the symmetry of the players, the respondent stressed that having players of different size could actually be beneficial. The argument behind was that every entity comes with *“different strengths and weaknesses”*. For instance, the respondent explained that small players had quite often a level of bureaucracy quite low. Besides, they are most of the time quite effective at a field level. Everything actually depends on the size of the need.

Finally, complementarity and compatibility were viewed as essential. The more compatible, the better the gaps can be filled. The same applied to complementarity.

4.6 UNICEF Mozambique – Anonymous Informant

The informant was interviewed on April 11, 2013 on the phone. For confidentiality reasons, the informant's name and position cannot be revealed. The interview was not recorded, and the person acted as an anonymous informant for the researchers.

4.6.1 Drivers and Outcomes

Concerning why UNICEF intervened in this disaster, the informant stated that it was one of UNICEF's objectives. In the informant's belief, UNICEF would intervene in any kind of disaster.

In regards to the LSPs UNICEF was using, the informant did not know who they were exactly but did know that several LSPs were used during disaster relief operations. A high level of cooperation was witnessed between the different UN agencies and some NGOs. In the case of an emergency, everything seemed to be done *"very ad hoc"*.

4.6.2 Facilitators

In regards to the influence UNICEF's corporate culture could have on the relationship with its LSPs, the informant was relatively unsure. It was reckoned that logistics was very complex in any emergency, and that the different organizations would have to work together with the government. In addition, the informant highlighted that everything they do is tightly tied to UNICEF corporate culture.

Concerning their management philosophy, the informant pointed out that some conflicts could actually arise between them, the LSPs and the government. Those were mainly connected with the different responsibilities among the actors, and who was responsible for what. For instance, in some situations UNICEF wanted to deliver some supplies to some beneficiaries, but it was impossible since those supplies were stored in government warehouses. Since one of UNICEF's missions' aims at strengthening government capacities, some conflicts can then arise because of conflicting ideas on how fast the supplies should be delivered.

In terms of complementarity of capabilities, the informant viewed UNICEF as a coordinator. Since they do not own the means for distributing supplies, they must use the actors capable of delivering the supplies for them.

4.6.3 Constraints

In the informant's opinion, having a sudden and massive workload just makes things more difficult to handle. More specifically, the informant emphasized the coordination level and the importance of coordinating the different actors involved more in disaster relief operations. For instance, the informant recalled hearing about trucks going half empty. The informant suggested that a higher level of coordination would help avoid those situations and make sure every truck is used to its maximum capacity.

In regards to trust, the informant stressed that it was important. However, no further details were provided on why and how this would affect the relationships between UNICEF and its LSPs.

Finally, concerning the political interests, the informant emphasized both its presence and importance. The informant stated that UNICEF is *"involved in everything in all aspects"*. The informant highlighted an existence of a certain kind of diplomacy between UNICEF and the other entities involved, especially between UNICEF and the government. UNICEF cannot do anything prior to receiving the green light from the government. Therefore, UNICEF and its partners become dependent on whether or not the government requests their help.

4.6.4 Components

In regards to time, the informant stated there was a lot of time needed to build the relationship. However, in reality it seemed there was little time allocated to building that relationship. To quote the informant, *“it would be more effective if you give it some more time and build up the relationship”* in order to *“pull together as one and not having conflicting interests”*.

Concerning contact intensity, the informant emphasized that a lot was needed. More specifically, the informant emphasized that knowing where the driver is at any time was really important to UNICEF.

The informant did not have an opinion concerning contact familiarity nor the degree of formality.

The informant was aware of the fact that WFP was a main provider of logistics services to UNICEF. However, no clear opinion was expressed in regards to how joining WFP could or could not enhance effectiveness.

The informant reckoned that disasters generate complex situations. Ideally, everything is kept simple. In reality, everything is really complex. The informant highlighted that UNICEF's capacity at first response during the flooding of January 2013 was of 25,000 people in two hours, whereas more than 100,000 people were actually in need. Also, the informant emphasized that complexity arose because of a lack of control. For instance, some items were delivered to the wrong place or even disappeared. The informant informed the researchers that such situations were difficult to handle for UNICEF since the drivers do not work for them directly.

The informant connected principles and trust. In the informant's opinion, UNICEF cannot compromise its principles since those are tightly connected to trust. However, the informant made no clear connections concerning how being uncompromising affects the relationship they have with its LSPs.

In regards to size, the informant connected sizes and funds of the different organizations. In the informant's opinion, the different LSPs have a lot of power. In a certain way, UNICEF is dependent on them since they are the ones capable of providing the services they need.

Finally, the informant was not able to provide clear answers on the importance of complementarity and compatibility. The respondent emphasized that the different organizations that work together must be able to intervene, coordinate, and cooperate quickly.

4.7 WFP Mozambique – Logistics Level

The respondent was interviewed on the phone on April 19, 2013 during 59 minutes. The respondent has been holding a central position at World Food Program (WFP) in Mozambique for 4 ½ years.

4.7.1 Drivers and Outcomes

In terms of motivation, the respondent stated that WFP Mozambique is the *“biggest actor”* in terms of logistics and is the lead of 3 clusters, one being the logistics cluster. This is because of the level of activity within the country and it is part of their mandate to facilitate the whole donor appeals and provide logistic services.

It was stated by the respondent that the relationship between WFP and UNICEF is *“good”* and relatively close. Mozambique is a pilot country for many things, one being the imple-

mentation and use of *service provision* that was started in 2008 between WFP and UNICEF. Previously, there was no formal agreement between the two, however WFP promotes the service provision because UNICEF had previously used their facilities and not too many systems were in place before. To organize transport for UNICEF through WFP makes it easier and cheaper for them. The service provision is offered to other partners in the country who use WFPs services.

Mozambique is a relatively large country, covering 2500 km. In terms of logistics, it is divided and regionalized into 5 areas. Therefore it is important to understand and know the local prices and local service providers in order to *“have an effective supply chain outside of Maputo”*.

Additionally, the respondent noted that WFP does not have their own fleet therefore they hire through the private sector, However, the private sector is *“very immature”* so they *“still have to oversee them”* in order to make certain that they and their customers/partners are getting the best prices and actually delivering as per the contract.

4.7.2 Facilitators

On a global scale regarding corporate culture, WFP has a Memorandum of Understanding (MOU) with UNICEF for logistics services. This means that at the headquarter level, it is decided that WFP and UNICEF work together in many countries. Overall, there is a *“positive attitude towards working together and building on each other’s main strengths”*.

In terms of management philosophy, WFP Mozambique has been *“fairly active towards promoting the service provision”* towards UNICEF and all its partners. According to the respondent, each country decides on the participation of the service provisions offered through WFP. In relation to WFP Mozambique, the service provision is a *“benefit”* for both WFP and UNICEF because WFPs programs are changing, there has been less funding for logistics, and it is easier to provide transport solutions for large tonnages. As a solution, the respondent indicated that to work with other partners could result in maintaining *“economies of scale and have more leverage with our service providers”*.

Additionally, the respondent stated that from the higher-level management side, it has been *“a very positive attitude towards working with UNICEF”*. Working with food items in logistics can be *“complicated”*, therefore the respondent stressed that training their logistics staff is critical. As per the respondent’s arrival at WFP Mozambique in 2008, there were 40 people in logistics with different understandings on how to do logistics effectively, such as working with more transporters with smaller trucks and at optimal levels. Furthermore, supporting the partners with logistic services secures job positioning/placement. Being partnered together means having a larger staff to maintain. Therefore, a challenge for WFP has been getting staff to understand that training is *“beneficial”* for them, especially at the local level. For example, *“a local storekeeper might not be too positive about loading a UNICEF (item) because he thinks it is a hassle”*.

As stated by the respondent, UNICEFs set up is very different from country to country. UNICEF utilizes WFPs facilities to store their supplies and with one call, *“facilitate some of the logistics for them”*. In terms of capabilities and its mandate, UNICEF has a global set up and supports the government in special areas such as importing vaccines and/or essential drugs. The respondent indicated that WFP does not have that capability. As a result, WFP utilizes this capability they lack and learn from UNICEF, especially since WFP is working more with the Ministry of Health.

4.7.3 Constraints

In terms of sudden and massive workload, the respondent indicated that on a management level it is understood that WFP receives funding for *“this special operation”* to work and provide services to UNICEF. As a result, it is understood that UNICEF is *“just as much their client as their program unit inside”*. Therefore, if the storekeeper and the warehouse manager are not aware that UNICEF is also the client, it can *“complicate matters a bit”*. For example, if the storekeeper and/or warehouse manager are very busy, they are going to prioritize what they know. For this particular emergency, there were communication *“complications”* between staff at WFP and UNICEF due to coordination oversight and misunderstandings.

As for trust, the respondent felt that *“the more trust you have, the better services”*. The more familiar WFP is with the processes and capabilities of UNICEF, the *“easier”* it is to be more effective and communicate in the relationship. The services offered to UNICEF are the same across the board.

There is an apparent level of trust between WFP and UNICEF Mozambique because they know each other at several levels and not just between the logistics departments. Additionally, WFP and UNICEF work together in coaching the humanitarian country team in which they are *“promoting”* the logistics cluster, such as how it works and the services that are provided.

As far as the influence of political interests, the respondent indicated that both WFP and UNICEF work based on which type of management they have in place and what the interests are of that particular management. Although there may be *“global guidance”*, a new manager has the *“power to change things”*, which can affect the relationship. According to the respondent, this is a major influence because if there is a good working relationship already established, political interests of a new manager can shift the relationship completely.

Additionally, the respondent informed the researchers that in Mozambique, they *“are quite far with the whole UN approach, and both UNICEF and WFP have been very active in promoting it”*. For example, UNICEF has a one-year procurement plan in which they are also receiving some funds for it now. WFP has the one UN Information Communication Technology (ICT) common services so there has been *“quite a bit of push”* working more together in the UN, which leaves the room for negotiation in the service position a little bit less open.

4.7.4 Components

In regards to the time to build, the respondent explained that the more time to build, the better because of the difference of items shared between WFP and UNICEF. The respondent tied this to trust, which enables *“more services coming back”*.

The respondent connected contact intensity with time to build because *“the more contacts we have, the better”*. As a result, WFP and UNICEF Mozambique become more familiar with each other at all levels, and not just at the decision-making level. The respondent emphasized that the relationship WFP has with UNICEF is *“fairly established”*. Therefore, both parts have knowledge in regards to supplies needed, work flow and processes, as well as *“comfortable”* communicating throughout the organization.

In terms of contact familiarity, the respondent expressed that *“it comes down to personality”*. The respondent explained that it is not entirely important to know other people, however at the operational level *“the more familiar, the better”*.

The respondent felt that the degree of formality between WFP and UNICEF was “a mix”. At a personal level, it is “informal”. However, it has become more formal in order to have good structure in place and to negate security risks and theft. As a result, “there needs to be some level of formality”.

The respondent emphasized that the time to build a relationship should occur “more pre-disaster”. This is because “the more time we have to build a relationship, the more effective it is going to be”. When disaster strikes, they have 24 hours to send supplies so it is important to know the value of supplies, the trucks it can be transported in, and ensure delivery to the right place at the right time. The respondent put an emphasis on the fact that “preparing your planning makes your operation way more effective. The more you know of the partner’s items, the better”.

In the respondent’s perspective, the degree of simplicity between WFP and UNICEF is “fairly simple”. However, from the point of view of a local storekeeper, the respondent thought that the relationship would be perceived as being more complex. Furthermore, the respondent added “the more simple the relationship with UNICEF will make it more effective to work, except if the simplicity is going to affect the cost effectiveness of it or put it at risk, security wise. So you have to balance it”.

In terms of adherence to principles, the respondent’s perspective was that “being logistics, we are very flexible”. Depending on the task at hand during and throughout an emergency, solutions have to be found and implemented quickly. Adhering to procedures and regulations is important. However, processes such as invoicing can be delayed until after the emergency is no longer an emergency. In logistics, the respondent explained that they try to find solutions that adhere within procedures and regulations.

The respondent perceived that WFP Mozambique and UNICEF Mozambique are “fairly compatible in being an UN Organization on management teams even through disasters” because they are sister organizations and therefore understand each other. This could be directly tied to adherence of principles because of the service provision intact. As a result, there is no need to invoice UNICEF in advance because they have a “global memorandum”, which gives them quite a bit of flexibility. They know each other’s procedures and adhere to the same rules that enable everyone to act “faster as well as cheaper”.

In the respondent’s opinion, WFP Mozambique and UNICEF Mozambique are complementary even though UNICEF has different programs. “If our programs complemented each other more, the relationship would also, or at least the relationship would be more effective. Furthermore, it was stated that they are “split organizations”, hence they are “competing”. This is common amongst UN organizations. Therefore, if there is too much overlap there might be “political interests” that stop the relationship, or put a “barrier” to it because of competition of funding from donors. The respondent explained that WFP is becoming more involved into nutrition, which collides with what UNICEF provides. The respondent added “it is good to complement more than overlap too much”.

5 Analysis

In this chapter, the authors will provide a thorough analysis of the empirical data, using relevant theories from the literature review. The chapter is divided in five sections. The first four sections will follow the research questions' structure, while the fifth section will present an updated version of the conceptual framework.

5.1 Influence of the Drivers and the Outcomes on the Relationship between UNICEF and Its LSPs

As the frame of reference in Lambert & Knemeyer (2004) relationship model highlighted, different drivers and expected outcomes influence the status of a relationship between a humanitarian organization and its LSP(s). Therefore, in order to answer the first research question the different drivers and outcomes found within the empirical findings are analyzed.

The data gathered from all respondents confirm that both UNICEF and WFP become involved when a disaster strikes because of their mandates. This confirms Hilhorst (2002)'s statement that when engaging in humanitarian relief operations, a range of players with different cultures, purposes, interests, and mandates work closely together. As stated in the frame of reference (Lambert & Knemeyer, 2004), the combination between drivers and facilitators triggers the decision to create or adjust a relationship, thus the mandate shared between the two parties drives and facilitates their involvement in disaster relief operations.

As in the frame of reference, Bolumole (2003) suggests the types of services provided are varied depending on the role of the organization vs. the role of the logistics service provider. From the point-of-view of each of the logistics officers both at UNICEF and WFP, their objectives or roles are slightly different. UNICEF first focuses first on assisting the government in setting up a response mechanism and ensuring that the different supplies are available. Additionally, they ensure the proper training of human resources and that response plans are ready to go when a disaster occurs. On the other hand, WFP focuses more on donor appeals and providing logistic services, while also ensuring proper staff training and preparedness.

Nevertheless, similarities in training and preparedness plans are shared between UNICEF and WFP. This contradicts Murray (2005) who indicates that preparation and training are often neglected since donors pressure for their money to go directly help victims, but not to finance back-office operations. It can be inferred that training and preparedness plans are considered key capabilities that have been prioritized into the effectiveness of UNICEFs and WFPs operations. Given in the frame of reference, Panayides & So (2005) research points out that there is a positive influence on sharing key organizational capabilities. This promotes an improvement in supply chain effectiveness and performance when a closer relationship between LSPs and their clients is formed.

From both sides of the parties, the current, working relationship between them is good. UNICEF is quite dependent on WFP since they are the main provider of logistic services for UNICEF. WFP understands this dependence and therefore enables their service provision as a way to be more effective within their coordination efforts. This confirms the theory that LSPs are enablers or "tools" in achieving supply chain integration, as mentioned by Fabbe-Costes et al. (2008) in the frame of reference.

As the frame of reference Alessandra Cozzolini (2012) states, there are several actors interacting at the same time during disaster relief operations. In this case, other logistic service providers include local transporters and storekeepers. Until the logistics cluster is activated, UNICEF will ad hoc local logistics providers in order to maintain a certain level of control during the early stages of disaster relief.

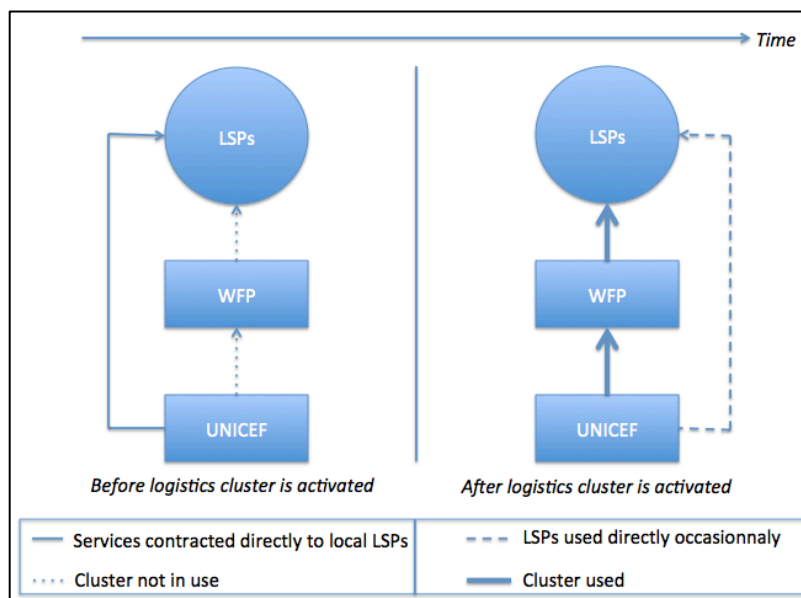


Figure 8 Evolution of the Logistics Services Usage Made by UNICEF Mozambique During an Emergency
Source: Balland and Sobhi 2013

Both UNICEF and WFP are aware that language, cultural barriers within the regions and differences in costs and infrastructure hinder and/or create ineffectiveness upon delivery or receipt of the goods. This awareness encourages the two parties to work together, especially since it is the role/objective of WFP to be knowledgeable and more inept in the logistics field. This confirms the trend to outsource logistics activities as discussed in the frame of reference Panayides & So (2005) who suggest that those logistics functions undertaken will influence effectiveness and performance in the supply chain.

5.2 Influence of the Facilitators on the Relationship between UNICEF and Its LSPs

Within the frame of reference (Lambert & Knemeyer, 2004), there are three main facilitators highlighted (compatibility of corporate culture, compatibility of management philosophy, and complementarity of capabilities) that influence the relationship a humanitarian relief organization has with its LSP(s). Consequently, the different findings from the empirical section will be analyzed and presented in this subsection.

5.2.1 Compatibility of Corporate Culture

As previously mentioned, the shared mandate between UNICEF and WFP encourages the two parties to work effectively together. In addition, it enhances the growth of their partnership to be better prepared in order to provide better services.

Additionally, as each organization works with the government of each country in need of relief, the commonality to help children during disaster relief operations helps to ease negotiations. Furthermore, under the MOU, prioritization is given to UNICEF, thus enhancing

their partnership. In direct comparison to local logistics providers and UNICEF, funding and prioritization are intertwined. This means, if you pay the local or commercial service provider to do a job, they will do it, but the overall services could be costly.

The overall compatibility between UNICEF and WFP as the main logistics provider contributes to a positive working environment, despite the complex circumstances surrounding logistics during a time of crisis. Therefore, the corporate culture facilitator is confirmed.

5.2.2 Compatibility of Management Philosophy

Management philosophy and techniques refer to a set of beliefs that are used by an individual, or an organization, in a management position to guide the decision making process (Business Dictionary, 2013).

It is determined from the case that there exist several factors guiding the decision making process between UNICEF and WFP such as recognition of reputation, level of coordination, recognition of budget and personal relationships. Those elements were confirmed within the frame of reference (Tomasini & Van Wassenhove, Humanitarian Logistics, 2009b). Each organization has different tasks, including the host government, but each is guided by their mandates. Recognition of less funding means utilizing each other's strengths to be effective and achieve economies of scale and job positioning/placement. Personal relationships are developed individually and usually pre-disaster. Having close contact internally and externally affects the priority level of response.

As indicated in the empirical findings, the role of WFP is shifting into other service areas that create conflicting activities, thus complicating the ability to effectively coordinate. Stress and demand level can complicate their compatibility. However, both sides prioritize a level of flexibility in order to aid victims of disaster in a timely and effective manner. To maintain this coordination level, WFP actively promotes their service provision. UNICEF willingly takes on the service provision as a way to enhance their partnership.

Between the government and UNICEF, UNICEF recognizes the importance to strengthen the government's warehouse capacity in order to enhance their relationship and be more effective in rapidity.

From upper management to fieldwork, there is consensus of a positive relationship. However at the local level, it becomes a bit more complicated as it is the unwillingness to cooperate as well as regional diversification that hinders service from the local level. Training is offered in order to eliminate this barrier.

Therefore, the facilitator compatibility of management philosophy is confirmed.

5.2.3 Complementarity of Capabilities

Within the frame of reference McLachlin & Larson (2011), it states that in order to complement each other's capabilities, one part provides a service that the other cannot handle alone. In this case, there are two different perspectives of coordination. UNICEF is not specialized in logistics therefore the organization relies heavily on the coordination capabilities of WFP as well as their logistic services provided. On the other hand, UNICEF coordinates these actors in order to distribute their supplies to the beneficiaries in need in a timely manner. Uncertainty of demand and the lack of predictability of disaster occurrence are shared barriers between the actors involved therefore, utilizing each other's strengths and recognizing each other's weaknesses is crucial. The payoff is lack of control.

Learning from each other enhances their “competitive advantage” for future growth. This is confirmed in the frame of reference Skjoett-Larsen (1999) when he concludes in his research that the role of a LSP is not merely a means to cost efficiency, but also as a strategic tool for creating competitive advantage through increased service and flexibility. This falls in line with commercial logistics within the frame of reference, in that the private sector takes advantage of the competitive market in which it evolves, where performance is mainly rewarded throughout internal incentives and increases in revenues and profits (Murphy & Jensen, 1998). However, humanitarians evolve in a “market” where there exists no “real” competition, since the main objective is to save lives. The competitive advantage achieved between UNICEF and WFP in this case is better service and increased flexibility, which ultimately saves more lives.

Therefore, the facilitator complementarity of capabilities is confirmed.

5.3 Influence of the Constraints on the Relationship between UNICEF and Its LSPs

Within the frame of reference (Seybolt, 2009), it has been highlighted three main constraints (the sudden and massive workload, the need for trust among the actors, and the political interests of the different actors) can influence the relationship a humanitarian relief organizations has with its LSP(s). Consequently, the different findings from the empirical section will be analyzed and presented in this subsection.

5.3.1 Sudden Massive Workload and Findings

The different findings suggest that the sudden and massive workload affect the relationship UNICEF has with its LSPs. This fact was supported within the literature review, as disasters engender much work for the different actors (Banatvala, Roger, Denny, & Howarth, 1996). Interestingly, the different respondents highlighted the fact that the actual size of the emergency will actually be the determinant of the sudden and massive workload. Therefore, within the framework, the researchers suggest to actually connect the sudden and massive workload with the size of an emergency. In others words, the bigger the emergency the more work tasks the relief actors will have to fulfill. Therefore, the relationship between UNICEF and its LSPs finds itself affected depending on the size of the emergency.

In addition, the different people interviewed within UNICEF stressed that capacity issues could arise. Hence, the size of an emergency will also affect the capacity to contract and/or simply find LSPs that can transport the goods for UNICEF. At the LSP level, the respondent emphasized the fact that apart from being a client, UNICEF was also under the UN organization (UN, 2013). Therefore, it is important for the people that work for WFP to know that UNICEF is the client. Consequently, a certain priority has to be given to it.

The different respondents have also emphasized the role played by the location of the emergency. Connecting it with the capacity issues of the LSPs, they become actually affected by the location of the emergency itself and by the point of departure. As the literature supports it, humanitarians evolve in a volatile climate (Van Wassenhove, 2006) and unstable environment (Van Wassenhove, 2006; Kovacs & Spens, 2007) that makes it difficult to forecast the location of a disaster. Therefore, this location constraint needs to be added to the framework since it affects the nature of the relationship. It will be merged under the constraint of sudden and massive workload.

Moreover, an increase in prices seems to occur when the demand is actually high and the offer relatively low. Once again, this finding actually ties into the capacity issues some LSPs

are likely to face. Therefore, another constraint concerns the likeliness of the services to become more expensive all of a sudden.

5.3.2 Need for Trust among the Actors and Findings

In regards to trust, the empirical findings as well as the literature (Stephenson, 2005) suggest that it occupies a major role within the relationship between UNICEF and its LSPs. In fact, issues in terms of trust actually occur when capacity issues come into play. As the different empirical findings suggest it, the “*well-deserved reputation*” UNICEF has plays in their favor when they have to contract logistics services. UNICEF and its LSPs try to build relationships during the preparedness phase since Mozambique is prone to flood disasters, which is what the frame of reference advices (Kovacs & Spens, 2007). However, it was found that it is not easy to build relationships during the response phase. Therefore, the trust is being confirmed as a crucial element to the effectiveness in the relationship between UNICEF and its LSPs.

In addition to what was found in the conceptual framework, the empirical findings suggest that the information that is exchanged between the two parts (UNICEF and its LSPs) has to be accurate. The importance of that information was emphasized within the literature (Long & Wood, 1995). The quality and accurateness of the information is actually “*crucial*” in order to both increase trust and solve a problem. Therefore, the need for accurate and trustworthy information is needed among the actors, along with the need of trust.

5.3.3 Political Interests of the Different Actors and Findings

In terms of political interests, the literature (Olsen, Carstenesen, & Høyen, 2003) as well as the empirical findings have confirmed the important role they play between the actors. More specifically, the role they have on the relationship between UNICEF and its LSPs. As one respondent stated, political interests are “*involved in everything in all aspects*”.

However, a distinction has to be made concerning the political interests that exist between the humanitarian organizations (UN, NGOs...) and the LSPs. As the literature showed it, pressure from the donors is more and more present (Van Wassenhove, 2006). On the one hand, the different organizations that do not come from the private sector are competing in a certain way in terms of funds, creating competition inter-agencies. On the other hand, the LSPs that come from the private sector will simply provide the service they are contracted for, provided that they get paid. Consequently, the political interests constraint is likely to arise between agencies that rely on funds only.

Within this case study, the different respondents highlighted that WFP and UNICEF always “*try to work together*”, especially in Mozambique where they feel like the two agencies “*go quite far with the whole UN approach*”. Therefore, it seems like this inter-agencies competition for funds is avoided.

5.4 Influence of the 11 Components on the Relationship between UNICEF and Its LSPs

Within the frame of reference, it has been highlighted 11 components are responsible for enhancing the effectiveness of a relationship (McLachlin & Larson, 2011). Therefore, the findings from the empirical section will be analyzed and presented in this subsection.

5.4.1 Time to Build

In regards to the time UNICEF and the LSPs must devote to building a relationship, the findings suggest the more time the better. The literature supports this view (McLachlin & Larson, 2011). Dedicating time to building a relationship improves cooperation, reduces conflict of interests, and avoids trust issues. The findings even highlight this particular problem: issues in terms of trust do arise once a relationship has to be built *“ad hoc”*. Therefore, it is important to dedicate as much time as possible to building a relationship during the preparedness phase in order to be ready.

5.4.2 Contact Intensity

Concerning contact intensity, the findings reveal that many contacts are actually needed in order to build and maintain the relationship. The findings advocate the following point-of-view: *“the more contacts you have, the better”*. Therefore, this finding updates the previous framework presented in the frame of reference, since it was advocated that a reasonable number of contacts was needed (McLachlin & Larson, 2011). This research pushes towards having many contacts in order to improve the effectiveness of the relationship.

5.4.3 Contact Familiarity

Regarding contact familiarity, the conceptual framework in the frame of reference suggested having an initial familiar contact (McLachlin & Larson, 2011). The findings from this study confirm that if it is possible, *“the more familiar the better”*. However, the findings also confirm that only an initial known contact is better. It is not *“entirely important”*. Therefore, this part of the framework will stay as it was, namely having an initial familiar contact is better.

5.4.4 Degree of Formality

The findings stress that a certain consensus exists in terms of formality. Although it seemed preferable to have a certain degree of informality, still the relationship has to be professional enough in order to yield to the expected results. Therefore, the findings point towards a relationship that is at the same time relatively informal, but still professional. This confirms what was found in the literature review (McLachlin & Larson, 2011).

5.4.5 When to Build

The findings from the frame of reference suggest that it is always better to build a relationship during the mitigation and/or preparedness phases (McLachlin & Larson, 2011). Interestingly, the findings discovered in this research also confirm this trend: a relationship between UNICEF and its LSPs has to be built prior to a disaster. The main advantages provided are preparation and the capacity to react quickly, elements supported by the literature (Nikbakhsh & Farahani, 2011).

5.4.6 Groups Joined/Formed

The frame of reference unveiled that joining a large group of actors can enhance the likelihood to act together (McLachlin & Larson, 2011), while increasing cooperation (Tomasini & Van Wassenhove, Humanitarian Logistics, 2009b). The findings in this research point towards the fact that UNICEF enjoys joining a large group of players. Within this case study, it was discovered that UNICEF is even encouraged to work with WFP since both organizations are under the UN umbrella. Therefore, this component is confirmed and in line with what was found within the frame of reference (McLachlin & Larson, 2011).

5.4.7 Degree of Simplicity

In regards to simplicity, the different elements presented in the frame of reference pointed towards a need for simplicity (McLachlin & Larson, 2011). Since the humanitarian context imposes to work under the humanitarian principles (Tomasini & Van Wassenhove, Humanitarian Logistics, 2009b), in an unknown environment (Van Wassenhove, 2006) and cope with many actors (Cozzolino, 2012), which have distinct goals (Hilhorst, 2002), processes that are kept simple are always preferred. The findings in this research confirm the benefits that keeping processes as simple as possible bring: *“the more simple, the better”*.

5.4.8 Adherence to Principles

One clear element found in both the frame of reference (Tomasini & Van Wassenhove, Humanitarian Logistics, 2009b) and the empirical findings is that principles cannot be sidelined. UNICEF, WFP and the LSPs have to obey to the principles the humanitarian context imposes. However, the different respondents highlighted that since acting fast is crucial, some *“shortcuts”* can be taken. It can refer to invoicing, where such tasks are not necessarily vital to the sake of a disaster relief operation in the first place. Therefore, it is suggested to add a new section entitled *adherence to procedures and regulations*, where *“shortcuts”* can be taken.

5.4.9 Symmetry of Players

Concerning the symmetry of the players, it was suggested in the frame of reference that the players needed to be of relative equal size. Interestingly, the findings in this research suggest that having players of distinct sizes can actually yield to many advantages. Taking into consideration UNICEF and its LSPs of relatively small sizes, the findings praise their low level of bureaucracy, knowledge of the local market as well as the local language, and usefulness in organization transportation. Therefore, it is suggested here the size of the players actually only matters depending on the actual size of the need. Hence, and in order to avoid capacity issues, the size of the LSP contracted will first need to be assessed in order to make sure coping with the demand will not become a problem.

5.4.10 Compatibility

Within the frame of reference, it is suggested that a high level of compatibility needs to exist between the different players to have an effective relationship (McLachlin & Larson, 2011). In this research, the findings emphasize the importance of complementarity, where it is *“viewed as essential”*. Consequently, a high level of compatibility is needed between UNICEF and its LSPs.

5.4.11 Complementarity

In regards to complementarity, the findings are in line with what was developed in the frame of reference, meaning that the different capabilities of the players need to be complementary (McLachlin & Larson, 2011). Within this case study, *“complementarity is essential”*. Therefore, this element has to stay as such within the conceptual framework.

5.5 The Conceptual Framework after Research

5.5.1 The Conceptual Framework Modified

Within this subsection, a modified version of the conceptual framework is presented. This conceptual framework represents the result of the authors' research.

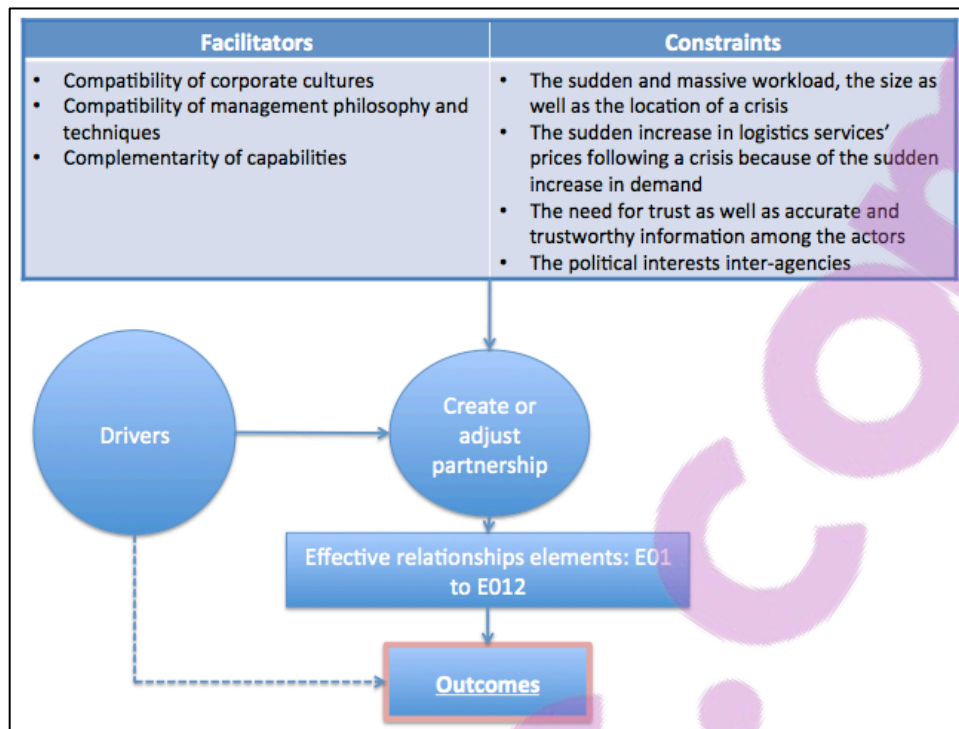


Figure 9 Framework for an Effective Relationship between Two Humanitarian Actors Source: Balland and Sobhi 2013

5.5.2 Summary of the Components

This section aims at summarizing the different findings that were found within the research in regards to the components of the literature review (McLachlin & Larson, 2011).

Property			Dimensional Range	
E01	Time to build	Little time	.....x	Much time
E02	Contact intensity	Few contacts	.....x	Many contacts
E03	Contact familiarity	Familiar	x.....	Unfamiliar
E04	Degree of formality	Informal	.....x.....	Formal
E05	When to build	Pre-disaster	x.....	Post-disaster
E06	Groups joined/formed	None	.....x	Many
E07	Degree of simplicity	Simple	x.....	Complex
E08	Adherence to principles	Compromising	.....x	Uncompromising
E09	Adherence to procedures and regulations	Compromising	.....x.....	Uncompromising
E10	Symmetry of players	Equal size	.....x...	Unequal size
E11	Compatibility	Incompatible	.....x	Highly compatible
E12	Complementarity	Low	.....x	High

6 Conclusion

In this section, the authors will present a conclusion to their research. It will be followed by the research contributions being discussed in a next subsection. Managerial implications, final reflections and suggestion for future research will conclude the research.

6.1 Research Conclusion

The purpose of this study was to explore the relationship between UNICEF and its LSP(s) during disaster relief operations. This was pursued throughout a case study of UNICEF Mozambique during the flooding that occurred in January 2013. The collection of primary and secondary data allowed the researchers to gather empirical findings that could be analyzed and connected to the frame of reference. Hence, the conceptual framework that had been developed within the frame of reference could be tested. This conceptual framework was updated according to the analysis made of the empirical findings.

The main driver in saving lives when disaster strikes are UNICEF and WFP's mandates. Although each other's roles and objectives are different, both UNICEF and its LSPs recognize that training and preparedness plans are key organizational capabilities needed in order to drive an effective relationship. Finally, UNICEF recognizes and utilizes its LSPs as enablers or "tools" to achieve effective supply chain integration within their relationship. The outcome of saving lives depends on the formed relationship, which must allow an effective coordination of the efforts between the humanitarian relief organizations and its LSPs when disaster strikes.

Compatibility of corporate culture includes having similar mandates, prioritization and a positive-working environment as the main influencers revealed under the study. This helps UNICEF and its LSPs to work effectively together in order to provide better services throughout their involvement in disaster relief operations. Under compatibility of management philosophy, several influencers that guide the decision making process include recognition of reputation, level of coordination, recognition of budget and personal relationships. Meanwhile, complementary capabilities are recognized and utilized through the understanding of each other's coordination levels and the ability to learn from each other, thus strengthening the coordination effectiveness between UNICEF and its LSPs.

In regards to the constraints of the relationship between UNICEF and its LSPs, this research concludes that the sudden and massive workload that occurs following a crisis is connected to the size and the location of the emergency itself. In addition, findings suggest that an additional constraint exists. It refers to the prices of the logistics services likely to increase because of a sudden increase in demand. The need for trust, as well as accurate and trustworthy information, between UNICEF and its LSPs is needed and crucial to their relationship. The political interests of the different actors were found to be likely to come into play only between agencies of the same type, sidelining the political interests the private sector could have.

In regards to the components developed by McLachlin & Larson (2011), this research concludes that in order to install an effective relationship between UNICEF and its LSPs much time has to be spent on building the relationship prior to a disaster. Also, many contacts have to occur, with the first one being familiar. Along a certain level of formality is preferred. Joining a group composed of many actors where processes are kept simple is advised. Principles cannot be compromised, whereas procedures and regulations need to be loosened. Finally, UNICEF and its LSPs do not have to be of equal size, however they have

to be highly compatible and complementary. The number of components went from 11 to 12 after this research was conducted.

6.2 Theoretical Contributions

The research the authors conducted has led to three theoretical contributions.

The first theoretical contribution is concerned with the conceptual framework the authors provided. This framework contributes to the existing literature on the topic of relationship management within the humanitarian field. More specifically, the framework provides its audience with an overview in terms of drivers, facilitators and constraints in order to reach the outcome humanitarian relief organizations strive for, namely to save lives and aid people in need when disasters strike.

The second theoretical contribution is concerned with the components McLachlin & Larson (2011) present as enhancers of the relationship effectiveness between two actors that wish to cooperate within the humanitarian relief community. This research allowed the authors to test the different components in a case study. One additional component was found and added to the original components after the research was conducted. Hence, the authors of this research now recommend 12 components that must be considered when two humanitarian actors look for having an effective relationship.

The third theoretical contribution is concerned with the general contribution this research brings to the humanitarian logistics field.

6.3 Final Reflections

It is not uncommon to face difficulties when conducting research, especially when focusing on real-context within a case study. Time and distance are factors that cannot be taken for granted in humanitarian logistics. This research focused on a disaster that occurred in Mozambique, thus limiting the researchers' ability to reach local logistics providers used by UNICEF before the logistics cluster is activated. This is due to time restrictions, distance and other factors mentioned in the Methods chapter. To compensate for the lack of LSP data, this research is more focused from an UN Agency point-of-view, rather than from the LSP side. However, since WFP is the main logistics provider once the logistics cluster is activated, the data retrieved balances the equation, thus fulfilling the purpose of research.

Disaster relief operations as a whole are quite complex. Narrowing down the focus area to the relationship between an UN agency and its LSPs simplified this study. The data is rich with insightful perceptions and meanings that answered our research questions and fulfilled our purpose. However, the focus is only the tip of the iceberg, meaning there is so much more to explore in the area of humanitarian logistics and its relationship with the many different actors involved in disaster relief operations. The findings are generalizable as it pertains to certain actors, namely an UN agency and LSP. However, if other relationships between actors could be explored, a much wider and general conclusion could be made.

6.4 Managerial Contributions

In regards to the managerial contributions this research has, there are two.

At a strategic level, this research has highlighted the different drivers, outcomes, facilitators, constraints and components that managers within the humanitarian field must take into consideration when building a relationship with another actor. Therefore, strategic manag-

ers could make use of the findings of this research in order to install relationships that are as effective as possible.

At an operational level, this research has highlighted and confirmed the difficulties of communication and coordination that exist between the humanitarian actors. Without clear mandates, roles, objectives and accurate information disaster relief operations are put at risk. Therefore, operational managers must make sure that their employees are trained and informed, as well as aware of the extremely volatile and demanding environment they evolve in. Professionals need to contribute to disaster relief operations utilizing their core competences.

6.5 Suggestions for Future Research

The researchers have identified additional elements to be utilized when building an effective relationship between an UN agency and its LSPs. This research focuses only on two out of seven main actors involved in humanitarian relief operations outlined by Alessandra Cozzolini (2012) in the frame of reference. Thus, it is recommended to test the newly derived framework between other actors such as an NGO and LSP.

Additionally, the researchers recommend quantifying the elements for more generalizable data and to collect a wider range of data.

Finally, a usable framework on how to build an effective relationship has been established. However, an improved coordination effort is needed since it is apparent from the research that building a relationship between UNICEF and its LSPs is nothing new. This is evidenced in the frame of reference where McLachlin and Larson (2011) state that implementation is difficult. As a result, it is recommended for future research to look more deeply into implementation procedures/efforts in order to enhance the speed and quality of saving lives during disaster relief operations.

List of References

- Bagchi, P., & Virum, H. (1996). European logistics alliance: a management model. *International Journal of Logistics Management* , 93-108.
- Balcik, B., & Beamon, B. (2008). Performance Measurement in Humanitarian Relief Chains. *International Journal of Public Sector Management* , 21 (1), 4-25.
- Balcik, B., Beamon, B. M., Krejci, C. C., Muramatsu, K. M., & Ramirez, M. (2010). Coordination in humanitarian relief chains: Practices, Challenges, and Opportunities. *International Journal of Production Economics* , 126 (1), 22-34.
- Ballou, R. (2007). The evolution and future of logistics and supply chain management . *European Business Review* , 19 (4), 332-348.
- Banatvala, N., Roger, A., Denny, A., & Howarth, J. (1996). Mortality and morbidity among Rwandan refugees repatriated from Zaire. *Prehospital and disaster medicine* , 13 (2), 17-21.
- Barbarosoglu, G., Özdamar, L., & Cevik, A. (2002). An interactive approach for hierarchical analysis of helicopter logistics in disaster relief operations. *European Journal of Operational Research* , 140 (1), 118-133.
- Beamon, B., & Kotleba, S. (2006). Inventory modelling for complex emergencies in humanitarian relief operations. *International journal of logistics: research and applications* , 9 (1), 1-18.
- Bolumole, Y. (2003). Evaluating the supply chain role of logistics service providers. *International Journal of Logistics Management* , 14 (2), 93-107.
- Bui, T., Cho, S., Sankaran, S., & Sovereign, M. (2000). A framework for designing a global information network for multinational humanitarian assistance/disaster relief. *Information Systems Frontiers* , 1 (4), 427-442.
- Business Dictionary. (2013). *Management Philosophy*. Retrieved 04 02, 2013, from BusinessDictionary.com: <http://www.businessdictionary.com/definition/management-philosophy.html>
- Cassidy, W. B. (2003, October 27). A logistics lifeline. *Traffic World* , p. 1.
- Chaikin, D. (2003). Towards improved logistics: challenges and questions for logicians and managers. *Forced Migration Review* , 18 (10), 10.
- Chandes, J., & Pache, G. (2010). Investigating humanitarian logistics issues: from operations management to strategic action. *Journal of Manufacturing Technology Management* , 320-40.
- Charles, A., Lauras, M., & Van Wassenhove, L. (2010). A model to define and assess the agility of supply chains: building on humanitarian experience. *International journal of physical distribution and logistics management* , 40 (8/9), 722-741.
- Cozzolino, A. (2012). *Humanitarian Logistics*. SpringerBriefs.
- Crowther, D., & Aras, G. (2010). *Development In Corporate Governance and Responsibility* (Vol. 1). Emerald.

- DeChaine, D. (2002). Humanitarian space and the social imaginary: Médecins Sans Frontières/Doctors Without Borders and the rhetoric of global community. *Journal of Communication Inquiry* , 26 (4), 354-369.
- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal* , 50 (1), 25-32.
- EM-DAT. (2013). *Natural Disaster Trends*. Retrieved 05 06, 2013, from EM-DAT: <http://www.emdat.be/natural-disasters-trends>
- Entrepreneur. (2013, 01 01). *Corporate Culture*. Retrieved 04 02, 2013, from Entrepreneur: <http://www.entrepreneur.com/encyclopedia/corporate-culture>
- Fabbe-Costes, N., Jahre, M., & Roussat, C. (2008). The Contribution of logistics service providers in supply chain integration. Avignon: RIRL.
- Fenton, G. (2003). Coordination in the Great Lakes. *Forced Migration Review* (18), 23-24.
- Gustavsson, L. (2003). Humanitarian Logistics: Context and Challenges. *Forced Migration Review* , 18, 6-8.
- Hilhorst, D. (2002). Being good at doing good? Quality and accountability of humanitarian NGOs. *Disasters* , 26 (3), 193-212.
- Hoyois, P., Below, R., Scheuren, J., & Guha, D. (2007). *Annual disasters statistical review: numbers and trends*. Université Catholique de Louvain, The Centre for Research on the Epidemiology of DIasters. Louvain: CRED.
- Kovacs, G., & Spens, K. M. (2007). Humanitarian logistics in disaster relief logistics. *International Journal of Physical Distribution and Logistics Management* , 37 (2), 99-114.
- Lambert, D., & Knemeyer, M. (2004). We're in This Together. *Harvard Business Review* , 82 (12), 114-124.
- Langley, Coyle, Gibson, Novack, & Bardi. (2008). *Managing Supply Chains: A Logistics Approach*. South-Western Cengage Learning.
- Lee, H. W., & Zbinden, M. (2003). Marrying logistics and technology for effective relief. *Forced Migration Review* (18.3), 34-35.
- Leverly, S. (2013). *NGOs, the UN and APA*. Retrieved 03 01, 2013, from American Psychological Association: <http://www.apa.org/international/united-nations/publications.aspx>
- Lieb, R. C., Millen, R. C., & Wassenhove, L. V. (1993). Third-party logistics: a comparison of experienced American and European manufacturers. *International Journal of Physical Distribution and Logistics Management* (26.3), 35-44.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Newbury Park, CA: Sage Publications, Inc.
- Long, D. C., & Wood, D. F. (1995). The logistics of famine relief. *Journal of Business Logistics* , 16, 213-213.
- Long, D. (1997). Logistics for disaster relief: engineering on the run. *IIE Solutions* , 29 (6), 26-29.

- Maloni, M., & Benton, W. (1997). Supply chain partnerships: opportunities for operations research. *European Journal of Operational Research* , 101 (3), 419-429.
- Maon, F., Lindgreen, A., & Vanhame, J. (2009). Developing supply chain in disaster relief operations through cross-sector socially oriented collaboration: a theoretical model. *Supply Chain Management* , 14 (2), 149-164.
- Mason, R., Lalwani, C., & Boughton, R. (2007). Combining vertical and horizontal collaboration for transport optimisation. *Supply Chain Management : An International Journal* , 12 (3), 187-199.
- McLachlin, R., & Larson, P. D. (2011). Building humanitarian supply chain relationships: lessons from leading practitioners. *Journal of Humanitarian Logistics and Supply Chain Management* , 1 (1), 32-49.
- Mentzer, J., Soonhong, M., & Zacharia, Z. (2000). The nature of interfirm partnering in supply chain management. *Journal of retailing* , 76 (4), 549-568.
- Murphy, K., & Jensen, M. (1998). *Performance pay and top management incentives*. Harvard University Press.
- Murray, S. (2005, January 7). How to deliver on the promises: supply chain logistics: humanitarian agencies are learning lessons from business in bringing essential supplies to regions hit by the tsunami. *Financial Times* , 7 (05), p. 9.
- Natarajarathinam, M., Capar, I., & Narayanan, A. (2009). Managing Supply Chains In Times of Crisis: A Review of Literature and Insights. *International Journal of Physical Distribution & Logistics Management* , 39 (7), 535-573.
- Nikbakhsh, E., & Farahani, Z. (2011). *Logistics Operations & Management*. Elsevier.
- Nunnenkamp, P., & Ohler, H. (2010). *Funding, Competition and the Efficiency Of NGOs: An Empirical Analysis of Non-Charitable Expenditures of US NGOs Engaged In Foreign Aid*. Kiel Institute For The World Economy. Kiel Working Papers.
- Oloruntoba, R., & Gray, R. (2006). Humanitarian aid: an agile supply chain? *Supply Chain Management: An International Journal* , 11 (2), 115-120.
- Olsen, G., Carstenesen, N., & Høyen, K. (2003). Humanitarian crises: what determines the level of emergency assistance? Media coverage, donor interests and the aid business. *Disasters* , 27 (2), 109-126.
- Panayides, P. M., & So, M. (2005). Logistics service providers - client relationships. *Transport Research Part E* , 41 (3), 179-200.
- Pettit, S., & Beresford, A. (2009). Critical success factors in the context of humanitarian aid supply chains. *International journal of physical distribution and logistics management* , 39 (6), 450-468.
- ReliefWeb. (2013, 01 15). *Mozambique: Floods - Jan 2013*. Retrieved 03 25, 2013, from ReliefWeb: <http://reliefweb.int/disaster/fl-2013-000008-moz>
- Russell, T. (2005). The humanitarian relief supply chain: analysis of the 2004 South East Asia earthquake and tsunami. *Doctoral dissertation* . Boston, USA.

- Sandwell, C. (2011). A qualitative study exploring the challenges of humanitarian organisations. *Journal of humanitarian logistics and supply chain management* , 1 (2), 132-150.
- Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research Methods for Business Students*. Harlow, England: Pearson Education Limited.
- Schoonhoven, C. B. (1981). Problems with Contingency Theory: Testing Assumptions Hidden within the Language of Contingency Theory. *Administrative Science Quarterly* , 26, 349-377.
- Schulz, S. F., & Blecken, A. (2010). Horizontal Cooperation in disaster relief logistics. *International Journal of Physical Distribution and Logistics Management* , 40 (8/9), 636-656.
- Seybolt, T. (2009). Harmonizing the Humanitarian Aid Network: Adaptive Change in a Complex System. *International Studies Quarterly* , 53 (4), 1027-1050.
- Simatupang, T. M., Wright, A. C., & Sridharan, R. (2002). The knowledge of coordination for supply chain integration. *Business Process Management Journal* , 8 (3), 289-308.
- Skjoett-Larsen, T. (1999). Third Party Logistics - from an interorganizational point of view. *International Journal of Physical Distribution and Logistics* , 112-127.
- Stephenson, J. (2005). Making humanitarian relief networks mor effective: operational coordination, trust and sense making. *Disasters* , 29 (4), 337-350.
- Thomas, A. S., & Kopczak, L. R. (2005). *From Logistics to Supply Chain Management: The Path Forward in the Humanitarian Sector*. Fritz Institute.
- Thomas, A. (2003). Why logistics? *Forced Migration Review* , 18 (4), 4.
- Tomasini, R., & Van Wassenhove, L. A. (2009). *Humanitarian Logistics*. New York, US: Palgrave McMillan.
- Tomasini, R., & Van Wassenhove, L. A. (2009b). *Humanitarian Logistics*. New York, US: Palgrave McMillan.
- Tomasini, R., & Van Wassenhove, L. (2009a). From preparedness to partnerships: case study research on humanitarian logistics. *International Transactions in Operational Research* , 16 (5), 549-559.
- Trunick, P. A. (2005). Special report: delivering relief to tsunami victims. *Logistics Today* , 1-9.
- UN. (2013, January). *About United Nations*. Retrieved April 02, 2013, from United Nations: <http://www.un.org/en/aboutun/index.shtml>
- UNICEF. (2013a, January). *About the goals*. Retrieved April 01, 2013, from www.unicef.org/mdg/index_aboutthegoals.htm
- UNICEF. (2013b). *Situation Report UNICEF Mozambique: Reporting period February 1-2, 2013: Flood Emergency Preparedness and Response*.
- UNICEF. (2013c, January). *The role of UNICEF*. Retrieved April 01, 2013, from www.unicef.org/mdg/index_unicefsrole.htm

UNICEF. (2013d, January). *What UNICEF is doing*. Retrieved April 01, 2013, from www.unicef.org/mdg/index_whatunicefisdoing.htm

Van Wassenhove, L. (2006). Humanitarian Aid Logistics: Supply Chain Management in High Gear. *Journal of the Operational Research Society*, 57 (5), 475-489.

WFP. (2013, January). *Logistics Cluster*. Retrieved March 29, 2013, from WFP Org: <http://www.wfp.org/logistics/cluster>

Yin, R. K. (2009). *Case Study Research: Design and Method*. London: Sage.

Appendix A – Interview Questions UNICEF

Interview Questions: Mozambique Case

1. For the purpose of this research, what is your name, position and responsibilities in relation to the current situation in Mozambique?
2. What is the current situation in Mozambique? What is the background?
3. What motivated you, as a UN Agency, to get involved in this specific disaster?
4. Who is your LSP? How would you describe your relationship with your logistics service provider?
5. How do you think your corporate culture influences/affects the relationship you have with your LSP?
6. How do you think your management philosophy influences/affects the relationship you have with your LSP?
7. How do you think your capabilities complement each other?
8. How do you think the sudden and massive workload affects your relationship with your LSP?
9. How do you think trust affects the relationship between you and your LSP?
10. How do you think political interests affect your relationship with your LSP?

11. See 11 elements of effective relationships:

- a. To what extent does EXX affect the effectiveness your relationship with your LSP?
- b. Why?

<u>Property</u>		<u>Dimensional Range</u>		
E01	Time to build	Little time	.....	Much time
E02	Contact intensity	Few contacts	.....	Many contacts
E03	Contact familiarity	Familiar	.....	Unfamiliar
E04	Degree of formality	Informal	.....	Formal
E05	When to build	Pre-disaster	.....	Post-disaster
E06	Groups joined/formed	None	.....	Many
E07	Degree of simplicity	Simple	.....	Complex
E08	Adherence to principles	Compromising	.....	Uncompromising
E09	Symmetry of players	Equal size	.....	Unequal size
E10	Compatibility	Incompatible	.....	Highly compatible
E11	Complementarity	Low	.....	High

Appendix B – Interview Questions WFP

Interview Questions: Mozambique Case

1. For the purpose of this research, what is your name, position and responsibilities in relation to the current situation in Mozambique?
2. What is the current situation in Mozambique? What is the background?
3. What motivated you, as the WFP, to get involved in this specific disaster?
4. How would you describe your relationship with UNICEF Mozambique?
5. How do you think your corporate culture influences/affects the relationship you have with UNICEF Mozambique?
6. How do you think your management philosophy influences/affects the relationship you have with UNICEF Mozambique?
7. How do you think your capabilities complement each other?
8. How do you think the sudden and massive workload affects your relationship with UNICEF Mozambique?
9. How do you think trust affects the relationship between you and UNICEF Mozambique?
10. How do you think political interests affect your relationship with UNICEF Mozambique?

11. See 11 elements of effective relationships:

- a. To what extent does EXX affect the effectiveness your relationship with UNICEF Mozambique?
- b. Why?

<u>Property</u>		<u>Dimensional Range</u>		
E01	Time to build	Little time	.....	Much time
E02	Contact intensity	Few contacts	.....	Many contacts
E03	Contact familiarity	Familiar	.....	Unfamiliar
E04	Degree of formality	Informal	.....	Formal
E05	When to build	Pre-disaster	.....	Post-disaster
E06	Groups joined/formed	None	.....	Many
E07	Degree of simplicity	Simple	.....	Complex
E08	Adherence to principles	Compromising	.....	Uncompromising
E09	Symmetry of players	Equal size	.....	Unequal size
E10	Compatibility	Incompatible	.....	Highly compatible
E11	Complementarity	Low	.....	High

Appendix C – Confidential Agreement Form

Confidentiality Agreement

Title of Research Project: Humanitarian Organizations and Its Relationship With Logistics Service Providers

The participant organization: XXXX – Mozambique Operations

As members of this research team we understand that we may have access to confidential information about study sites and participants. By signing this statement, we are indicating our understanding of our responsibilities and duties to maintain confidentiality and agree to the following:

- We understand that names and any other identifying information about study sites and participants are completely confidential.
- We agree not to reveal, publish, or otherwise make known to unauthorized persons or to the public any information obtained in the course of this research project that could identify the persons who participated in the study.
- We understand that all information about study sites or participants obtained or accessed by us in the course of our work is confidential. We agree not to reveal or otherwise make known to unauthorized persons any of this information.
- We agree to notify the research participant immediately if we become aware of an actual breach of confidentiality, or a situation that could potentially result in a breach.

Date: _____

Place: _____

The research authors: