Procurement policies in disaster relief

Analysis of sourcing practices applied by humanitarian organizations in the field of disaster response

Master’s thesis within ‘International Logistics and Supply Chain Management’

Author: Karin Berger, Emmanouil Garyfalakis
Tutor: Susanne Hertz
Jönköping, 05/2013
Abstract

Problem: Disasters cause massive destruction and their occurrence (even though declining since the last years) is still a topic of high actuality. To mitigate their negative impacts, in particular humanitarian organizations put a lot of effort into helping nations and people to recover from disasters by providing relief commodities. Responding adequately to a disaster is difficult due to its highly complex and uncertain nature. Flexible but efficient supply chains are needed, which makes high demands on procurement operations. Within disaster relief logistics, procurement accounts for 65% of total expenditures. Despite its significance, literature does not specifically focus on problems related to disaster relief procurement, which creates the need to examine this topic further, from theory as well as from practice.

Purpose: The purpose of this paper is to describe and analyze sourcing policies, currently applied by the largest humanitarian organizations in the field of disaster relief.

Method: This thesis conducted a descriptive and exploratory study of the literature in order to create a framework for a content analysis. During the content analysis, 108 officially published reports of the 14 biggest humanitarian organizations (concerning their annual budget) were investigated concerning their procurement policies in disaster response operations. Hence, this study uses a qualitative approach for a cross-sectional analysis of secondary data.

Conclusions: The findings of this paper present an overview of currently applied procurement concepts in disaster response. The compilation of a comprehensive sourcing toolbox allows the classification of sourcing policies. The results show a tendency, that similar procurement policies are applied in the largest humanitarian organizations regarding the area of sourcing or the number of suppliers. A lack of awareness and/or transparency was discovered regarding environmentally friendly procurement policies. The application of ethical procurement (social factors) is however highly emphasized by the organizations. An unexpected discovery was the importance of long-term agreements and the frequent application of tendering processes for supplier selection. Further research opportunities lie in the field of demand tailored sourcing instead of pre-stocking to reduce inventory costs or in the comparison of sourcing practices applied in big and small organizations. To sum up, humanitarian organizations not only focus on quick deliveries, also quality and cost efficiency are increasingly paid attention in the field of disaster response procurement.
# Table of Contents

1 **Introduction** ......................................................................................................................... 1  
   1.1 Background ........................................................................................................................... 1  
   1.2 Problem description & research questions ........................................................................... 2  
   1.3 Main purpose and objective ................................................................................................. 3  
   1.4 Delimitations and scope ........................................................................................................ 3  

2 **Frame of Reference** .................................................................................................................. 5  
   2.1 Definition and categorization of disasters ........................................................................... 5  
   2.2 Humanitarian logistics and disaster relief/response .......................................................... 5  
   2.3 Procurement particularities in humanitarian organizations .............................................. 6  
       2.3.1 Disaster Management Cycle ......................................................................................... 6  
       2.3.2 Actors involved in disaster relief ................................................................................ 7  
       2.3.3 Disaster relief operations ............................................................................................. 7  
       2.3.4 Procurement process in disaster relief ........................................................................ 8  
       2.3.5 Required relief items and equipment ........................................................................... 10  
   2.4 Humanitarian versus commercial supply chains ............................................................... 10  
   2.5 Procurement policies in commercial supply chains .......................................................... 12  
       2.5.1 Clarification of terms in sourcing ................................................................................... 12  
       2.5.2 Procurement policies related to number of suppliers .................................................. 12  
       2.5.3 Procurement policies related to area of sourcing ........................................................... 14  
       2.5.4 Use of IT and E-procurement ......................................................................................... 14  
       2.5.5 Environmentally friendly or green procurement ........................................................... 14  
       2.5.6 Ethical behaviour in procurement ................................................................................ 15  
       2.5.7 Procurement policies related to time (Warehouse Management) ................................... 15  
       2.5.8 Procurement policies related to object of sourcing ...................................................... 16  
       2.5.9 Sourcing toolbox ........................................................................................................... 16  

3 **Methodology chapter** ............................................................................................................... 17  
   3.1 Research design ..................................................................................................................... 17  
   3.2 Research approach ............................................................................................................... 17  
   3.3 Time horizon ......................................................................................................................... 17  
   3.4 Method choices ..................................................................................................................... 18  
   3.5 Data collection process .......................................................................................................... 18  
       3.5.1 Sampling ......................................................................................................................... 19  
       3.5.2 Type of data and sources ............................................................................................... 19  
   3.6 Data analysis process ............................................................................................................ 21  
   3.7 Evaluation of the study .......................................................................................................... 22  
       3.7.1 Validity .......................................................................................................................... 22  
       3.7.2 Reliability .................................................................................................................... 23  
       3.7.3 Threats to reliability and validity .................................................................................. 23  

4 **Empirical Data** ......................................................................................................................... 25  
   4.1 United Nations ....................................................................................................................... 25  
       4.1.1 United Nations Development Fund (UNDP) ................................................................. 28  
       4.1.2 United Nations Children’s Fund (UNICEF) ................................................................. 28  
       4.1.3 United Nations High Commissioner for Refugees (UNHCR) ....................................... 29
**Figures**
- Figure 1-1 Expenditures in humanitarian relief logistics .................. 2
- Figure 2-1 Humanitarian logistics chain structure .......................... 7
- Figure 2-2 Example of parallel sourcing ...................................... 13
- Figure 7-1 Trends in occurrence of natural disasters and number of victims .................................................. 16

**Tables**
- Table 2-1 Minimum list of required disaster relief items .................. 10
- Table 2-2 Sourcing toolbox from Arnold (1996) ............................. 16
- Table 3-1 Annual budget of major humanitarian organizations .......... 19
- Table 5-1 Analysis of sourcing policies based on empirical material .... 41
- Table 7-1 Major Activities of Disaster Management System Life Cycle .... 17
- Table 7-2 Overview of sources for gathering empirical data ............. 18
- Table 7-3 Example analysis of UNICEF ........................................ 22

**Appendix**
- Appendix 1 Trends of disasters .................................................. 16
- Appendix 2 Disaster Management Life Cycle activities .................... 17
- Appendix 3 Sources of empirical material ...................................... 18
- Appendix 4 Example analysis of UNICEF ....................................... 22
List of abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRS</td>
<td>Catholic Relief Services</td>
</tr>
<tr>
<td>IFRC</td>
<td>International Federation of Red Cross and Red Crescent Societies</td>
</tr>
<tr>
<td>JIT</td>
<td>Just-in-time</td>
</tr>
<tr>
<td>MSF</td>
<td>Médecins sans Frontières</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental organization</td>
</tr>
<tr>
<td>OCHA</td>
<td>United Nations Office for the Coordination of Humanitarian Affairs</td>
</tr>
<tr>
<td>SC</td>
<td>Supply Chain</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Fund</td>
</tr>
<tr>
<td>UNHCR</td>
<td>United Nations High Commissioner for Refugees</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
</tr>
<tr>
<td>UNFPA</td>
<td>United Nations Population Fund</td>
</tr>
<tr>
<td>USD</td>
<td>United States Dollar</td>
</tr>
<tr>
<td>WFP</td>
<td>World Food Programme</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>WVI</td>
<td>World Vision International</td>
</tr>
</tbody>
</table>
Acknowledgment

Many people helped and encouraged us during the completion of this thesis. Here we would like to express our appreciation for their support.

Sincere thank goes to our supervisor Susanne Hertz. She guided us patiently through this paper. Our utmost gratitude also goes to our colleagues from university, who devoted us their time and effort to provide us honest criticism and advice.

A special thanks also goes to our close friends: Verena Koschier, Julia Gruber, Kathrin Bruckschwaiger, Stefanie Langerreiter, Christina Alevizopoulou, Paschalia Antonopoulou, Pinelopi Barkonikou, Alexandros Gandis, Murad Sultanov and Yiorgos Dizes. They supported us not only during the creation of this paper, but also through all turbulent times during our studies and were not disappointed about our absence in important friendship matters.

Finally, our heartily appreciation goes to our family for their constant endorsement. Reinhard, Johanna and Josef Berger as well as Christos, Petros Garyfalakis and Sofia Paulou gave us the necessary backing to be able to fully focus on our studies.

Karin Berger & Emmanouil Garyfalakis

Jönköping, 20th May 2013
1 Introduction

This chapter introduces the reader to the topic of the thesis. First, a brief summary of the background and problems, humanitarian organizations have to face in the field of disaster relief, is given. A detailed explanation of the purpose and research questions follows, to create a clear understanding of the objectives and framework of this paper.

1.1 Background

Disasters cause massive destruction for a long time. In the ancient world, due to missing preplanning and limited capacities, natural catastrophes could even destroy entire civilizations (e.g. the volcano Vesuv extinguished Pompeii). Although today’s human knowledge and technological advancements have cured numerous diseases and solved many problems, it is still not enough to cope with the massive destructions disasters cause (Nikbakhsh & Farahani, 2011). According to Reliefweb (2013), the last disaster just happened in May 2013 in Uganda, where floods affected approximately 25,000 people. Hence, the occurrence of disasters is a topic of high actuality.

The number of disasters was constantly rising during the last decades. Appendix 1 illustrates the quantity of natural catastrophes. However, that trend does not seem to continue. In 2011, 332 natural disasters were recorded, which is less than the average annual disaster frequency observed from the previous years. Nevertheless, the human and economic impacts in 2011 were still massive, as 30,773 people died and 244.7 million victims were affected worldwide. In 2011, economic damages were the highest ever recorded (USD 366.1 billion) (Guha-Sapir, Vos, Below, & Ponserre, 2011).

Impacts of disasters rise, as more and more people live in disaster-prone areas. Natural or man-made catastrophies lead to loss of lives, shortage of food and water, (infra)structural damages, ruptured socioeconomic conditions (Akhtar, Marr & Garnevska, 2012) and economic damages (e.g. losses in sectors like fisheries, agriculture, livestock, tourism or microenterprises). To mitigate the negative impacts, humans prepare counter measures by creating infrastructure and planning relief operations in advance (Nikbakhsh & Farahani, 2011). In particular, governmental as well as non-governmental organizations (humanitarian organizations) all over the world put a lot of effort into helping nations and people to recover from disasters (Taupiac, 2001). These organizations usually provide food, water, blankets, shelters, medicines and other supplies to the affected population (Tomasini & Wassenhove, 2009).

Responding adequately to disasters is not an easy task, as many factors contribute to difficulties. For instance, the chaotic post-disaster relief environment (e.g. public panic, missing transportation and communication infrastructure) (Tomasini & Wassenhove, 2009), the large number and variety of actors involved (e.g. donors, media, governments, military, humanitarian organizations, …) (Van Wassenhove, 2006) and the lack of sufficient resources are obstacles in providing sufficient disaster response (Akhtar et al., 2012).

An efficient but flexible humanitarian relief supply chains is the key subject in disaster relief, discussed from academics as well as practitioners (Kovács & Spens, 2007). In order to reach this, humanitarian logistics is one of the most important disciplines within disaster management (Nikbakhsh & Farahani, 2011; UNDRO, 1992). One of the biggest hurdles to overcome in humanitarian relief supply chains, is the huge uncertainty in
demand, supplies and assessment accompanied by high time pressure. Hence, humanitarian logistics is determined by a high level of complexity, which makes this field the most expensive part during disaster relief (about 80% of total expenditures) (Van Wassenhove, 2006).

To be prepared to respond appropriately to a disaster, humanitarian relief organizations procure approximately USD 50 billion worth of goods and services from local and international suppliers. In general, the volume of goods and services purchased is continuously rising. For instance, the United Nations (UN) procured only in the year 2000 around 40% more than in 1996. The purchase of relief items (not services) at the UN amounts around 60% of total procurement expenditures (Taupiac, 2001). In summary, procurement is the most significant part of humanitarian logistics. The total quantity of purchased relief items is rising, which makes disaster relief procurement a topic of high relevance.

1.2 Problem description & research questions

Disaster relief procurement not only falls within the area of humanitarian logistics, it also contributes to a high extent to its overall cost. Figure 1-1 demonstrates that procurement accounts for 65% of total expenditures within disaster relief logistics. Administration, field personnel and transportation contribute only minor to the overall cost (Falasca & Zobel, 2011).

![Figure 1-1 Expenditures in humanitarian relief logistics (Falasca & Zobel, 2011)](image)

The main reason for this high amount is that humanitarian organizations often prepare for disasters through pre-stocking of critical relief supplies in strategic locations around the world. Although this method increases the ability to respond to a disaster quickly, it also causes immense costs (Balcik & Beamon, 2008).

Furthermore, humanitarian organizations have to face increasing pressure from donors to prove, that the money provided for aid is reaching those in need. Hence, the organizations’ outcomes need to be transparent and operations result-oriented (Van Wassenhove, 2006), which pressures them to use their resources more efficiently (Scholten, Scott & Fynes, 2010).

The above described factors influence procurement decisions in humanitarian organizations and also highlight the importance of efficient purchasing operations. Despite the proportion and significance of procurement in disaster response, existing
literature about humanitarian relief logistics focuses mainly on problems related to facility location, inventory management or transportation (Falasca, 2011).

Thus, a lack of information is given and creates the need to investigate present procurement policies in the field of humanitarian relief further, not only in theory but also from a practical point of view. In the face of this gap the current thesis intends to answer the following questions by applying appropriate research methods and concepts:

- How do large humanitarian organizations purchase disaster relief items in practice?
- What are the differences and similarities among these procurement policies?

After the theoretic compilation of sourcing policies from the literature, a qualitative analysis of current procurement practices from large humanitarian organizations is conducted. Differences as well as similarities among their purchasing actions are identified.

1.3 Main purpose and objective

The purpose of this paper is to describe and analyze sourcing policies, currently applied by the largest humanitarian organizations in the field of disaster relief.

In order to fulfill this purpose, a thorough literature review about sourcing policies in commercial supply chains as well as related to disaster relief will be conducted in first place. Based on this, a sourcing toolbox will be created, which summarizes the discussed procurement concepts derived from the literature. This toolbox builds the framework to gather empirical material.

A qualitative approach will be applied to analyze secondary data (i.e. annual reports, websites or disaster case reports) published by the 14 biggest humanitarian organizations (regarding their annual budget). To examine their procurement policies, a content analysis will be conducted. As result, different or similar procurement approaches of humanitarian organizations will be described and further discussed.

1.4 Delimitations and scope

Due to the restricted time and word frame, delimitations of this paper are necessary. First of all, the current thesis focuses only on the analysis of procurement policies, currently applied by the 14 biggest humanitarian organizations (regarding their annual budget). Big organizations apply different purchasing approaches, as they have access to better information and communication technology systems or operate with higher market power due to their size (McLachlin & Larson, 2011). Hence it is questionable, if the outcome of this paper is also beneficial for small and middle-sized humanitarian organizations.

Moreover, this study is limited to procurement policies applied for purchasing disaster relief items. In general, procurement in humanitarian aid can be divided into two main categories: ‘procurement for development aid’ and ‘procurement for humanitarian relief’. Although these two types have certain common characteristics, their differences are important. Development aid aims at long-term social and economic development. There, the requirements for the purchase of goods and services are quite distinctive. Speed and flexibility is less significant than low-cost procurement. On the contrary, the primary focus in humanitarian relief procurement is put on quick response and availability of goods in order to save lives. Relief items are relatively simple,
nevertheless tend to be expensive due to the high need of flexibility and speed (Taupiac, 2001). Hence, the emphasis of this paper is put on procurement in humanitarian relief supply chains.

This study contains a qualitative content analysis of secondary data. Due to the nature of these selected research methods, certain limitations occur in the empirical findings, which are discussed in detail in chapter 3.7. Even though the collection of primary data (e.g. through interviews) might have enriched this study, several reasons favour the use of only secondary information. First of all, secondary material provides comparative and contextual data and can lead to unforeseen and new discoveries (Saunders et al., 2009). This fits the current purpose, to describe and explore sourcing policies of humanitarian organizations, the best. Moreover, it allows the researchers to gain a very wide perspective of the procurement concepts of each organization, as the provided data are very broad. Primary data would be more limited in content regarding the pre-defined collection technique (e.g. the questions asked in interviews). Humanitarian organizations officially publish a huge amount of information material in order to show transparency to the public eye and keep funding from donors flowing (Burger & Owens, 2010). As result, the provided secondary material is not only extensive, but also of high data quality. Lastly, due to donor pressure and expectations, humanitarian organizations are very sensitive in matters of data confidentiality (Oloruntoba & Gray, 2006; Burger & Owens, 2010). Hence, gathering data besides the officially published material is difficult in the humanitarian aid sector.
2 Frame of Reference

This chapter presents a theoretical framework of concepts related to disaster relief procurement. Literature is used to define basic terms in order to create an elementary understanding for the reader. An overview of the environment, humanitarian organizations are operating in, is provided and existing procurement policies in disaster response as well as in the commercial sector are discussed.

2.1 Definition and categorization of disasters

According to UNDRO (1992, p. 14) a disaster can be defined as

‘... a serious disruption of the functioning of a society, causing widespread human, material, or environmental losses which exceed the ability of affected society to cope using only its own resources.’

Hence, the term ‘disaster’ implies, that the affected society is not capable of counteracting the negative effects with its own properties anymore. A disaster contains also needs to contain a thread or affection of human beings. If an earthquake or flood occurs in an unpopulated area, it is considered a natural phenomena, not a disaster (Nikbakhsh & Farahani, 2011).

Generally, disasters can be separated into two main categories: natural and human-made ones (UNDRO, 1992). Natural disasters are the consequence of natural phenomena like storms, earthquakes, floods, droughts, epidemics or volcanic activities. Human-made disasters are the direct consequence of human activities, which take place either deliberate (e.g. wars, terrorist attacks, …) or non-deliberate (e.g. industrial accidents, infrastructure failures, …) (Nikbakhsh & Farahani, 2011).

A similar term to disasters is emergency. Emergencies differ from disasters concerning their time period and level of urgency. A disaster comprises a certain period, in which lives and essential property are immediately at risk. An emergency suggests a more general period, in which a clear and marked deterioration in the coping abilities of a group or community is given (UNDRO, 1992).

2.2 Humanitarian logistics and disaster relief/response

According to Thomas and Kopczak (2005, p. 4), the term ‘humanitarian logistics’ is defined as

‘... the process of planning, implementing and controlling the efficient, cost-effective flow and storage of goods and materials, as well as related information, from the point of origin to the point of consumption for the purpose of alleviating the suffering of vulnerable people. The function encompasses a range of activities, including preparedness, planning, procurement, transport, warehousing, tracking and tracing, and customs clearance.’

The authors Kovács and Spens (2007) distinguish between two main streams of humanitarian logistics: ‘aid work’ and ‘disaster relief’. ‘Aid work’ mostly focuses on the continuous support of people in need (e.g. development aid). The term ‘disaster relief’ is usually used for operations that cope with sudden catastrophes (natural or man-
made disasters). Based on the definition from Barbarosoglu, Özdamar and Cevik (2002, p. 2), the main emphasis of disaster relief activities is therefore 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.’

In this context, disaster relief is understood as part of humanitarian logistics. However, Nikbakhsh and Farahani (2011) state, that humanitarian logistics is a branch of logistics, which is used in the management of disasters. According to this description, humanitarian logistics is part of disaster relief. To conclude, humanitarian logistics is necessary to execute both, aid work and disaster relief. Its relationship to disaster relief (part of disaster response or vice-versa) can be defined differently.

In this thesis, the term ‘humanitarian logistics’ is assumed of being part of disaster response. The expressions ‘disaster relief’ and ‘disaster response’ are used interchangeably in the current paper.

2.3 Procurement particularities in humanitarian organizations

Procurement in the humanitarian sector basically has the same goals and intentions as in private business. As buyer, organizations want the best possible value at a reasonable price (Taupiac, 2001). In addition to that, humanitarian procurement processes try to ensure, that organizations have all supplies required to meet the needs to provide adequate disaster relief (PAHO, 2001).

2.3.1 Disaster Management Cycle

In order to mitigate the negative impacts of disasters, the design of preventive measures and recovery plans is necessary. Related to time, disaster relief operations can be separated into four phases:

- before a disaster strikes (preparation phase)
- shortly after (immediate response phase)
- in the aftermath (reconstruction phase)
- and afterwards (mitigation phase)

These steps build the so-called Disaster Management Cycle (Long, 1997). Each phase requires different resources and skills. For instance, the first two phases mainly focus on strategic planning and preparation, whereas the last stage requires actual project management (Kovács & Spens, 2007).

During the preparedness phase, plans are set up in case a disaster occurs (e.g. pre-planning of logistics operations, stockpiling of relief items, establishing communication plans, training of relief personnel). The response phase requires an immediate dispatch of personnel, equipment and other items to the disaster area. During the recovery phase, efforts are made to restore the affected areas to their previous state by reconstructing houses and public facilities (Nikbakhsh & Farahani, 2011). In the mitigation phase,
measures to prevent hazards from turning into disasters or to reduce their negative impacts are set (e.g. construction of flood levees, strengthening of existing buildings, land-use planning, insurances) (Haddow & Bullock, 2004). Hence, this phase requires high long-term planning and investment (Wilson, 2009). Appendix 2 lists tasks and activities executed in each particular phase of the Disaster Management Cycle.

2.3.2 Actors involved in disaster relief

Many actors, like donors, aid agencies, governments, military or non-governmental organizations (NGOs) are involved in disaster relief (Kovács & Spens, 2007). Each of them has different motives for providing relief (Long & Wood, 1995). Political issues might even prevent a successful conduction of relief actions (Murray, 2005).

A NGO is a non-profit, voluntary group of citizens (locally, nationally or internationally organized), that contains common interests and focuses on specific issues (human rights, environment, health or disaster relief) (NGO, 2013). Donors are very special actors, as they provide the basis for relief activities, but are not directly linked to the benefits of satisfying demand. Donor expectations however shape the funding structure of humanitarian organizations and are in this respect, often regarded as the real customers of relief organizations, not the aid recipients (Kent, 1987). The military is important in delivering communications and logistics capabilities. Host governments are crucial as well, as they typically command and control all operations (Seaman, 1999).

2.3.3 Disaster relief operations

The supply chain in disaster relief consists of three main steps (see Figure 2-1): supply acquisition and procurement, pre-positioning and warehousing and transportation (Tomasini & Van Wassenhove, 2009).

![Humanitarian logistics chain structure](Nikbakhsh & Farahani, 2011)
The first stage contains all activities related to procurement of relief items (Balcik, Beamon, Krejci, Muramatsu & Ramirez, 2010), which originate from monetary sources or non-monetary (in-kind) donations (Akhtar et al., 2012). Goods are usually purchased from local or global suppliers by applying various procurement techniques (direct purchasing, e-procurement, tenders, …). The main challenges are here the reduction of purchasing costs (considering price inflation in local markets after disasters) and lead times by still ensuring availability and the coordination of in-kind donations (Balcik et al., 2010). Most procurement decisions are short-termed, as demand can only be evaluated after a needs assessment performed in the affected area. Therefore, relief organizations stockpile ready-to-dispatch inventory in locations with access to disaster-prone regions (Balcik & Beamon, 2008).

Transportation is the next stage in the supply chain and it includes the movement of personnel, equipment and necessary items. First, the goods are brought to central distribution centres, distribution intermediary points or local distribution centres and finally transported to the regions affected by the disaster (Nikbakhsh & Farahani, 2011). Although each supply chain structure differs depending on the type of disaster and organizations involved, a common design, composed of procurement, inventory and transportation management, exists.

2.3.4 Procurement process in disaster relief

Instantly after a disaster strikes, relief organizations conduct an initial assessment (usually within one day after occurrence). The expected quantity of supplies required to meet the relief needs of the affected population is estimated (Thomas, 2003) as well as pre-positioned supplies, already available at the organizations warehouses, are evaluated. Relief items, which need to be procured from suppliers, are determined (Balcik & Beamon, 2008). As next step, this assessment is translated into supply requirements. Demand for relief supplies varies in terms of magnitude, criticality and type of required materials and is highly unpredictable (Kovács & Spens, 2007).

Supplies are mainly ‘pushed’ to the disaster area in the response phase, whereas during the reconstruction phase the principle of ‘pull’ in sourcing is predominately applied. Another key point is, that the customers (receivers of aid) do not generate demand voluntarily and do not intend to ‘repurchase’. Thus no ‘real demand’ is created, as demand is assessed through aid agencies (Long & Wood, 1995).

Goods can be acquired differently, like in bulk or vendor stored, until needed (Russell, 2005) and procurement can consider just local or also global suppliers and vice-versa (Blecken, 2010). After a disaster struck, speed at any costs is of utmost importance, as the first 72 hours are crucial for providing relief. Goods are brought into the affected area as quickly as possible. After the first 90 to 100 days, disaster response is delivered more effectively at reasonable cost and speed. Humanitarian organizations start from then on to source relief items locally (Van Wassenhove, 2006).

Statistics show, that in practice suppliers of relief items are predominately multinational firms from developed countries, capable of supplying immense quantities (Taupiac, 2001). Conversely, pre-stocked items at the affected region can considerably increase the speed of operations. Another approach of disaster response procurement is purchasing from local and regional suppliers instead of relying on long-distance donations in order to decrease transport costs and accelerate delivery (Nikbakhsh &
If local procurement is applied, the economy of the affected region is stimulated as well. Nevertheless, local procurement usually faces quality problems and might lead to supply shortages. In addition, local purchasing can generate competition between organizations, which results in high prices for the relief items (PAHO, 2001). International or global procurement is primarily done to access larger quantities, get lower prices and keep consistent quality. In contrast, delivery times are longer and transportation costs are higher by using global suppliers (Sowinski, 2003). In most cases, humanitarian organizations will have multiple suppliers for each relief effort (Falasca & Zobel, 2011).

Humanitarian organizations often purchase relief items from global suppliers through competitive bidding processes (Balcik & Beamon, 2008) in order to provide equal opportunities to all firms interested. However, in cases of huge disasters, when providing goods quickly in large amounts is crucial, tendering techniques are not applied (Taupiac, 2001). In the bidding process, humanitarian organizations first identify potential suppliers, which are able to meet the item and delivery requirements. Next, these qualified suppliers are invited to bid. As final step, humanitarian organizations evaluate the purchasing offers and finally make contracts with the winning supplier. Then the delivery of supplies to the affected areas begins. To increase responsiveness, humanitarian organizations started to establish pre-purchasing agreements with suppliers, which specify in advance quality and delivery requirements for emergency items. Mostly, these agreements contain that suppliers hold emergency stocks for humanitarian organizations (Balcik & Beamon, 2008).
2.3.5 Required relief items and equipment

After a disaster occurred, a high demand for various relief items exists. The Pan American Health Organization and the World Health Organization (2011) released a minimum list of required relief commodities for disaster management. Those products are listed in table 2-1.

Table 2-1 Minimum list of required disaster relief items (Pan American Health Organization & World Health Organization, 2011)

<table>
<thead>
<tr>
<th>Disaster relief item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
</tr>
<tr>
<td>Water and sanitary items</td>
</tr>
<tr>
<td>Environmental health equipment and items (e.g. water-treatment equipment)</td>
</tr>
<tr>
<td>Medicine (general pharmaceutical products and/or specific pharmaceutical products in possible cases of epidemics)</td>
</tr>
<tr>
<td>Health kits and supplies for supporting health-care processes</td>
</tr>
<tr>
<td>Field hospitals</td>
</tr>
<tr>
<td>Clothing and blankets</td>
</tr>
<tr>
<td>Items associated with infants and children (e.g. instant milk, diapers, toys)</td>
</tr>
<tr>
<td>Shelters and temporary housing facilities (e.g. tents)</td>
</tr>
<tr>
<td>Electrical power generating equipment</td>
</tr>
<tr>
<td>Fuel (e.g. coal, gas, or oil)</td>
</tr>
<tr>
<td>Field kitchen equipment and utensils</td>
</tr>
<tr>
<td>Cleaning supplies</td>
</tr>
<tr>
<td>Agricultural commodities and livestock</td>
</tr>
<tr>
<td>Specialized equipment for handling hazardous materials</td>
</tr>
<tr>
<td>Communication equipment</td>
</tr>
<tr>
<td>Firefighting equipment</td>
</tr>
<tr>
<td>Debris-removal equipment and vehicles</td>
</tr>
<tr>
<td>Construction equipment and vehicles</td>
</tr>
</tbody>
</table>

As a matter of course, this list is general and the type of products and level of urgency differs, depending on the requirements and characteristics of each disaster. In case of an earthquake during the winter season for instance, the supply of clothing and blankets is more critical, than during a flood in summer (Nikbakhsh & Farahani, 2011).

2.4 Humanitarian versus commercial supply chains

Although the objectives are similar, managing humanitarian logistics supply chains in practice is very different compared to commercial ones (Nikbakhsh & Farahani, 2011). This is mainly because, commercial firms are rewarded by the market (e.g. higher revenues and profit), if they perform well. In the humanitarian sector, performance is
hard to measure, as demand and supply is not directly regulated through price (Van Wassenhove, 2006).

The following list shows the distinct attributes humanitarian supply chains require and points out the differences to commercial supply chains:

1. Mission statements in the humanitarian field differ from profit-making organizations, as their focus lies on quick lifesaving instead of maximizing revenues.

2. Humanitarian organizations face more trade-offs than private firms due to the high amount of stakeholders involved (e.g. governments, donors, …).

3. The demand requirements in the humanitarian sector are very complex because of:
   a. High demand uncertainty in location, time, type and quantity
   b. Suddenly occurring demand and hence very shorter lead times

4. The operational conditions in humanitarian supply chains are very difficult due to:
   a. The chaotic nature during post-disaster periods makes it complicated to assess the resources available (Tomasini & Van Wassenhove, 2004). That generates redundancies and duplicated efforts and materials (Simpson, 2005).
   b. Lack of resources (e.g. vehicles, equipment, food, water and medical supplies) but also oversupply occurs, because of high the uncertainty of disasters (Balcik et al., 2010). In addition, aid agencies receive many unsolicited and even unwanted donations (Chomolier, Samii, & van Wassenhove, 2003) like drugs and food that exceeded its expiry dates (Murray, 2005) or heavy clothing donations, which are not suitable for tropical regions (Dignan, 2005). Inappropriate donations clog airports and warehouses, hinder disaster relief operations (Murray, 2005) and create redundancies (Sowinski, 2003).
   c. Disruptions in infrastructures (e.g. transportation and communication)
   d. Shortage of professional human resources
   e. Lack of security in the affected regions

5. A single actor has not enough resources to respond effectively to a major disaster. Hence different organizations share their resources and cooperate during performing disaster response (Akhtar et al., 2012). However, often missing coordination between organizations hinders relief operations.

6. Humanitarian organizations follow their ethical principles (humanity, neutrality, and principles of impartiality), which increases the complexity of disaster relief actions.

7. A politicized environment often complicates to maintain a humanitarian perspective to operations.

8. There is no way to punish ineffective organizations, as the final voice of the beneficiary is absent in the performance appraisal. Affected people are not directly involved in the evaluation process, whereas in a commercial supply chain ineffective members pay for their inefficiencies (e.g. less customers or profit) (Nikbakhsh & Farahani, 2011).
Some of the above described characteristics are a serious challenge to any supply chain, not matter if for commercial or humanitarian relief purposes. However, the majority of factors specifically describe challenges for humanitarian supply chains.

2.5 Procurement policies in commercial supply chains

Until 10 years ago, procurement was not considered to be crucial for a successful relief operation. However, nowadays many humanitarian organizations recognized its importance and adopt due to missing concepts in the literature, practices used in commercial supply chains (Nikbakhsh & Farahani, 2011). Hence, this thesis also investigates literature about procurement policies, described in the private business sector in order to gain additional insights and a broader view of purchasing policies.

2.5.1 Clarification of terms in sourcing

First of all, the terms ‘procurement’ and ‘purchasing’ are defined to provide an understanding of their role and characteristics in the sourcing of commodities. ‘Procurement’ includes all activities, which are necessary in order to acquire goods and services consistent with user requirements at the ‘best’ price. An organization can gain competitive advantage by executing effective procurement activities (Langley, Coyle, Gibson, Novack, & Bardi, 2009). Therefore, procurement includes all activities ranging from the placement of an order to its delivery.

‘Purchasing’ is regarded as a sub category of procurement, which focuses on functions associated with the actual buying (Wankel, 2009). Hence, purchasing is considered as an operational function at a lower level than procurement, which does not contribute to the overall corporate competitive strategy (Herberling, 1993). In this thesis, purchasing is understood as an operational process, including all activities related to the buying of goods or services. Procurement is seen as a highly integrated procedure, which contains, besides the whole process of buying goods and services, also the assessment of the delivery status or strategic planning and supplier selection.

The following subchapters present different classifications of procurement policies and discuss the advantages and disadvantages of each sourcing concept in order to provide an overview.

2.5.2 Procurement policies related to number of suppliers

According to the number of suppliers, procurement policies can be categorized as following:

- Single sourcing
- Sole sourcing
- Dual sourcing
- Parallel sourcing
- Multiple sourcing

Treleven and Schweikhart (1998, p. 95) define single sourcing as

‘… fulfillment of all of an organization’s needs for a particular purchased item from one vendor by choice. Furthermore, the organization’s goal with single
sourcing is to have, at most, one supplier for each inventory item (‘at most’ be-
cause whole families of parts may also be sourced from one supplier).’

Single sourcing describes therefore the intended choice of purchasing only from one supplier. In contrast, when purchasing from one supplier is not done voluntarily (e.g. monopoly), this policy is termed ‘sole sourcing’ (Treleven & Schweikhart, 1988). McGuinness and Bauld (2007, p. 20) state, that sole sourcing

‘… describes a non-competitive procurement process accomplished after solicit-
ing and negotiating with only one source.’

Traditionally, organizations avoid purchasing from only one source of supply to reduce risk. Therefore, a multiple sourcing policy is applied, which refers to

‘… a vendee purchasing an identical part from two or more vendors.’ (Treleven & Schweikhart, 1988, p. 96)

Here, the risk of demand uncertainty is decreased. Lead time and cost can be reduced by placing orders on different suppliers with subtle timing and quantities to create competition (Shen, 2004).) The authors state further, that

‘If only two vendors are used, this is a special case of multiple sourcing called dual sourcing.’ (Treleven & Schweikhart, 1988, p. 96)

A slightly different concept from dual sourcing is parallel sourcing, which can be defined as

‘… the strategy in which the buyer simultaneously purchases conventional prod-
ucts from a group of suppliers – each specialized in a single product category.’
(Richardsson, 1993, p. 12)

In order to clarify the difference between parallel and dual sourcing an example is presented in figure 2-2. A firm produces two different products (model 1 and model 2). Each model consists of two different components (component A and component B). Model 1 and 2 however, require the supply of similar (the same) components (each needs a component A and a component B).

Figure 2-2 Example of parallel sourcing (Cousins, Lamming, Lawson & Squire, 2008, p. 56)

In the parallel sourcing approach, different suppliers are providing the same components for each model. As result, two sourcing streams are designed simultaneously. Therefore the supply of one component is provided by different suppliers in order to use the advantages of single sourcing and at the same time having alternative choices (multiple sourcing) (Cousins, Lamming, Lawson & Squire, 2008).
2.5.3 Procurement policies related to area of sourcing

Procurement policies can also be classified according to the area, where the purchase transactions are accomplished. This category consists of two main types, which are often named differently in the literature:

- Local/domestic/regional sourcing
- Global/worldwide sourcing

Monczka and Trent (1991, p. 8) defined worldwide sourcing as

‘... the strategy which refers to the purchasing activities outside the business unit’s home borders.’

The main objective of applying global sourcing is not only to exploit suppliers’ competitive advantage, but also to profit from locational benefits of different countries and global competition (Kotabe & Helsen, 2009). Global sourcing is characterized by high complexity, as firms have to overcome many barriers (Kotabe, Murray, & Mol, 2008).

Local sourcing in contrast is applied, when the sourcing firm and its suppliers are located in the same country (Murray, Wildt & Kotabe, 1995). To minimize the cost/agility trade-off, many firms combine global and local sourcing concepts.

2.5.4 Use of IT and E-procurement

Davila, Gupta and Palmer (2003) define E-procurement as

‘... the use of electronic methods in every stage of the purchasing process from identification of requirements through payment and potentially to contract management’ (cited in Aini & Hasmiah, 2011, p. 301).

Moreover, Anonymous (2001) describes e-sourcing as

‘the process of using web based technologies to support the identification, evaluation, negotiation and configuration of products, suppliers and services into a supply chain network that can efficiently respond to changing market demands.’ (Anonymous, 2001, p. 18)

The authors of this thesis define e-procurement, as any purchase process, which is supported by the use of internet and electronic technologies, including all stages ranging from the supplier identification until delivery.

2.5.5 Environmentally friendly or green procurement

Green procurement refers to all impacts transportation, material management, energy use or packaging have on the environment during the process of purchasing a product or service (Turner & Houston, 2009).

Green sourcing forces companies to examine their entire supply chain and their overall carbon footprint (Turner & Houston, 2009). Green sourcing can increase a firm’s revenue by contributing to a better public image (Christensen, Park, Sun, Goralnick, & Iyengar, 2008).
2.5.6 Ethical behaviour in procurement

Reham, Eltantawy, Fox and Giunipero (2009) provide a definition about social ethical responsibility related to purchasing functions. For them ethical purchasing is described as

‘... managing the optimal flow of high quality, value-for-money materials, components or services from a suitable set of innovative suppliers in a fair, consistent, and reasonable manner that meets or exceeds societal norms, even though not legally required.’ (cited in Wild & Zhou, 2011, p.110).

Ethical responsibility and the role of corporate ethics are important factors for public confidence in a marketing sense (Wild & Zhou, 2011) in particular in international aid, as it influences donor perceptions (European Union, 2007). Hence, it is crucial in keeping stability in the humanitarian supply chain in terms of donor revenues and supplier provision of goods (Oloruntoba & Gray, 2006).

Humanitarian organizations address ethical issues through living by their principles of humanity (help for everyone in need), neutrality (not influencing the outcome of a conflict with their interventions) and impartiality (no single group will be favoured over the other) (Van Wassenhove, 2006).

Ethical behavior is not only included in the humanitarian organizations’ values and strategies, but also in their relationships and collaboration with suppliers (Svensson & Baath, 2008). In order to achieve mutual ethical behavior and values among actors involved in the supply chain, humanitarian organizations implement Codes of Conduct. For instance, no contracts will be made with suppliers that use child labor, are connected to the manufacturing of weapons or are accused of environmental abuses (Taupiac, 2001). Unethical behavior in supplier networks poses a constant risk for organizations’ credibility and lastly threatens the flow of incoming donations (Svensson, 2009).

2.5.7 Procurement policies related to time (Warehouse Management)

Procurement policies related to time are closely linked to optimizations of inventory. These procurement policies can be categorized as following:

- Stock sourcing
- Demand tailored sourcing
- Just in time

Stock sourcing means, that a company builds up stocks, which contribute to avoid supply risks (Essig, 2000). In contrast, the next concept avoids stockpiling of goods, as demand tailored sourcing means

‘...both buying to current requirements and the so-called ‘hand-to-mouth buying. Only the buyer tries to avoid owning stock.’ (Essig, 2000, p. 19)

A step-up of demand tailored sourcing is just-in-time. Ansari and Modarress (1990) defined this concept as

‘... a stockless supply through all levels of the supply chain (buyer and supplier).’ (cited in Essig, 2000, p. 19)
Just-in-time creates a significant cost reduction and requires close collaboration between the buyer and supplier (e.g. single sourcing) (Essig, 2000).

2.5.8 Procurement policies related to object of sourcing

Procurement policies can furthermore be classified related to the components or parts, which a company purchases. Here, the categories are:

- Unit sourcing
- Modular sourcing
- System sourcing

Unit sourcing means, that a firm purchases a lot of different items with low composition complexity and assembles the items itself. Alternatively, modular sourcing refers to the supply of highly integrated modules and to reduce the amount of direct suppliers (Essig, 2000). System sourcing is a process related to the outsourcing of assembling activities, which are in line with prevailing recommendations to focus on core operations. For instance, instead of having four suppliers, which deliver one component each, the buying firm assigned one of them to supply a ‘system’. This system consists then of these four components and in addition includes the assembly activities (Gaddea & Jellbob, 2002).

2.5.9 Sourcing toolbox

To sum up, table 2-2 presents a comprehensive aggregation of all discussed procurement concepts. This table was adapted based on the existing sourcing toolbox of Arnold (1996). Some concepts were added (e.g. use of IT, ethics, environment) from the literature, as those policies were not common in 1996, when the original table was created. Certain policies were left out (e.g. just-in-time, modular, …), as their evaluation during the analysis seemed too difficult. The category ‘duration of supplier contracts’ was added, as many of the investigated reports highlighted the importance of this section.

Table 2-2  Sourcing toolbox from Arnold, 1996 (cited in Essig, 2000, p. 20, adapted)

<table>
<thead>
<tr>
<th>Procurement policies related to:</th>
<th>Sourcing Concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of suppliers</td>
<td>Single sourcing</td>
</tr>
<tr>
<td>Area of sourcing</td>
<td>Local sourcing</td>
</tr>
<tr>
<td>Use of IT</td>
<td>Applied</td>
</tr>
<tr>
<td>Environmentally friendly</td>
<td>Focus</td>
</tr>
<tr>
<td>Ethical behavior</td>
<td>Focus</td>
</tr>
<tr>
<td>Warehouse Management</td>
<td>Stock sourcing</td>
</tr>
<tr>
<td>Object of sourcing</td>
<td>Unit sourcing</td>
</tr>
<tr>
<td>Duration of supplier contracts</td>
<td>Long term</td>
</tr>
</tbody>
</table>

This toolbox is further used as basis to evaluate procurement policies, currently applied at the biggest humanitarian organizations in the field of disaster response. The terms, elaborated in the sourcing toolbox, provide the codes, necessary to perform a content analysis. The concept of content analysis is described in detail in the next chapter.
3 Methodology chapter

This chapter provides an overview of the choices made regarding the research approach, strategy and method for this paper. A detailed description of the data collection and analysis process for gaining empirical material is presented. In the end, the quality of the present study is evaluated.

3.1 Research design

In order to meet the purpose and answer the research questions, a two-step approach was chosen. Firstly, a literature review was conducted in order to analyze theoretical concepts related to disaster relief and to identify procurement policies of commercial and humanitarian organizations. The descriptive approach, which was applied here, aims at portraying an accurate profile of people, events or situations (Saunders, Lewis & Thornhill, 2009). The authors intended to ‘portray’ existing sourcing policies and ‘describe’ their key characteristics in this paper.

Afterwards, a more exploratory study was practiced for the design of a sourcing toolbox, which allows classifying sourcing policies. Exploratory studies are used to find new insights and assess phenomena in a new light (Saunders et al., 2009). The here developed sourcing toolbox presents procurement policies in a new light through a different categorization.

The second step in order to meet the purpose consists of a content analysis, which investigates reports and websites of the biggest humanitarian organizations regarding their procurement policies. A mono-method qualitative concept was used, which is characterized by the collection and analysis of data with only a single qualitative technique (Saunders et al., 2009). In this study, the conduction of a content analysis indicates the mono-method. A qualitative approach, which describes the collection and interpretation of non-numerical data (Harkland, van de Vijver & Mohler, 2003) is appropriate, as all material (theory as well as empirical data) was mainly of non-numerical nature.

3.2 Research approach

In a deductive approach, theory and/or hypotheses are developed first. Subsequently a research strategy is designed in order to test the theory and/or hypothesis. In case of an inductive approach, empirical data are collected firstly, from which a theory is developed on, as a result of the data analysis process (Saunders et al., 2009).

The approach of the current thesis has a tendency to be more deductive, as theory is the fundament to gain basic knowledge about existing sourcing strategies, which is further used to gather empirical data about procurement policies of humanitarian organizations.

3.3 Time horizon

Basically, time horizons for a particular study are independent on the type of research strategy or method chosen. In general, there are two types of time horizons:

- Cross sectional
- Longitudinal
Cross sectional refers to the study of a phenomenon at a particular time, whereas longitudinal contains a long term scale (Saunders et al., 2009). The time horizon chosen for the current thesis is considered as cross-sectional, as sourcing policies of humanitarian organizations at a particular period of time (currently) were investigated.

### 3.4 Method choices

The method can be distinguished between qualitative and quantitative research (Kumar, 2005). Quantitative research refers to the examination of two or more variables, which are measured numerically. Data are usually collected through standardized techniques like questionnaires, structured interviews or observations. It often includes the testing of hypotheses and the data are analyzed in a statistical way (Saunders et al., 2012).

Qualitative research involves the detailed description of situations, events, people or interactions and intends to capture experiences, attitudes, beliefs and thoughts (Patton, 1990). Data are usually gathered through observations and unstructured or semi-structured interviews (Saunders et al., 2012). Results of qualitative studies are usually in depth and detailed in contrast to the outcomes of quantitative studies (Patton, 2002).

Regarding this paper, a qualitative research method was selected in order to gain rich insights of the procurement policies commonly applied by the biggest humanitarian organizations. This thesis aims to describe purchasing processes and operations of these organizations as detailed as possible to create a better understanding of the concepts applied in practice. A content analysis was executed to generate empirical findings. This method is commonly used in qualitative research (Hsieh & Shannon, 2005). Content analysis can be defined as

‘... a generic form of data analysis in that it is comprised of a theoretical set of techniques which can be used in any qualitative inquiry in which the informational content of the data is relevant.’ (Froman & Damschroder, 2008, p. 40).

Hence, it generally refers to any data reduction, that transforms a volume of qualitative data into core meanings (Patton, 2002) and ranges from impressionistic, intuitive and interpretive to systematic and strict textual analyses (Rosengren, 1981). As result, the type of content analysis chosen depends on the interests of the researcher and the problem studied (Weber, 1990). To meet the purpose of the current study, a more interpretive textual analysis was conducted in order to find as many matches as possible with the before created sourcing toolbox, composed from the literature.

### 3.5 Data collection process

For the literature review a simple search of keywords (first: *sourcing* OR *procurement* OR *purchasing* AND *policies*; second: *sourcing* OR *procurement* OR *purchasing* AND *non-governmental organization* OR *disaster response* OR *disaster relief*) in academic databases for books and journals (e.g. Emerald, Science direct, Business Source Premier) was carried out.

Afterwards, the authors did a primary selection of sources, based on their relevance. A further title and abstract analysis and consequently a contextual analysis narrowed down the sources further. Articles and books, which directly described procurement policies, were included. All documents without a direct correlation to these terms were excluded.
In certain cases, German literature was considered as beneficial for the content of this paper. As one of the authors is a native German speaker, these sources were translated into English by this author.

3.5.1 Sampling

Overall, it is significant for the quality of a study to sample a population that is within the research context (Saunders et al., 2007). As this paper aims at describing and comparing procurement policies for disaster response operations, the 14 biggest humanitarian organizations (based on their annual budget) were chosen as sample (see table 3-1).

Table 3-1  Annual budget of major humanitarian organizations (Tatham & Pettit, 2010, adjusted)

<table>
<thead>
<tr>
<th>Humanitarian organization/agency</th>
<th>Annual budget (USD billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Nations Development Fund (UNDP)</td>
<td>5,000</td>
</tr>
<tr>
<td>United Nations Children’s Fund (UNICEF)</td>
<td>3,390</td>
</tr>
<tr>
<td>United Nations High Commission for Refugees (UNHCR)</td>
<td>1,095</td>
</tr>
<tr>
<td>United Nations Population Fund (UNFPA)</td>
<td>250</td>
</tr>
<tr>
<td>United Nations Office for the Coordination of Humanitarian Affairs (OCHA)</td>
<td>240</td>
</tr>
<tr>
<td>World Food Programme (WFP)</td>
<td>5,000</td>
</tr>
<tr>
<td>World Health Organization (WHO)</td>
<td>4,225</td>
</tr>
<tr>
<td>World Vision International (WVI)</td>
<td>1,620</td>
</tr>
<tr>
<td>Save the Children</td>
<td>810</td>
</tr>
<tr>
<td>International Federation of Red Cross and Red Crescent Societies (IFRC) (not including income of National Societies, e.g. American Red Cross)</td>
<td>500</td>
</tr>
<tr>
<td>CARE</td>
<td>440</td>
</tr>
<tr>
<td>Catholic Relief Services (CRS)</td>
<td>440</td>
</tr>
<tr>
<td>Médecins sans Frontières (MSF)</td>
<td>430</td>
</tr>
<tr>
<td>Oxfam</td>
<td>400</td>
</tr>
</tbody>
</table>

All agencies of the UN have been combined to one analysis in the beginning in order to avoid redundancies. However, those agencies are described separately as well, in case their sourcing policies vary from the general rules of the whole UN system.

3.5.2 Type of data and sources

The first step to conduct a content analysis is to determine the documents to be analyzed (Guthrie, Petty, Yongvanich, & Ricceri, 2004). The choice of documents depends on their availability, accessibility and relevance (Cullinane and Toy, 2000). Text data for content analysis might originate from narrative responses, open-ended survey questions, interviews, focus groups, observations or print media such as articles, books or manuals (Kondracki & Wellman, 2002). Hence, the main sources for this study were annual reports, specific disaster case papers and data provided on the websites of the humanitarian-
an organizations. In total, 108 sources were analyzed for the purposes of this study, which are presented in Appendix 3.

In general, secondary data include raw data, published summaries like reports, articles or video material. Thus, secondary data were used for this study, which enables the re-analysis of already collected information for a different purpose (Saunders et al., 2009). Primary data were excluded, as their collection seemed very difficult due to confidentiality reasons. As previously mentioned, many humanitarian organizations are dependent on the donors’ monetary and non-monetary contributions. Hence, reputation is a very important issue for humanitarian organizations and providing data outside of officially published reports is a sensitive matter (Oloruntoba & Gray, 2006).

The advantages of using secondary data are besides enormous savings in time and cost during the information gathering process and the high speed information is provided (as data are already available) also the permanent availability of these type of data. Moreover, secondary data offer the possibility to provide comparative and contextual data. In addition, secondary data may also result in unforeseen and new discoveries, if re-analyzed (Saunders et al., 2009). The last two facts are useful for this thesis, which seeks to compare as well as to describe and explore sourcing policies of humanitarian organizations in disaster relief.

Disadvantages of applying secondary data are that the information might not match the need of the purpose, as the aggregation and definition of the data might be unsuitable. Furthermore, access might be difficult and costly (not free of charge sources). Another main issue is the question of data quality. As the information was not collected by the researchers itself, it is very important to read the data collection process, initially done, carefully and evaluate its quality (Saunders et al., 2009). The reports used for this paper are considered of high quality, as they were officially published from the humanitarian organizations, which underlie a strict ethical Code of Conduct, which also often includes paragraphs about sharing reliable and accurate information.

Overall, descriptive studies often apply secondary data (Saunders et al, 2009). As the approach of this paper is descriptive in the beginning, the use of secondary data seems the most appropriate.

Secondary data can be classified into three major categories:

- Documentary data (include written material like notices, correspondence, reports, diaries but also books, journals, magazine articles and newspapers)
- Survey based secondary data (information, gathered through a survey strategy like questionnaires, which have already been analyzed for a different purpose)
- Multisource secondary data (include either entirely documentary or survey secondary data or can be a mix of these two, e.g. various compilations of company information) (Saunders et al., 2009).

As this research extracts information from various company sources, it can be characterized as a multisource secondary data type.
3.6 Data analysis process

Qualitative content analysis typically uses small units like paragraphs, sentences, words or characters of an article (Unerman, 2000). It goes however beyond simply counting of words to classify large amounts of text, it rather intends to capture the context and meanings of the examined material (Weber, 1990).

‘Coding’ is a widespread method, to examine text passages (Gläser & Laudel, 2010) by assigning a keyword to a string of relevant information (Patton, 2002). These codes can either stem from theoretical conclusions or develop during the analysis of the data. In this study, codes emerged from the literature. Based on the codes from the sourcing toolbox, all empirical material was investigated to detect matches. As result of the analysis, two papers were generated for each humanitarian organization. The first document is an excel sheet (see example in Appendix 4), which is structured identically like the sourcing toolbox.

To create transparency, direct quotes indicating matches, were extracted from the empirical documents and added in this excel file. This procedure allows tracing back the final analysis results, as it links information taken out from the literature and the empirical material. As next step, each quote got assigned to a key word (codes), which are basically the sourcing concepts mentioned in the toolbox. In some cases, those key words were mentioned directly:

‘We apply the most rigorous and fair standards to our procurement processes, and follow stringent ethical principles.’ (UNICEF, 2013d)

Here, the key word ‘ethical’ matches exactly with the labeling from the sourcing toolbox. As final result the researchers concluded, that UNICEF focuses on ethical behavior during its procurement operations. In other cases, like in the following example, a direct correlation could not be drawn, as the wording was different.

‘UNICEF does not accept manufacturers to fund trips, hotels, etc. or gifts’ (UNICEF Supply Division, 2012, p. 22)

However, out of the context the researcher concluded here as well that this sentence refers to ethical behavior in procurement. This statement was therefore also assigned to the key word ‘ethical’.

For some sourcing concepts, no evidence could be detected in the empirical material. For instance, no data could be found for UNICEF, indicating whether the organization emphasizes green procurement. It would be inappropriate to conclude that these concepts are not applied at all. Therefore, the researchers can only interpret, that no information was found or it was not specified in the examined material. That means either this concept is not used, there is a lack of knowledge (the organization is not aware of the existence of certain procurement concepts) or the information is not published by the humanitarian organization for various reasons.

Appendix 3 provides the full final analysis of UNICEF as example. Due to space reasons, not every analysis sheet was included in this thesis. Finally, all statements were clustered and are presented in table 5-1. Unlike in a frequency content analysis, where the occurrence of selected elements are rated and compared (Mayring, 2003), the quantity was not taken into account here. This seems irrelevant, as the identification of pat-
terns, themes and categories in data were in the foreground and not to point out how of-
ten each concept was mentioned. As final result, the before selected humanitarian or-
ganizations could be classified concerning their sourcing approach.

The second analysis paper is a simple word file, which provides a summary of each of
the humanitarian organization’s procurement processes and policies. This summary is
directly integrated in this thesis (see chapter 4) and delivers an overall understanding of
the procurement practices. It hence helped the researchers to detect extraordinary factors
outside of the categorizations of the sourcing toolbox.

3.7 Evaluation of the study

In order to evaluate this study, the use of qualitative data has to be discussed at first
place. In general, qualitative data complicate the analysis, as their analysis methods are
less standardized and well-established as quantitative methods. Furthermore, the analy-
sis is often time-consuming due to the volume of data. Generalization of the research re-
results is difficult (Williamson, 2002). As this paper does not aim in generalizing its find-
ings, this fact can be neglected. However, the researchers are aware of the limitations of
the study by applying qualitative data collection and analysis methods.

The credibility of findings is an important issue in qualitative as well as quantitative re-
search. If the outcomes of a study are right or wrong, can’t be said certainly. However,
the possibility of getting the answer wrong can be reduced, through a thorough research
design. The credibility of a research project is mainly evaluated through reliability and
validity (Saunders et al., 2009).

3.7.1 Validity

In qualitative research validity is described in many different ways (Golafshani, 2003).
Joppe (2000) explains, that validity defines

‘… whether the research truly measures that which it was intended to measure or
how truthful the research results are. In other words, does the research
instrument allow you to hit “the bull’s eye” of your research object?’ (cited in

Validity means therefore to evaluate if the research approaches really connect to the
findings and if the results are really related to what they are supposed to be (Saunders et
al., 2009). Validity is highly influenced by the perception, the researchers have of valid-
ity. That notion determines the methods chosen for the data collection and analysis
(Creswell and Miller, 2000).

To assure validity in this thesis, clear categorization schemes and decision rules for the
coding procedure were developed. That process leads to objectivity and transparency of
the conducted content analysis. Starting point for the coding schemes was the literature,
which provided a theoretical framework about sourcing concepts. The subsequent
creation of the sourcing toolbox served as coding scheme during the execution of the
content analysis. Furthermore, a simple and comprehensible classification of the results
(‘Y’ = Yes, ‘n.s.’ = not specified) was generated to catalogue the results.
3.7.2 Reliability

According to Patton (2002) reliability is a crucial criteria in order to assess the quality of a study. Reliability refers to

‘... the extent to which your data collection techniques or analysis procedures will yield consistent findings.’ (Saunders et al., 2009, p.156)

Furthermore, Joppe (2000) defines reliability as

‘... the extent to which results are consistent over time and an accurate representation of the total population under study is referred to as reliability and if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable.’ (cited in Golafshani, 2003, p. 598).

To ensure reliability, the consistency of the analysis results over time and the ability to reproduce the outcomes have to be proven. According to Golafshani (2003) trustworthiness plays an important role to ensure the reliability in qualitative research.

The data of the current study can be considered trustworthy, as information was extracted from representative reports and official websites of the investigated humanitarian organizations are therefore of high quality. Moreover, the empirical material is available for a long period of time and accessible for everyone. The research process is described in detail (subchapter 3.5), which provides transparency and facilitates transformability to conduct the same research study in a similar environment with other organizations and researchers.

Furthermore, reliability is ensured in this paper, as two independent coders, analyzed the empirical material. Coding discrepancies were considered severe, as soon as it would result into the change from one coding category to the other. Each difference in the coding results were finally discussed among the researchers in order to generate a mutual coherent result. Even though pre-defined coding schemes existed, the researcher further focused on gaining additional insights and find out particularities outside of these categories.

3.7.3 Threats to reliability and validity

Depending on the researchers conducting a study, the interpretations of the empirical data are influenced by their background and knowledge (Williamson, 2002). In particular, content analysis involves the threat of subjectivity in its coding process (Guthrie et al., 2004), as the decision of assigning a statement to particular categories lies on the coder (Pasukevicciute and Roe, 2005). This bias limits the validity and reliability of findings. However, there are many measures to appraise these threats.

Robson (2002) defined several threats to reliability, whose impacts the authors of the current thesis tried to mitigate:

- Researcher error: If there are several researches conducting an analysis, the outcome might differ. To avoid this, the researchers agreed upon rules to ensure a similar coding procedure before the conduction of the content analysis.
• Researcher bias: The risk, that data are interpreted differently depending on the researcher, who conducts the analysis, is almost unavoidable. To mitigate that, the authors tried to be as objective as possible by discussing inconsistent coding results during the content analysis and agreeing mutually on a final outcome.

Furthermore, Robson (2002) also describes threats to validity, which the researchers intended to avoid:

• History: If the research is conducted after or during a major event, which impacts the studied area, the results will not be valid. During the compilation of this paper, no main incidence occurred, which might have changed the procurement policy decisions of humanitarian organizations and hence influenced the final analysis outcome.

• Instrumentation: If a study is executed over a period of time, new policies might emerge in the meantime, which could affect the outcome of the study. Humanitarian organizations are constantly improving their procurement processes. However, no major change could be identified, which would make the outcomes of this study different.

Overall, the researchers are aware of the limitations of their study and tried to avoid biases as much as possible in order to increase the validity and reliability of this paper.
4 Empirical Data

In this chapter, the empirical findings are presented. Based on the concept of content analysis, reports and other information material of humanitarian organizations have been investigated to compare and describe sourcing policies in disaster response.

4.1 United Nations

The United Nations (UN) is an international organization founded after the Second World War. The organization’s commitment is to maintain international peace and security, develop friendly relations among nations and promote social progress, better living standards and human rights (UN, 2013a). Nowadays, 193 Member States support the UN and express their views in the General Assembly, which is composed of representatives of all Member States. The General Assembly is the main deliberative organ of the UN, and its mandates dictate the work of its agencies (UN, 2013b).

The tasks the UN performs are very broad and range from sustainable development, environment and refugees protection, disaster relief, counter terrorism and disarmament to promote democracy, human rights, gender equality, international health and further more. Due to its unique and international character, the organization has the power to take action in a wide range of issues (UN, 2013a).

The main objective of the UN’s procurement policies is to ensure an uninterrupted, sustainable supply of quality products to an affordable price. The following paragraphs describe the basic procurement policies and processes of the UN in general in order to provide an overview of the whole system. These policies are used from all UN agencies. As already stated in chapter 3, some of these agencies (UNDP, UNICEF, UNHCR, UNPF, OCHA, WFP, WHO) are considered among the 14 biggest humanitarian organizations. In addition to the general description of UNs’ procurement policies, the consequent subchapters further investigate each of these agencies separately.

Number of suppliers at the UN

UN generally applies a multiple supplier strategy. Those providers of goods are located in either developing or developed countries (UNICEF Supply Division, 2012).

Area of disaster relief procurement at the UN

Basically, the UN focuses on long-term relationships with a wide range of suppliers in accordance with its basic procurement principles of the General Assembly, which state that sources of supply should have a large geographical distribution (UNHCR, 2007). However, some agencies try to encourage procurement from developing countries to a certain extent in order to stabilize and strengthen the weak economy of those countries (WFP, 2006).

Use of IT in disaster relief procurement at the UN

To reduce procurement lead-times, purchasing processes have been computerized at the UN. Each step of the procurement procedure, including the tendering process, is linked to an integrated program (UNHCR, 2007). Furthermore, the UN publishes a Core Relief
Item Catalogue on an electronic platform, in order to clarify product specifications and facilitate its suppliers the tending process (UNHCR, 2013a).

Environmental focus in disaster relief procurement at the UN

This policy not only includes social regulations (maximum working hours, minimum compensation, no child labor, ...) but also sets environmental standards. The supplier is highly encouraged by protecting the environment through monitoring of air emissions, minimization of waste, maximization of recycling efforts, solid waste disposal and further more (UN, 2007).

Table 3-1 provides a combined analysis of all UN agencies and their procurement policies. If an indication for the application of a certain policy was found in the empirical material, it was marked grey in the table below.

Ethical behavior in disaster relief procurement at the UN

Fair and rigorous standards and guidelines assure, that the UN and all its agencies follow strict ethical principles (UNICEF, 2013a). For instance, employees of the organization are forbidden to accept gifts and favors of any kind (UNHCR, 2004). But not only the UN itself follows a firm Code of Conduct, the organization also imposes these standards on its suppliers.

The UN supplier Code of Conduct demands from its suppliers to respect human rights, social justice and equal rights for man and women. Reaching these goals is seen as a continuous improvement process by the supplier. The UN monitors and evaluates constantly the suppliers’ efforts to meet the requirements set by the Code of Conduct through on-site inspections, also of their subcontractors’ facilities for instance (UN, 2007).

Procurement policies related to time (Warehouse Management) at the UN

As emergencies cannot be planned properly in advance, an immediate response is required. Therefore, emergency stockpiles of frequently needed goods like blankets, plastic sheets, food and vehicles shortens delivery times tremendously (UNHCR, 1999). Many disaster relief items, in particular medical products are already stored in the UN central warehouse in Copenhagen to ensure immediate delivery (UNICEF, 2013a). This warehouse, which can meet the immediate needs of 250,000 beneficiaries, is run by UNICEF.

Besides that, many agencies also run regional hubs, strategically located near crisis-prone regions, as well as in proximity to airports (UNHCR, 2013a). In addition, local stockpiles are also located near or in politically unstable countries (e.g. Tanzania, ...) (UNHCR, 2007). There, relief items can be dispatched in some cases within a period of 48 hours after a disaster occurred (UNICEF, 2013b). A Global Stock Management system makes it possible to deliver quickly from the network of regional warehouses and hubs (UNICEF, 2013b). This system is provides a central platform with a single-entry interface, which maps the capacities and resources of humanitarian actors sorted by region, sector, organization and/or organization type (OCHA, 2013d).

The main benefit of stockpiling is the ability to send life-saving goods in case of a disaster, without conducting time-consuming market research and procurement. Further-
more, all goods are already quality controlled and appropriately packed, ready for immediate dispatch (OCHA, 2013c).

**Objects of sourcing in disaster relief at the UN**

The emergency division of the UN is specialized in developing and shipping pre-packed kits, which are assembled, shipped and distributed rapidly in emergency situations (UNICEF, 2013e).

Each of these kits contains a complete set of supplies and instructions for use, which enables its immediate application. The warehouse in Copenhagen stocks components for 40 different kits (UNICEF, 2013e). Those components are for instance, medical supplies (UNICEF, 2013f), tents, blankets or cooking sets (UNICEF, 2013g). These kits have been developed based on extensive tests and on the experience, the UN gained in disaster relief over many years. Besides already developed kits, customized ones can also be assembled upon request (UNICEF, 2013b).

**Duration of supplier contracts in disaster response at the UN**

In order to increase efficiency of the generally time-consuming bidding process a pre-selected roster system of suppliers was implemented. Long-term arrangements with a limited number of suppliers have been worked out. These suppliers have been pre-selected, depending if they comply the technical specifications for each required item. These pre-qualified suppliers are contacted, when the need arises (UNHCR, 2013c).

Another procurement concept are frame arrangements, which guarantee the availability of an increasing variety of relief items, rapid access and a stable quality by fixed prices (UNHCR, 2007). The organization does not promise to take a maximum or minimum quantity. Furthermore those arrangements are non-exclusive, which means that the same item still can be procured elsewhere if needed (UNHCR, 1999).

**Purchasing operations and bidding processes in disaster response at the UN**

At the initial stage of the organization’s purchasing activities, suppliers are selected during bidding processes. First, on basis of the UN’s procurement strategy and objectives, a demand forecast for a specific item is developed. The price is calculated regarding the premise to guarantee, that the product is affordable to governments and donors, as well as that it covers the manufacturers minimum requirements. As next step a tender document is generated, which is evaluated through a pre-tender meeting with the product-related industry and finally officially issued (UNICEF Supply Division, 2012).

After the supplier handed in their offer, a qualitative and quantitative review in regards to the evaluation criteria and procurement objectives is executed. In addition, meetings and calls with suppliers for clarifying the tender requirements are done. After this approval process, a supplier gets selected and notified in order to establish an arrangement. This information is finally posted publicly on the organization’s homepage. The duration of tenders varies to a high extent. Some goods are only required on single-year tenders (products with ad hoc and highly changing demand), others for multiple-years (for products with stable demand) (UNICEF Supply Division, 2012).

In some cases these bidding processes are not applied. Complex products, for instance, are not requested through an invitation to bid, instead proposals can be submitted by the suppliers. These proposals allow manufacturers to develop more freely their offer in-
cluding all factors (production volumes, timing of production, …) necessary to generate a competitive product (UNICEF Supply Division, 2012).

Cooperation and coordination among the UN agencies in disaster response procurement

Inter-agency cooperation, organized by the UNDP agency, plays a crucial role for the whole UN. This cooperation aims at harmonizing and standardizing the procurement entities and activities of all agencies to procure at the lowest cost possible. Joint tendering programs for instance result in the arrangement of world-wide price agreements (Executive committee of UNHCR, 1996).

The next subchapters describe each UN agency, which accounts under the 14 biggest humanitarian organizations separately. To avoid redundancies only distinctive characteristics and particularities about their sourcing policies apart from the main UN procurement system are pointed out there.

4.1.1 United Nations Development Fund (UNDP)

As a UN agency, UNDP aims at empowering lives and building resilient nations in order to withstand crises (UNDP, 2013a). At the moment, UNDP helps more than 80 countries to build resilience to conflicts and disasters. When a disaster strikes, UNDP works towards longer-term development objectives, while other humanitarian organizations focus on immediate life-saving (UNDP, 2013b).

UNDP is among the 14 biggest humanitarian organizations (see table 3-1). However, the organization does not directly execute disaster response and is therefore not further examined within the frame of this thesis. Nevertheless, for the sake of completeness the organization has been considered as potential source for information.

4.1.2 United Nations Children’s Fund (UNICEF)

UNICEF is one of the world leaders in humanitarian aid focusing in particular on children (UNICEF, 2013b). Supplies purchased by the organization are crucial to child survival through support in health, education and protection from abuse, exploitation and neglect. The main products purchased by UNICEF are besides pharmaceuticals, micronutrients, vaccines, safe injection materials, medical devices also water and sanitation goods. In total UNICEF procures over 5000 different products to address the needs of children. In 2011, UNICEF procured humanitarian aid items for USD 2.14 billion in total (UNICEF, 2013c). These commodities and services were provided in 158 countries all over the world (UNICEF, 2013d).

In addition to on-going programs, UNICEF also provides rapid supply response to emergencies. In 2011, UNICEF supported 78 countries during disasters, which amounts USD 166 million of relief items and services. The main focus of UNICEF’s disaster relief is to ensure global availability of lifesaving commodities (UNICEF, 2013c) like vaccines, essential medicines, nutrition, drinking water and sanitation (UNICEF, 2013e).

Particularities in procurement processes and policies

Concerning their length, UNICEF places tenders ranging from 2 years to 15 years for different vaccines for instance. During the bidding processes, incoming offers from suppliers are evaluated depending on a technical review, released by the World Health
Organization (WHO) for each item (UNICEF Supply Division, 2012). Hence, UNICEF buys vaccines only from manufacturers, which are pre-qualified by the WHO. However, for multi-year tenders also other manufacturers are invited to bid in order to not exclude new suppliers from the procurement process. Nevertheless, for single-year tenders, necessary to cover immediate needs, only pre-qualified suppliers are considered to reduce process response time (UNICEF Supply Division, 2012).

The organization establishes so-called Long Term Arrangements (LTAs) in order to guarantee a long-term relationship with its suppliers (UNICEF, 2013h). Vaccines for instance are bought on basis of 2 to 4 years LTAs.

Because of market conditions, which are unique in the vaccine industry, UNICEF added special rules into the basic Code of Conduct. Those guidelines should maintain vaccine product quality as well as supply security to be also able to procure from the poorest countries (UNICEF, 2013a). For instance, bids and tender proposals are validated by an independent bid section and later on forwarded to the contracting staff. Furthermore, communication with the potential supplier during the tender process is mainly formal and written or suppliers are not invited to the offices (UNICEF Supply Division, 2012).

4.1.3 United Nations High Commissioner for Refugees (UNHCR)

UNHCR was established to protect refugees worldwide by helping them to seek asylum with the option to return home voluntarily, integrate locally or resettle in a third country. Today, UNHCR supports around 33.9 million people in more than 125 countries, who need to restart their lives (UNHCR, 2013a).

To meet the needs of refugees, UNHCR mainly purchases tents, domestic utensils, clothes, plastic sheets, blankets, farm tools, water pumps, water treatment units, vehicles, food, petrol, charcoal and mattresses (UNHCR, 2013c). Providing humanitarian relief items is a core task of UNHCR in order to meet the needs of displaced refugees in emergency situations. A timely delivery is crucial and UNHCR managed in 2012 that 92% of all emergency items needed, were delivered in less than 72 hours after request (UNHCR, 2013d).

Particularities in procurement processes and policies

Every purchase is basically regulated by competitive bidding. However, UNHCR set the rule, that only purchases of goods and services above USD 20,000 require a formal international competitive bidding. Below that budget, only three written offers need to be compared (UNHCR, 2013c). Nevertheless, tendering processes are still a fixed component of UNHCR’s sourcing policies (UNHCR, 2007).

The ordering process at UNHCR is centrally done at the headquarters in Geneva. However, to increase flexibility, several field offices are authorized to purchase directly from local suppliers (UNHCR, 2013c). Most of the organization’s operations take place in the field, including procurement actions (UNHCR, 2013b). In 2009, 64% of UNHCR’s total procurement was procured in field work and only 36% of purchases were conducted by the headquarters (UNHCR, 2009).

If possible, locally made products are given priority, when a purchasing decision is taken (UNHCR, 2013c) in order to foster host refugee communities, which are often among the poorest in the world (UNHCR, 2013e). Hence, UNHCR focuses on local
procurement from developing countries, if it can be done competitively. Local procurement represents around 25% UNHCR’s total procurement (UNHCR, 2007). Long-term agreements with suppliers are usually valid for a one-year period (UNHCR, 1999).

UNHCR highly focuses on green procurement. Guidelines were established in 1997, which requires the organization to purchase goods and services with a low negative environmental impact. Environmental criteria are part of the supplier evaluation and selection, in terms of the goods purchased, the production process, transport, packaging, use and disposal. However, in case of an emergency, delivery might take precedence over environmental issues. Nevertheless, suppliers are asked to provide detailed information about their products’ environmental impacts. This is a challenging task, when it comes to local procurement from development countries, where small suppliers usually can’t provide this information. As result, UNHCR intends to ensure that this environmental policy does not discriminate against markets that operate under less rigorous environmental regulations (UNHCR, 2007).

4.1.4 United Nations Population Fund (UNFPA)

The core goals of the UNFPA are achieving universal access to sexual and reproductive health (including family planning), promoting reproductive rights and reducing maternal mortality. Furthermore, governments need to collect detailed information about population dynamics and trends to manage their policies. UNFPA supports them in these tasks through censuses, surveys or population-related research and analysis. UNFPA also assists governments in delivering sexual and reproductive health care. These areas include:

- family planning
- antenatal, safe delivery and post-natal care
- prevention of abortion and management of its consequences
- treatment of reproductive-tract infections
- prevention, care and treatment of sexually transmitted infections (including HIV)
- information, education and counseling on human sexuality and reproductive health
- prevention of violence against women (actions to eliminate traditional harmful practices) (UNFPA, 2013a).

UNFPA is today the largest public sector procurer of contraceptives and related commodities for the developing world (UNFPA, 2013c). Access to reliable contraceptives, condoms, medicines and equipment saves and improves lives, as it empowers couples to plan their families, prevents HIV from spreading and supports women in childbirth (UNFPA, 2013d).

Often, the special needs of women and young people are overlooked in humanitarian emergencies. Furthermore, during conflicts pregnancy-related deaths, sexual exploitation and sexual violence increases. Reproductive health services often become unavailable and young people become more vulnerable to HIV infection. Hence, UNFPA provides supplies and services to protect reproductive health in disasters (UNFPA, 2013b).

Particularities in procurement processes and policies

In general, procurement is carried out by the UNFPA’s local country office or by the headquarters. About 85% of total procurement volume is done by the headquarters
The main products procured by the organization are male condoms, female condoms, reproductive health medicines (including hormonal contraceptives), and medical devices (UNFPA, 2013f).

UNFPA does business with suppliers from all over the world. Approximately one third of procurement contracts are closed with developing countries, as the UNFPA actively fosters sourcing from developing countries (UNFPA, 2013e). During the bidding process, UNFPA runs a separate team, which is dedicated exclusively to quality assurance matters in order to provide objectivity (UNFPA, 2013f).

UNFPA places a high priority on quality assurance for its health commodities. Hence, suppliers are pre-qualified and their products’ quality is constantly evaluated by a strict and systematic process to ensure that the goods meet specified requirements and standards. Quality assurance includes prequalification, technical evaluations, quality control, and monitoring (UNFPA, 2013f). The UNFPA Quality Assurance system has been harmonized with UN partner agencies, which means that the suppliers of UNFPA are pre-qualified by the WHO and meet their standards (UNFPA, 2013h). Quality control determines whether the specified standards are being maintained through inspection, sampling and laboratory testing (UNFPA, 2013f).

Proper and safe disposal of reproductive health products is also a critical issue. Improper and unsafe disposal pose public health and environmental threats. As result, UNFPA developed a guidance document on how to dispose responsibly unusable products of the UNFPA (UNFPA, 2013g).

4.1.5 United Nations Office for the Coordination of Humanitarian Affairs (OCHA)

OCHA is responsible for bringing together humanitarian actors to assure a coherent response to disasters (OCHA, 2013a). The agencies mission is to

‘mobilize and coordinate effective and principled humanitarian action in partnership with national and international actors in order to alleviate human suffering in disasters and emergencies.’ (OCHA, 2013a)

The main objective of the OCHA is to coordinate all involved humanitarian actors in order to ensure the adequate and timely provision of non-food items in response to the needs of affected populations in emergencies (OCHA, 2013b). Since 2000, OCHA has dispatched 117 shipments to 48 countries affected by natural disaster or conflict. A total of 2,356 tons of relief items have been distributed, worth over USD 17.5 million (OCHA, 2013c).

Overall, OCHA is responsible for stock management, fund-raising and donor reporting, stock replenishment and the dispatch of orders (OCHA, 2013d). In summary, no special characteristics apart from the basic procurement processes and policies of the UN could be found at OCHA by the researchers.

4.1.6 World Food Programme (WFP)

The World Food Programme is one of the world’s largest humanitarian organizations that distributes over 5 million tons of food reaching an average of 95 million beneficiaries per year. The organization’s main objectives are (WFP, 2013b):
• Save lives and protect livelihoods in emergencies
• Prevent acute hunger and invest in disaster preparedness and mitigation measures
• Restore and rebuild lives and livelihoods in post-conflict, post-disaster or transition situations
• Reduce chronic hunger and under nutrition
• Strengthen the capacities of countries to reduce hunger, including through hand-over strategies and local purchase

The vast majority of WFP operations are in response to emergencies (WFP, 2006). In June 2012, the allocation of up to USD 300 million was approved, which enables the organization to purchase commodities in advance in order to ensure a steady flow of food and reduce response time in emergencies (WFP, 2012).

Particularities in procurement processes and policies

The WFP’s main objective is to procure appropriate food in a timely and cost-efficient manner. The organization distinguishes between the following types of food procurement activities:

• World market transactions
• Triangular transactions
• Regional purchases
• Local purchases

World market transactions describe the purchase from one country in order to use it in a developing country. These transactions contain purchases from both, developed and developing countries. Triangular transactions refer to the procurement of food from one developing country in order to use it within another developing country. In case of transactions between developing countries in the same geographic region or sub-region, it is considered a regional purchase. When WFP purchases food from the food aid recipient country to use it within the same country, it is regarded as local purchase. As result the organization set the rule, that if conditions are equal, the preference will be given to suppliers from developing countries (WFP, 2006).

4.1.7 World Health Organization (WHO)

The World Health Organization directs and coordinates the section of international health within the United Nations. Health guidelines and standards are defined by WHO experts in order to help countries to confront public health issues (WHO, 2007).

The role of WHO is to support member states to be ready for, respond to and recover from emergencies like natural disasters, conflict, disease outbreaks, food contamination and more (WHO, 2013a). For that reason the WHO Emergency Risk Management and Humanitarian Response department works closely with all UN Member States, international partners, and local institutions to ensure international capacity is available for emergency response (WHO, 2013c).

When a disaster occurs, its consequences for the public health are addressed by the WHO. The emergency response framework of WHO includes 4 critical functions during the emergency response process (WHO, 2013a):
Leadership
Information
Technical expertise
Core services

Procurement is defined as a sub-function of the field core services (as well as logistics, supply management, administration or finance) (WHO, 2013a).

Particularities in procurement processes and policies

The WHO established also a special procurement service in 1990 to facilitate member states their access to high quality HIV test kits at reasonable costs even during disaster periods (WHO, 2013b). For some relief items, pooled procurement is used. With applying this strategy, the WHO tries to make vaccines more affordable to a group of countries, which are jointly procuring vaccines, medical products and technologies (WHO, 2013d).

Apart from the UN and its agencies, the following subchapters present sourcing policies of the remaining humanitarian organizations, investigated in the frame of this thesis.

4.2 World Vision International (WVI)

WVI is a Christian Humanitarian Organization, which focuses on children, families and fights against poverty and injustice. The organization serves around 100 million people in nearly 100 countries, regardless their religion, ethnicity or gender (WVI, 2013a). WVI is inspired by Christian values in trying to help the world’s most vulnerable people (WVI, 2013b).

When a disaster comes up, the approach of World Vision is ‘first-in, last-out’ (WVI, 2013c). That means, the organization tries to provide help as quickly as possible but also attempts to serve disaster victims as long as possible.

Procurement processes and policies

WVI uses local sourcing from multiple suppliers in its attempt to procure a high percentage of food aid from developing countries (WVI, 2013d). Furthermore, the organization is committed to the IFRC’s Code of Conduct (WVI, 2013e).

World Vision strategically located disaster response warehouses all over the world. Those warehouses are pre-stocked with relief supplies like shelter materials, cooking utensils and blankets to deliver without delay in case of a disaster (WVI, 2013f).

4.3 Save the Children

Save the Children is an independent organization with the mission to change the lives of children all around the world. Even though the organization closely cooperates with other organizations, governments and local partners, it still tries to keep its independence (no religious or political orientation).

When a disaster comes up, Save the Children saves the lives of children by providing food, medical care and education. Moreover, Save the Children maintains in disaster hit areas in order to establishing long term recovery programs (Save the Children, 2013).
Procurement processes and policies

The organization states, that it uses demand tailored sourcing instead of stockpiling when responding to a disaster (Save the Children, 2007) and provides hygiene kits (containing soap, toothbrush, laundry detergent, …) or household kits (blanket, broom, mosquito nets, …) to disaster victims. Furthermore, Save the children applies a strict Code of Conduct, which also involves ethical procurement (Save the Children, 2013).

4.4 International Federation of Red Cross and Red Crescent Societies (IFRC)

The idea of the Red Cross was born in 1859 by Henry Dunant (Swiss man) (IFRC, 2013a). Today, the organization comprises 187 members, a bureau in Geneva and 60 delegations, strategically located all over the world (IFRC, 2013b). Their core principles are humanity, impartiality, neutrality, independence, voluntary service, unity and universality (IFRC, 2011).

Every year the IFRC serves around 30 million disaster victims. Disaster management represents the major part of work and includes immediate response as well as long-term rehabilitation work (IFRC, 2013c).

Procurement processes and policies

In order to standardize and harmonize the required relief items, the IFRC established an emergency items catalogue, currently consisting of around 2,500 standard commodities (IFRC, 2013h). Quality assurance is a core point in the IFRC’s purchasing strategy. Detailed specifications published in the organization’s emergency relief catalogue, guarantee a high product quality (IFRC, 2013f). The IFRC offers its procurement services online at a special portal, where the national as well as international suppliers are able to register their products and services (IFRC, 2013e).

Suppliers are basically selected through a competitive bidding process. All suppliers need to register first and are evaluated upon if they can meet the qualitative and quantitative product requirements as well as if they maintain ethical business practices (e.g. not involved in any form of corruption or fraud, no child labor, …) (IFRC, 2013g). If a supplier gets approved, the vendor will be added to the IFRC’s database, which does not guarantee the conclusion of a contract (IFRC, 2013k). The main factors for the supplier evaluation are: the quality of the product or service provided, compliance with contractual terms and conditions, ability to meet delivery schedules, efficiency in response to requests, adherence to warranty provisions, speed and cooperation in resolving problems or claims (IFRC, 2013l).

The IFRC runs logistics units in strategically important places (e.g. Panama, Dubai, Kuala Lumpur, …) and has a significant amount of pre-positioned stock there to immediately meet the needs of 300,000 people. Those emergency supplies mainly consist of essential non-food (e.g. blankets, kitchen sets, buckets, tents, …) and shelter items for disaster affected people (IFRC, 2013q). However, the organization regionalized many purchases, which enabled them to reduce the costs for providing disaster relief kits. In other cases, consolidated orders enhance the organization to use a higher purchasing power due to the large volumes in order to achieve a competitive price (IFRC, 2013f).
In addition, framework and long term agreements are set to keep a competitive price while assuring a high quality, quantity and speed (IFRC, 2013f). In these framework agreements the supplier agrees to supply a certain commodity at a certain price for a particular period of time. Those agreements are mainly used for commodities with a high demand and large quantities (mainly pre-positioned stock items) in order to increase efficiency, a competitive price and quality.

Framework agreements are usually established at a global level, but may as well be set at a regional or local sphere. Globally, are mainly standard relief items and medical products like blankets or mosquito nets procured. On a local level, framework agreements are applied for goods that will be specifically used by communities of a particular region (e.g. hygiene parcels) (IFRC, 2013m). The IFRC usually sets framework agreements for a two-year period (IFRC, 2013o).

The strict Code of Conduct, the Red Cross imposed on itself, shows its commitment also in the field of purchasing (IFRC, 2013d). Cooperation is just done at IFRC with suppliers that also accept these regulations for ethical behavior (IFRC, 2013f).

4.5 CARE

CARE is a humanitarian organization that helps individuals and families of the world’s poorest communities. CARE works together with women, as they have the power to assist whole families and communities to escape poverty. Moreover, CARE distributes emergency aid to survivors of war and natural disasters helping them to rebuild their lives (CARE, 2013a).

Procurement processes and policies

Despite the information gathered from online resources and annual reports, the authors of the current thesis couldn’t extract detailed data about CARE’s sourcing policies.

4.6 Catholic Relief Services (CRS)

CRS was established in 1943 in order to help the European population, which was affected by the 2nd world war (CRS, 2013a). Nowadays, the commitment of the Catholic Relief Services is to help the poor and vulnerable all around the world (CRS, 2011). The mission of the organization is to:

- Promote human development by responding to major emergencies, fighting disease and poverty, and nurturing peaceful and just societies;
- Serve Catholics in the United States as they live their faith in solidarity with their brothers and sisters around the world (CRS, 2011, p.2).

CRS has a great experience in emergency preparedness and response and establishes partnerships directly with affected communities and local partners (e.g. local communities, churches, governments, NGOs, UN agencies) (CRS, 2013a).

Procurement processes and policies

Procurement activities of CRS are conducted in an open and impartial way, focusing on transparency, adequately testing the market, avoiding biased specifications and treating all suppliers equitably. In that way, confidence of donors and vendors is strengthened. All procurement activities have to comply with all donor regulations in order to increase
their transparency (CRS, 2013b). The procurement process at CRS includes the following steps:

- Step 1: Submission of a request for quotations based on a purchase requisition form
- Step 2: Receive bids from prospective vendors
- Step 3: Analysis of Bids and selection of supplier
- Step 4: submission of the purchase order or contract with the selected supplier (CRS, 2013b, p.27)

A procurement tracking system is used in order to provide information about the status of the order, detailed description about the suppliers’ performance, a background of the organization’s business with the suppliers, ensuring the quality of the items which delivered and the duration of the delivery of goods (CRS, 2013b).

A tool to respond to emergency needs and at the same time to improve food security in developing countries is the so-called Local and Regional Procurement Program (LRP). LRP purchases food locally within the country or region, where it is needed (CRS, 2013c).

**4.7 Médecins sans Frontières (MSF)**

Médecins Sans Frontières is a private non-profit organization, which mainly consists of doctors and health sector workers, who provide assistance to populations in distress like victims of natural or man-made disasters (MSF, 2011a). The headquarters is based in Geneva. The organization runs 19 main offices all over the world (MSF, 2011b).

In order to access and assist people in need appropriately, MSF’s operational policies emphasize the importance of being independent of governmental influence. Hence, the organization does not accept funds from governments or other parties, who are directly involved in the conflicts MSF is responding. Therefore, MSF relies on the generosity of private individuals for the majority of funding (MSF, 2011a).

**Procurement processes and policies**

MSF’s primary focus is to provide medical care for ongoing projects and to deliver immediate disaster relief items (non-food) in case of emergencies. These commodities are mainly distributed as kits (e.g. cooking kits consist of a stove, pots, plates, cups and cutlery). Only in 2011, MSF distributed 225,500 relief kits (MSF, 2011b). For efficiency reasons, MSF set up 10 specialized sub-organizations, so-called ‘satellites’. Those satellites focus on different core areas like humanitarian relief supplies or medical research (MSF, 2011b). Inventories are held at the headquarters as well as at the satellites, from where the relief items are getting distributed to the crises affected areas. Goods and materials are procured globally as well as locally. Inventory reserves are recorded based on stock usage, expiry date and damaged items (MSF, 2011a).

As a medical organization, MSF regularly distributes drugs to patients all over the world, and is therefore due to the nature of medical goods committed to keep a high level of product quality. The organization set up two procurement centers (France and Belgium) to supply relief goods as quickly as possible and simultaneously controlling product quality. This evaluation is carried out by the MSF headquarters and employees, regularly visit MSF missions in the field to verify that the supply channels and product quality is in line with the standards defined at the headquarters (MSF, 2013b).
Any manufacturer, who wishes to supply goods to MSF is invited to express his interest by filling in a special document. Each file submitted is first screened for completeness, than evaluated by MSF pharmacists. As next step, MSF visits the manufacturing site to assure that the products are manufactured on the approved premises. The auditor writes a final report, which approves the admission for a supplier to deliver goods to MSF. Such approvals are usually granted for 3 years, including periodic re-audits. As next step the supplier needs to submit detailed technical information about the product specifications. If the product meets the standards of MSF, green light is given for commercial negotiations and the final purchase of these goods (MSF, 2013b).

### 4.8 Oxfam

Oxfam is an international association, consisting of 17 organizations, which are operating in more than 90 countries. The headquarters of Oxfam is situated in Oxford (United Kingdom). The main objective of Oxfam is to build a future world free from poverty (Oxfam, 2013a). Oxfam believes, that all people affected by disasters have the right to receive live saving aid, be free from violence, access clean water, shelter and food as well as to be heard and take control of their own lives (Oxfam, 2012).

Besides long-term development programs, Oxfam is also one of the world leaders in delivering emergency relief (Oxfam, 2013c). The organization is globally recognized as expert in water and sanitation provision, ensuring access to food and basic necessities for hygiene as well as in the establishment of shelters (Oxfam, 2013b). Due to poor water supplies in refugee camps immediately after a disaster, there is a higher risk of outbreaks of diseases such as cholera or diarrhea. Hence, Oxfam builds latrines and conducts health campaigns in refugee camps to raise awareness (Oxfam, 2012).

**Procurement processes and policies**

In certain emergencies, when food is still available in disaster affected areas, the organization purchases locally to strengthen these communities (Oxfam, 2012). In order to respond quickly to emergencies, Oxfam also uses emergency stocks (Oxfam, 2013f). Items like plastic sheets are produced in huge bulks and pre-stored (Oxfam, 2010c). Here, Oxfam also applies tendering procedures (Oxfam 2013e). In cooperation with its key suppliers, Oxfam develops new products based on their experience and improves emergency kits and simple relief items further (Oxfam, 2012).

The organization only accepts to purchase from suppliers which are in line with Oxfam’s values and believes. Goods are only purchased, when they are produced under labor conditions that meet the Ethical Trade Initiative Base Code (ETI), which means no involvement in the abuse or exploitation of any person. In addition, Oxfam seeks to collaborate with suppliers, which have the least negative impact on climate change and the environment (Oxfam 2013d). Oxfam is increasingly aware of the significance to conduct disaster response in an environmentally-friendly way. The organization is committed to reduce its energy consumption and greenhouse gas emission production. This is done through constant environmental impact reporting. Based on this assessment reduction targets are set and finally changes in the organizations processes are conducted. Initiatives to reduce negative environmental impacts contain various measures like waste reduction or recycling (Oxfam, 2012).
5 Analysis

The final analysis of procurement policies, currently applied at the biggest humanitarian organizations in the field of disaster response, will be presented in this chapter. Similarities as well as differences among the organizations’ approaches to procurement are pointed out and particularities are highlighted.

5.1 Analysis of examined humanitarian organizations

The following subchapters provide the final analysis of the procurement policies of each investigated humanitarian organization. These results derived from the empirical findings (chapter 4) as well as from the outcomes of the content analysis (see example Appendix 4). The results of both analyses are combined here in order to provide an overview of each of the 14 examined humanitarian organization separately. At the end of this subchapter a comprehensive table summarizes the results of the analysis.

5.1.1 United Nations (UN) and its agencies

A large quantity of data material (reports, guidelines, …) related to the organization’s procurement policies was available. In summary, the UN’s procurement policies could be analyzed without difficulty due to the huge amount of information. Hence, the researchers could easily match the concepts from the pre-defined sourcing toolbox with procurement operations described in the reports for the organization.

Besides, some distinctive characteristics should be mentioned. The UN and its agencies focus on tender procedures during the initial stage of supplier selection (UNICEF Supply Division, 2012; UNHCR, 2007; UNHCR, 2013c; UN 2007). Bidding processes are commonly applied in the humanitarian aid field for purchases from global suppliers (Balcik & Beamon, 2008). Such bidding processes are not listed in the sourcing toolbox developed by the researchers of this paper. Yet, tender concepts are of interest to be further discussed in the frame of disaster relief procurement.

Surprisingly, the researchers discovered some inconsistencies between the different agencies and their sourcing concepts. Although the organization intends to harmonize and standardize its procurement activities among its entities, (Executive committee of UNHCR, 1996) fundamental differences have been found in particular regarding the tendering process. For instance, the UNHCR set the rule, to apply bidding processes only in purchases of goods and services above USD 20,000. Below that budget, only three written offers need to be compared (UNHCR, 2013c). Hence, tendering procedures would be a field of interest for further research in order to evaluate the UN system and its coherency in procurement policies.

Basically all investigated UN agencies (UNICEF, UNHCR, UNFPA, OCHA, WFP, WHO, UNDP) follow the general sourcing regulations set up by the UN. In addition, some of the agencies added further rules regarding procurement, which are described in the following subchapters. According to the UNDP’s homepage, the agency does not operate in the field of disaster response and was thus excluded from further analysis.
5.1.2 World Vision International (WVI)

Unfortunately the researchers could gather only little information about the organization’s procurement policies. Therefore not all factors from the sourcing toolbox could be matched with the empirical material, provided by WVI.

This absence of information might show, that either WVI does not put emphasis on its procurement policies in general. Also, it can be a hint, that the organization is lacking transparency and clear communication towards the public and in particular to its donors. Donors are often considered as the real customers and their satisfaction is of high importance for humanitarian organizations (Kent, 1987). As result, this finding provides improvement potential for WVI in order to make its procurement policies more transparent.

5.1.3 Save the Children

Save the Children did not provide extensive information about their procurement policies in disaster response. Nevertheless, some factors from the sourcing toolbox could be matched with the empirical material.

As mentioned above, this missing information indicates either a lack of transparency and communication, or the organization does not consider procurement as very significant. Therefore, this fact provides an opportunity for Save the Children to expand the allocation of information material concerning its sourcing operations.

5.1.4 International Federation of Red Cross and Red Crescent Societies (IFRC)

The IFRC presents a lot of information about its procurement policies in the investigated online sources and annual reports. The majority of concepts from the sourcing toolbox could be related to the data provided from the organization. This fact gives evidence, that the IFRC considers procurement as an important field in disaster response. Furthermore, the organization manages to communicate this significance well to the public.

Additionally, suppliers at the IFRC are selected through competitive bidding. All suppliers need to register first in order to get approval to be able to deliver their commodities to the organization (IFRC, 2013g). Such pre-registrations are mainly done to increase responsiveness and speed of disaster relief actions, as quality and delivery terms are already specified in advance (Balcik & Beamon, 2008).

5.1.5 CARE

Despite the information gathered from online resources and annual reports, the authors of the current thesis couldn’t extract detailed data about CARE’s procurement policies. As result, no information from the empirical material could be brought in line with the pre-developed sourcing toolbox. So, the researchers conclude, that CARE is missing transparency in the field of procurement or sourcing is not a matter of importance for the organization.
5.1.6 **Catholic Relief Services (CRS)**

Limited information was available from the CRS about their procurement policies, which indicates lack of transparency or importance. Thus, only few concepts from the sourcing toolbox could be matched with the data provided.

Nevertheless, the organization states, to use tender procedures in order to select its suppliers (CRS, 2013b). Bidding procedures should not only lead to competitive prices for the commodities, but also provide equal opportunities for all vendors in the field of humanitarian aid. In the case that very urgent disasters relief is needed tendering techniques are usually not applied (Taupiac, 2001). Unfortunately the CRS does not state, if or under what circumstances tender processes are not applied. This issue would be of interest for further research in order to provide managerial implications to humanitarian organizations.

5.1.7 **Médecins sans Frontières (MSF)**

MSF provided a very detailed description of its procurement operations. The authors could assign many factors from the sourcing toolbox with the data provided by MSF.

Specially should be pointed out here, that MSF as a medical organization, regularly distributes drugs. Due to the nature of medical goods, high importance is dedicated to quality assurance. Regular audits and on-site visits of suppliers are conducted (MSF, 2013b). This outcome seems interesting, as speed and flexibility is usually the core focus of humanitarian organizations in disaster response (Van Wassenhove, 2006).

5.1.8 **Oxfam**

Oxfam provides extensive information about its procurement policies in disaster response. The researchers could easily allocate the majority of concepts from the sourcing toolbox with the empirical material.

Interesting fact is, that the organization highly stresses the importance of environmentally friendly practices in procurement. Oxfam assesses its whole supply chain and sets reduction targets to decrease the environmental impacts of disaster relief operations, which also affects the suppliers (Oxfam, 2012). The researchers could not detect such a high emphasis on green procurement during the investigation of the other humanitarian organizations. That shows, that a strong commitment to environmentally friendly relief chains is still neglected by many big humanitarian organizations.
5.1.9 Overview of sourcing policies

Table 5-1 provides an overview of the final analysis. The letter ‘Y’ (Yes) indicates evidence, that a particular organization applies a certain concept. ‘n.s.’ stands for ‘not specified’ and describes, that no statement could be found. It does not explain whether this concept is applied or not. There was no case where an organization stated, NOT to use a certain concept. Therefore two categories were sufficient for the analysis.

Table 5-1 Analysis of sourcing policies based on empirical material (own illustration)

<table>
<thead>
<tr>
<th>Humanitarian organization</th>
<th>Number of suppliers</th>
<th>Area of sourcing</th>
<th>Use of IT</th>
<th>Environmentally friendly</th>
<th>Ethical behaviour</th>
<th>Warehouse Management</th>
<th>Object of sourcing</th>
<th>Duration of supplier contracts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Single</td>
<td>Multiple</td>
<td>Local</td>
<td>Global</td>
<td>Applied</td>
<td>Focus</td>
<td>Focus</td>
<td>Stock</td>
</tr>
<tr>
<td>UN</td>
<td>n.s.</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>UNICEF</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>UNHCR</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>UNFPA</td>
<td>n.s.</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>OCHA</td>
<td>n.s.</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>WFP</td>
<td>n.s.</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>WHO</td>
<td>n.s.</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>WVI</td>
<td>n.s.</td>
<td>Y</td>
<td>Y</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Save the Children</td>
<td>n.s.</td>
<td>Y</td>
<td>n.s.</td>
<td>Y</td>
<td>n.s.</td>
<td>n.s.</td>
<td>Y</td>
<td>n.s.</td>
</tr>
<tr>
<td>IFRC</td>
<td>n.s.</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>n.s.</td>
<td>n.s.</td>
<td>Y</td>
<td>n.s.</td>
</tr>
<tr>
<td>CARE</td>
<td>n.s.</td>
<td>Y</td>
<td>Y</td>
<td>n.s.</td>
<td>Y</td>
<td>n.s.</td>
<td>Y</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

The statements, which are the basis for this analysis, are not rated concerning their significance and frequency. Hence, if the organization puts a heavy focus on one factor, the table above does NOT indicate this.
5.2 Procurement concepts in disaster response

The following subchapters present a detailed analysis of every concept from table 5-1. Each sourcing policy and its application in the humanitarian relief context is discussed, based on the information derived from the literature in combination with the outcomes from the empirical data. The organization CARE and the UN agency UNDP got excluded from further analysis due to lack of information about their procurement operations. Hence, only data from the 12 biggest humanitarian organizations are presented here.

5.2.1 Number of suppliers in disaster relief procurement

For products required of high quantity or with a short lead time, multiple sourcing is ordinarily applied in commercial supply chains to receive a competitive price (Treleven & Schweikhart, 1988). To purchase relief items from multiple suppliers seems relatively common in the field of disaster response as well, as all 12 investigated humanitarian organizations mention its application.

10 out of the 12 investigated humanitarian organizations did not specifically mention the use of single sourcing. However, the UNHCR states, that single sourcing is also applied in disaster response for small quantity purchases from local markets to empower the regional economy of a developing country (UNHCR, 2013). In case no other supplier is available and the choice of a single supplier is therefore not voluntarily, this is termed sole sourcing (Treleven & Schweikhart, 1988). Sole sourcing is sometimes practiced in a disaster response context as well for complex or quality sensitive products like drugs (UNICEF Supply Division, 2012). Organizations usually avoid single or sole sourcing to reduce the risk of supply chain disruptions (Treleven & Schweikhart, 1988). Therefore, the majority of the observed organizations uses competitive bidding processes to ensure supplier variety. These tendering procedures are discussed further in chapter 6.1.

In practice, humanitarian organizations will have a multiple sourcing policy for each relief item (Taupiac, 2001; Falasca & Zobel, 2011). Regarding to the number of suppliers, the outcomes from the empirical analysis are supported by the literature. This means that mostly multiple sourcing is applied and only in particular cases for special product, single sourcing is practiced.

5.2.2 Area of disaster relief procurement

Related to the area, the majority of investigated organizations uses both, local (11 out of 12) as well as global (10 out of 12) sourcing, depending on the type of disaster and product. Local sourcing is mainly applied in order to respond quickly to a disaster (short delivery time) or benefit from cost savings (short transportation ways) (Van Wassenhove, 2006). In contrast, global sourcing is mainly practiced to create a stock of standard relief items or products, which require the supplier to meet rigorous quality standards (Sowinski, 2003; Falasca & Zobel, 2011). Thus, quality-sensitive items like vaccines or drugs are usually procured globally (Save the Children, 2013).

On a local level, goods are purchased, which are specifically needed in the particular region (IFRC, 2013m). Moreover, the use of domestic suppliers boosts the local economy (PAHO, 2001). Therefore many of the investigated organizations (WFP, UNHCR, UNICEF, UNFPA, VVI, and CRS) stressed the importance of procuring products locally, if it can be conducted competitively. WFP and UNHCR even implemented the regulation, that if conditions are equal, the priority will be given to suppliers from
developing countries (WFP, 2006). Especially goods like food can be procured locally from developing countries (Oxfam, 2012; WVI, 2013d). However, local procurement still contains a higher risk of supply shortages (PAHO, 2001). It also has severe impacts on local markets (CRS, 2013c), as it generates competition between small firms, which results in high prices for the relief items (PAHO, 2001). Furthermore, it poses a threat to the already from the disaster affected local economy through price inflation on the markets (Balcik, et al., 2010).

The ratio of local and global sourcing highly depends on each organization. For instance, at UNHCR local procurement represents around 25% of its total procurement (UNHCR, 2007), whereas one third of UNFPA’s procurement policy is conducted on a local level (UNFPA, 2013e). Overall, the investigated organizations applied global and local sourcing to different extents and are in line with the discussed advantages and disadvantages, found in the literature. Despite the disputed view from the literature of the benefits created by procuring locally, the majority of humanitarian organizations highlights its benefits.

5.2.3 Use of IT in disaster relief procurement

In summary, 8 out of 12 humanitarian organizations mentioned to use IT in procurement. Yet, the extent of IT support varies, ranging from simple online product catalogues to monitoring all steps of the procurement process. For instance, the IFRC established supplier portals in order to enable the vendors to pre-register their products (IFRC, 2013e). The UN, uses a Global Stock Management system to map capacities and resources of available relief items (OCHA, 2013d).

Some organizations indicate a very high integration of IT in their procurement activities, where each step is linked to an integrated program (UNHCR, 2007). This system enables the organizations to track all purchases by providing information about order status, suppliers’ performance or quality of the items (CRS, 2013b). This helps to save cost and time in supplier selection and increases transparency of all procurement actions (Aini & Hasmiah, 2011).

Most procurement decisions are short-termed, as demand can only be assessment instantly after a disaster (Thomas, 2003; Balcik & Beamon, 2008). Therefore, the use of IT in disaster relief facilitates to allocate supplies quickly and is of high importance for efficient operations due to the literature. The majority of the investigated organizations mentioned the use of IT in disaster relief procurement. However, the importance of IT support was particularly stressed in the opinion of the researchers.

5.2.4 Environmental focus in disaster relief procurement

Speed in deliveries of relief items is of utmost importance in disaster response (Kovács & Spens, 2007). In addition, quality assurance and gaining competitive prices for relief commodities is recognized as crucial (Van Wassenhove, 2006). However, less emphasis is put on environmental issues during disaster relief procurement. Evidence, that green procurement is fostered, was found from 7 out of the 12 investigated organizations. But these statements mainly originated from general guidelines. Little information was published on the websites and the researchers perceived them as slightly obvious, even hidden. That might be a hint, that the organizations even though they perform environmentally friendly practices in procurement, these efforts need to be advertised more to the public. In commercial supply chains, the concept of green sourcing is al-
ready paid a lot of attention. There, green procurement is not only applied to decrease negative environmental impacts and benefit from higher efficiency (Turner & Houston, 2009), but also used as mean to improve the firms’ brand images and reputation (Christensen, Park, Sun, Goralnick, & Iyengar, 2008).

Some organizations (UN, UNFPA, and UNHCR) added regulations regarding environmental protection in their Codes of Conduct in order to encourage their suppliers to minimize waste, maximize recycling efforts and arrange solid waste disposal. Especially for products like drugs proper and safe disposal is extremely important. Some organizations like Oxfam and UNHCR went even a step further and added environmental criteria to their supplier evaluation and selection scheme in terms of goods purchased, the production process, transport, packaging, use and disposal. Nonetheless, these organizations state, that in case of emergencies priority is still given to a fast delivery of relief items. Another problem that arises in that context, is related to local procurement from developing countries. In case strict environmental regulations are applied for supplier selection, these small suppliers would be discriminated. Therefore, the organizations focus on green sourcing, even though environmental regulations are less rigorous enforced (UNHCR, 2007).

In summary, the application of green procurement is considered as very important, as it contributes to the overall sustainability of a humanitarian organization. That results not only in less negative environmental impacts, but is also part of the donors’ satisfaction and can increase their interest (European Union, 2007). It seems, that the investigated organizations still need to increase their efforts in implementing and advertising green procurement practices.

5.2.5 Ethical behavior in disaster relief procurement

All of the 12 investigated organizations focus on ethical behavior, which is mostly constituted in their Codes of Conduct. Not only the organization commits itself to comply with ethical regulations, also their suppliers are requested to adopt ethical behavior. In order to do business with these organizations, suppliers are required to accept their Codes of Conducts (Svensson & Baath, 2008).

These Codes of Conduct usually contain rules like to respect human rights and social justice, which mainly means no involvement in the abuse or exploitation of any person (e.g. child labor) (UN, 2007). The execution and control of this standards varies, but is mostly applied very strictly, as unethical behavior in supplier networks endangers credibility of the humanitarian organization (Svensson, 2009). The UN, for instance, constantly monitors its suppliers and conducts on-site inspections also to subcontractors (UN, 2007).

Ethical sourcing plays a crucial role in forming the perception of donors (Wild & Zhou, 2011) and is therefore very important for humanitarian organizations in order to keep stability of donor revenues (Oloruntoba & Gray, 2006). In the notion of the researchers, the information, available about ethical behaviour and its promotion, is very extensive and detailed. So it can be concluded, that the investigated humanitarian organizations are very much aware of the significance of ethical behavior in disaster procurement.
5.2.6 Procurement policies in disaster relief related to time (Warehouse Management)

10 of 12 humanitarian organizations stock relief items in advance. Only one organization (Save the children) clearly states to procure commodities also to current requirements in order to avoid stock (Essig, 2000). Hence, most of the investigated organizations run their own or use external warehouse in strategically essential places to be able to dispatch pre-stocked relief items quickly (IFRC, 2013q). Usually, frequently needed goods are pre-stocked (UNHCR, 1999).

Besides a speedy delivery, a main benefit of stockpiling is, that the goods are already quality controlled and appropriately packed (Nikbakhsh & Farahani, 2011; OCHA, 2013c). On the other hand, pre-stocking is very costly (Balcik & Beamon, 2008). But it helps the humanitarian organizations to gain a flexible relief supply chain, which is a key issue for disaster response logistics (Kovács & Spens, 2007).

To conclude, demand tailored sourcing is mainly not applied in disaster response, even though stock sourcing creates high costs. The high flexibility demand of humanitarian supply chains in disaster relief might hinder the implementation of concepts like demand tailored sourcing or JIT. Against this background, further research regarding drivers and obstacles of implementing demand tailored sourcing concepts in disaster relief would be interesting.

5.2.7 Object of sourcing in disaster relief

Basically, the objects of sourcing in disaster response are separated into relief items, which originate from monetary sources or non-monetary (in-kind) donations (Akhtar et al., 2012). During the empirical analysis, it turned out that many of the investigated humanitarian organizations stated, that they do not accept in-kind donations anymore. One reason for this might be, that many of these donations are unsolicited or unwanted (Chomolier, Samii, & van Wassenhove, 2003). This is mostly because some in-kind donations are simply inappropriate like drugs and food that exceeded its expiry dates. Such donations cause immense problems, as they clog airports and warehouses (Murray, 2005).

The majority (10 out of 12) of the investigated organizations mentions to distribute combined kits. Those kits usually contain a complete set of supplies and user instructions for immediate application (UNICEF, 2013f). The purchase of already assembled kits indicates the application of system sourcing. But UNICEF, for instance, also just buys single components and customizes them to kits, which means the assembly upon request for other humanitarian organizations (UNICEF, 2013a).

This field was very difficult to interpret from the researchers. Many organizations mentioned in their reports the use and distribution of relief kits, but did not particularly specify how those items were procured (single unit or the whole kit). Nonetheless, some statements were discovered, which point toward system sourcing, as many humanitarian organizations do not have the time, skills and resources to assembly purchased relief commodities by themselves.

Due to the nature of certain relief items, some goods do not need to be distinguished based on the object of sourcing. Food for instance, food does not require system sourcing, as it is not assembled or combined with other units. Although the organizations do not
point out the purchase of only units in particular, the researchers assume that many items are procured in a unit status due to their characteristics. To summarize, system as well as unit sourcing is most likely applied by humanitarian organizations in the field of disaster response, depending on the type of product and further factors.

5.2.8 Duration of supplier contracts in disaster response

Even though the majority of procurement decisions are very short-termed, due to the volatile nature of disasters, humanitarian organizations favor long-term contracts with their suppliers in order to benefit from rapid access, stable quality and fixed prices (Balcik & Beamon, 2008; UNHCR, 2007). This fact could also be observed during the analysis of the empirical material. The majority of investigated humanitarian organizations (9 out of 12) stated, to try to arrange long-term relationships with their suppliers.

The length of such contracts varies and highly depends on the type of product. Complex and quality sensitive goods like vaccines or medicines are usually bought on basis of longer contracts (e.g. 2 to 4 years). In particular cases, those contracts can even range up to 15 years (e.g. certain vaccines at UNICEF). Other organizations like the IFRC sets contracts only for a two-year period (IFRC, 2013o) and the UNHCR even less (1-year period) (UNHCR, 1999).

Short-term contracts are foster in order to strengthen the economy of disaster hit areas or developing countries (WFP, 2006). In contrast, long term contracts are mainly used for commodities with a high demand and large quantities (pre-positioned stock items) (IFRC, 2013f).

Long-term agreements are usually based on a pre-selection and pre-qualification of the suppliers at first hand, depending on the required technical specifications of the products (UNHCR, 2013c). Contracts are established, which mainly do not promise the purchase of a maximum or minimum quantity. Hence those arrangements are non-exclusive and goods can always be procured elsewhere. The suppliers are only contacted, if the need for their commodities arises (UNHCR, 2013c; UNHCR, 1999). The main purpose of these arrangements is therefore to set minimum criteria in advance, in order to be more flexible and able to respond quicker to a disaster (UNHCR, 2013c; Balcik & Beamon, 2008).

The duration of supplier contracts varies mainly depending on the type of product, but humanitarian organizations tend to close agreements on a long term range in order to be more flexible. In order to encourage the local market economy short termed contracts are completed. The results from the empirical investigation is mainly in line with the suggestions about the duration of supplier contracts, derived from the literature.
6 Further Discussion

Outside of the pre-defined categories for sourcing policies, the researchers found additional factors, which contribute to successful procurement operations within humanitarian organizations. Those particularities are described in the following subsections.

6.1 Purchasing operations and bidding processes in disaster response

One factor, the majority of the investigated humanitarian organizations (UN, IFRC, MSF, and Oxfam) put emphasis on, are bidding or tendering procedures. They are applied at the initial stage of the procurement process in order to select products and suppliers appropriately (UNICEF Supply Division, 2012).

Either, depending on forecasts and the organizations’ objectives a tender document is generated, that invites related suppliers to bid and submit their offer (UNICEF Supply Division, 2012; MSF, 2013b). Or, suppliers submit a proposal without request from the organizations. This is mainly done for complex products, where competitive bidding can’t be applied as it would be too difficult (UNICEF Supply Division, 2012). Some organizations set minimum purchase values as standard whether to apply tendering or not (UNHCR, 2013c). In some urgent disaster cases, bidding processes are also not applied in order to reduce response time (Taupiac, 2001).

A qualitative and quantitative review of each supplier offer is the next step of this tendering procedure (UNHCR, 2013c). All suppliers are evaluated based on their ability to meet the qualitative and quantitative product requirements, but also if they maintain ethical business practices (IFRC, 2013g). Evaluation criteria might be: the quality of the product or service provided, compliance with contractual terms and conditions, ability to meet delivery schedules, efficiency in response to requests, adherence to warranty provisions, speed and cooperation in resolving problems or claims (IFRC, 2013l). Some organizations, send auditors to the suppliers’ manufacturing sites in order to assure that the products are manufactured on the approved premises (MSF, 2013b). Based on that, suppliers get approved (which leads to a further arrangement or contract) or disapproved (UNICEF Supply Division, 2012). Periodic re-audits are also part of the tendering process (MSF, 2013b). If all these requirements are met, commercial negotiations start, which result in the final purchase of goods (MSF, 2013b).

The duration of tenders varies to a high extent, ranging from single-year (for products with ad hoc and highly changing demand) to multiple-years tenders (for products with stable demand) (UNICEF Supply Division, 2012; MSF, 2013b). Mostly, these agreements contain that suppliers hold emergency stocks for humanitarian organizations (Balcik & Beamon, 2008).

Bidding processes are not only widespread in practice, but also broadly discussed in the literature. Hence, the researchers conclude, that applying competitive tendering in order to procure disaster response items is a very important concept.

6.2 Subject of sourcing in disaster response

Some of the investigated organizations stated, that their ordering processes are centrally organized. UNFPA purchases 85 % of its total procurement volume by the headquarters
(UNFPA, 2013e). In contrast, other organizations indicated a decentralized purchasing structure. At UNHCR, for instance, the majority of its purchasing activities is done by field offices in order to increase flexibility (UNHCR, 2013b).

In the opinion of the researchers, this finding is worth to be further examined in order to evaluate the impacts of centralized or decentralized procurement actions in disaster response.

6.3 Quality assurance in procurement of relief items

The importance of product quality was a factor, mentioned by the majority of the organizations. In particular for health commodities (e.g. vaccines) a high level of product quality is essential (UNFPA, 2013f; UNICEF Supply Division, 2012).

In order to ensure that quality standards are met, most of the humanitarian organizations use pre-qualification schemes for their suppliers (UNFPA, 2013f; MSF, 2013b). Already during the bidding process, incoming offers are evaluated regarding technical and qualitative standards. UN partner agencies like UNICEF or the UNFPA buy their commodities only from manufacturers, which are pre-qualified by the WHO in order to harmonize the Quality Assurance within the UN system (UNFPA, 2013h; UNICEF Supply Division, 2012). Organizations like the UNFPA or UNICEF even installed separate teams (independent bid sections), exclusively responsible for quality assurance matters to provide objectivity (UNFPA, 2013f; UNICEF Supply Division, 2012). Additionally, UNICEF added special rules into its Code of Conduct to maintain objectivity in product quality evaluation. For instance, communication with potential suppliers during the tender process is mainly formal and written and suppliers are not invited to the offices (UNICEF Supply Division, 2012).

Also, after the bidding process, registered suppliers are constantly evaluated and controlled regarding quality. Regular on-site visits and inspections, sampling and laboratory testing are conducted by the majority of the investigated humanitarian organizations in order to verify that product and supply chain quality is in line with the predefined standards of the organizations (UNFPA, 2013f; MSF, 2013b).

To conclude, humanitarian organizations not only focus on a quick delivery, also quality issues are increasingly paid attention to in the field of disaster response procurement.

6.4 Pooled Procurement in disaster response

For some relief items, pooled or joint procurement is used from the investigated organizations. With applying this strategy, the WHO for example, tries to make vaccines more affordable by cooperatively procuring vaccines, medical products and technologies (WHO, 2013d).

In other cases, consolidated orders enhance the organization to use a higher purchasing power due to the large volumes in order to achieve a competitive price (IFRC, 2013f). Joint tendering programs also result in the arrangement of world-wide price agreements at the UN (Executive committee of UNHCR, 1996).

In summary, this fact points out that disaster response procurement does not only focus on the quick delivery and quality issues (as discussed above), but also low cost and efficiency are essential.
7 Conclusion

The purpose of this paper is to describe and analyze procurement policies, applied at the biggest humanitarian organizations in the field of disaster response. To accomplish this, a thorough literature review provided the necessary background to understand the environment, in which humanitarian organizations execute disaster response procurement. An overview of sourcing policies in the humanitarian and commercial sector was given.

The purpose of the current thesis was further meet through the development of a classification scheme of well-known sourcing policies (so-called sourcing toolbox), derived from the literature. Secondary data, provided from the 14 largest humanitarian organizations were analyzed on basis of this sourcing toolbox in order to present disaster relief procurement from a practical point of view.

7.1 Theoretical contribution

This paper contributes to theory by providing a summary (sourcing toolbox) of currently applied procurement concepts in disaster response. Even though a homogenous sourcing pattern was not identified, a general tendency of how the largest humanitarian organizations procure disaster relief items was recognized.

In practice, humanitarian organizations tend to use multiple sourcing. Single sourcing is practiced as well in case of purchasing complex products, a supplier monopoly or in order to foster the local economy from developing countries. Regarding the area, local as well as global sourcing is mostly applied, as each concept offers different benefits. The significance of using IT in disaster relief procurement is not particularly pointed out. Environmentally friendly sourcing practices are considered as important by the organizations. However, implementation and advertisement efforts of green procurement should be increased in the opinion of the researchers. Contriarily, ethical behavior (social factors) in procurement is highly emphasized and published by the investigated organizations. Demand tailored sourcing is mainly not applied, due to the high flexibility need in disaster response. Stock sourcing is favored, despite its immense costs. System as well as unit sourcing is most likely practiced, depending on the type of product. The duration of supplier contracts varies, but the investigated organizations lean towards agreements on a long term basis to benefit from rapid access, stable quality and fixed prices. Short termed contracts are applied in order to encourage the local market economy. Bidding processes are widespread among the investigated organizations. Pooled procurement is practiced to increase efficiency and lower costs.

7.2 Managerial contribution

The practical contribution of this study lies in creating an understanding of the procurement policies big humanitarian organizations currently apply. That might help similar organizations to adapt some of these policies in order to improve their sourcing policies.

One main managerial implication concerns communication and transparency of sourcing activities. The final analysis showed, that basic information about procurement policies in some organizations is absent. This is in particular interesting, as humanitarian organizations claim to be very transparent in providing information about their processes. That finding might either indicate a lack of awareness from humanitarian organizations of the significance of procurement. Or it might show, that those organizations are still lacking
transparency and clear communication towards the public. As result, this provides improvement potential for humanitarian organizations.

In addition, little attention is paid to green sourcing among the investigated humanitarian organizations. In contrast, ethical procurement practices regarding social factors like fair working conditions are well established and communicated to the public. However, the lack of awareness of green procurement among the examined humanitarian organizations, does not necessarily mean, that these groups do not apply green procurement. It is nevertheless a hint, that there is further improvement for these organizations to advertise their environmental friendly policies more. This is highly important due to the donor-driven environment humanitarian organizations, operate in. Sustainability is known to strengthen the good reputation and public image of an entity. Hence, increasing application of green sourcing and consequently its communication to the donors will besides decreasing negative environmental impacts the organizations cause, also attract donors.

7.3 Further research opportunities

In order to gain a broad view of existing sourcing policies in disaster response, the authors chose secondary data for their analysis. However, the contribution of primary data through in-depth interviews for instance, would enrich the results of this paper. Certain procurement concepts could not be covered with a content analysis, even though the examined empirical material was extensive. Nonetheless, the content of these data was sometimes limited. In particular factors, marked as ‘not specified’ in table 5-1, would be of high interest for further research. Not only to figure out whether these concepts are applied, but also to identify the reasons why those aspects were not mentioned. Lack of awareness of the importance of these policies could be likely reasons.

Another research possibility of interest would be the investigation of procurement policies in disaster response related to the size of organizations. This study focused only on the biggest humanitarian organizations, operating in the field of disaster response. The question is, if the sourcing concepts identified in this study, are also applied in small or middle sized humanitarian organizations, which operate in different environments (less market power, less developed IT systems, …). Consequently, similarities and differences with procurement of big organizations could be discovered. A comparison would help to understand better the distinctive characteristics of procurement applied in big or small humanitarian aid entities.

A further idea would be a study in what cases tender processes should be applied. Some organizations stated in this paper, that it is not always beneficial to use bidding processes in disaster response. Moreover, the role of centralized or decentralized offices, which are responsible for disaster relief procurement, could be examined. And lastly, the application of demand tailored sourcing concepts like JIT in disaster relief procurement to avoid costly pre-stocking provides an additional option for further research.
List of references


List of References


Dignan, L. (2005). Tricky currents; tsunami relief is a challenge when supply chains are blocked by cows and roads don’t exist. Baseline, 1 (39), 30.


List of References


List of References


UNHCR (1999). UNHCR global report - Procurement and transportation.


UNICEF Supply Division (2012). Overview of UNICEF Procurement Processes


Appendix 1 Trends of disasters

Figure 7-1  Trends in occurrence of natural disasters and number of victims (Guha-Sapir et al., 2011)
## Appendix 2 Disaster Management Life Cycle activities

Table 7-1 Major Activities of Disaster Management System Life Cycle (Altay & Green, 2006)

<table>
<thead>
<tr>
<th>Phase</th>
<th>Activity</th>
</tr>
</thead>
</table>
| Mitigation | Establishing land-use planning and control to prevent occupation of high-hazard areas  
|           | Using technological advancement to mitigate disasters effects  
|           | Establish preventive measures to control developing situations  
|           | Improving disaster resistance of structures by enforcing building codes  
|           | Establishing tax incentives or disincentives  
|           | Ensuring application of proper methods in rebuilding buildings and infrastructures after disasters  
|           | Measuring potential for extreme hazards using risk-analysis techniques  
|           | Enforcing the use of insurance plans to reduce disasters’ financial impacts  |
| Preparedness | Recruiting personnel for emergency services  
|           | Establishing community volunteer groups  
|           | Emergency planning  
|           | Logistical planning  
|           | Acquiring and stockpiling necessary items  
|           | Developing mutual aid agreements and memorandums of understanding with other organizations, NGOs, international organizations, and other countries  
|           | Providing training for both response personnel and concerned citizens  
|           | Performing threat-based public education  
|           | Budgeting  
|           | Acquiring necessary vehicles and equipments  
|           | Acquiring, stockpiling, and maintaining emergency supplies  
|           | Constructing central and regional emergency operations centers  
|           | Developing communications systems  
|           | Planning regular disaster exercises to train personnel and test capabilities  |
| Response  | Activating emergency operations plan  
|           | Activating emergency operations centers  
|           | Evacuating disaster areas  
|           | Opening shelters and providing mass care  
|           | Providing emergency rescue and medical care  
|           | Firefighting  
|           | Performing search and rescue  
|           | Providing emergency infrastructure protection and recovering lifeline services  
|           | Establishing fatality management  
|           | Ensuring the security of affected areas by deploying police or military forces  |
| Recovery  | Providing disaster debris cleanup  
|           | Providing financial assistance to individuals and governments  
|           | Rebuilding roads, bridges, and key facilities  
|           | Providing sustained mass care for displaced people and animals  
|           | Reburying displaced human remains  
|           | Fully restoring lifeline services  
|           | Providing mental health and pastoral care  |
### Appendix 3 Sources of empirical material

Table 7-2  Overview of sources for gathering empirical data (own illustration)

<table>
<thead>
<tr>
<th>Organization</th>
<th>Source</th>
<th>Author</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARE</td>
<td><a href="http://www.care.org/about/index.asp">http://www.care.org/about/index.asp</a></td>
<td>CARE</td>
<td>2013</td>
</tr>
<tr>
<td>CRS</td>
<td>Annual report</td>
<td>CRS</td>
<td>2011</td>
</tr>
<tr>
<td>CRS</td>
<td><a href="http://crs.org/emergency/">http://crs.org/emergency/</a></td>
<td>CRS</td>
<td>2013</td>
</tr>
<tr>
<td>IFRC</td>
<td>Innovations in Local and regional procurement</td>
<td>IFRC</td>
<td>2013</td>
</tr>
<tr>
<td>IFRC</td>
<td>The Red Cross Red Crescent approach to sustainable development, Position paper, 2011, Geneva</td>
<td>IFRC</td>
<td>2011</td>
</tr>
<tr>
<td>IFRC</td>
<td>Annual report 2011</td>
<td>IFRC</td>
<td>2011</td>
</tr>
<tr>
<td>IFRC</td>
<td><a href="http://www.ifrc.org/PageFiles/99108/General%20Terms%20and%20Conditions.pdf">http://www.ifrc.org/PageFiles/99108/General%20Terms%20and%20Conditions.pdf</a></td>
<td>IFRC</td>
<td>2013</td>
</tr>
<tr>
<td>Source</td>
<td>URL</td>
<td>Date</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>IFRC</td>
<td><a href="http://www.ifrc.org/en/who-we-are/history/">http://www.ifrc.org/en/who-we-are/history/</a></td>
<td>IFRC 2013</td>
<td></td>
</tr>
<tr>
<td>MSF</td>
<td><a href="http://www.msf.org/msf/about-msf/about-msf_home.cfm.htm">http://www.msf.org/msf/about-msf/about-msf_home.cfm.htm</a></td>
<td>MSF 2013</td>
<td></td>
</tr>
<tr>
<td>OCHA</td>
<td>Activity Report, 2011</td>
<td>OCHA 2011</td>
<td></td>
</tr>
<tr>
<td>OCHA</td>
<td>Annual report, 2011</td>
<td>OCHA 2010</td>
<td></td>
</tr>
<tr>
<td>OCHA</td>
<td><a href="http://www.unocha.org/about-us/who-we-are">http://www.unocha.org/about-us/who-we-are</a></td>
<td>OCHA 2013</td>
<td></td>
</tr>
<tr>
<td>Oxfam</td>
<td>Better jobs in better supply chains, 2010</td>
<td>Oxfam 2010</td>
<td></td>
</tr>
<tr>
<td>Oxfam</td>
<td>Think big. Go small. Adapting business models to incorporate smallholders into supply chains, May 2010</td>
<td>Oxfam 2010</td>
<td></td>
</tr>
<tr>
<td>Oxfam</td>
<td>Plastic sheeting use and procurement in humanitarian relief, 2010</td>
<td>Oxfam 2010</td>
<td></td>
</tr>
<tr>
<td>Save the children</td>
<td><a href="http://www.savethechildren.org/site/c.8tKLIXMGbg44E/b.6146405/k.C7E9/About_Us.htm">http://www.savethechildren.org/site/c.8tKLIXMGbg44E/b.6146405/k.C7E9/About_Us.htm</a></td>
<td>Save the children 2013</td>
<td></td>
</tr>
<tr>
<td>Save the children</td>
<td>The Unique Needs of Children in Emergencies</td>
<td>Save the children 2007</td>
<td></td>
</tr>
</tbody>
</table>
## Appendix

<table>
<thead>
<tr>
<th>Organization</th>
<th>Resource URL</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UN Supplier Code of Conduct Revised 03-May 2007</td>
<td>2007</td>
</tr>
<tr>
<td>UNDP</td>
<td>Public Procurement Capacity Development Guide</td>
<td>2010</td>
</tr>
<tr>
<td>UNFPA</td>
<td><a href="http://www.unfpa.org/public/cache/offonce/home/about;jsessionid=84EA62E35CCF50136E758DBEB6841E1E.jahia01">http://www.unfpa.org/public/cache/offonce/home/about;jsessionid=84EA62E35CCF50136E758DBEB6841E1E.jahia01</a></td>
<td>2013</td>
</tr>
<tr>
<td>UNFPA</td>
<td><a href="http://www.unfpa.org/public/cache/offonce/home/procurement/pid/8622;jsessionid=6BES500F375EE9D64B87BC4B8E7468EE2.jahia02">http://www.unfpa.org/public/cache/offonce/home/procurement/pid/8622;jsessionid=6BES500F375EE9D64B87BC4B8E7468EE2.jahia02</a></td>
<td>2013</td>
</tr>
<tr>
<td>UNHCR</td>
<td>Background note on international procurement</td>
<td>1996</td>
</tr>
<tr>
<td>UNHCR</td>
<td>UNHCR global report - Procurement and transportation</td>
<td>1999</td>
</tr>
<tr>
<td>UNHCR</td>
<td><a href="http://www.unhcr.org/cgi-bin/texis/vtx/search?page=search&amp;docid=3b54446f64&amp;query=procurement">http://www.unhcr.org/cgi-bin/texis/vtx/search?page=search&amp;docid=3b54446f64&amp;query=procurement</a></td>
<td>2013</td>
</tr>
<tr>
<td>UNHCR</td>
<td>Doing business with the united nations high commissioner for refugees supply management service</td>
<td>2007</td>
</tr>
</tbody>
</table>
Appendix

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNHCR</td>
<td>Procurement statistics supply management service 2009</td>
<td>DESS</td>
</tr>
<tr>
<td>UNHCR</td>
<td>Report on Supply Management</td>
<td>UNHCR</td>
</tr>
<tr>
<td>UNHCR</td>
<td>[Link](<a href="http://www.unhcr.org/cgi-bin/texis/vtx/search?page=docid=419216f2f2&amp;q">http://www.unhcr.org/cgi-bin/texis/vtx/search?page=docid=419216f2f2&amp;q</a></td>
<td>UNHCR</td>
</tr>
<tr>
<td>UNHCR</td>
<td>ury=procurement)</td>
<td></td>
</tr>
<tr>
<td>UNHCR</td>
<td>[Link](<a href="http://www.unhcr.org/cgi-bin/texis/vtx/search?page=docid=3b5444f64&amp;q">http://www.unhcr.org/cgi-bin/texis/vtx/search?page=docid=3b5444f64&amp;q</a></td>
<td>UNHCR</td>
</tr>
<tr>
<td>UNHCR</td>
<td>ury=procurement)</td>
<td></td>
</tr>
<tr>
<td>UNICEF</td>
<td>Overview of UNICEF Procurement Processes</td>
<td>UNICEF</td>
</tr>
<tr>
<td>UNICEF</td>
<td><a href="http://www.unicef.org/supply/index_procurement_services.html">Link</a></td>
<td>UNICEF</td>
</tr>
<tr>
<td>UNICEF</td>
<td><a href="http://www.unicef.org/supply/index_26069.html">Link</a></td>
<td>UNICEF</td>
</tr>
<tr>
<td>UNICEF</td>
<td><a href="http://www.unicef.org/supply/index_26071.html">Link</a></td>
<td>UNICEF</td>
</tr>
<tr>
<td>UNICEF</td>
<td>[Link](<a href="http://issuu.com/supplydivision/docs/unicef_supply_annual_report_201">http://issuu.com/supplydivision/docs/unicef_supply_annual_report_201</a></td>
<td>UNICEF</td>
</tr>
<tr>
<td></td>
<td>1 commodity_groups/1</td>
<td></td>
</tr>
<tr>
<td>UNICEF</td>
<td><a href="http://www.unicef.org/supply/index_protection.html">Link</a></td>
<td>UNICEF</td>
</tr>
<tr>
<td>UNICEF</td>
<td><a href="http://www.unicef.org/supply/index_26071.html">Link</a></td>
<td>UNICEF</td>
</tr>
<tr>
<td>UNICEF</td>
<td><a href="http://www.unicef.org/supply/index_26069.html">Link</a></td>
<td>UNICEF</td>
</tr>
<tr>
<td>WFP</td>
<td>Food procurement in developing countries</td>
<td>WFP</td>
</tr>
<tr>
<td>WFP</td>
<td><a href="http://www.wfp.org/content/logistics-we-deliver">Link</a></td>
<td>WFP</td>
</tr>
<tr>
<td>WFP</td>
<td><a href="http://www.wfp.org/about/strategic-plan">Link</a></td>
<td>WFP</td>
</tr>
<tr>
<td>WFP</td>
<td>Food procurement annual report</td>
<td>WFP</td>
</tr>
<tr>
<td>WHO</td>
<td>Working for health</td>
<td>WHO</td>
</tr>
<tr>
<td>WHO</td>
<td>Emergency Response Framework</td>
<td>WHO</td>
</tr>
<tr>
<td>WHO</td>
<td><a href="http://www.who.int/diagnostics_laboratory/procurement/en/">Link</a></td>
<td>WHO</td>
</tr>
<tr>
<td>WHO</td>
<td><a href="http://www.who.int/hac/about/en/">Link</a></td>
<td>WHO</td>
</tr>
<tr>
<td>WHO</td>
<td><a href="http://www.who.int/mnuvi/financing/en/">Link</a></td>
<td>WHO</td>
</tr>
<tr>
<td>WVI</td>
<td><a href="http://www.worldvision.org/content.nsf/about/who-we-are?open">Link</a></td>
<td>WVI</td>
</tr>
<tr>
<td>WVI</td>
<td>[Link](<a href="http://www.worldvision.org/content.nsf/about/our-mission?Open&amp;pos=1f">http://www.worldvision.org/content.nsf/about/our-mission?Open&amp;pos=1f</a></td>
<td>WVI</td>
</tr>
<tr>
<td></td>
<td>t_txt_Our-Mission</td>
<td></td>
</tr>
<tr>
<td>WVI</td>
<td>[Link](<a href="http://www.worldvision.org/content.nsf/about/our-work/disaster-respon">http://www.worldvision.org/content.nsf/about/our-work/disaster-respon</a></td>
<td>WVI</td>
</tr>
<tr>
<td>WVI</td>
<td>s)</td>
<td></td>
</tr>
<tr>
<td>WVI</td>
<td><a href="http://www.worldvision.org/content.nsf/about/press-food-aid-FAQ">Link</a></td>
<td>WVI</td>
</tr>
<tr>
<td>WVI</td>
<td>[Link](<a href="http://www.wvi.org/disaster-management/how-world-vision-works-disaster">http://www.wvi.org/disaster-management/how-world-vision-works-disaster</a></td>
<td>WVI</td>
</tr>
<tr>
<td>WVI</td>
<td>s)</td>
<td></td>
</tr>
<tr>
<td>WVI</td>
<td>[Link](<a href="http://www.wvi.org/disaster-management/standards-disaster-management">http://www.wvi.org/disaster-management/standards-disaster-management</a></td>
<td>WVI</td>
</tr>
</tbody>
</table>
### Appendix 4 Example analysis of UNICEF

Table 7-3  Example analysis of UNICEF (own illustration)

<table>
<thead>
<tr>
<th>Policies related to:</th>
<th>Sourcing concept</th>
<th>Key word</th>
<th>Quote</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of suppliers</td>
<td>Single / Multiple</td>
<td>Multiple</td>
<td>&quot;Procurement from multiple suppliers for each vaccine presentation&quot;</td>
<td>Overview of UNICEF Procurement Processes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Multiple</td>
<td>&quot;From one award per vaccine to multiple awards per vaccine&quot;</td>
<td>Overview of UNICEF Procurement Processes</td>
</tr>
<tr>
<td>Area of sourcing</td>
<td>Local / Global</td>
<td>Local</td>
<td>&quot;In addition to our main warehouse in Copenhagen, regional supply hubs are located around the world. We are in a unique position to work locally with global standards.&quot;</td>
<td><a href="http://www.unicef.org/supply/index_procurement_services.html">http://www.unicef.org/supply/index_procurement_services.html</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Global</td>
<td>&quot;Procurement from manufacturers in developing countries and industrialized countries&quot;</td>
<td><a href="http://www.unicef.org/supply/index_procurement_services.html">http://www.unicef.org/supply/index_procurement_services.html</a></td>
</tr>
<tr>
<td>Use of IT</td>
<td>Applied / Not applied</td>
<td>Applied</td>
<td>&quot;The UNICEF Supply Catalogue, available online, contains detailed specifications for some 2,000 products, as well as technical bulletins. Additional information on commodities, including packing, shipping and delivery information can be found in the brochure Commodities and Supply Services.&quot;</td>
<td>Overview of UNICEF Procurement Processes</td>
</tr>
<tr>
<td>Environmentally friendly</td>
<td>Focus / No focus.</td>
<td>No focus</td>
<td>NO DATA FOUND</td>
<td></td>
</tr>
<tr>
<td>Ethical behaviour</td>
<td>Focus / No focus</td>
<td>Focus</td>
<td>&quot;We apply the most rigorous and fair standards to our procurement processes, and follow stringent ethical principles.&quot;</td>
<td><a href="http://www.unicef.org/supply/index_26069.html">http://www.unicef.org/supply/index_26069.html</a></td>
</tr>
<tr>
<td></td>
<td>Focus</td>
<td>Focus</td>
<td>&quot;Public posting of awards (<a href="http://www.unicef.org">www.unicef.org</a>)&quot;</td>
<td>Overview of UNICEF Procurement Processes</td>
</tr>
<tr>
<td></td>
<td>Focus</td>
<td>Focus</td>
<td>&quot;Contracting staff are governed by UNICEF Financial Rules and Regulation and procedures related to ethical behaviour&quot;</td>
<td>Overview of UNICEF Procurement Processes</td>
</tr>
<tr>
<td></td>
<td>Focus</td>
<td>Focus</td>
<td>&quot;During the time when a tender is open (from tender issuance to closing) - communication with suppliers is more formal and written, in accordance with tender instructions&quot;</td>
<td>Overview of UNICEF Procurement Processes</td>
</tr>
<tr>
<td></td>
<td>Focus</td>
<td>Focus</td>
<td>&quot;Bids/proposals are received and validated by an independent „Bid Section“ (QA) and then transferred to Contracting staff&quot;</td>
<td>Overview of UNICEF Procurement Processes</td>
</tr>
<tr>
<td></td>
<td>Focus</td>
<td>Focus</td>
<td>&quot;UNICEF does not accept manufacturers to fund trips, hotels, etc. or gifts&quot;</td>
<td>Overview of UNICEF Procurement Processes</td>
</tr>
<tr>
<td></td>
<td>Focus</td>
<td>Focus</td>
<td>&quot;Business should be conducted during normal working hours&quot;</td>
<td>Overview of UNICEF Procurement Processes</td>
</tr>
<tr>
<td></td>
<td>Focus</td>
<td>Focus</td>
<td>&quot;Meetings should be with minimum two UNICEF staff members&quot;</td>
<td>Overview of UNICEF Procurement Processes</td>
</tr>
<tr>
<td></td>
<td>Focus</td>
<td>Focus</td>
<td>&quot;Suppliers not invited to UNICEF staff offices&quot;</td>
<td>Overview of UNICEF Procurement Processes</td>
</tr>
<tr>
<td></td>
<td>Focus</td>
<td>Focus</td>
<td>&quot;Rigorous guidelines are applied to ensure the safe delivery of vaccines and the reporting of condition on arrival through the Vaccine Arrival Report.&quot;</td>
<td>Overview of UNICEF Procurement Processes</td>
</tr>
</tbody>
</table>
### Appendix

<table>
<thead>
<tr>
<th>Warehouse Management</th>
<th>Stock / Demand tailored</th>
<th>Stock</th>
<th>“Supply Division’s Copenhagen warehouse is key to UNICEF’s emergency response capacity.”</th>
<th><a href="http://www.unicef.org/supply/index_protection.html">http://www.unicef.org/supply/index_protection.html</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration of supplier contract</td>
<td>Long term / Short term</td>
<td>Long term</td>
<td>“We have long-term arrangements in place with suppliers for over 800 products, guaranteeing you quality items at highly-competitive prices.”</td>
<td><a href="http://www.unicef.org/supply/index_protection.html">http://www.unicef.org/supply/index_protection.html</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long term</td>
<td>“Emergency supplies are increasingly planned as part of long-term programs, which also include rehabilitation and reconstruction.”</td>
<td><a href="http://www.unicef.org/supply/index_protection.html">http://www.unicef.org/supply/index_protection.html</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long term</td>
<td>“UNICEF should provide manufacturers with accurate and long-term forecasts; Manufacturers should provide UNICEF with accurate and long-term production plans.”</td>
<td>Overview of UNICEF Procurement Processes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long term</td>
<td>“UNICEF establishes “framework arrangements” called Long Term Arrangements (LTAs)”</td>
<td>Overview of UNICEF Procurement Processes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long term</td>
<td>“From short term, lowest price to ensuring Vaccine Security”</td>
<td>Overview of UNICEF Procurement Processes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long term</td>
<td>“From single-year to multi-year tenders”</td>
<td>Overview of UNICEF Procurement Processes</td>
</tr>
<tr>
<td>Object of sourcing</td>
<td>Unit / System</td>
<td>Unit</td>
<td>“The Division specialises in developing and shipping pre-packed kits that can be assembled, shipped and distributed rapidly.”</td>
<td><a href="http://www.unicef.org/supply/index_protection.html">http://www.unicef.org/supply/index_protection.html</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unit</td>
<td>“The Copenhagen warehouse stocks components for 40 different kits.”</td>
<td><a href="http://www.unicef.org/supply/index_protection.html">http://www.unicef.org/supply/index_protection.html</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unit</td>
<td>“Customized set packing is also undertaken upon request”</td>
<td>Overview of UNICEF Procurement Processes</td>
</tr>
</tbody>
</table>