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Organizing of Response After 2020 Beirut Explosion

"How was the response after the 2020 Beirut explosion organized?"

Erik Berggren

Master's Thesis in Societal Safety

Spring 2021

Acknowledgments

This master's thesis marks the end of a five-year-long academic journey at the University of Stavanger – starting with a three-year-long bachelor's degree in Political Science, followed by a two-year-long master's degree in Societal Safety. With this, I have to thank the academic staff of the university for providing me with the competency and abilities needed to complete my master's thesis.

I can look back at this period of working on my master's thesis as a long and challenging period, but also a valuable experience. Throughout the process, I learned new skills and particularly insights that can help me in my professional career in the future. The most challenging part was basing my master's thesis on an event that happened on another continent during a global pandemic. The pandemic made fieldwork impossible and meant that I had to spend several hours on the internet locating relevant data. This process definitely improved my ability to find information online.

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Erik Berggren

Kristiansand, June 2021

Summary

The 2020 Beirut explosion caused massive destruction to the city's infrastructure, causing 204 deaths as well as roughly 15 billion US Dollars in property damage. Lebanon has a lack of a standardized disaster response framework, leaving the Lebanese Army as the only mechanism for disaster response in the country. This might work in smaller events and crises, but in a disaster, a large international mobilization is required, with clear and well-defined roles for every contributor in the response. With the lack of a real disaster response framework in the country, a highly active civil society has evolved in the country. This is mostly due to the citizen's lack of faith in the government – a factor that led to a high number of volunteers and local NGOs participating in the response after the explosion. The purpose of this thesis was to explore how the response after the Beirut explosion was organized. To do this I also formulated three research questions, dividing the response into three categories – government, international organizations, and local communities.

With this thesis being constructed during the Covid-19 pandemic, fieldwork became virtually impossible, meaning that all of the data collected and used in this thesis was gathered through document studies and interviews.

The theoretical framework of this thesis was focused on crisis management and other strategies for risk mitigation. With the response after the explosion being categorized on a large number of volunteers and local NGOs, a fair amount of the theoretical framework was also dedicated to community based capacities. This was included to explore and analyze how the local communities organized their response.

The response after the 2020 Beirut explosion was mostly organized through an informal decentralization due to the lack of a standardized disaster preparedness framework in the country. This meant that the international organizations had their own framework for organizing their response, leading to a multi-sectoral response involving several organizations. The two largest contributors here were the UN and the Red Cross. The same was the case regarding the local communities, who had to create their own crisis management structures to organize their response. With Lebanon already having a large number of NGOs, there were already several established organizational structures available with a basis for volunteer mobilization, leading to a more effective response. Furthermore, many ad-hoc structures and initiatives were formed to coordinate the large number of volunteers.

List of Abbreviations

AUB:	American University of Beirut
BCD:	Beirut Central District
CAP:	Consolidated Appeal Process
CBDP:	Community Based Disaster Risk Reduction
CCECS:	Center for Civic Engagement and Community Service
DRR:	Disaster Risk Reduction
HPC:	Humanitarian Programme Cycle
HRC:	High Relief Committee
HRP:	Humanitarian Response Plan
LCD:	Lebanese Civil Defense
LRC:	Lebanese Red Cross
NGO:	Non-Governmental Organization
NPTP:	National Poverty Training Program
OCHA:	United Nations Office for the Coordination of Humanitarian Affairs
OPR:	Operational Peer Review
PAR:	Pressure and Release
UN:	United Nations
UNDAC:	UN Disaster Assessment and Coordination
UNDP:	United Nations Development Program
UNHCR:	United Nations High Commissioner for Refugees
USAID:	U.S. Agency for International Development
USAR:	Urban Search and Rescue
WASH:	Water, Sanitation and Hygiene
WFP:	World Food Program

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1. Introduction

Lebanon has a highly active civil society, with thousands of NGOs registered with the state alongside other informal initiatives. Some people claim that the rise of civil society in Lebanon and the 2020 Beirut explosion is both a result of a corrupt and dysfunctional state (Chehayeb and Sewell, 2020).

The explosion in Beirut in august of 2020 and its aftermath, in many ways, highlighted the shortcomings of a complex political system that seems to have little ability or willingness, to implement productive policies and changes for Lebanon's people. Many would argue that the explosion could have been avoided had the government stepped in earlier, and in the aftermath of the explosion, the lack of response from the government left the citizens of Beirut to fend for themselves.[1]

The two explosions in Beirut on the 4. August 2020 caused massive destruction to the city's infrastructure, causing 204 deaths as well as roughly 15 billion US Dollars in property damage. [2] This has facilitated a tremendous need for recovery and relief work, foreign aid as well as a need for volunteers to help. Immediately after the blast the focus was on urgent lifesaving needs as well as providing shelter to the roughly 300,000 people that was left homeless. Further on in the first week after the explosion hundreds of civilians gathered to clean up debris, and several owners of businesses, hotels, and homes provided the homeless with free shelter. Three months later after the explosions, the city is still facing a slow and large rebuilding and recovery process.[3]

In disasters the government or aid organizations may not always be able to provide aid right away. This makes it important that communities and civilians to have the ability take care of themselves. Even when the government and aid organizations are able to provide aid, the scope of the disaster may be larger than the scope of their resources. This has recently placed a larger focus on how to help communities increase their own ability to help themselves (Patel, Rogers, Amlôt and Rubin, 2017).

The latest mass disasters have shown the importance of local communities and resources beyond official emergency planning. Local institutions, communication, and cooperation has

[1] NBC News, (2020)
[2] Devi, S. (2020)
[3] Concern Worldwide, 2020

become an integral part of an effective response (Aharonsen-Daniel, Cohen, Lahad, Leykin, Hornik-Lurie and Rapaport, 2018).

Communities that learn to live in a dynamic environment and learn to adapt and live with uncertainty can adapt and build the capacity to handle unexpected events. This type of community resilience can be increased through their response to crises, and thereby strengthen their resilience (Magis, 2008).

This thesis will look at the response after the explosion. With the lack of Governmental agencies providing aid and recovery work after the blast, the citizens, international organizations, and various Non-Governmental Organizations (NGOs) were left to do most of the work. The lack of organizing from a higher governmental body created a complex and confusing situation for those who were contributing to the response, this thesis aims to explore how the response after the explosion was organized.

1.1 Background

Lebanon has been going through a financial crisis since 2019, which in the end led to a political meltdown. The country inhabits almost seven million people, with 18 religious sects, or communities. As a result of the 15 year long Lebanese Civil War, the country faced a comprehensive and expensive reconstruction period in the 1990s, which culminated in a public debt of 40 billion US Dollars – a debt that doubled in 2015 and has risen to roughly 90 billion US dollars today. This figure totals about 170% of Lebanon's GDP, leading to the country being the third most indebted country in the world (Mansour-Ille, 2020). Lebanon is also going through a crisis with a large influx of Syrian refugees coming to the country. UNHCR estimates the total number of Syrian refugees to be 1.5 million, and of those 90 percent were living in extreme poverty in 2020. A number that was 55 percent the year before.[4]

Civil societies have been a major resource in the response in several disasters. While some states have viewed the relationship between state and civil, with the state a sort of "father" or "provider" and the civil as more of the victim in a disaster. The failure of states to provide adequate relief and measures in the wake of a disaster, has necessitated the need for an active civil society. Even in a highly technological state like Japan, up to 1.5 million volunteers mobilized and provided relief after the Kobe earthquake of 1995. The active participation of civil society in the relief work after the accident somewhat eroded the views of a paternal state and created a new form of egalitarian relationship between state and the public (Özerdem and Jacoby, 2006).

1.2 Problem Statement/Research Problem

The lack of a government providing necessary aid to the people of Lebanon, meant that the citizens of Beirut was almost left to fend for themselves after the explosion in Beirut. This created a chaotic response with several different actors involved. The aim of this thesis is to explore how this response was organized.

To answer this, I have formulated the following problem statement:

How was the response after the 2020 Beirut explosion organized?

[4] Brookings, Why Syrian refugees in Lebanon are a crisis within a crisis, 2021

1.3 Research Questions

The purpose of this thesis is to understand how the response after the explosion in Beirut was organized. As previously mentioned, a lot of the response was conducted by volunteers. This sort of community based response creates a confusing situation with many unknown factors. At the same time, the explosion required a large international mobilization, leading to a response categorized by many different involved actors. Therefore, it will be beneficial to devise some research questions to support the main problem statement. The research question will help to provide structure to the thesis and further strengthen my ability to answer the main problem statement. This has led me to formulate the following research questions:

Q1. What did the Government do in response to the explosion?

Q2. What did international organizations do in response to the explosion?

Q3. What did the local communities do in response to the explosion?

By formulating these research questions, I can separate the response into three different categories. These categories – separating the response by three actors – will serve as a tool to give a more structured approach to the analysis. All three categories will be apparent throughout the thesis, as they will steer me in both my data collection as well as the presentation of the data.

1.4 Limitations of Study

The problem statement of this thesis requires some limitations. This thesis was written between January and June 2021. As this was amid the Covid-19 Pandemic, fieldwork became virtually impossible. This meant that all collection of data was conducted from Norway through document studies and interviews.

This thesis will focus on the response after the explosion in Beirut in 2020 and will not pay much attention to how crisis and disaster responses in Lebanon have been organized previously. However, to provide some context to the thesis, there will be given a limited amount of insight into the civil society and the Government’s typical procedures in emergencies, as well as Lebanon’s disaster management capacities. The main focus will be on the response in the period right after the explosion, and the following weeks. As the research for the thesis is done primarily through document studies and some interviews, the problem

statement and research questions were devised in such a manner that the method of data collection would give sufficient data to answer them. This was aided by grouping the response into three groups, or sectors: These being the government, international organizations, and the local communities. Categorizing the problem statement into these three groups, makes data collection without field-work possible, as it is easier to find more general empirical data on these groups than more detailed data on a lower level of the response. Likewise, with such a large response with several contributors, I had to limit the number of actors I included in my research. This was particularly the case regarding international organizations. However, focusing on the largest contributors and organizers of their response, a generalized description of their response can be made.

This thesis was written from the lens of social science, meaning that any technical insight into the response will not be given. The findings presented, as well as, the following discussions and conclusions will be done through the framework of social science and societal safety. As an example of this, I will be presenting some findings related to the repair work of some properties damaged by the explosion in Beirut; however, I will not make any judgments on the quality of this repair work. The same goes for any reports of medical aid provided after the explosion.

1.5 Other Relevant Research

Özerdem and Jacoby (2006) studied the role of civil society in disaster management. For instance, in the case of the Kobe earthquake of 1995, the government's response to the disaster was slow and confusing. However, around 1.5 million citizens responded quickly by taking on many disaster relief activities. The large number of volunteers created some problems in terms of coordination and organizing. Furthermore, officials showed an unwillingness to cooperate with the volunteers and civil society, believing that they lacked the competency to handle some of the disaster relief tasks. In the past there had been a belief in Japan that there was a missing spirit of volunteerism; a view that was challenged by the large number of volunteers after the Kobe earthquake. The conclusion after the earthquake was that it was rather a lack of an institutional framework to manage the volunteers that might have caused this belief (Özerdem and Jacoby, 2006).

Patel, Patterson, and Weil (2009) studied the role of community in disaster response by looking at Hurricane Katrina. They concluded that the communities' response after the hurricane highlighted the importance of local knowledge, resources, and cooperative

strategies for their resilience and recovery. For one, Jewish communities in the region have developed contingency planning methods through experiencing several earthquakes. These were specifically targeted towards senior citizens in the area, from which they can deliver assistance and services to those in need after an earthquake. Furthermore, communities evacuated everyone wanting to leave and gather evacuees in shopping malls. This event highlighted the importance of well-functioning community organizations with trust and respect in the community. The presence of these presents a possible moral authority in disaster – possibly being a catalyst for cooperation and teamwork when government agencies and officials might not be able to do the same (Patel et al. 2009).

2. Context

This chapter will serve to provide some context into the overlying theme of this thesis. Lebanon's history and complex political system play an essential role in understanding the factors that have led to a country lacking the ability to provide its citizen with some fundamental services.

2.1 Lebanon as an Independent State

Throughout the first half of the 20th century, Lebanon was influenced by occupants from France, Great Britain, and Turkey. At the start of the 16th century most of the current day Lebanon was ruled by the Ottoman Empire. The provinces that today make up Lebanon, were partial-autonomous subdivisions of the Ottoman Empire until the wake of World War I. Following the war, The Greater State of Lebanon became a part of the French Mandate. The French Mandate was a League of Nations Mandate founded after World War I. This was a result of the Partitioning of the Ottoman Empire, following their loss in the war. In 1926, The Lebanese Republic was formed by the French. As of today, Lebanon was a diverse country with many different religious ethnic groups, but at that time it was mostly a Christian country - which was the main rationale to establish an autonomous Lebanese country. The Christians in the country viewed the French as liberators, while the Muslims in Lebanon rejected the new state.[5]

Lebanon started to gain independence from the French when France was occupied by Germany during World War II. In 1941, General Charles de Gaulle visited Lebanon and recognized the independence of the country - most likely due to political pressure. In 1943 elections were held, and the new government of Lebanon abolished the French Mandate. The French however, reacted to the news by briefly imprisoning this newly elected government before releasing them a couple of weeks later as a result of international pressure.[5]

After World War II the French Mandate was terminated. Lebanon was a founding member of the United Nations (UN) on the 24th of October in 1945, and article 78 of the UN charter declares that any member state of the UN shall be an independent country. This meant that Lebanon had gain full independence, and the last French troops left the county by the end of 1946.[6]

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[5] Wikipedia (2020) History of Lebanon
[6] Wikipedia (2020) Lebanon

2.1.1 Demographics

As of 2020, Lebanon has a reported population of around 6.8 million. This number is however uncertain, due to the lack of national census being conducted in several years. Lebanon's population has been rapidly aging in later years. This is mostly due to higher life expectancy, lower fertility rates and a growing rate of people migrating out of the country. In fact, Lebanon is reported to have one of the lowest rates of population growth in the Arab region; mostly due to the factors previously mentioned. While the country's inhabitants are mostly Christian or Muslim (roughly 99 percent of the population) the population is split between a vast array of different denominations called sects. Religion and these religious sects of Lebanon is a sensitive issue, especially because there is supposed to be somewhat of a religious-political power balance in the country. This has led to the absence of a national census being conducted in the country since 1932. Consequently, accurate population numbers are lacking.[7]

The country consists a diverse mix of ethnic and religious groups. Lebanon has a complicated confessional system of religious sects. The country has 18 official sects, which are all based on the 18 recognized religious groups in the country. More on what role this sectarian system plays in society and politics will be explained in chapter 2.2. However, the 18 official religious sects are:

Alawite	*Armenian Catholic*	*Armenian Orthodox*
Assyrian Church of the East	*Chaldean Catholic*	*Copts*
Druze	*Greek Orthodox*	*Isma'ili*
Jewish	*Latin Catholic*	*Maronite Catholic*
Melkite Greek Catholic	*Protestant*	*Sunni*
Shia	*Syriac Catholic Church*	*Syriac Orthodox Church*

Table 1. 18 Religious Sects in Lebanon[8]

These 18 sects are divided into 12 Christian sects, four Muslim sects, the Druze sect and the Jewish sect.

[7] Wikipedia (2020) Demographics of Lebanon

[8] Global Security (2013) Lebanon – Religious Sects

2.1.2 Beirut

Beirut is the capitol of Lebanon, and its largest city. When the elections of Lebanon were held in 1943, Beirut officially became the capital of the country. Like the rest of Lebanon, Beirut is diverse with all 18 religious sects being represented in the city's demographics. Likewise, Muslims and Christians are the majority in the city, with Muslims being the largest religious group.[9]

Diversity in Beirut is not only exclusive to large number of religious groups, but also in terms of economic inequality. In the 1950s Beirut experienced a real estate boom that contributed to make the city the economic center of the Middle East. The city also experienced an influx of money after 2008, when Lebanon managed to evade the global financial crisis.[10] Beirut's economic booms of the past are very visible when visiting the city. The Beirut Central District (BCD), also called Downton Beirut, is a starch contrast to other less visited parts of the town. BCD is Beirut's hub for shopping, restaurants, and entertainment (Marot, 2018).

2.2 Political System in Lebanon

The current political system in Lebanon has its roots in the unofficial independence achieved in 1943 after the weakening of France in the second world war, and after centuries of Ottoman Rule. This year the National Pact was enacted; an unwritten agreement for how political power in modern Lebanon is to be allocated. The allocation of political power in Lebanon is based on a confessional system, meaning that political power is based on the size of the confessional communities, or sects. As mentioned in the last chapter, the last national census conducted in Lebanon was in 1932, this census set the parameters for how political power was allocated in their confessional system. One key point of the National Pact to ensure the division of power between the religious sects was that the President of Lebanon must always be Maronite Christian, the Prime Minister Sunni Muslim, and the Speaker of Parliament Shia Muslim. At the time, the Maronite Christians were the majority, representing 51% of the population. The result of Christians being the religious majority in the country has however been a controversial one, with many believing that the census was manipulated to give Christians a majority in parliament. This consequently meant that the seats in the parliament would be divided into a 6 to 5 ratio of Christians to Muslims. In the years following the National Pact, it became apparent that the number of Christians in Lebanon was diminishing.

[9] Sistema Critico International, Lebanon: A Rich Cultural and Religious Diversity, 2020
[10] International Monetary Fund, IMF Survey: Resilient Lebanon Defies Odds In Face of Global Crisis, 2009

Therefore, the Christian majority in Parliament seemed to give an unfair advantage to the Christians of Lebanon. This is one of the factors, including an increasing division between the religious sects, that lead to the Lebanese civil war in 1975. In 1989 the Ta'if Agreement was passed, ensuring an equal division of seats in parliament between Christians and Muslims.[11]

Lebanon's legislative branch, or parliament, is divided into 128 seats. 64 Christian seats, and 64 Muslim seats. Given that Lebanon's confessional system is divided into 18 different sects, this 50/50 confessional allocation of seats is also divided between the largest individual Christian and Muslim sects. This means that the 64 Christian seats are allocated between 7 different Christian religious groups, with the Maronite Catholic being the largest. The 64 Muslim seats are divided between 4 Muslim religious groups, with the Sunni and Shia being the two largest – both having 27 seats, ensuring equal power distribution.[11]

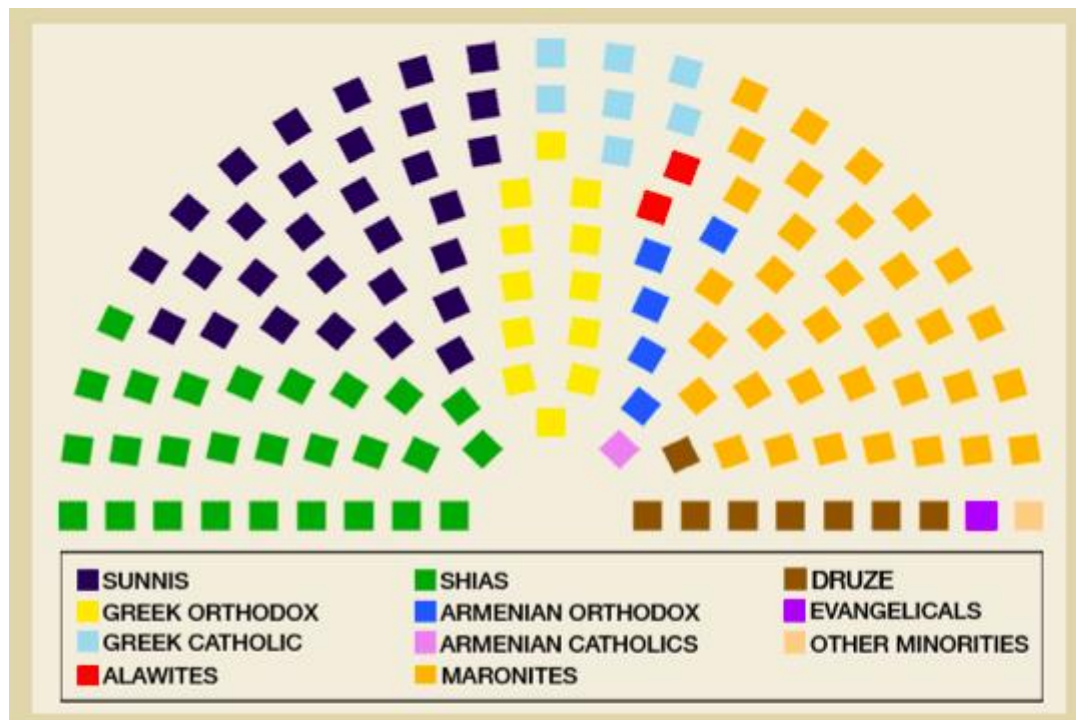

Figure 1. Allocation of Seats in Lebanese Parliament.[12]

This is one of the biggest reasons as to why there has not been conducted a national census since 1932. In Lebanon's confessional political system, political power is allocated based on the size of each religious group. A new national census would likely reveal an unfair allocation of political power in the country and could create national instability. More recent data suggests Muslims account for 54% of the Lebanese people and the number of Christians

[11] Wikipedia, Politics of Lebanon, 2021
[12] Petallides, Constantine J (2011) Cedars to the East: A Study of Modern Lebanon

in the country only being 40.5%, showing a clear majority of Muslims in the country (CIA, 2015). This being the case, would reveal that Lebanese Christian are receiving an unfair amount of political power.

2.2.1 A Controversial Political System

Lebanon's confessional political system, where each religious sects' political power is represented by the number of seats their representatives are given in parliament, is not without its critics. The system that was supposed to distribute a fair amount of power between all sects of the country and to lock them in, seems to only have nurtured a growing division between the sects and an inability for government to enact new policies. While the principles the National Pact was supposed to create a fair political system where no religious community of Lebanon would be neglected, the system has had an adverse and paradoxical effect. Rather than creating fair opportunity and outcome for all groups, it has created a system where each religious group works to better their own situation, most of the time at the expense of everyone else.[13] Such a sectarian system seems to have created larger divides and national interests are set aside for personal interests.

The result of Lebanon's political system is a dissatisfied and protesting population. It has created a government that has to fight accusation of rampant corruption. Its political system has, since its inception, created a society which infrastructure is lacking in essential civil services and an ability to provide its citizens with services inhabitants of most other countries take for granted. The 2020 Beirut explosion can serve to illustrate the Lebanese political systems failure. Many would argue that the government's incompetence is at fault for the explosion, where an early action from the government could have prevented the conditions that led to the explosion. The aftermath of the explosion furthermore illustrated incompetency the of the government. Civil society and the communities of Lebanon has over the years created their own ways to fill the gap between where there is a lack of services provided by the government.[14] This was highlighted after the explosion, where volunteers did all of the recovery work.

[13] EuroNews, How does Lebanon's government work?, 2020
[14] World Politics Review, Can Lebanon Rebuild Not Just Beirut, but its Broken Political System?, 2020

3. Theoretical Framework

3.1 Key Terms and Definitions

The vision of "Do No Harm" pertains to that humanitarian organizations should strive to minimize all unintended harm they could inflict through the act of performing humanitarian aid (Anderson, 1999).

A disaster can be described as a serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources (UNISDR, 2009. P. 9).

Disaster preparedness refers to measures taken to prepare for and reduce the effects of disasters (International Federation of Red Cross and Red Crescent Societies, 2000).

Resilience refers to the ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of the hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions (UNISDR, 2009, P. 24).

One key term in this thesis is "response". Response refers to the provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected (UNISDR, 2009. P. 24). This term will be used to describe the activities of the government, international organizations and local communities – with local NGOs and volunteers placed under the description of local communities.

A community can be defined as the people living in one particular area or people who are considered as a unit because of their common interests, social group, or nationality (Cambridge Dictionary, 2021).

3.2 Crises and Disasters

There are several definitions of crises, each offering different characteristics of what a crisis is. One frequently used definition is:

An event, concentrated in time and space, in which a society, or a relatively self-sufficient subdivision of a society, undergoes severe danger and incurs such losses to its members and

physical appurtenances that the social structure is disrupted and the fulfillment of all or some of the essential functions of the society is prevented (Engen et al. 2016, Ch. 9).

Engen et al. (2016, Ch. 9) argues that what separates a crisis from a disaster is the scope of the event, as well as the amount of resources and mobilization that is required as a result of the event. A crisis normally requires local and regional mobilization, while a disaster requires national and international mobilization. The Beirut explosion led to massive mobilization of international relief, making it a clear example of a disaster. Taking this into account, I will be referring to the Beirut explosion as a disaster in this thesis. However, further in this chapter I will expand on crisis typology, where the crisis term will encompass both accidents, crises, and disasters.

3.2.1 Crisis Phases

Engen et al. (2016, Ch. 9) points out that a crisis is often thought of as one single event with a definite beginning and end. This phase of the crisis is normally what one refers to as the acute-crisis phase. An example can be a traffic accident, where the accident is has a clear beginning and is over when normalcy has returned. However, many argue that a crisis has three phases: Pre-crisis, acute crisis, and post-crisis.

This illustrates the three phases of a crisis as a linear process, with a clear beginning and end. The pre-crisis phase is categorized by preparation and prevention, the acute crisis entails the response phase, while the post-crisis phase is categorized by recovery and learning.

The view of a crisis as a linear process has been challenged and, by some, viewed as an oversimplification of crises. This has led to an expansion of the crisis term. Within this view, the crisis is still a three-phase process with the same phases, but it is viewed as a circular process.

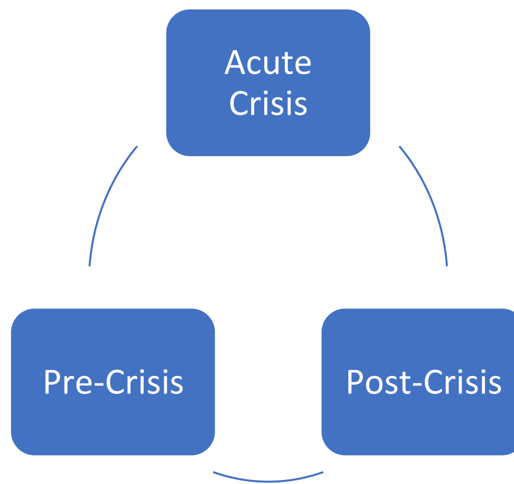

Figure 2. Crisis Phase Process. Adapted from Engen et al. 2016

A circular process is viewed as a more fitting description of a crisis as a crisis is more complex than a linear process. Within this view of a crisis as a circular process, the acute crisis phases have to be seen in connection with the pre-crisis and post-crisis phases. One argument for this view is that extraordinary events can come as a result of human error and failure of procedures in the pre-crisis phase. As Barry Turner (1978) points out, the pre-crisis phase can be viewed as an incubation period, where a period of increasing risk can culminate in a crisis. In this period the accumulation of latent errors and events go unnoticed before an event can trigger a crisis (Dekker & Pruchnicki, 2014).

3.2.2 Crisis Development and Termination Typology

One way to differentiate crises is to categorize them by their speed of development and termination. 't Hart and Boin (2001) outline a typology of four different trajectories a crisis can have.

Speed of termination \ Speed of development	Fast: Instant	Slow: Creeping
Fast: Abrupt	Fast-burning crisis	Cathartic crisis
Slow: Gradual	Long-shadow crisis	Slow-burning crisis

Figure 3. Typology of Crisis Development ('t Hart & Boin, 2001).

A fast-burning crisis is a crisis with a rapid beginning and ending, examples of this can be plain hijackings and other hostage-taking situations (‘t Hart & Boin, 2001). Cathartic crises; however, have a long build-up with a rapid ending. One example of cathartic crises is international confrontation where there is tension between minor and major powers. In such cases, the minor power can make gradual moves of provocation that challenge the major power until the major power is provoked enough to impose a rapid and resolute resolution of the conflict (t’ Hart & Boin, 2001). A slow-burning crisis is a crisis that has a long build-up and a slow termination. In other words, the crisis creeps up and fades out. Environmental crises can be examples of slow-burning crises. These crises can build up through years of pollution where the situation does not reach crisis status before the culmination of pollution reaches a certain level. Such a crisis takes years to terminate (t’ Hart and Boin, 2001). A long-shadow crisis is a crisis that suddenly occurs but takes a long time to end. In these situations, the crisis can uncover certain structural issues in a society making the termination of the crises difficult. As t’ Hart and Boin (2001) argue, such a crisis can raise critical issues of society, leading to political and institutional crisis.

The Beirut explosion is a good example of a long-shadow crisis. A large explosion is a crisis that could have a rapid termination in some cases, but in the case of the Beirut explosion, the blast uncovered major issues in Lebanon’s crisis response preparedness, as well as leading to a larger frustration among the citizens of Beirut regarding the Lebanese Government. One could argue that the Beirut explosion was a slow-burning crisis, as the explosion could have been seen as a result of a long political deadlock and corruption. However, the immediate nature of the explosion makes it more fitting to categorize it as a long-shadow crisis. This will be discussed more in the discussion part of the thesis.

3.3 The Pressure and Release Model

The Pressure and Release (PAR) model is a model that explains how disasters are a result of a dynamic relationship between physical exposure and socio-economic pressures. It describes the progression of vulnerability, which is a process of socio-economic conditions that over time can build vulnerability. Vulnerability can be defined as “exposure to risk and an inability to avoid or absorb potential harm” (Pelling, 2003, p. 5). It is when these socio-economic factors meet physical exposure that disasters can happen. This is the pressure part of the model, the intersection between physical hazards and socio-economic conditions. Disasters are therefore a result of two opposing forces colliding, creating the necessary condition for a

disaster to occur. The release part of the model is how the vulnerabilities are addressed and hopefully reduced, thereby releasing the pressure.

3.3.1 Disaster

A disaster is an event that occurs as a result of several factors. As the PAR-model describes the progression of vulnerability, a disaster occurs when the physical events meet the socio-economic factors.

3.3.2 Root Causes

The root causes of vulnerabilities are the most fundamental factors of society. These are divided into structural and ideological factors. Structural factors can be limited power, structures, and resources. Ideological factors that can lead to vulnerabilities are political and economic systems. As the PAR-model describes the progression of vulnerability, these root causes can further cause a snowball effect, where something like a corrupt political system can lead to vulnerabilities in several parts of society.

An example of this can be the confessional political system of Lebanon. A political system where political power is allocated based on the size of the denominations could create certain dynamic pressures, which further on could increase vulnerabilities in the country.

3.3.3 Dynamic Pressures

Dynamic pressures describe the dynamic factors in society that can lead to vulnerabilities. This entails, among other things, a lack of freedom of speech, a free press, training, and local institutions. Dynamic pressures also encompass macro-forces like population changes, urbanization, deforestation, and other socio-economic factors. Lebanon has a highly active civil society, which members of claim is as a result of a government not doing their job. It has, to some, become apparent that the country's political system has created an ineffective government, lacking the ability to do jobs they are supposed to do.

3.3.4 Unsafe Conditions

Unsafe conditions entail the physical environment, local economy, social relations, as well as public actions and institutions. This can be viewed as the result of the root causes, dynamic pressures creating unsafe conditions. Hence, the progression of vulnerabilities. The PAR-model shows how vulnerabilities are a result of several socio-economic factors creating a snowball effect, which in the end creates the condition necessary for a disaster to occur.

The storing of ammonium nitrate next to fireworks in Beirut is an example of an unsafe condition. Pair this together with a city that has a lack of public institutions on stand-by to provide aid during a crisis, and you have all the conditions necessary to create a disaster.

3.3.5 Hazards

Hazards are the physical events that can trigger a disaster. These can be flooding, earthquakes, storms, and viruses. All of these events by themselves do not necessarily cause a disaster, but with the right physical conditions, a disaster can occur. In the case of the Beirut explosion, the hazard was the fire that caused the explosion. This shows how hazards can become disasters as soon as they meet the right socio-economic conditions.

3.4 Disaster Risk Reduction

Disaster risk reduction (DRR) is a broad term for all applications and developments throughout society to reduce vulnerabilities and risk. This means that reduction of risk should not be exclusive to one part of a society, but a guiding principle in all sectors. In short, DRR, entails discovering risks, evaluating them, and putting into action the necessary measures to reduce them. Therefore, DRR should be integrated into all parts of society to ensure a more resilient society (Twigg, 2015). Increasing the resilience of a society makes it less vulnerable to all sorts of hazards and risks, DRR should therefore play an integral part in all societies.

Previously, one of the most uses frameworks for DRR is the Hyogo Framework for Action 2005-2015, which was a framework consisting of five priorities agreed upon by the members of the United Nations (Twigg, 2015). Later, the Sendai Framework 2015-2030 was established as the Hyogo Framework's successor. The five priorities of the Hyogo Framework was changed and adapted in The Sendai Framework into four main priorities: understanding disaster risk; strengthening disaster risk governance; investing in disaster risk reduction for resilience; and enhancing disaster preparedness for effective response, and to 'Build Back Better' in recovery, rehabilitation and reconstruction (Twigg, 2015).

3.4.1 Implementing DRR

Twigg (2015), argues that one of the more important aspects of DDR is that it should be institutionalized and ingrained within all organizational structures and processes. The implementation of DRR in organizations is a comprehensive task, and not something that is done overnight. When it comes to a whole country, it is even more difficult. It is therefore

important to view DRR as a process, where small changes over time can make a large difference.

One problem with implementing DRR in some countries is instability, conflict or just that the state is fragile, Twigg (2015) points out. The implementation of DRR is not easy, or even prioritized, in the midst of political instability and dissatisfaction among the people, something that can be related to the situation in Lebanon. This can cause DRR to be marginalized as other needs is on the political agenda. Some of these countries might even have a lack of basic infrastructure, which makes the implementation difficult. Still, in more developed countries, the presence of weak official institutions, financial resources, and corruption, coupled with a lack of coordination and cooperation creates conditions where the implementation of DRR is difficult.

One of the more integral ways to integrate DRR is to work with local institutions, which makes it possible to address risks and hazards on the lower levels of society. This can, however, be a challenge at times. Political tensions may be a hindrance to ensure a fair and neutral approach to the implantation of DRR. One can argue that Lebanon is an example of this with its sectarian political system. With the allocation of political power being based on the size of the different religious sects in the country, the neutrality of the government can be questioned, making working with local institutions to implement DRR complicated. This dynamic may create a need to work with INGOs and other organizations (Twigg, 2015). Such conditions might also empower the more informal local capacities, making them a key contributor in facilitating problem-solving among local communities and creating a more deliberate approach to addressing risks and hazards.

3.5 Planning for Disasters

A country's capacity for disaster preparedness entails many factors. Disaster preparedness can involve detailed contingency plans for specific events or broad strategic plans to mitigate the scope of the events. The operational priority of a good plan should be to save lives and restore critical infrastructure. In addition to good plans, functioning operational and managerial systems are vital to ensure an effective emergency response (Twigg, 2015).

3.5.1 Emergency Planning

Emergency planning entails a political jurisdiction's ability to act on threats from the environment in a way that minimizes the consequences of impact for health and safety of individuals as well as the integrity of and functioning of physical structures and systems

(Lindell & Perry, 2004, p. 338). There are several theories and frameworks for emergency planning, but Lindell and Perry (2004) identify three critical components of emergency planning: Planning, training, and written plans.

Lindell and Perry (2004) point out that emergency planning does not always entail a formal written plan, and a written plan may sometimes be mistaken as proof for sufficient preparedness. Planning is a continuous process where all dynamic and newly discovered factors should be considered. In that sense, a written emergency plan can be viewed as insight into the emergency planning of a certain time. Good emergency planning should therefore be a dynamic process where one examines and identifies all hazards, and then identifies which human and material resources are available to deal with said hazards. This should be based on accurate information through hazard assessments and vulnerability analysis. Analysis and assessments make it easier for policymakers to identify weaknesses (Lindell & Perry, 2004). Such as is in the case of storing dangerous chemicals like ammonium nitrate in the Beirut Port, an outside expert can be called in to evaluate the situation.

Training is also an integral part of emergency planning. Emergency plans encompass a large number of organizations and individuals, and thus require a lot of coordination and preparation. This means that all administrators in charge of a department - and its personnel – that is involved in an emergency plan should be aware of what is expected for their department. The same goes for elected officials and citizens in communities who are involved in emergency plans. Lindell and Perry (2004) therefore emphasize risk communication as an integral part of training, where important information is shared with the audience of an emergency plan. The audience, in this sense, refers to actors of an emergency plan who does not have a specific role in the plans; this can include both elected officials and citizens. Information shared with personnel of emergency response organizations is more formal and falls more under the umbrella of training than risk communication. Training also involves drills and testing of emergency protocols. Drills serve as an examination of emergency plans and can facilitate better cooperation across sectors and agencies that normally do not work together. Additionally, drills can increase the publics' knowledge of emergency plans, just by the mere act of publicizing plans and making them aware of that drills are being conducted (Lindell & Perry, 2004).

Thirdly, written plans are an integral part of emergency planning. As mentioned earlier, written plans are a product of a continuous planning process, and should therefore be updated regularly. Updating plans requires time and resources, therefore it is important to not have too

detailed emergency plans. This is because specific details often change over time and can make emergency plans outdated too quickly (Lindell & Perry, 2004). Additionally, detailed emergency plans are more complex and can be harder to understand, creating confusion for the actors that are supposed to adhere to the plan. Paradoxically, too many details can therefore make relevant actors less informed. With this in mind, Lindell and Perry (2004) emphasize that emergency plans should include the fundamental principles of emergency response and specify priorities. Hence, details are an operational concern, meaning that jurisdictional plans are more an overarching and general plan aimed towards coordinating the different sectors involved in the plan.

3.5.2 Disaster Preparedness Framework

As a part of the United States Development Programme in collaboration with Office of the United Nations Disaster Relief Coordinator for the Disaster Management Training Programme, Randolph Kent (1994) wrote a module that proposes a 9-step framework for disaster preparedness.

1. Vulnerability Assessment	**2. Planning**	**3. Institutional Framework**
4. Information Systems	**5. Resource Base**	**6. Warning Systems**
7. Response Mechanisms	**8. Public Education and Training**	**9. Rehearsals**

Table 2. Disaster Preparedness Framework. Adapted from (Kent, 1994)

Firstly, *vulnerability assessment* is a continuous process that includes identifying hazards, analyzing them, and determining how to deal with them. This is the first step of planning and preparation. Secondly, when hazards and vulnerabilities are located, planning for how to deal with them follows. *Planning* includes figuring out which resources are needed to provide services during an emergency to ensure an effective and coordinated response. This includes agreements between different agencies and stimulating interactions between sectors to create an ongoing planning process (Kent, 1994). Like Lindell and Perry (2004) argued, a written plan is not the end goal in the planning process, but to create an ongoing process.

Further on, creating an *institutional framework* is an important part of preparedness. This includes creating a coordinated response system with horizontal coordination between specialized agencies and governmental levels, and vertical coordination between local and central authorities. Kent (1994), also argues for working within already established structures and systems and avoid creating new organizations specified for disaster preparedness. This is to ensure cooperation between existing agencies by not creating more layers of bureaucracy. Within this institutional framework, Kent (1994), points out the importance of reliable *information systems* for gathering and sharing information between agencies. An example of this can be meteorological offices providing forecasts of upcoming extreme weather.

The fifth step of the framework, *resource base,* entails the needs and goods that are required to deal with the disasters the plans anticipate. This can mean stockpiling resources like food and medicine and creating emergency shelters. Funding is also a part of this step, meaning that a fund is available to deal with disasters. Insurance can be an example of such a mechanism (Kent, 1994). Further, when a disaster occurs, it is important to have functioning *warning systems*. A disaster can damage communication systems, making it vital to have robust systems for warning people at risk.

The sixth step is *response mechanisms*, which are the types of responses that should be available – depending on the threat. These can include evacuation procedures, search and rescue, security of affected areas, among other things (Kent, 1994). All these types of responses should be rehearsed once a disaster preparedness plan is in place. Thus, the eighth step is *public education and training.* This includes risk communication as well as training courses for disaster responders and those threatened by disaster. Kent (1994), points out that training is vital to ensure that the plan is followed and effective. The last step is *rehearsals.* This can include drilling response procedures, which again can expose weaknesses of the disaster preparedness plan. Therefore, rehearsals are a vital tool for evaluating and improving plans (Kent, 1994).

3.6 Crisis Management

Previously in the theoretical chapter, I have outlined some basic strategies pertaining to emergency planning and disaster preparedness. As Engen et al. (2016, Ch. 11) point out, emergency planning and preparedness are the steps one takes before a crisis occurs – identifying hazards followed by establishing resources and plans to handle said hazards. Crisis management is the actions one takes during a real-life crisis. Boin, Kuipers & Ovedijk (2013,

p. 81) defines crisis management as the sum of activities aimed at minimizing the impact of a crisis.

The goal of crisis management is to restore normalcy by responding to an unwanted event under uncertainty and time pressure. This means reducing the consequences a crisis might have for life, health, and environment. Within the expanded crisis term mentioned in 3.2.2, one also looks at crisis management as preparation in the pre-crisis phase, as well as recovery and learning in the post-crisis phase, giving a more holistic understanding of the crisis management term. This expanded view of crisis management also put an emphasis on the leaders in crisis management, with the public's expectations of leaders being able to both prevent and mitigate crises, as well as being able to ensure that crises do not reoccur.

3.6.1 Organization of Crisis Management

In crisis management one often talks about a hierarchical three level in the crisis response.

1. Strategic Level	Acquisition of resources and planning
2. Operational Level	Coordination during the crisis
3. Tactical Level	On site – implementation of measures

Table 3. Levels of Crisis Management. Adapted from: Engen et al. 2016, Ch. 11

As this table outlines, crisis management is normally divided into three levels – each representing different roles and proximity to the actual crisis. This means that the strategic level is responsible for the overall planning of the crisis management as well as acquiring the necessary resources. The operational level is responsible for coordination during the crisis, meaning that the plans from the strategic level are put into action and coordinated. The tactical level pertains to the part of the crisis management that is occurring in the field of the crisis. This means that the actors on this level are responsible for implementing the measures ordered by the higher levels. Some also call this level the technical level, as it is at this level one measure and evaluates the efficacy of the measures.

Centralization vs Decentralization

When managing a crisis there is also the question of a centralized or decentralized structure. The centralized structure is normally a bureaucratic approach with a hierarchical structure. Most organizations are formed around this bureaucratic structure, with clear and defined roles (Engen et al. 2016, Ch. 11) However, as Schneider (1995) argues, these structures function best under normal conditions.

Such a structure can create issues when the organizations responding to the crisis are met with a dynamic and unexpected crisis. In such conditions, the bureaucratic structure can be challenged by the needs a dynamic crisis creates. Further, Schneider (1995) argues that this can create a gap between bureaucratic and new emergent norms. From this, new patterns of program implementation can emerge – patterns that can challenge the centralized structure. For one, it can create a bottom-up pattern. In such a decentralized structure, local authorities will utilize local resources to deal with a crisis before national authorities are requested to provide assistance. This pattern can also be called a "pull system", where the actors of the lower levels "pull" needed resources from the higher levels, creating a decentralized bottom-up system. Juxtaposed to this system is the "push system", which is a decentralized top-down approach. This system can describe a situation where local authorities dealing with a crisis do not have the capacity or resources to deal with the magnitude of the crisis, leading to a situation where national authorities have to "push" resources down the system (Engen et al. 2016, Ch. 11).

Engen et al. (2016) point out that the argument for a decentralized approach is that a crisis is a dynamic event with time pressure and uncertainty. In such conditions, information is one of the most valuable resources, placing an emphasis on the importance of the actors on the lowest level of crisis management. A centralized approach can; therefore, create an inefficient crisis management slowed down by bureaucratic processes. t' Hart, Kouzmin, and Rosenthal (1993) describe two main forms of decentralization: *informal* and *formal decentralization*.

Informal decentralization can happen when decision-makers on the lower levels' perception of the situation can be different from the decision-makers on the higher levels. 't Hart et al. (1993) argues that this is especially relevant when the actors on the lower level are affected by time pressure, leading to them having to make their own decisions – outside of the bureaucratic structure of rules and decision-making. Another reason for informal decentralization can be when the higher levels can be overloaded, leading to a decentralization of power.

Formal decentralization is a preplanned and formalized structure – often as a result of learning from previous crises ('t Hart et al. 1993). Such a structure can also be instilled as an anticipatory measure to reduce potential problems related to a centralized structure. As t'Hart et al. (1993) point out, disruption to one part of a centralized system can trigger a cumulative effect of damage to the whole system, leading to a decentralized structure sometimes being instilled pre-emptively.

3.7 Community Based Capacities

Communities can be used as a resource and tool in a crisis. Firstly, communities are the first responders in crisis. Rajib Shaw (2016) argues that this factor means that community based DRR should be the core of any risk reduction approach. Further, Shaw (2016) argues that the participation of communities is important because they are the main actors involved, being the beneficiaries of the benefits gained through improved risk reduction and development. One of the most important reasons to involve communities is that disaster risk management and response programs mostly fail to take local needs into account, and ignoring the capacities and resources of communities might increase their vulnerabilities (Department of Disaster Management Ministry of Home and Cultural Affairs, 2012).

3.7.1 Community Based Disaster Preparedness

Allen (2006) points out that while preparedness historically has been viewed as an expert's field, there has recently been somewhat of a paradigm shift within the field. In later years, more emphasis has been placed on community-based approaches to preparedness. One of the motivating factors behind this shift has been the wish to find the root causes of vulnerabilities and increasing the resilience of communities, thereby pre-emptively being able to prevent, or minimize, disasters. Another natural reason for the increased emphasis on community based contribution in preparedness is changes in policies - both international and national. For instance, a country cutting back on expenses might pass on some disaster management roles to civil society (Allen 2006).

Allen (2006) argues that Community Based Disaster Response (CBDP) can strengthen local communities' ability to handle disasters, which can be particularly valuable as the disasters are being dealt with by the people who are actually being affected by the disaster. The local communities' ability to deal with a disaster is influenced by several different factors. As the communities over time build experience and knowledge, the CBDP will increase. This means that communities that are vulnerable to a certain type of event most likely will increase their ability to deal with the said event over time. One example of this can be areas that are prone to storms and extreme weather. On the other hand, an unforeseen and rare event will limit the communities' ability to manage the event. However, within the field of CBPD, the hope is that their experiences and training will have instilled some procedures and skills that will increase their ability to manage any type of event or disaster.

The weakness of CBPD, according to Allen (2006), is the lack of resources, a decision-making authority, and local institutions. A too large of an emphasis on CBPD over time might create somewhat of a lackluster approach to disaster management from the governmental institutions of a state. Such emphasis on CBPD might, paradoxically, weaken the communities' resilience. This is one of the reasons CBPD should be viewed as a part of a state's total approach to disaster management; not the main actor of it.

3.7.2 Community Based DRR

Community based DRR pertains to the local communities of an area working together to deal with hazards that may affect them. Implementing DRR in local communities is a valuable tool to address hazards in areas where there is a lack of trust between citizens and the state. In that way, the communities can be more resilient without the help of the state and local institutions (Twigg, 2015). The main argument for such an approach is that communities themselves know their own situation best (Gaillard, Kelman, Mercer, 2017).

In community based DRR the aim is to increase the capacity of the people and local communities. This means providing more access and control of local resources. One can do this by having meaningful participation of local communities in decision-making processes that affects their own lives. By doing this one can, according to Gaillard et al. (2017), increase the confidence of the members of a society to include themselves in other development endeavors, which again can include addressing and reducing vulnerabilities present in society. This might be reducing poverty, social inequality, and the depletion of environmental resources.

When agencies approach local communities, they should be sensitive to whatever tensions may be present between the different communities in an area. This also means trying to understand the causes for these tensions, whether they may be rooted in religious or other cultural differences. With these factors in mind, agencies can position themselves in such a way that support can be given across different groups and communities - despite whatever conflicts may be present. In some circumstances, DRR can help relieve tension between groups by creating a neutral common ground where the groups might work together (Twigg, 2015). A community based DRR approach still lacks official recognition in some international agencies but is being implemented in more and more countries (Gaillard et al. 2017). Twigg (2015), argues that in areas with a strong civil society, a community based

approach to DRR is much easier to implement. The presence of local organizational structures and actors makes the coordination of such efforts much simpler.

3.7.3 Community Resilience

Based on relevant literature, community resilience seems to be a somewhat ambiguous concept. There seem to be three main views on what community resilience is (Patel, Rogers, Amlôt and Rubin, 2017): 1) a process-driven concept; 2) the lack of negative effects concept; 3) an attribute-based concept – meaning a collection of different abilities related to response. While these three views might share a lot of the same overlying aspects, they differ slightly. The first view looks a community resilience as a process of a community adapting to unique events and still being able to function. The second view is more focused on the outcome of events and communities' ability to maintain a normal function. This view looks at community resilience more as the product of a communities' functions and capabilities when interacting with the environment. The third view looks at the specific abilities of a community and emphasizes the importance of identifying and strengthening them (Patel et al. 2017).

Even if there is no clear definition of what community resilience is, and different ways to view the concept, the clear overarching theme seems to be that community resilience is a communities' ability to withstand the effects of a hazard. One definition that is now used by the United Nations International Strategy for Disaster Reduction is: the "*ability of a system, community, or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner including through the preservation and restoration of its essential basic structures and functions"* (Ostadtaghizadeh, Ardalan, Paton, Jabbari, and Khankeh, 2015, p. 3). While this definition does not encompass all aspects of community resilience, it does however serve as an adequate description of what the concept is. It does not, for instance, encompass all different aspects of community resilience. Communities all over the world are different in terms of language and culture; both internationally and nationally. Moreover, different cultures are subject to different kinds of disasters, which opens a pandora's box of different challenges, making an operational definition of community resilience difficult to formulate (ibid). Nonetheless, the concepts and descriptions of community resilience explored in this chapter should serve as a sufficient foundation for this thesis.

3.8 Summary of Theoretical Framework

The theoretical chapter initially begins with shortly exploring the crisis typology. This is done to understand the Beirut explosion as a disaster, and how a disaster is a dynamic event that might not have a clear beginning and end. To give a more expansive understanding of how crises and disasters can occur, I included the PAR-model in my theoretical framework. This will be used to describe how the dynamic factors in Lebanon, like their political system, might have led to the explosion and its consequences, as well as the large presence of civil society in Lebanon.

The next part of the theoretical framework focuses more on activities for preventing, mitigating, and responding to crises. This starts with DRR, which is included to highlight the importance of and lack of risk-reducing activities in Lebanon. Crisis management will be used to evaluate how the different actors in the response after the explosion organized their efforts. Further, I included emergency planning and disaster preparedness framework, which later in this thesis will be used to expand on the lack of a standardized emergency response and disaster preparedness framework in Lebanon.

The last part of the theoretical chapter focuses on community-based approaches to disaster risk management capacities. As the response after the Beirut explosion was categorized by the large presence of volunteers and local NGOs, the inclusion of community-based approaches was important. With a lack of national standardized emergency response, the communities and NGOs had to organize their own response. These theoretical frameworks will be used to analyze and discuss how the communities and NGOs of Beirut organized their response to the explosion, as well as provide insight into the efficacy of their approaches.

4. Research Design and Methodology

This section will give some insight into the methodological choices I made throughout the research period. I will also make some assessments on the validity and reliability of the data collected, as well as deliberate on the challenges I encountered in the collection of data. With the research process happening during the Covid-19 pandemic, I had to make certain choices to make research possible. This being said, all methodological choices were made with the pandemic and the challenges it posed as a guiding factor.

4.1 Research Design

According to Blaikie (2009), a research design is a description of the choices taken during the research process, as well as an accounting of those choices. To explore the topic of the thesis I devised the following problem statement:

How was the response after the 2020 Beirut explosion organized?

This problem statement led me to apply a single case, case study approach to my research design. A case study is an investigation of a case to interpret or discover something. The goal is not to test a hypothesis, rather interpret a case (Flick, 2018). In this thesis, the goal is to explore and interpret the response in Beirut after the explosion. To research this the data in this thesis will mostly be based on document studies and semi-structured interviews.

4.1.1 Research Strategy

As the topic of this thesis is centered around social interaction between humans and organizations, a qualitative approach to the research was a natural choice from the start of the research. As this thesis is based on a case study, the case being the response after the explosion in Beirut, an exploratory inductive strategy is the best approach. Beirut is a completely foreign city with complex social dynamics, culture, and language. An inductive approach means that all relevant facts and data are observed, which then is used to generate a theory. As opposed to a deductive approach, where the data is used to test a previously generated theory (Blaikie, 2000). This research strategy would ideally include document studies, interviews, and fieldwork to first-hand observe the social dynamics explored in the thesis, but the Covid-19 pandemic made fieldwork virtually impossible. Therefore, document studies and interviews were selected as the two approaches to data collection. This was viewed as the most appropriate approach to get the most relevant data to explain a complex situation without being able to observe it self. This included locating documents with first-

hand accounts of the response after the explosions – both from civilians and professional actors. In terms of interviews, the strategy was to locate relevant informants located in Beirut. This process included locating names in relevant newspaper articles, as well as identifying which organizations participated in the response, and thus contacting actors within those organizations. Another hope here was that the acquisition of one relevant informant would expedite the process of locating more relevant informants, as the initial informant could direct me towards other relevant informants.

4.1.2 Research Process

Time Period	**Research Method**	**Data Captured**	**Potential Insights**
January - May	Document studies	Relevant actors, general overview of response after explosion	Creating an overall picture of the response
March - April	Qualitative Interviews	Additional information about response	Confirming data captured from document studies
March - May	Reduction of Data	Most relevant data for the problem statement and research questions	Creating a framework for answering problem statement and research questions
June	Making conclusions and completion of research	Using the resulting data from data reduction	Having enough information and competency to answer research questions and problem statement

Table 4. Research Process

4.2 Method of Data Collection

The data of this thesis is collected through document studies and interviews.

4.2.1 Document Studies

The main method of data collection in this thesis was a document study. This was mostly done through reviewing news articles and official situation reports. Even before devising any form of problem statement, the document study created the foundation for this thesis. This foundation made it possible to create a problem statement and three research questions, with the goal of gaining insights into the organization of the response in Beirut after the explosion of 2020.

Most of the findings about the response of international organizations presented was found through official situation reports from organizations like The UN and its organs, like OCHA and UNICEF. How the response of the local communities after the explosion were, was mostly collected through news articles. The situation reports from OCHA and UNICEF also provided some insights into the response of the local communities and volunteers. In terms of the government's response to the explosion, the data was mostly collected through news articles, with situation reports providing some insights in terms of governmental institutions collaborating with international organizations.

The literature review of the international organizations and local communities' response to the explosions also provided a lot of insights before conducting any interviews with informants. Therefore, the document study became the foundation for the research progress. This meant that wherever the documents lacked information, the interviews were used to fill in the gaps.

4.2.2 Interviews

Throughout the research process, I conducted three interviews. The anonymous informants for these interviews were people with knowledge of the response after the explosion; with all three being in Beirut during parts of the response. As the main method of data collection in this thesis was document studies, the information gathered from the documents provided a base knowledge for what questions I wanted to ask the informants. The interviews followed a semi-structured method, with a list of a few questions being written down in advance. This allowed for the interviews to be conducted more as a conversation, and the pre-written questions acting more as "conversation starters" for different topics. Throughout the conversations I wrote down the most relevant information the informants provided. This information provided a more detailed description of some of the data collected in the document studies, as well as providing a different viewpoint on some. Other relevant

information from the interview was mostly small nuances and details of the response after the explosion that I was not able to find in the document studies.

Before the interviews, I created interview guides. These were almost identical for all three interviews, with small changes in formulations. The interview guides were constructed in such a way that the main topics for the interviews would be in accordance with the problem statement and research questions. In that way, the research questions provided a structure for the interviews, where I used information gathered in the document studies to add a couple more detailed questions under the umbrella of the research questions.

4.2.3 Challenges in Collection of Data

This thesis is limited by a number of factors that are important to mention, and factors in when evaluating the scope of this paper. A study like this normally requires fieldwork to acquire as much relevant data as possible. Seeing as this thesis was written in the first half of 2021, the Covid-19 pandemic has been a huge limiting factor in the development of this thesis. This has required using alternative forms of data collection, mainly document studies and interviews over Zoom, Teams, and other forms of online communication. This means that whatever information and data I collect for this thesis will mostly be from other people's accounts. In some areas of this thesis, it is important to acknowledge that this may decrease the thesis's validity. It is therefore important to collect data from reliable sources and try to find informants with first-hand experience of the response in Beirut.

The largest challenge in this process was the enormous number of different articles, reports, and other documents I had to read to locate relevant information. With document studies being the main method of data collection, several hours and days were spent on the internet trying to find data from reputable sources. This also meant that there was not really any other way to verify the information than to find several sources with the same information. By locating different sources with the same information, I felt more comfortable using information and making sure the information was unbiased. This process of gathering data from document studies was an ongoing process throughout the project, where I constantly found more relevant information for my thesis.

4.3 Reliability and Validity

4.3.1 Reliability

Reliability means dependability or consistency (Neuman, 2013). In research contexts it pertains to if a later investigation followed the same procedures done in this research, they should come to the same findings and conclusions (Yin, 2014). When doing qualitative research, one operates under dynamic and evolving settings, which means that different researchers using different methods might find different data. Neuman (2013), argues that this can be a positive facet of qualitative research, as it might show different aspects of the same case. The data used in this thesis was mostly based on document studies, where most of the documents were written within a short timeframe of the actual case of the thesis. This strengthens the validity of this thesis. Especially because the document studies included finding several different sources with the same accounts of events. Additionally, the data used also included information from official situation report from OCHA and UNICEF. Using data from large internationally recognized organizations like the UN has increased the reliability of the data. Had the main method of data collection in this thesis been interviews, one introduces the opportunity of bias and people having different memory and interpretations of the events. This is why interviews were used as a secondary method of data collection in this thesis, as they could provide insights into the data collected from the document studies. Furthermore, the document studies provided a comprehensive database of information that could be used to fact-check some of the information acquired in the interviews.

4.3.2 Validity

Assessing the validity of the data in this thesis has been challenging at times, as all the empirical data of the thesis is second-hand information. This necessitates a thorough assessment of every informant and website before the data is deemed valid and useable in the thesis. The validity of this thesis is dependent on how valid my own conclusions are, which is judged by the validity of my data (Blaikie, 2008).

Internal Validity

Internal validity pertains to internal errors one might have made in the design of a research project which might lead to false conclusions (Neuman, 2013). As Yin (2014) points out, internal validity is only relevant for causal case studies. The question is if one correctly can conclude that event *x* led to event *y*, without the existence of a third spurious variable. This thesis has included an extensive document study to strengthen its internal validity. There is

obviously always a chance of missing some vital relevant information, but the document study included checking several sources on every information included in the data of the thesis. One could also argue that the conclusions derived from the data in this thesis do not necessarily exclude the possibility of missing variables and factors. The problem statement in this thesis is: How was the response after the 2020 Beirut explosion organized? Even though there might have been other factors contributing to the organizing of the response, the ones mentioned in this paper also hold validity – there is just the possibility of them not showing the complete picture.

External Validity

External validity is concerns whether or not the findings of this thesis are generalizable beyond this case study (Yin, 2014). Seeing as the design of this research is a case study, where I am researching a specific location and a specific case - with Beirut and the 2020 Beirut explosion being the location and case, generalizing beyond this case study might be difficult. This is because the data and conclusions in this thesis are derived from a single case that might not be identical to any other. However, some of the generalizations from this case study might be applied to other similar cases. As Neuman (2014. p. 221) points out, external validity pertains to whether or not one can generalize a result found in a specific setting specific group of actors beyond that situation or externally to another situation. Similar disasters in other countries that have a lacking emergency response system might have similar dynamics as the Beirut explosion, with a large presence of volunteers and other NGOs. This might strengthen the external validity of this thesis somewhat. Furthermore, organizations like the UN work with disaster response all over the world, and experiences from the response after the Beirut explosion might be applied in other similar situations.

4.4 Reduction of Data

With the large number of documents evaluated in the document studies, reducing data was quite challenging. This included reading several articles, reports, and other documents. The most important factor here was to locate information relevant to the research questions. To do this I often had to resort to different keywords to search for in different documents, and from there evaluate the relevancy of the data. This also highlighted one of the challenges with doing a document study, as some of the information might not be expansive enough, which led me to have to collect more relevant information from other documents on the same topic. The literature list of this thesis reflects the scope of this document study, and that the

reduction of data resulted in a diverse literature list – consisting of official situation reports, newspaper articles, academic papers, books, and different web pages.

This process continued throughout the research period, where data was added to the thesis in May 2021, just one month before the completion of the thesis. In my findings, I have sorted the collected data into different chapters in accordance with the research questions. The research questions of this thesis have in that way provide a good guideline for data reduction as well as structure for the thesis in general.

4.5 Strengths and Weaknesses of Research

Constructing a master's thesis where the topic is based on a different continent during a pandemic was obviously not perfect timing. This created some obstacles in the data collection process. The obvious major weakness of the data in this thesis is the lack of fieldwork possibly limiting the collection of relevant data. This also creates the possibility of collecting false, or inaccurate, information. Secondhand information can be corrupted through biases and political influences, possibly weakening the validity of this thesis. To circumvent this obstacle, a thorough and extensive approach was taken to the collection of data. Several hours were spent scouring the internet for relevant articles, reports, interviews, and research papers. This led to finding several different sources with the same account of events, which strengthen my confidence in the reliability and validity of the data I collected.

While the problem statement of this thesis has stayed the same throughout the research period, the research questions have been changed from time to time. This is because I wanted to remain flexible as new and unexpected information appeared. Not being able to change the research questions could have led to a biased and not very nuanced thesis, but changing them as more information appeared have strengthened the thesis' ability to show a more nuanced picture of the response and relief work after the Beirut explosion.

As the case for this thesis occurred mostly in 2020, I have confidence that not much of the data in this thesis will change after the completion of the research. New and hidden information might appear after some time, but the information used in this thesis will not change after time. The three interviews I conducted also strengthened this confidence, as the information acquired mostly echoed the information I already had collected.

4.6 Transferability

Even though this is a case study about the response after the 2020 Beirut explosion, conclusions derived from this thesis might provide insights into the response after disasters in other countries with lacking disaster response capacities. A disaster response mainly consisting of NGOs, international organizations, and community efforts is not exclusive to the 2020 Beirut explosion. Therefore, this thesis might serve as a way to further understand such disaster responses in a disaster where there is an absence of a standardized disaster response framework.

5. Findings

In this section I will present the most relevant data collected to answer the problem statement and research questions of this thesis. The data will be sectioned into different categories according to the research questions. Some data will not necessarily fit into neither of the research questions but is deemed to be relevant to the problem statement and the greater thematical context of the research questions. These will be sectioned into their own category.

5.1 The Explosion

In 2013 the Moldovan-flagged cargo ship MV *Rhosus,* carrying 2,750 tons of ammonium nitrate, made port in Beirut. The ship was initially not planning on docking in Beirut, but after unforeseen events, the ship was forced to dock in Beirut. The reason for this was not entirely clear, but some sources claim the ship was having possible engine problems, while other claims that the ship captain was lacking funds to cross the Suez-canal. After inspection, the ship was damaged due to heavy machinery being stocked on top of the doors of the ship's cargo space. Therefore, the ship was deemed unseaworthy. After several complications with the owner of the ship's finances, and other unforeseen events, the cargo of the ship were placed in *Warehouse 12* in Beirut's port.[15]

The storing of almost 3,000 tons of ammonium nitrate in a port warehouse was not unprotested. Customs officials sent letters to judges six times between 2014 and 2017 requesting a resolution to the issue of the ammonium nitrate. One of the main issues was the storing of such and unstable chemical compound in an unregulated storage facility with unstable climatic condition. Another issue, highlighting the lack of safety concern given to the storing of ammonium nitrate, were the fact that the ammonium nitrate was stored next to a stash of fireworks.[16]

On the 4th of august, 2020, a fire broke out in Warehouse 12. At around 18:00, local time, firefighters were dispatched to the warehouse. Upon reaching the fire, the fire crew reportedly claimed the fire was unusually large and produced sounds a normal fire would not produce. Apparently the fire had an unusual character and they claimed that there was "something wrong".[17] At around 18:07 an explosion was seen from the warehouse. This explosion was most likely caused by the fireworks stored in the warehouse. The explosion caused heavy

[15] Wikipedia (2020) Beirut 2020 explosion
[16] Al-Jazeera (2020) Beirut blast: Tracing the explosives that tore the capital apart
[17] FIRE (2020) The Port of Beirut explosion: A timely reminder

damage to the warehouse and has been calculated to have produced a force equivalent to around 1.5 to 2.5 tons of TNT.[15]

About 33 to 35 seconds later, a second explosion occurred. The force of this explosion has been calculated to be equivalent to anywhere from 407 to 936 tons of TNT (Stennet, Gaulter & Akhavan, 2020). For some context, the Oklahoma City bombing of 1995 that killed 168, where the explosives were made up of ammonium nitrate mixed with other substances had a force equivalent of roughly 2 tons.[18]

5.1.1 Consequences

The explosion caused massive damage to buildings and infrastructure, killing at least 204 people, and leaving over 300,000 homeless. Buildings were ripped apart and cars were flipped upside down. In the port where the explosion occurred, a crater - over 100 meters in diameter, was formed - obliterating a section of the shoreline.[19] The fiscal consequences of the explosion are reported to be above 15 billion US Dollars.[20]

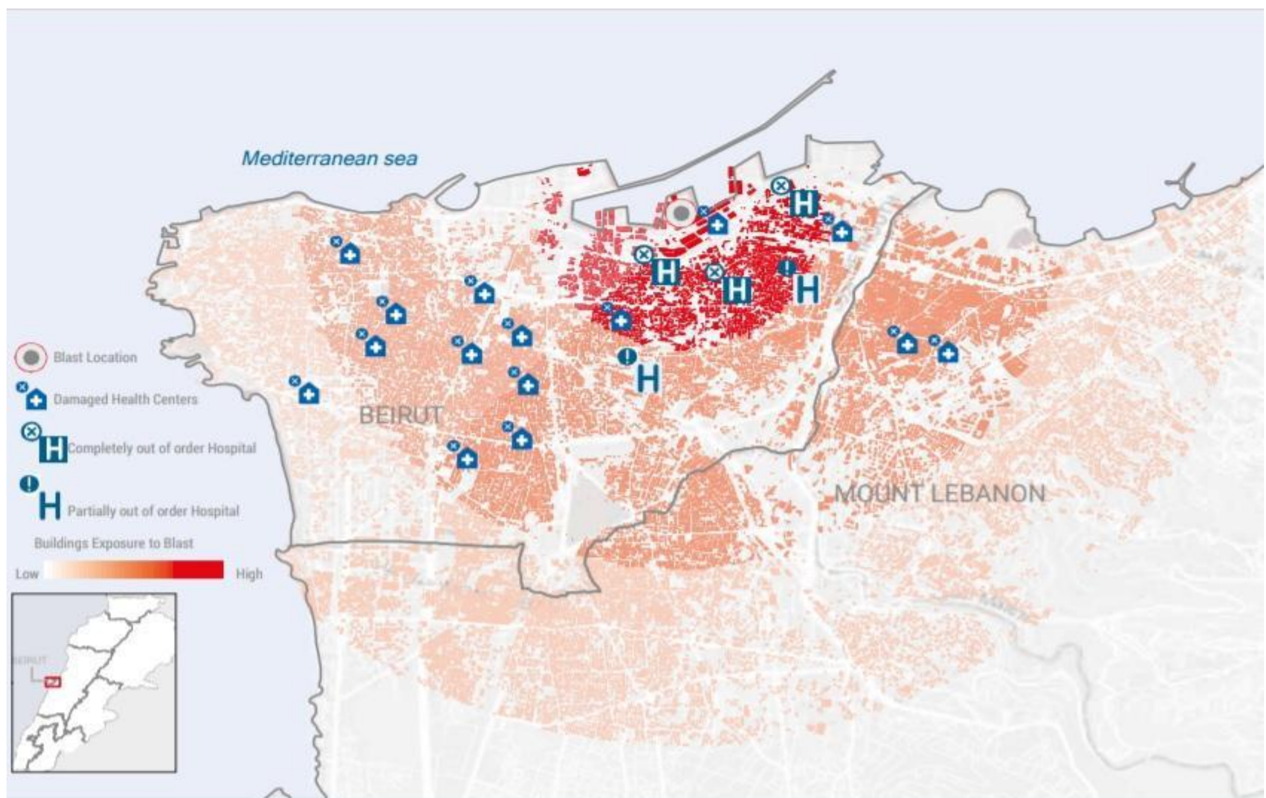

Photo: Buildings Exposure to the Explosions with Damaged Hospitals and Health Facilities.[21]

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[18] Engineering Laboratory (2017) Oklahoma City Bombing 1995
[19] Wikipedia (2020) 2020 Beirut Explosion
[20] USA Today (2020) Beirut explosion left 300,000 homeless, caused up to $15 billion in damage
[21] OCHA, Lebanon Flash Appeal 2020 (August)

For a city like Beirut, the consequences of the explosion were exacerbated by the COVID-19 pandemic. Not to mention the fact that Lebanon has been in an ongoing financial crisis, since August 2019. These two factors had caused a food shortage in the country, which was only worsened by the explosion in 2020. Mostly due to a large silo containing roughly 15,000 tons of grain that was destroyed in the explosion, severely limiting the country's grain reserve.[19]

The explosion also caused about 7,500 injuries, putting an already pressed health system amid a pandemic in a state of under capacity. To make matters worse, the explosion damaged the *Saint George Hospital,* which was less than one kilometer from the blast site. Both medical personnel and patients from the hospital were among the casualties after the explosion. The damage to the hospital caused some of the patients to be treated in the streets, before the patients with the most immediate need for medical care were moved to other facilities while the rest of the patients were discharged.[19]

5.2 What did The Government do in Response to The Explosion?

This chapter will consist of the Lebanese government's response to the explosion. First, I will provide some insight into Lebanon's disaster management capacities. The chapter will also include some of the reactions and criticisms of the government's handling of the explosion.

5.2.1 Disaster Risk Management Capacities in Lebanon

After large storms in 2002 and forest fires in 07-08, the disaster response in Lebanon was deemed to be inadequate. This started a reform of the High Relief Committee (HRC) in Lebanon with the aim to integrate a coordinated disaster response (UNISDR, 2012). In 2006 a framework for systematically implementing and coordinating a DRR approach for disaster prevention, mitigation, and response was offered by the Hyogo Framework for Action. However, this framework has never been implemented. Mostly due to political instability and the 2006 Lebanon War (UNISDR, 2012). The result is that any real attempt to create a DRR authority in Lebanon has been stalled for almost 20 years.

In 2009, the previous prime minister of Lebanon did; however, attempt to strengthen DRR capacities in the country. This was done by working with the United Nations Development Program (UNDP) to set up a unit for improving national emergency response. To achieve the goals of the project, the work was divided into two phases. Phase 1 included establishing a Disaster Risk Reduction and management unit, devising a national DRR strategy, improving national capacities, and raising public awareness of DRR. Phase 2 included establishing institutional mechanisms for Disaster Risk Management to increase national resilience,

implementing DRR considerations into development planning of critical social and economic sectors, as well as strengthening the local and community capacity for DRR (UNDP, 2015). These phases were planned under the overarching goal of "mainstreaming disaster preparedness and management in national development framework strategies in Lebanon" (UNDP, 2015, p. 3).

The project spent roughly 1,8 million US Dollars, with a budget of 3,1 million US Dollars. In short, they report several promising outcomes. Disaster preparedness and the national emergency response improved. Stakeholders in the project report reported several incidents where cooperation between different agencies had improved. However, the project did not reach is most important objective – establishing a national disaster management institution and reforming national disaster management policy (UNDP, 2015). Much like in the previous attempt to strengthen risk management in Lebanon 10 years earlier, the project had been halted by political processes, with most of the blame being put on the political deadlock in Lebanon.

5.2.2 Lebanon's Response to Emergencies

What has been typical for emergency response in Lebanon is a lack of a coordinated and standardized emergency response. In incidents with a large number of casualties, the lack of a standardized response framework in an incident with several involved agencies and resources creates a confusing and ineffective disaster response in Lebanon (El Sayed, 2013).

The lack of a standardized response framework in Lebanon is compensated by the large presence of the Lebanese army and its own military command structure, creating somewhat of a coordinated response to emergencies. This does not, however, create a framework for an effective response to larger incidents. A factor that has been exacerbated by the country's heavy reliance on aid from international agencies (El Sayed, 2013). The lack of a standardized emergency response in Lebanon can mostly be contributed to political deadlock, which can be highlighted by the fact that a disaster response law that was drafted in 2012 is yet to be approved in parliament. With Lebanon's complex confessional political system, achieving consensus in parliament is virtually impossible, making any efforts to create a standardized emergency response in the country futile.[22] Even the firefighters responding to the initial fire before the explosion had no knowledge of the ammonium nitrate stored in the same building

[22] United Nations Development Programme. Strengthening disaster risk management capacities in Lebanon.

as the fire, a factor that might have contributed to the death of ten firefighters (El Sayed, 2013).

5.2.3 Explosion - First Response

On August 5, the Lebanese government declared a state of emergency for two weeks in Beirut, as well as launching an international appeal for disaster assistance. However, this appeal for disaster assistance did not specify a list of medical needs, which somewhat delayed coordination and deployment of resources (El Sayed, 2020). In terms of governmental response to the explosion, as described in 5.2.2, the Lebanese Army acted as the disaster response and started by setting up a command structure for the disaster response. This structure was made to coordinate and oversee all sectors of the Army's disaster response activities. The Lebanese Army has performed several previous drills to quickly establish this command structure after disasters. These drills had been performed for several years to strengthen this structure and its protocols. One problem that the Army encountered regarding its command structure, was that some international donations arrived at different entities, which is something the centralized command structure tries to avoid (El Sayed, 2020).

The initial response was a cooperative effort between The Lebanese Army, The Beirut Municipality, and The Internal Security Forces. The Lebanese Army initially secured the blast area and started search and rescue operations. Search and rescue operations were performed in conjunction with the Lebanese Civil Defense (LCD) - which is Lebanon's designated search and rescue agency - and other agencies like the Lebanese Red Cross (LRC). They also allowed for investigation teams to enter the area. This was mostly done by The Internal Security Forces, who also were responsible for securing the affected properties and preventing theft and looting. A lot of this work was also coordinated with the LRC, who in addition to helping with the search and rescue work, also identified victims of the explosion. Further on the Lebanese government launched a call center dedicated to response activities, as well as designating the Beirut International Airport as the main hub for receiving international resources (El Sayed, 2020).

So, while the government itself did not do much initially, The Lebanese Army is somewhat controlled by the government and this can be viewed as the government's response to the disaster. Still, the initial view of the civilians of Beirut was a passive government with little action. To make amends and help out the victims of the explosion, the government did later create some new laws designed to help out those in need. Among those laws were one where

citizens that had lost family members in the explosion were exempt from paying taxes on any inheritance, another law prevented citizens from being evicted from their houses within one year (Informant 1).

Roughly one week after the explosion the Lebanese army declared that the life-saving phase of the response was over, this meant that most of the Urban Search and Rescue Teams (USAR) had completed their job and left. Still, the Civil Defense and volunteers kept on cleaning debris and recovering bodies. This was aided by a few international experts (OCHA 2, 2020)

As the port of Beirut was destroyed, the government directed all imports and exports to the port of Tripoli (OCHA 1, 2020). Governmental authorities also worked together with the LRC to identify priority areas in Mount Lebanon and Beirut (OCHA 2, 2020). They identified Qarantina, Mar Mikhael, Ashrafiyeh, and Gemmayzeh as the most pressing districts of Beirut (OCHA 3, 2020). Through the Lebanon National Poverty Targeting Program (NPTP), which is Lebanon's poverty assistance program to provide social assistance to the poorest Lebanese households, over 105,000 Lebanese citizens receive assistance via e-cards.[23] The United Nations World Food Programme (WFP), initially worked together with the government to expand the NPTP to include victims of the explosion (OCHA 4, 2020). The findings do not; however, show any efforts by the Lebanese government to expand this program. Additionally, with some of the hospitals in Beirut being damaged by the explosion, The Ministry of Health provided medical supplies to local hospitals (El Sayed, 2020).

5.2.4 Criticisms of Government's Response

Already prior to the explosion, there had been months of protesting over the Lebanese government. In the midst of an economic crisis, and on the cusp of a complete economic collapse, the citizens of Lebanon were protesting over what they called a corrupt government. A lack of a real response from the government after the explosion, on top of the fact that the storing of ammonium nitrate on the port Beirut was a well-known fact by the government, angered the citizens even further.[24] Less than a week after the explosion, the Lebanese government resigned as a result of the negative response from the people of Beirut. With a

[23] The World Bank, Targeting Poor Households in Lebanon, 2020
[24] Alarabiya News, Beirut explosion: Angered by government's response, Lebanese activists plan protest, 2020

disastrous event as the explosion after a long period of frustration and demonstrations, the government could not stay in office anymore.[25]

This explosion was by some seen as a symbol, or manifestation, of the political incompetence of the government. A view that was emphasized by the fact that after an international conference organized by France, where world leaders would discuss how to provide aid to the victims of the explosion, a joint statement was released calling for all aid to be delivered directly to the people of Lebanon. This statement was supported by the administrator of the U.S Agency for International Development (USAID), who announced that no aid from the United States is going to the Lebanese government.[26] The Lebanese government has since the end of the civil war received billions of US Dollars in loans and donations (Ministry of Finance, 2009), earmarked towards reform and reconstruction. These funds have allegedly disappeared through corruption,[27] and the funds that actually was used for its purpose, was not distributed fairly (Chaaban, Jad & Salti, Nisreen, 2010). This alleged negligence was highlighted by the loans of roughly 11 billion US Dollars pledged to Lebanon by other states during the CEDRE in 2018; the only caveat being that the loan will materialize once Lebanon has implemented structural reforms.[28]

Roughly one week after the explosion, the Lebanese Army distributed boxes of food to victims of the explosion. This was not well received by many of the volunteers. The action by itself was a positive one, but it only happened once, and was viewed as more of a publicity stunt.[29] "Not a single public administration took to the streets in order to help these people. Not a single public establishment actually tries to clean the roads to clean up this tragedy, this catastrophe."[30] One volunteer commented on the government and public administration’s response to the explosion.

5.2.5 Summary of Government Response

What the 2020 Beirut explosion shows, is a lack of a lack of a standardized response framework in Lebanon. The lack of an emergency response system is compensated by the

[25] BBC News, Beirut explosion: Lebanon's government resigns as public anger mounts, 2020
[26] France 24, Streets before suits: US envoy visits Beirut's 'real' rescue hub, 2020

[27] Synaps Network, The art of not governing, 2019
[28] Al Jazeera, Lebanon faces painful reforms to unlock foreign aid, 2020
[29] NPR, After Beirut Blast, Lebanese Volunteers Deliver Relief The State Fails To Provide, 2020
[30] Insider, Volunteers are cleaning up Beirut and distributing aid to 300,000 homeless as Lebanon's government resigns over deadly explosions, 2020

large presence of the Lebanese Army. This was highlighted by the Lebanese Army being virtually the only response mechanism the state had to offer in response to the explosion. Having the Army acting as the country’s emergency response does create some sort of coordinated response do emergencies, but in larger incidents like disasters, the Army’s structure is not enough. This became apparent after the explosion, where the magnitude of the event required a large mobilization of international resources.

Even though there is a lack of a standardized emergency response system in Lebanon, there have been attempts of implementing such frameworks, as well as attempts of strengthening DRR capacities in the country. First, after storms and forest fires during the 2000s, the disaster response in Lebanon was deemed inadequate. However, due to political instability and the Lebanon war, any attempts to implement and coordinate a DRR approach for disaster prevention, mitigation, and response were unsuccessful. Later, in 2009, the prime minister attempted to strengthen DRR capacities by working with the UNDP to set up a unit for improving national emergency response. The project did report some promising results but failed in reaching its most important goal - establishing a national disaster management institution and reforming national disaster management policy. Once again, the culprit being the political deadlock in Lebanon.

As for the government itself response to the explosion, they did not do much, other than passing a few new temporary laws to ease the needs of the victims of the explosion. This did not come as a surprise to the citizens of Lebanon, who blamed the government for the explosion. They viewed the explosion as a culmination of years of political corruption and neglect. In response the government resigned less than a week after the explosion - after years of protests and then the explosion in 2020, the government had reached its limits of political power.

5.3 What did international organizations do in Response to the Explosion?

As Engen et al. (2016) points out, a disaster requires both national and international mobilization - as opposed to a crisis - which normally requires local and regional mobilization. This was certainly the case in Beirut after the explosion. For one, a large resource mobilization was required in terms of funding, as well as the UN providing many resources in terms of being a large contributor in the actual response. The UN together with

the LRC was the largest international contributors in the response. In this chapter, I will present some of the work they did.

5.3.1 United Nations

One of the largest contributors in the response was The UN and its subagencies. Immediately after the blast, the UN deputy chief pledged that the United Nations would help the people of Lebanon in every way possible.[31] This started with a United Nations Flash Appeal – The Lebanon Flash Appeal[32] - requesting 196,6 million US Dollars, with 158,7 million received. A funding that was supposed to respond to the most urgent humanitarian needs, which expanded across six sectors: food security, health, shelter, protection, water and education.[33] In this section I will present some of the most important contributions in the response the UN provided.

OCHA

One actor that played a large role as a coordinating mechanism was the United Nations Office for the Coordination of Humanitarian Affairs (OCHA). OCHA is a body of the UN that, among other things, provides humanitarian funding and coordinates humanitarian responses.[34] In short, OCHA specializes in creating an effective humanitarian response.

Initially, OCHA set up plans for the response in conjunction with other organizations and added some coordination mechanisms, which included dividing the city into different operational zones to easier coordinate the efforts. This work began with OCHA immediately after the explosion organizing the deployment of experts from the International Search and Rescue Advisory Group (INSARAG) and UN Disaster Assessment and Coordination (UNDAC) (OCHA 1, 2020). These two groups were deployed to assist the volunteer workers and first responders. As mentioned earlier in the chapter, as a response to the Beirut explosion, a United Nations Flash Appeal was launched on the 14 August. As one of OHCA's main mechanisms is to act as a coordinating body, they manage the Financial Tracking Service which oversees all humanitarian contributions (OCHA 8, 2020). The OCHA Country Office also provided coordination throughout the response through working together with

[31] UN News, Beirut blast: 'The faster we act, the better we can reduce human suffering,' says UN deputy chief, 2020
[32] OCHA, Lebanon Flash Appeal 2020 (August)
[33] Reliefweb, Beirut explosion, six months on. UN-Habitat's response and what lies ahead, 2021
[34] OCHA, Our Work, 2021

UNDAC and bringing in a coordinator from the Emergency Telecommunications Sector to assess the communication needs of the response (OCHA 4, 2020).

Throughout the response OCHA published regular situation reports from Beirut. These reports show how OCHA serves as somewhat of a coordinating and administrative center in the response (OCHA 1, 2020)

The Humanitarian Programme Cycle

As mentioned in the previous chapter, one of OCHA's missions is to coordinate emergency response. The aim of their coordination is to expand the reach of human coordination, ensure that the aid reaches everyone in need, and reduce duplication of efforts. This coordination is done through a program called The Humanitarian Programme Cycle (HPC).[35]

The HPC contains five elements:

1. Needs Assessments and Analysis.

Before any strategic planning takes place, a needs assessment must be initiated to provide information and evidence. The needs assessment is conducted in conjunction with any relevant humanitarian actors and organizations participating in the aid work. This is done to provide as much relevant information as possible and identify the needs of everyone affected by the relevant event.[36] As a product of the needs assessment, a needs overview creates an clear picture of the situation – what needs there are, which actors should do what, and so forth. This can be exemplified by the multi-sectoral needs assessment conducted in Beirut after the explosion.

2. Strategic Response Planning

The humanitarian needs overview provides evidence and analysis into the scope of a crisis, and what needs are present. From this, humanitarian response plans (HRP) are formed. A HRP is necessary when than one agency is required in a response. The HRP further works as a management tool for the humanitarian coordinators. Another purpose of the HRP is to work as a communication tool, as they can communicate the scope of a crisis and what resources are needed.[37] Such, the HRP can mobilize donations and volunteers.

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[35] OCHA, Coordination, 2021
[36] Humanitarian Response, Needs assessment: Overview, 2021
[37] Humanitarian Response, Strategic response planning: Overview, 2021

3. Resource Mobilization

As the humanitarian needs overview and HRP identifies what resources are needed, the mobilization of resources begins. This can be done through a flash appeal – which was the case after the Beirut explosion with The Lebanon Flash Appeal – or through The Consolidated Appeal Process (CAP). The CAP is the Humanitarian Country Team's mechanism and platform for publishing strategic response plans. Using the strategic response plans, the humanitarian agencies should ensure that all resources and funding received should be allocated in line with the strategic response plans.[38]

4. Implementation and Monitoring

The fourth step entails monitoring the assistance given to the affected population. Monitoring the assistance means comparing it to the targets of the OPR. This is done through tracking the inputs and outputs from the assistance. One of the key elements here, is to evaluate the response of the affected populations and consider the diversity of said population.[39]

5. Operational Review and Evaluation

The fifth step uses the Operational Peer Review (OPR), which is management tool used for evaluation and monitoring of response. With the OPR the humanitarian coordinators and Humanitarian Country Teams can assess where improvements or changes need to be made. In that way the coordinators can review the gathered information and make any necessary strategic and operational decisions. The evaluation part of the fifth step is an independent assessment carried out by members of The Inter-Agency Standing Committee, which OCHA is a member of.[40] This evaluation assesses if, and how, results have been achieved according to plans.[41]

The point of the HPC is that it is a cycle, with each step leading into the next. In that sense, the fifth step – *operational review and evaluation* – will lead back to the first step again. This purpose of this circular process is that once again is back at the first step, learning from previous experiences will improve the HPC. The role of HPC in the response after the Beirut explosion will be discussed in the discussion part of the thesis.

[38] Humanitarian Response, Resource mobilization: Overview, 2021
[39] Humanitarian Response, Response monitoring: Overview: 2021
[40] Wikipedia, Inter-Agency Standing Committee, 2021
[41] Humanitarian Response, Inter-Agency Humanitarian Evaluation, 2021

UNHCR

The United Nations High Commissioner for Refugees (UNHCR) is an organization working to protect the rights and lives of refugees. Like OCHA, UNHCR also played a large role in the response in Beirut. After the explosion UNHCR started supporting humanitarian shelter needs assessments, as well as providing weatherproofing materials and supporting reparation efforts (OCHA 2, 2020). This eventually became a coordinated effort between OCHA, The LRC, and UN-Habitat, who all coordinated the shelter response (OCHA 3, 2020). The humanitarian shelter needs assessment was a part of a multi-sectoral needs assessment, that was mostly conducted by the LRC. This multi-sectoral needs assessment made it possible for the LRC and UNHCR to create a zoning system that made assessment planning much more efficient (OCHA 6, 2020).

UNHCR was also a part of the collective protection approach after the explosion. This means, among other things, providing psychological first aid to those who needed it. To do this, they engaged with all affected communities and tried to identify anyone in need of aid (OCHA 6, 2020). UNHCR also has reception centers in Beirut available to anyone in need of aid. Throughout August, they responded to roughly 6,000 calls for protection and assessments. These included Lebanese people, migrant workers, and refugees, who experienced both physical and mental stress through worsened living conditions and other factors (OCHA 7, 2020). UNHCR also played a large role in tracing missing persons and did so throughout the response efforts (OCHA 8, 2020). These efforts were especially targeted towards refugees, as this UNHCR's main area of work. This being the case, UNHCR approached all affected refugee households, which totaled 10, 884 households (OCHA 5, 2020). UNHCR continued monitoring the status of refugees throughout the relief work after the explosion. This was a targeted system that included making 10,916 calls from August 14 until the beginning of September. Through the system, they located 15 refugees that died in the explosion (OCHA 9. 2020). Additionally, 52% of the respondents in the calls reported damages to their homes or living arrangements. It is worth noting that only 49% responded to the calls (OCHA 10, 2020).

UNICEF

UNICEF, or the United Nations Children's Fund, provides aid to children all over the world. This includes emergency relief after disasters, as well as working with disease prevention, education, and social policy for children.[42]

UNICEF's approach to the response after the explosion was being a part of the multi-sectoral response with the priority being the wellbeing of children and families - as is in line with their vision. Their role in this multi-sectoral response was focused on WASH, Child Protection, and Primary Healthcare activities (UNICEF 2, 2020). UNICEF first started cooperating with the national authorities and civil society after the explosion, conducting search and rescue operations. This also included providing water and other aids to the first-line responders, as well as the port workers in the area of the explosion. As one of UNICEF's main objectives is disease prevention, they immediately started working with the government and the Ministry of Public Health to retrieve medicines and vaccines stored in warehouses damaged by the explosion. A total of 1,748,660 vaccines were retrieved and relocated to other secure locations (UNICEF 4, 2020). This was to make sure that children across Lebanon would have available vital medical supplies. Most of this work was done by the UNICEF Lebanon country office.

Further on, UNICEF's priority in the response is to ensure the safety of children affected by the blast. This also included psychosocial support services, mainly to help children deal with the trauma the explosion might have caused (UNICEF 1, 2020).

Over the first month after the explosion, UNICEF managed to mobilize over 2,000 youths to help out with the cleaning of streets and preparation of food for families in need. This food preparation led to 12,686 families being provided with hot meals since the start of the response period. Their mobilization of youths also included 587 individuals with previous training in UNICEF's courses for rehabilitation and restoration. These individuals were equipped with the necessary materials and tools to support the rehabilitation of 493 damaged houses. UNICEF also provided sewing materials to 82 youths, who were able to produce and distribute 23,154 face masks to affected families and relief workers (UNICEF 7, 2020).

[42] UNICEF, What we do, 2021

5.3.2 The Lebanese Red Cross

After the explosion, LRC teamed up with The Syndicate of Engineers to conduct assessments in all the areas affected by the blast. This also included providing temporary shelter with access to food and other basic need to those in need (OCHA 1, 2020). As a result, the LRC set up enough shelters to house around 1,000 families. In the days that followed, the shelter response became a joint coordinated response with UN-Habitat and UNHCR. After the initial assessments, the LRC also led a multi-sectoral needs assessment, which included surveying 6,000 households. As mentioned in 5.3.1, LRC, together with UNHCR, also created a zoning system for the Shelter Partners. This was used as a coordination tool, which ensured that there would not be overlapping work. It also provided the structure for the multi-sectoral needs assessments (OCHA 6, 2020). One factor discovered through the assessment was that woman-headed households were more likely to report the need for aid, which may have led to a high number of reported damaged households consisting of single elderly women (OCHA 7, 2020).

The LRC, along with UNHCR and UN-Habitat, worked together with Shelter Partners throughout the response, as well as working together with many other sectors of the response. One example of this is how after The Water, Sanitation and Hygiene (WASH) sector found that in 337 affected houses, only 225 had access to water. As a response, the LRC, in conjunction with UNICEF, distributed water and several personal hygiene items to these households (OCHA 3, 2020). They also continued working with the WASH sector, along with other partners throughout the response, distributing hygiene and baby kits to families in need (OCHA 8, 2020).

The blast also created a large demand for medical assistance, at the same time as several medical facilities were damaged – including 3 hospitals and at least 12 medical facilities, of which some of these had severe enough damage to be rendered inoperable. In response around 70 ambulances and 375 medical teams were mobilized by the LRC. This was done to provide aid to the most vulnerable in need of medical aid (OCHA 2, 2020).

5.3.3 Negative Reactions

One problem that arose throughout the aid work of the INGOs, was some landlords taking advantage of the situation. In Beirut, you have what is called “new rent” and “old rent”. After the second world war, Lebanon enacted a rental-control law to avoid landlords raising rent prices and making it virtually impossible for regular citizens to afford the rent. In 1992, this

law was essentially removed, meaning rents freely can be agreed upon between landlord and tenant after 1992. However, any contracts signed before 1992 essentially froze. This means that some people still have a monthly rent of as little as 200 US Dollars.[43]

With this concept of "new rent" and "old rent", the international organizations working on shelter assessments and repairs had to be mindful of not doing any work that could render these old rent contracts null and void. This meant that the legal advisors of the NGOs had to be wary of any repairs to properties that could make the rent contracts null and void (Informant 2). This dynamic created a situation where landlords could take advantage of the situation and try to get tenants under "old rent" evicted, meaning that new contracts could be signed under "new rent" (Informant 2).

The international organizations that work in Beirut after the explosion exclusively work in the zones of the city directly affected by the explosion. This has created a situation where some people living outside the blast try to move into the zone where international organizations are working (Informant 3). As Lebanon is in the midst of a pandemic and a possible economic collapse, the citizens in need of aid are not exclusive to the ones affected by the explosion. These might be poor people that are just as much in need of aid as the victims of the blast, but because they do not live in the INGOs designated areas, they are not eligible to receive aid (Informant 3).

There has also been some anger among the victims of Beirut in response to the international organizations work. The feeling has been that the INGOs have a set list of tasks and jobs to do in their response; not that they take into account what the victims *actually* needs (Informant 3).

5.3.4 Summary of International Organization Response

The two largest international contributors in the response were the UN and the LRC. Initially, the UN also launched a Flash Appeal to mobilize funding for the response. This Flash Appeal requested 196,6 million US Dollars, with 158,7 million received. Both the UN and the LRC were a part of a large multi-sectoral needs assessment after the explosion, which provided the basis for the plan for response and relief in the period after the explosion. The multi-sectoral

[43] NEXT CITY, The World's Most Extreme Rent-Control Law May Soon Be Repealed, 2014

response expanded across six sectors: food security, health, shelter, protection, water, and education.[44]

The multi-sectoral response was supposed to respond to the most urgent humanitarian needs. While the LRC and UN were not the only contributors in this response, I only highlighted these two as they were the two largest actors and were the catalysts of the planning and implementation of the response. In the response, the UN divided work between their subagencies, like OCHA, UNHCR, and UNICEF, with each agency doing the work most in line with their expertise and main missions. For instance, UNHCR monitored the status of refugees in Beirut after the explosion, while UNICEF's main priority was to ensure the safety of children affected by the explosion. OCHA's work included more coordination and creating regular status reports of the response. The LRC worked across several sectors throughout the response. As the LRC is already stationed in Lebanon, they initially teamed up with The Syndicate of Engineers to conduct assessments in all the areas affected by the blast. The LRC also led the multi-sectoral needs assessment.

5.4 What did The Local Communities do in Response to The Explosion?

Some have argued that Lebanon has one of the most active civil societies in the world (AbiYaghu, Léa, & Jagarnathsingh, 2019). Members of these communities claim that the country's active civil society is a result of the government's shortcomings, making an active civil society a necessity.[45]

One example is the group *Tadamon al-Ness,* which in Arabic means *People's Solidarity.* Before the explosion, this group already had over 4000 volunteers. Already established civil groups like this created the possibility of a quick response to the explosion. One member of the group claim that when the Lebanese government started providing aid, groups like this were already knocking on doors and distributing food to those in need. Local groups like *Tadamon al-Ness*, can have some advantages in emergency response situations, as their knowledge of local communities provides the means of a more effective response. Active members of groups like these claim that despite political instability and the lack of

[44] Reliefweb, Beirut explosion, six months on. UN-Habitat's response and what lies ahead, 2021
[45] NBC News, 2020

governmental aid has created what they call “Lebanese resilience - a determination to carry on despite ongoing crises and systemic neglect”.[46]

5.4.1 First Response

Initially, a lot of the response among the citizens of Beirut was one of frustration; a feeling that was followed by hope. Many of the citizens hoped that this event could be a catalyst for change in the country (Informant 1). The explosion also mobilized the citizens to provide relief for victims of the explosion. One day after the explosion, volunteers showed up with shovels and brooms to aid the cleaning process. To provide food for the homeless, several teams also showed up with sandwiches and water. With the lack of a coordinating body in the response, a lot of teams were doing overlapping work, creating an inefficient process. This was evident when volunteers provided food to people that already had received food,[47] and their efforts could have been better served in other areas.

Some reports of the response after the explosion paints a picture of an army of citizens equipped with brooms wandering the streets of Beirut volunteering in the response. Some arriving in buses, others from less affected areas of the town. It has been explained as a completely volunteer-led operation, with combined efforts between civilians and NGOs. When most of the chaos after the explosion had settled down, and the people of Beirut started to gather themselves, many started to gather around the blast site. Immediately they started to clean debris after the explosion, helping the wounded, and doing essential relief work. Some people expressed that this was necessary, as the trust in that the government will do any work is non-existent.[48] Overall, the first response was characterized by chaos and incoordination. Some citizens claimed that all these efforts were almost instinctual by the people of Beirut, claiming that they know they have to fend for themselves. As soon as the aftermath of the explosion had settled down, they did not wait for any organizations to come and help the people. This mindset was emphasized by one citizen; “We have to come together, the government has done absolutely nothing, not even the municipality. It’s always up to us to rebuild our city when they destroy it like this.”[49]

Although the initial response was chaotic and uncoordinated, the response became more efficient in the later days. Some coordination mechanisms were installed by the NGOs and

[46] The New Humanitarian, Local Groups step up to lead Beirut blast response, 2020
[47] The New Humanitarian (2020) Local groups step up to lead Beirut blast response
[48] NBC News, After Beirut explosion, Lebanese volunteers flock to help clean up, 2020
[49] NBC News, 2020

somewhat The Lebanese Army. One example of such a coordination mechanism was how the citizens and NGOs of Beirut request assistance from the government to put up tents and other relief related material. There were also other actors like the UN Country Team who contributed with coordinating volunteer work (Informant 1).

The large international organizations also contributed in mobilizing volunteers. Within the first week after the explosion, UNICEF managed to mobilize 1,700 young volunteers. These youths were a part of a community-based response to the explosion, and they worked with cleaning damaged sites. Their efforts included cleaning 11 damaged sites 650 properties and 11 neighborhoods. As well as cleaning up debris, they also produced and distributed face masks, goggles, safety vests and helmets (OCHA 4, 2020).

All over Beirut, volunteers teamed up and helped out where they could. Several initiatives were also started. In one example, a gas station destroyed by the blast, was converted into a disaster relief center the day after the explosion. The station, named Nation Station, is in the neighborhood of Geitawi, which is closely located to the blast area. For the nearby residents, this became a hub for volunteers eager to help out with the response. On the station the volunteers managed to set up electricity and Wi-Fi, which made it possible to set up shift plans for the volunteers. These volunteers provided hot meals, home reparation, and distributed free clothes to victims among other things.[50]

5.4.2 Mobilizing of Local NGO's

Initiatives like the "Nation Station" sprung up all over Beirut after the explosion, with already existing civic groups mobilizing, and new ones forming. There were too many to mention them all, but in this chapter, I will present some examples of such groups.

In the first days after the explosion, some youths got together and created a network called the "Helping Hub". This initiative was created to coordinate the efforts of volunteers. The founders of this initiative were originally members of a group called "Bahá'í", which is a group that engages in community-building efforts. These members were able put the knowledge gained in their community-building efforts into relief and recovery work. The Helping Hub first consisted of 10 members; however, throughout the response the group grew to more than 80 members. Their work consisted of a meeting every morning, where the volunteers would distribute tasks between them. Every night the group would meet again to

[50] NPR, After Beirut Blast, Lebanese Volunteers Deliver Relief The State Fails To Provide, 2020

report and discuss the work they had done that day, which also included carrying out needs assessments and creating a list of work that needed to be done the next day. Then again, they would meet the next morning and distribute the work based on the last meeting the night before.[51]

Another group, “Shaabemasouleyati”, which means “My group, my responsibility”, was an already established relief organization. The group originally helped out families during the economic crisis, but after the explosion the group naturally transitioned into the response relating to the explosion. During the response they mobilized thousands of volunteers to help with the cleaning of debris after the explosion. They also performed damage assessments of buildings with the help of engineers, as well as providing medical assistance to injured citizens.[52]

With more than 70,000 houses damaged by the explosion[53], many local groups turned their efforts towards rebuilding damaged properties. One such group was the Lebanese NGO, Tamanna. Tamanna originally worked with granting wishes to critically ill children, but after the explosion and displacement of more than 300,000 citizens, they refocused their efforts towards reparations of properties. Being a small organization, they commented that they were unhampered by bureaucratic structures slowing the response time down and could immediately start working on reparations. Without donations and supplies from other countries, Tamanna relied on supplies from local and private institutions, such as one local company supplying the group with glass to fit 5 homes. Another local institution called “Min Beib La Beib” that recycles and sells used furniture supplied Tamanna and other groups with furniture to furnish the houses. Min Beib La Beib also received more furniture from donations, meaning that their supplies were able to meet the demands.[54]

These are just some of the local initiatives and NGOs that either sprung up or refocused their work as a reaction to the explosion. Among other groups were FoodBlessed who work to fight hunger in Lebanon and doubled down on their work after the explosion. Caritas Lebanon, who is the Catholic Church’s relief group in Lebanon, also helped by distributing food and repaired houses. There were also groups like Lebanon 2.0, which is an initiative by youths that works for a better Lebanon by youths in Lebanon, who also prepared meals and

[51] Bahá’í World News Service, Youth in Beirut create disaster recovery network, 2020
[52] The Christian Science Monitor, Beirut’s challenge: A wealth of volunteers and a deficit of trust, 2020
[53] FR24 News, Beirut explosion: 70,000 houses among damaged buildings, 2020
[54] Al Bawaba, Changing Mission: Lebanese NGOs Vow to Rebuild Beirut After Devastating Blast, 2020

distributed them to victims and frontline workers.[55] These are some of the other groups that exemplifies how the explosion created a large mobilization of Beirut and Lebanon's local NGOs and groups, as well as a surge of volunteers ready to provide aid. Seemingly most of these already established groups turned their attention towards the post-explosion response.

5.4.3 Beirut Recovery Project

One example of how volunteers contributed to the response after the explosion, was the mobilizing of staff and student at the American University of Beirut (AUB). The night after the explosion, AUB's Center for Civic Engagement and Community Service (CCECS), put out a message on social media calling for volunteers. As a result, over one thousand volunteers registered to provide relief in the most damaged parts of Beirut. They called this the "Beirut Recovery Project".[56]

In the morning after the call for volunteers was put out, 300 of the registered volunteers were divided in the two most damaged parts of Beirut closest to the blast area. The volunteers were students, staff, faculty members from AUB of all ages. Tents were put up in both areas, and the volunteers were provided with necessary equipment, such as shovels, masks, gloves, brooms, goggles - equipment to help remove debris and clean up after the explosion. The first and most important goal of the Beirut Project was relief and recovery, and to "waste no time".[55]

Over the next few days, the volunteers were divided into smaller groups of seven, with one coordinator in each group. The groups went from house to house, checked the condition of the people that still were in their houses, and helped them clean up. Vacated houses were not tended to, as their objective was to provide immediate relief and not waste time. The volunteers also included experts in various fields, such as engineers and architects – one of the advantages of the volunteers being AUB-based. These volunteers were given the job of mapping out damaged areas, and what sort of damage had occurred to critical infrastructure. With the help of the experts, they were able to map out what sort of needs were necessary for normal life to resume in the areas. This included fixing damaged piping and water tanks, electrical wiring, and damaged doors.[55]

The coordination of all these efforts was done through the messaging app, *WhatsApp,* where they made a group chat for all the volunteers. To aid the efforts, the once offices of the

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[55] The 961, 14+ Lebanese NGOs Actively Helping Blast-Stricken Beirut, 2020

[56] Safa, Jafari (2020) Beirut Recovery Project kicks off for quick impact and relief.

CCECS, have turned into operation rooms for the Beirut Recovery Project. Here they coordinated the volunteers, who worked on a shift basis, which was conveyed through the *WhatsApp* group chat. In this group chat, the volunteers also provided information about what sort of supplies and equipment is needed in certain areas. The people in the operation rooms used this information to plan and prepare for the next day. [55]

5.4.4 Basecamp Beirut

Basecamp Beirut is an initiative that originally rose during the protests against the government in 2019, but after the explosion in 2020, they evolved into a volunteer group participating in the response.[57] This initiative became a coalition between several volunteer groups like Muwatin Lebnene, Minteshreen, Embrace and Baytna Baytek. Some members define the group as a mix between a political initiative, civic duty, and NGO.[58] Basecamp Beirut provides coordination to the other volunteers and volunteer groups. Their aim is to enable an efficient use of all resources and coordinate the efforts by mapping neighborhoods affected by the blast. In the initial stages of the response, they provided shelter to those who needed it. Later Basecamp moved into a large warehouse where they had different types of resources like engineers, a medical center, and psychological resources to those in need of relief.[59]

Basecamp Beirut also set up a relief hotline for anyone in need of aid. Within the first two hours after they set up the relief hotline, they received over two hundred calls. Responding to the calls for aid, the actors within the basecamp offered food, medicine, and shelter. When the volunteers of Basecamp walked around the streets, they were approached by several people in need of aid, who were instructed to call the hotline. One problem that occurred was that some of the victims of the explosion did not even have enough money to charge their phones.[60] They also conducted damage assessments in over 1,200 houses and performed reparations for victims, which among other things included installing over 600 wooden doors.[61]

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[57] Reuters, 'Doing the government's job': Beirut volunteers steer relief effort, 2020
[58] Forbes, After The Beirut Blast: How This Activist Rallies Citizens To ‘Embrace’ Lebanon, 2020
[59] Arab News, Lebanon’s Basecamp sets the pace for citizens’ initiatives in fragile states, 2020
[60] Asharq Al-Awsat, 'Doing the Government's Job': Beirut Volunteers Steer Relief Effort, 2020
[61] France 24, Streets before suits: US envoy vists Beirut's 'real' rescue hub, 2020

5.4.5 Social Media as a Tool for Mobilization and Coordination

As the response after the explosion in Beirut was in large a community based one, the lack of a coordinating authority creates a confusing and ineffective response. One solution to this problem was the use of social media as a tool for coordination, as well as mobilization.

The use of social media was very visible in the days following the explosion, with one informant noting that "being in Beirut without noticing it was impossible" (Informant 1). Mostly Facebook was used, but also Instagram and other social media applications. This was mostly targeted towards young people, as they are easier to reach on social media.

One problem several volunteers encountered was the overlapping of tasks. In one instance, volunteers provided with sandwiches and water to victims of the explosion, only to realize that others already had done the same. Situations like this was one of the catalysts of several social media sites popping up to coordinate the efforts. As mentioned in 5.4.3, social media played a large role in the coordination of the Beirut Recovery Project. Just by publishing a call for help on social media, over 300 people showed up the next day to provide aid.

5.4.6 Aid Across Communities

In a country divided into 18 different religious sects, the local communities of Beirut even provided aid across communities with historical tension. One example of this is when a group of Palestinian members of NGO Al Jana - a group focused on promoting culture and art in Palestinian and marginalized communities of Beirut – provided aid in Christian communities of Beirut. The group consisted of 45 young Palestinians who daily showed up in historically Christian communities and cleaned glass and debris. They did this, even though some of these Christian neighborhoods were strongholds for anti-Palestinian militia during the Lebanese civil war.[62] One volunteer commented that the people of Lebanon always comes together to help each other in crises, despite where they come from.[63] This example presents the image of a population left to fend for themselves in a country, who's government lacks the ability to provide its people the necessary services.

5.4.7 Summary of Local Community Response

Initially after the explosion many citizens of Beirut mobilized and went out to the streets and cleaned up debris. They showed up with shovels and helped out where they could. A lot of

[62] The New Humanitarian, Local Groups step up to lead Beirut blast response, 2020
[63] International Alert, After Beirut explosion, Lebanese civil society unite across divides, 2020

this response was uncoordinated and more of a reactionary initiative. However, many volunteers joined local groups, initiatives, and NGOs. The Beirut Recovery Project is an example of how some volunteers were mobilized, when staff and member of the American University of Beirut managed to mobilize more than 1,000 volunteers by sending out a call for aid on social media. This initiative was a way to coordinate the volunteers and create a more effective response to the explosion. The Beirut Recovery project is also an example of how social media was used as a tool for mobilization and coordination of response.

What a lot of the findings also show is a lack of a belief in the government being a catalyst for the creation of several local NGOs in Lebanon. Not only did the explosion cause the inception of new NGOs, but many of the already existing NGOs in Lebanon refocused their efforts to the response after the explosion. Some of these NGOs joined forces through initiatives like "Basecamp Beirut". Through the basecamp the local NGOs managed to collect and organize their resources to create a more efficient response and provide several services to the victims of the explosion. There were also several other local NGOs that refocused their efforts to the response the explosion, highlighting the active civil society in Lebanon. Through the findings one can also see examples of how the local NGOs worked together with volunteers with different skills, like how "Shaabemasouleyati" worked together with engineers to conduct damage assessments of buildings.

6. Discussion

The structure of this discussion somewhat follows the three crisis phases presented in 3.2.1, meaning that I will first discuss some of the planning that occurred in the pre-crisis phase, as well as some reflections on the factors that led to the explosion and its consequences. This will be followed by a discussion of the organizing of the response in the acute crisis phase, where I discuss the response of each actor separately. In the last chapter of the discussion, I present some reflections for the post-crisis phase and provide some lessons with the response viewed in hindsight.

6.1 Pre-Crisis Phase Planning

6.1.1 Political System as a Root Cause for Vulnerabilities

The citizens of Lebanon have on several occasions expressed distrust in the government's ability to make any real changes in Lebanon, as well provide its citizens with many of their basic needs. Some even argue that Lebanon's political system is the cause for both the explosion and the need for an active civil society in the country.

The confessional political system in Lebanon was created to give all religious groups in the country a fair representation in Parliament, with each socio-political group, or sect, receiving a proportional number of seats in parliament based on their size. Originally this created a 6:5 size divide between the Christian and Muslim seats in parliament; despite many factors indicating that the numbers were manipulated to give a Christian majority. This perceived unfair distribution of political power was one of the causes of the 15-year Lebanese civil war that started in 1975. As a result, the Ta'if agreement was passed in 1989, dividing the political power between Christians and Muslims equally. Today, most indications point to a diminishing Christian population in the country, with some studies showing that the Christian population representing about 40 percent of the population. Still, the division of power in parliament is divided equally between Christians and Muslims. This dynamic highlights what, by some, is perceived as a corrupt political system, creating divisions in the political sphere that are more interested in working for their own good rather than the good of all.

Long-Lasting Development of Explosion

Using the PAR-model as a tool to analyze what lead to the explosion in Beirut, the political system can be a root cause for vulnerabilities in Lebanon. The storing of a large amount of ammonium nitrate in the port of Beirut had been a cause for concern for a long time, with

customs officials sending letters to judges six times between 2014 and 2017. One could argue that the repeated unheeded warnings were symptomatic of a political system that lacks the ability to get anything done. The situation was worsened by the fact that the ammonium nitrate was stored next to a stash of fireworks, creating a very vulnerable situation. Even the firefighters that showed up during the initial fire that led to the explosion were not notified of the ammonium nitrate. A functioning country with functioning local institutions would have evacuated anyone in close proximity to the fire, probably leading to fewer casualties.

Lebanon has many dynamic factors that increased the vulnerabilities for the explosion and its consequences. For one, the political system has created a society with a lack of local institutions. As noted in 5.4.1, the citizens of Beirut have no belief in the government's ability to do anything in response to extraordinary events like the explosion. This distrust and lack of local institutions have been the catalyst for a highly active civil society, with a high number of local NGOs in Lebanon. Lebanon, like most countries, has control and requirements of all import and storage of chemical substances in its ports. Still, no action was taken to reduce the risk of causing an explosive chemical in a warehouse pose. This points to a lacking set of rules and guidelines, which again is a dynamic factor that leads to increased vulnerabilities in Lebanon.

One could argue that Lebanon's political system and the dynamic factors it created was the catalyst for highly unsafe conditions. The unsafe conditions in this case being the warehouse containing a large amount of ammonium nitrate stored next to a stash of fireworks. It can also be viewed as highly negligible to store such a large amount of highly explosive material that close to a residential area.

As a culmination of all of these socio-economic pressures, a massive and destructive explosion was - in hindsight - an almost expected outcome. As the PAR-model highlights, it is when all of these physical events meet a hazard, disasters can occur. In the case of the Beirut explosion, it was something as small as a fire that triggered the disaster. Fires can differ in size and consequences, but an explosion as large as the one in Beirut is not a natural result of a fire. In Beirut, the culmination of an ineffective political system, leading to a large amount of ammonium nitrate – knowingly - being stored close to residential areas, was the cause of a massive explosion with a large scope of damage. It is worth noting that the assessments of Beirut's confessional political system not a judgment of a confessional system in itself. There are examples of non-functioning political systems with nearly every imaginable structure throughout history.

6.1.2 Emergency Planning in Lebanon

There seems to be a severe lack of emergency planning in Lebanon, something that seems to stem from their political system. The HRC in Lebanon attempted to implement a coordinated disaster response after storms and forest fires during the 2000s but failed due to political instability and The Lebanon War. Another attempt was made in 2009 when the UNDP teamed up with the Lebanese government to set up a unit for improving the national emergency response. Once again, the project mostly failed. This seems to be symptomatic, and something that repeats itself repeatedly - that it is very difficult to achieve any type of reform through Lebanese political channels. A disaster response law drafted in 2012, yet to be passed in government, is emblematic of this paradigm.

As Lindell and Perry (2004) point out – emergency planning consists of three main components: Planning, training, and written plans. Planning is a continuous activity, with constant updating as new factors appear. Lebanon's emergency planning seems to be a periodic and sparse activity. Something they might do more as a reactionary effort after extraordinary events, such as storms and forest fires. It could also be viewed as a political play to placate the angry citizens. There certainly is a lack of training in Lebanon, as any real emergency response plans do not exist. As El Sayed (2013) argues, the lack of a standardized response framework in an incident with several involved agencies and resources creates a confusing and ineffective disaster response in Lebanon. The 2020 explosion in Beirut seems like a good example of this. With no real coordination provided by government agencies, INGOs like the UN and The LRC had to step in to fill the void. The large number of local NGOs also had to create their own coordination mechanisms to organize the volunteers doing relief work.

In the 2009 project to strengthen DRR capacities in Lebanon, there were reports of improvements in disaster preparedness and national emergency response. One example of this was the report from stakeholders recounting an improvement in cooperation between different agencies. However, this is not something that could be seen in the response after the explosion. It seems as if these improvements might have been noticeable in events of a smaller scale, but there is no evidence that the Lebanese government had the capacity to manage an event as large as the Beirut explosion was.

The 2009 project's biggest failure was not being able to establish a national disaster management institution and reforming national disaster management policy. Again, political

deadlock hindered any such reform. It is not necessarily that disaster prevention is lowest on the political agenda in Lebanon, but anecdotal evidence in my findings seems to point to a divided and corrupt political system with divisions that are more worried about retaining political power and money than working together to improve Lebanon. Meaning that even if there is a willingness to improve disaster management capacities in Lebanon, it seems impossible to convert the willingness into real reform.

6.1.3 Lack of DRR Implementation

As mentioned previously and presented in 5.2.1, there have been attempts to strengthening DRR capacities in Lebanon. These attempts have mostly been in conjunction with any attempts to implement some sort of coordinated disaster response framework. The 2009 project that was set up with UNDP showed few promising results, and while there might have been some progress made, the explosion in Beirut and the following response shows that the project did not have many real tangible results. This is not an indictment of the project and its contributors but on the Lebanese government and political system. As Twigg (2015) argues, implementing DRR in the midst of political instability and with lacking infrastructure is difficult. Lebanon seems to serve as a good example of this. It is not only that it is difficult to implement DRR under such conditions, DRR might not even be prioritized. In my research, I have not come over any clear evidence of DRR not being prioritized, but most of my findings seem to indicate a government and divided parliament where each division is more worried about staying in power than actually helping the Lebanese people. This seems to be one of the deepest root causes for vulnerability in Lebanon. Like Twigg (2015) points out, a corrupt political system can cause a snowball effect of vulnerabilities spreading to several parts of society.

What has become apparent through my research and is evident in my findings is a complete lack of risk awareness in Lebanon. Just the mere fact that a large amount of ammonium nitrate could be stored in a warehouse for 6 years without any action being taken to secure it suggest a lacking consideration given to risk management in Lebanon's institutions. The Beirut port is a major hub for transportation in the region, and in line with the DRR framework, a specialized storing facility for different hazardous material would seem to be necessary. The problem with a lacking DRR consideration is highlighted even further when you take into account that a stash of firework was stored next to the ammonium nitrate. This shows major negligence among those responsible for the port.

As noted in 5.2.1, with the failure of establishing a national disaster management institution, no DRR authority is present in Lebanon. It seems as if there were no existing protocols determining what to do with the ammonium nitrate. As mentioned previously, the storing of ammonium nitrate in the port was well known, but nothing was done about it. In such situations it seems that the presence of a strong framework with clear and assigned responsibilities is vital for the necessary actions to be taken. With no clear decision-making authority, decision-making tends to slow down.

6.2 Response to Explosion

6.2.1 Government's Response

What the 2020 Beirut explosion seemed to uncover was the shortcomings of an ineffective and corrupt political system. The same shortcomings of the system that might have led to the explosion were the same ones that led to a government completely devoid of the ability to provide any real disaster response after the explosion. With this in mind, the explosion and its consequences can be viewed as an almost symbolic culmination of years of political corruption and deadlock. In smaller crises, the government has been able to rely on the Lebanese Army as their only mechanism for crisis response, but in a disaster like the explosion was, this is not enough.

Throughout my research of the response after the explosion, there was one clear thread – an absence of governmental agencies. There was a large presence of both INGOs, NGOs and citizens volunteering, but very few governmental agencies. This was met with frustration, but not surprise from the citizens. A government that does not help seems to be the norm in Lebanon. Immediately after the explosion, thousands of citizens flocked to the streets with shovels to help out. My research has given me the impression of this being an almost instinctual action - as if it was expected that the government would do nothing.

As mentioned in 5.2.1, Lebanon does not have any clear standardized response to emergencies, with a disaster response law drafted in 2012 not yet approved in parliament. This has clearly shown a reliance on the Lebanese Army, with the Army virtually being the only instrument for disaster response after the explosion.

6.2.2 Lack of Disaster Preparedness

The Beirut explosion and its consequences have highlighted the lack of disaster preparedness in Lebanon. As elaborated on in 3.4.2, Kent (1994) proposes a 9-step framework for disaster

preparedness. The Beirut explosion of 2020 has highlighted weaknesses in all of these 9 steps. First of all, the storing of ammonium nitrate in the Beirut port seems to point towards a lack of vulnerability assessments. Further, the fact that there is no specialized facility for storing of vulnerable chemicals strengthens this point. The planning part of the disaster preparedness has already been mentioned in the previous chapter, but in short, planning has been a sporadic and ineffective activity in Lebanon.

Lebanon's institutional framework for disaster preparedness seems to be severely lacking. The only governmental agency providing any tangible response after the explosion was the Lebanese Army, who seems to have a monopoly on any real disaster response in Lebanon. Kent (1994) argues for establishing coordination and cooperation between already established organizations within the disaster preparedness framework. Firstly, apart from the firefighters responding to the initial fire that led to the explosion, there were no other governmental organizations responding to the disaster. It is obviously worth noting that my research cannot comprehend the full scope and every detail of the response, but my findings suggest that the Lebanese Army was the primary and only governmental agency responding to the explosion. This seems to be an important aspect of Lebanon's weak capacity for disaster preparedness. Establishing cooperation between already established organizations is difficult when these organizations do not even exist. The establishing of a national disaster management institution could have provided some ability to strengthen this part of Lebanon's disaster preparedness. However, even if such an institution were established, it would not be unreasonable to assume that this institution would struggle to cause much change within Lebanon's political framework.

In terms of Lebanon's resource base, the explosion affected a large quantity of medicines and vaccines that were stored in warehouses that were damaged by the explosion. This shows some effort given to strengthen Lebanon's resource base. However, the fact that the warehouses these medical supplies were stored in were damaged by the explosion again shows weaknesses in Lebanon's institutional framework for disaster preparedness. This led to UNICEF retrieving and relocating more than 1,7 million vaccines (UNICEF 4, 2020). Furthermore, a large quantity of a volatile chemicals like ammonium nitrate should not be stored in proximity to stocks of medical supplies, nonetheless close to residential areas. This can be as a result of lacking cooperation and communication between institutions.

In my research, I did not find any clear information elaborating on Lebanon's warning systems in disasters. However, when the initial fire that led to the explosion broke out. There

were no efforts made to warn the citizens living in close proximity to the Beirut port. This is not a clear indictment on Lebanon's warning systems, as this is could be due to no one with authority to set in action such warnings having the knowledge of that the fire could cause such an explosion.

As mentioned previously, the primary response mechanism in a disaster is the Lebanese Army. This will be discussed more in the next paragraph. Other than the LCD conducting search and rescue operations, the large role of NGOs, international organizations, and volunteers in the response after the explosions seem to indicate a country where non-governmental actors have to fill the void in its disaster preparedness. Outside of the Lebanese army, which seems to operate independently from the Lebanese government, there seems to be a severe lack of response mechanisms, public education and training, and disaster preparedness rehearsals. This is mostly performed by the NGOs and international organizations that have their own functioning response mechanisms and drills associated with them. A lack of response mechanisms in Lebanon can be highlighted by the reactions of the citizens in Beirut, as they seem to have an innate reaction to immediately respond to disasters by taking part in the disaster response. Thousands of citizens flocking in the streets with shovels to clean up debris presents an image of a country with zero tangible response mechanisms in disasters.

6.2.3 The Lebanese Army as a Response Mechanism

In my findings, I have presented a government with no standardized emergency response. This responsibility seems to have been given to the Lebanese Army. Whether or not this is by design, or a natural evolution in a country with no standardized emergency response is unclear in my research. Nevertheless, the Lebanese Army does provide some sort of coordinated disaster response in Lebanon.

The Lebanese Army has their own military command structure, which does seem to provide some sort of coordinated disaster response structure. After the explosion, the Army set up a command structure for the disaster response to oversee all sectors of the disaster response. This structure was set up to oversee all response activities, which included logistics, finance, administration among other things. Meaning that the disaster response structure was a centralized one, with everything going through the top of the hierarchy. This structure was, as mentioned in 5.2.3, challenged by international donations bypassing this structure and being delivered directly to different agencies. In my research, I was unable to locate any sources

expanding on this, but it is possible that this in line with international financial donors' unwillingness to trust official Lebanese authorities.

This does provide Lebanon with some sort of response mechanism in disasters, but as mentioned in 5.2.2, it does not create a framework for an effective response to larger incidents (El Sayed, 2013). As Lindell and Perry (2004) argue, emergency plans encompass a large number of organizations, elected officials, and citizens. Additionally, in line with DRR, risk reduction should be integrated in all levels of society (Twigg, 2011). With the Lebanese Army acting as Lebanon's main disaster response mechanism, it makes the country vulnerable to larger emergencies and disasters. This was highlighted by the explosion. Without a standardized emergency response that includes all levels of society, the implications of a disaster like the explosion will be larger. A well-functioning and effective response requires cooperation between several agencies and sectors and needs well-defined roles for all participating actors. This can also be related to root causes and dynamic pressures, where Lebanon's political system has led to several dynamic pressures that were highlighted by the response after the explosion. With the lack of training and local institutions, the response is characterized by a large number of non-governmental organizations and volunteers working independently of any governmental organizations. The Lebanese Army did cooperate somewhat with the LRC, especially in the initial stages of the response. In the first stages of the response, the Army cooperated with the LRC to conduct search and rescue work, as well as identifying victims. However, there seems to be a lack of cooperation between the Lebanese Army, international organizations and local NGOs.

If one accepts the fact that the Lebanese government repeatedly has failed to implement any coordinated and standardized emergency response, and further that this role is left to the army, NGOs, and international organizations, this needs to be a coordinated effort. However, this seems to be a challenging task. For one, to act as a part of the disaster response in Lebanon is not the job of international organizations. Secondly, the Lebanese Army is a part of a political system that is a subject of distrust among the international community. As mentioned in 5.2.4, international financial aid has on more than one occasion been misused by the Lebanese government[27], and consequently, financial aid has later been delivered directly to the people of Lebanon. This dynamic does not create good conditions for future cooperation between international organizations, NGOs, and the Lebanese Army.

6.2.4 International Organization's Response

The response after the explosion was in large part conducted by large international organizations, acting somewhat as a substitute for a governmental response. As presented in my findings, the INGOs seem to be the largest actor in the response after the explosion. The largest contributors in the response after the explosion, based on my findings, seem to be the LRC and the UN and its subagencies.

Organization of Response

As mentioned, two of the largest contributors in the response and relief work after the explosion were the UN and the LRC. The work seemed to follow the steps of the HPC. Initially, the LRC teamed up with The Syndicate of Engineers to conduct assessments in the areas affected by the blast. As the LRC already is stationed in Lebanon, they were the first organization that arrived in the blast area. Once the UN and its subagencies arrived, the LRC worked together with UN agencies to conduct a multi-sectoral needs assessment, which seems to be led by the LRC. One could argue that the reason for the LRC taking the lead here is their strong presence in Lebanon, which probably gives them more relevant knowledge about Beirut, thus making them better equipped for leading such an assessment.

This multi-sectoral needs assessment led to a multi-sectoral response, with different agencies taking different responsibilities. The UN, with its different subagencies, took on different roles in this response. As these subagencies have different agendas and goals, these seem to have created the framework for a defined division of labor. For instance, UNICEF, whose main goal is to provide aid to children, focused on children and families in the response. One of the ways UNICEF did this, was to retrieve medicines and vaccines stored in warehouses damaged by the blast. UNHCR, whose goal is to protect the rights and lives of refugees, focused on refugees affected by the blast. As a part of this work, UNHCR created a targeted system to monitor the status of said affected refugees. This included making 10,916 phone calls. These factors all seem to be in line with the strategic response planning of HPC. Strategic response planning in necessary when there is more than one agency involved in the response. The multi-sectoral response can be viewed as a product of a strategic response plan, with well-defined roles and tasks between the different agencies.

The HPC also gives an indication of being a constantly updated program. As Lindell and Perry (2004) argue, planning is a continuous process, whereas a written plan should be viewed as somewhat of a snapshot of the planning process of a certain time. The HPC and the

international organizations' response to the Beirut explosion can serve a very good example of this principle. With the HPC being a circular process, it gives an indication of being a continuous planning process, with learning from past events being emphasized as a catalyst for improving future plans. In this sense, a written plan for the Beirut explosion can be viewed as a snapshot of the planning process for a certain event in a certain location. This is where the HPC and international organizations' work might differ from a country's emergency planning. When a country plans for emergencies, they work within a set framework of institutions, actors, culture, and other socioeconomic factors. International aid organizations utilizing HPC, are normally operating under foreign and unfamiliar conditions. This means that whatever written plans are formulated in the HPC process needs to be tailored for any specific situation they are to be used in. Such a dynamic creates an interesting paradigm in the difference between the emergency planning process for international aid organizations and countries.

Decentralized Pull System

The international organizations' response to the explosion, and the HPC in general, seem to follow a decentralized pull system. As Engen et al. (2016) point out, the argument for a decentralized approach is that a crisis is a dynamic event with time pressure and uncertainty. The Beirut explosion was a dynamic crisis, with critical damage to infrastructure and properties, ultimately affecting a large number of civilians. Under such conditions, information is essential.

As per the steps of the HPC, the first step is conducting a needs assessment. After the explosion, the international organizations conducted a multi-sectoral needs assessment. This needs assessment served as the basis for The Lebanon Flash Appeal. The financial goal of flash appeal was to receive 196,6 million US Dollars, which was supposed to respond to the most urgent humanitarian needs - expanding across six sectors: food security, health, shelter, protection, water, and education.[33] This is in accordance with HPC's third step – resource mobilization. This is an indication of a decentralized pull system, meaning that the resources are being "pulled" from higher levels down to crisis management on lower levels. There is, however, a distinction to be made between international organizations like the UN, and crisis management within a state and its own disaster preparedness. In a crisis, resources are being "pulled" from national level to the lower regional and local levels. In a disaster, like the Beirut explosion was, there is a need for mobilization from the international level. In these

situations, the resources are being pulled from the international community, via financial aid and supply of other resources.

6.2.5 Local Communities' Response

As highlighted in much of my findings, there seems to be a clear distrust towards the government among the citizens of Beirut. The lack of a response to the explosion from the government, as well as their limited contributions in the relief work shows that this view is not unfounded. There was a large number of INGOs and international organizations doing the response, but there was also a huge mobilizing of volunteers and local NGOs in Beirut. As mentioned in 5.4, the mobilization of citizens seems to have been an almost instinctual reaction. The rest of the response section in the discussion, will be dedicated to the local communities' response.

6.2.6 Community Based Disaster Preparedness in Lebanon

As Allen (2006) points out, in recent years there has been placed a larger emphasis on community-based approaches to preparedness. However, as she also points out, CBDP should only be viewed as a part of a state's approach to disaster preparedness, not the main actor of it. In Lebanon, a CBDP does not seem to be a formalized and governmental encouraged approach to disaster preparedness, but a necessity. This means that the CBDP in Lebanon is not necessarily a planned part of the disaster preparedness, but something that has evolved organically. In Lebanon it seems as if the community – civil society and volunteers - has to do everything the Lebanese Army does not do. The root causes for this seem to be structural and ideological, meaning political factors and limited resources. As Twigg (2015) points out, these root causes can cause a snowball effect, and lead to vulnerabilities in other parts of society. One could argue that this the case in Lebanon, and the reason for their highly active civil society.

The response after the explosion highlighted this large presence of CBDP in Lebanon. According to Allen (2006), communities that are vulnerable to a certain type of event, most likely will increase their ability to deal with the said event over time. However, an unforeseen and rare event will limit the communities' ability to manage the event. The hope in such situations is that the experiences of the local communities will have instilled some skills and procedures to manage unforeseen events as well. With such a large mobilization of local NGOs and volunteers, the lack of a standardized disaster preparedness framework in the country seems to have strengthened the CBDP in the country. Lebanon's large civil society

presents a basis for a strong community based response in disasters, with the NGOs structures facilitating a more effective response. Even if these existing NGOs are not geared towards disaster response activities, their existing organizational structure and ability to mobilize volunteers creates a framework for organizing disaster response efforts. Furthermore, the NGOs can cooperate to create an even larger coordinated response, while also ensuring that response efforts of the different NGOs do not overlap. An example of this Basecamp Beirut, where several NGOs and local groups joined forces to – in practice - create their own crisis management structure.

The response also included a large mobilization of volunteers outside of the NGOs, which initially began with citizens of Beirut gathering in the streets with shovels to remove debris. This early response was uncoordinated and improvised, which is natural in the early stages after an explosion. However, it seems as if the volunteers that were not a part of NGOs and other groups, also created some sort of structures to coordinate the response after this initial response. An example of this is the Nation Station, where the citizens in the neighborhood of Geitawi were able to refunction a destroyed gas station as a hub for coordinating response efforts. Such initiative points towards a country whose local community has over the years built up a strong sense of CBDP as a response to the government and states lacking ability to respond to a crisis. These ad-hoc structures and initiatives will be discussed further in the next chapter.

6.2.7 Ad-Hoc Structures

Due to Lebanon's lacking disaster response mechanisms, the local NGOs and groups became a large part of the response after the explosion. This created a chaotic response with a large number of different groups and organizations. To combat this, some initiatives and ad-hoc response structures were formed.

Basecamp Beirut

One such initiative was Basecamp Beirut. Basecamp Beirut is a coalition between several volunteer groups like Muwatin Lebnene, Minteshreen, Embrace, and Baytna Baytek.[57] By creating a coalition of several groups, they were able to mobilize resources and create a more effective coordinated response. Basecamp Beirut moved into a large warehouse that would serve as their base. From here they created somewhat of a hierarchical structure for crisis management. In this structure, the warehouse would serve as the strategic and operational level of the crisis management. From here they provided medical and psychological aid for

those in need, as well as engineers that would assist in needs assessments and repairs. They also set up a relief hotline, which would serve as a tool to create a more coordinated and targeted response. These factors made them able to coordinate the tactical level, consisting of volunteers, who performed reparations on properties among other things.

Beirut Recovery Project

Another example of ad-hoc structure forming as a response to the explosion is the Beirut Recovery Project. This initiative was formed by AUB's CCECS, who put out a call for volunteers on social media the night after the explosion. The call of volunteers resulted in over 1,000 people registering to participate in their response efforts – a number that mostly consisted of staff and students at AUB. To coordinate the efforts, the offices of CCECS were turned into operational rooms. These rooms would serve as the base for their strategic level. The operational level of their structure also operated from these rooms, but with some coordination also happening outside these rooms. To coordinate the tactical levels of their structure, the group created a *WhatsApp* group chat. From here they divided the volunteers into groups of seven, with one coordinator in each group – acting as somewhat of the strategic level. The group chat was also utilized for the actors on the tactical level to convey what resources were needed. This indicates a decentralized pull system within the initiative, with the tactical level "pulling" resources from the higher levels of the structure. It is worth noting that this an evaluation of the group's own structure, not an evaluation of the group's function within a larger societal structure. Within the whole response after the explosion, with the state Lebanon as the larger structure of the response, Beirut Recovery Project is an example of the state having an informal decentralized structure in the response - again, as a result of the absence of a standardized disaster preparedness framework in Lebanon.

Other Examples

There were several other examples of ad-hoc structures set up to coordinate the volunteer efforts in the response. One example is Nation Station, where a destroyed gas station in the neighborhood of Geitawi was converted into a disaster relief center. As a hub for nearby citizens to help out with the response, the gas station was used to set up shift plans and organize the volunteers. From this hub, they provided hot meals, distributed clothes, and performed reparations. As Allen (2006) points out, unforeseen and rare events will limit the communities' ability to manage a disaster, but experiences and training will instill some procedures and skills that will increase their ability to manage any type of disaster. With

Lebanon being a country that, among other things, endured a 15-year long civil war and a government not being able to provide a real response in crises, initiatives such as Nation Station paints a picture of a community with an innate sense of CBDP. Utilizing a destroyed gas station to function as a hub for crisis management shows how a community can create some sort of order in the chaos of the response in an acute-crisis phase.

Another structure that was formed after the explosion was Helping Hub, which was created by members of a group called "Bahá'í", This initiative eventually grew to more than 80 members. To coordinate the efforts the group had morning meetings dividing work, followed by evening meetings to report what was done, what needed to be done, and what resources were needed. This evening meeting provided the plans for the next day's morning meeting. Even though this group of around 80 volunteers was not the largest contributor in the response, the group shows the advantage of having a large number of NGOs in Lebanon. With Lebanon having an active civil society that often has to fill the gap of the government's shortcomings, there are already some structures present to create a more coordinated volunteer response in events like the Beirut explosion. Even if the NGOs are not geared towards disaster response and their structures have to be changed, there is at least some sort of hierarchical structure and a basis of volunteers ready to participate. Helping Hub is an example of this, where a group that engages in community-building efforts, used their existing knowledge and resources in the relief and response work.

These are some of the many ad-hoc structures that were formed in response to the explosion. All of them represent the communities' and local NGOs efforts to form some sort of crisis management and coordinate the response. As Allen (2006) points out, experience and training can instill some procedures and skills that will increase communities' ability to manage any type of disaster. These initiatives that were formed after the explosion further seem to be an indication of this being the case in Lebanon, which would point to a strong presence of CBDP in the country. A highly active civil society in the country strengthens this point. With Lebanon's eventful history, it seems as if the citizens are aware of being in a pre-crisis phase, with a new crisis possibly being triggered at any point. This being the case, the examples presented in this chapter points to citizens being prepared to act in response to any crisis. With initiatives like Nation Station, they show a strong ability to set up structures for crisis management and coordination.

6.3 Lessons

6.3.1 Issues Regarding Lack of Formalized CBDP

One of the largest issues regarding CBDP being such a large part of Lebanon's disaster preparedness is the informal nature of the structure. Without CBDP being a formal part of a structured disaster preparedness framework, a need for improvisation and the creation of ad-hoc structures arises. As within Randolph Kent's (1994) framework for disaster preparedness, a part of the planning process is to create agreements and ongoing cooperation between agencies. Lebanon's local NGOs and relief groups are not constructed to take a large role in disaster response, which created a need for them to refocus their efforts and cooperate with each other. The problem here is that the coalitions of NGOs and initiatives that responded to the explosion arouse after the explosion and were not a part of some formalized disaster preparedness framework. This can create a slow and ineffective response, exemplifying one of the issues with Lebanon's lacking disaster preparedness and over-relying on their civil society.

The ad-hoc nature of the response mechanisms after the explosion shows how many of the steps in Kent's (1994) framework for disaster response had to be performed after the disaster already had occurred. For instance, the institutional framework and a lot of the resource base had to be organized in the acute crisis phase. As discussed in the previous paragraph, the coordination between different NGOs and groups had to be created after the explosion, which shows how CBDP is not a formalized part of any national disaster preparedness. In terms of the resource base, emergency shelters, in large part, had to be constructed during the response, and groups like FoodBlessed mentioned in 5.4.2 had to fill in the gap of Lebanon's lacking food resources earmarked for emergencies.

According to Allen (2006), some countries wanting to cut back on expenses might increase CBDP's role by passing on some disaster management responsibilities to civil society. For this to provide somewhat of a functioning disaster response, these roles and responsibilities should be formalized and coordinated. As Lindell and Perry (2004) argue, good emergency planning should be a dynamic process where one examines and identifies all hazards and identifies which human and material resources are available to deal with said hazards. If CBDP is a part of a countries' disaster preparedness, then the resources of the civil society should be properly evaluated and used to deal with the hazards they have the capacity to deal

with. This could either be to fill the gap where the disaster preparedness is lacking resources or fill the gap where a government might cut expenses.

Another issue related to CBDP being such a large part of Lebanon's disaster preparedness is the scattering of resources and response mechanisms. This can create ineffective and uncoordinated crisis management. As Engen et al. (2016) point out, crisis management consists of three levels: Strategic, operational, and tactical. With a disaster response consisting of several different local NGOs, international organizations, and other agencies, coordination and cooperation become a challenge.

Decentralization of Crisis Management

With the large emphasis being placed on CBDP in Lebanon, this creates a – except for the Lebanese Army as a response mechanism – mostly informal decentralized crisis management. The response after the explosion highlighted this paradigm very clearly. As Engen et al. (2006) point out, a decentralized approach to crisis management can be an appropriate approach as it gives more authority to those who are closest to the crisis; hence, those who are more well informed of the needs in the crisis.

In the case of the Beirut explosion, however, the decentralization of authority in the crisis management is not by design. The complete lack of any disaster preparedness framework in Lebanon means that the crisis management is mostly happening on the lower levels. There is, as mentioned in a distinction to be made between the larger INGOs and international aid organizations who, as mentioned in 6.2, have their own organizational structures compared to the local groups and NGOs. In the case of the local communities' response to the explosion, the crisis management has a completely informal decentralized structure. As t'Hart et al (1993) point out, informal decentralization normally happens when the actors on the lower levels are under time pressure, or when the actors on the higher levels are overloaded. The situation in Beirut after the explosion presents a third reason for informal decentralization – an absence of a higher level. Meaning that there is not even a higher level of crisis management present. This is, again, all due to the lack of a disaster preparedness framework. It is worth noting that the local NGOs and groups that were a part of the response did create their own organizational structures, but this is all happening locally - there was no connection and coordination between the local and national resources in Beirut.

6.3.2 Community-based DRR

In 5.2.1 I outlined a project in Lebanon with a goal of strengthening DRR capacities in Lebanon. Phase 1 of this project included raising public awareness of DRR. Whether or not the public in Lebanon is aware of DRR as a framework is unknown – at least based on my finding. However, one could argue that public awareness of DRR as a framework is irrelevant. This is because the essence of DRR seems to be strong within the local communities of Lebanon, something that is apparent by the presence of a strong civil society in the country. As Gaillard et al. (2017) argue, the main argument for a community based DRR approach is that communities themselves know their own situation best. One could argue that the explosion in Beirut exemplified this statement very well. The explosion and its consequences also echoed Twigg's (2015) statement about implementing DRR in communities as a valuable approach when there is distrust between the citizens and state. The main argument here is that the communities can increase their resilience without the help of the state. Whether or not attempts of implementation of DRR in local communities have been successful in Lebanon, the distrust the citizens have towards the government seems to have implemented an innate sense of DRR in them. With the citizens and local communities having a view of the government as one that will not help them when they need help, it is reasonable to imagine that they will have developed a culture with a set of norms and preparedness that communities in more stable countries might not have. The instant reaction of the communities after the explosion gives a strong indication of this.

As Twigg (2015) points out, in areas where there is tension between groups, DRR can help relieve tension between groups by creating a neutral common ground where the groups might work together. There are indications of this being the case in Beirut. My findings do not show any DRR-activities among the citizens before the explosion, but the local communities' actions after the explosion paint a picture of a diverse community prepared to work together when it is needed. As I have elaborated on several times in this thesis, Lebanon is a multicultural country with several different religious groups – something their sectarian political system paints a good picture of. In Beirut, the situation is the same. In 5.4.6, I presented some findings of the explosion leading to aid across communities. In one instance a group of Palestinian members of the NGO Al Jana, provided aid in Christian communities of Beirut. What makes this noteworthy is the historical tension between these neighborhoods. This shows how working together towards a common goal - with a neutral common ground - might relieve tensions between groups. This might not be an example of DRR activities in

themselves have had this effect in Beirut, nevertheless, it serves as a good example of how creating a neutral common ground might help relieve tension between groups.

Community Resilience

As Patel et al. (2017) elaborate on, community resilience is somewhat of an ambiguous concept, with several differing views. However, the overarching theme of most definitions of the concept seems to be that community resilience is a community's ability to withstand the effects of a hazard. One could argue that the resilience of the communities in Beirut is strong but severely weakened by Lebanon's overall lacking capacity for disaster preparedness.

The fact that thousands of citizens gathered in the streets after the explosion can indicate a strong community resilience in Lebanon. To withstand the effects of the Beirut explosion seems to be a nearly impossible feat to accomplish, but one cannot use the consequences of the explosion to pass judgments on the community resilience in the country. Such a large mobilization of citizens showing up on the streets of Beirut to clean debris after the explosion seems to indicate a collection of communities with the ability to withstand the effects of several hazards and return to normalcy. This is in line with one of the views on community resilience that Patel et al. 2017 present, where communities are able to adapt to unique events and still being able to function. One of the reasons for a strong community resilience in Lebanon is the fact that the country has quite an unpredictable and eventful history, with the Lebanese civil war being one example.

6.3.4 Do No Harm

In accordance with the HPC, the fourth step is implementation and monitoring. One part of this step is to evaluate the response of the affected populations and consider the diversity of the said population.[39] As I elaborated on in 5.3.3, not all citizens of Beirut were happy with the work of the INGOs. Such consequences would not be in line with the concept of "do no harm", which is a principle NGOs are supposed to act by (Anderson, 1999). The response after the Beirut explosion highlights the need for any actor providing aid in a foreign country to try to understand the different dynamics of that country. A complicated country like Lebanon presents a challenging dynamic for any outsider to comprehend. The problem with "new and old rent" in Beirut is an example of how any foreign organization providing aid in Lebanon has many factors to take into account when responding to a disaster. Additionally, before the explosion, there was already people in Lebanon in need of aid but given that they did not live within the area affected by the explosion, they were not able to receive any aid.

This presents a complicated paradigm for international aid workers. It shows that organizations sometimes can have a tendency to be too pragmatic in their response, by creating a plan with a set list of activities and work they are supposed to do when providing aid. At the same time, these plans are essential to coordinate the efforts. With this I mind, it is hard to find a clear solution to this problem. However, one of the key elements of the HPC is to is to evaluate the response of the affected populations and consider the diversity of the said population. This shows a clear willingness and goal within the international aid community to attempt to be wary of these dynamic complicating factors. The key takeaway here is perhaps that the international organizations are doing their best to help as best they can, and that there is always going to be criticism. From this, the organizations should assess whatever criticism they receive and try to keep them in mind when conducting future aid work.

6.3.5 Long-Shadow Crisis

In the crisis field, one talks about a crisis consisting of three phases – pre-crisis, acute crisis, post-crisis. But as Engen et al. (2016) point out, viewing these phases as a linear process might be an oversimplified view of crises. Therefore, viewing it as a circular process might be a more accurate description of a crisis. The Beirut explosion was a sudden and surprising explosion, with a sudden onset of the acute crisis phase. However, as Turner (1978) argues, the pre-crisis phase can be viewed as an incubation period. In the incubation period, a long period of latent errors and increasing risk can culminate in a crisis. This can be applied to the Beirut explosion. A long period of institutional failures and latent errors within Lebanon’s bureaucratic processes led to the storing of a large quantity of ammonium nitrate being stored for six years in facilities not suitable for storing volatile chemicals.

In 3.2.2 I briefly categorized the Beirut explosion as a long-shadow crisis, but some could argue that it was a slow-burning crisis – precisely because of the incubation period of institutional failures and latent errors within Lebanon’s bureaucratic processes being at fault for the explosion. However, categorizing it as a long-shadow crisis is more fitting, as the explosion and its consequences are more in line with the description of a long-shadow crisis. A slow-burning crisis seems to be a result of the culmination of more tangible factors – such as pollution. The crisis is not necessarily a latent condition, waiting for the right event to trigger the crisis. In a slow-burning crisis, the acute crisis phase fades in and fades out, which is not the case in the Beirut explosion. The factors that led to the explosion might have been present for a long time, but the explosion and acute crisis phase had a rapid onset. What makes the explosion a long-shadow crisis, is that the explosion both uncovered major

weaknesses in Lebanon’s disaster preparedness, as well as creating political instability after the citizens’ unfavorable views of the government worsening as a result of the explosion. This eventually led to the government stepping down.

One of the biggest questions with this crisis is if the post-crisis phase can be used for real learning and recovery. As mentioned in the last paragraph, the explosion uncovered major weaknesses in Lebanon’s disaster preparedness. In most cases of crises, the learning part of the post-crisis phase can be used to evaluate certain structures and response mechanisms, but in the case of the Beirut explosion, the real lesson is that there is a large need for a real standardized and coordinated disaster response framework. Without it, Lebanon will always be vulnerable to large crises and disasters.

6.3.6 Failed Political System

If there is a main takeaway from the Beirut explosion, it is the need for a standardized and coordinated disaster preparedness in Lebanon. Essentially, there is a need for reform within both the Lebanese political system and their disaster preparedness. One could even have a real discussion about whether or not disaster preparedness even exists in Lebanon. Some hope that the explosion could be somewhat of a “new beginning” in Lebanon; that the explosion was a symbolic culmination of several years of political corruption and this could be some sort of turning point. However, the current political system and landscape are a cause for skepticism.

The failures of the 2009 UNDP program for strengthening DRR capacities in Lebanon are a good example of why the disaster management capacities in Lebanon are not strong enough. Such a program could be a good catalyst for improving disaster management capacities, but under the current political regime, getting anything of real consequence passed in parliament seems impossible. The program seems to have improved DRR capacities somewhat within the established institutions of Lebanon, but it failed in its overarching goal - “mainstreaming disaster preparedness and management in national development framework strategies in Lebanon” (UNDP, 2015, p. 3). For this to happen it seems as if a major reform within Lebanon’s political structure and landscape is needed, and the hope is that the Beirut explosion can be a catalyst for real change.

7. Conclusions

What Did the Government do in Response to the Explosion?

The government's response to the explosion highlighted the need for a standardized disaster preparedness framework. In terms of the Lebanese state's response mechanisms in emergencies, the Lebanese Army has been their main mechanism for response. This was certainly the case after the explosion. However, as the response proved, this does not present a functioning framework for disaster response in disasters like the Beirut explosion. Such events require a large mobilizing of resources and actors – both nationally and internationally.

The consequence of the government's lack of involvement in the disaster response is an informal decentralization of the response. With a response consisting of a large number of different actors from different levels, this creates an uncoordinated and inefficient response. This lack of involvement by the government was no surprise to the citizens of Beirut, who viewed the explosion as a culmination of years of political corruption. There had been attempts of strengthening disaster risk management capacities in Lebanon previously, but these mostly failed due to political deadlock. These failures and the consequences of the 2020 explosion emphasize the need for reform in Lebanon – both in terms of disaster planning as well as their political system as a whole.

What Did the International Organizations do in Response to the Explosion?

The response after the explosion was categorized by a large presence of international organizations, with the UN and LRC being the two largest contributors. For this reason, I focused on the two in this thesis. The response of these organizations seems to have followed the framework of the HPC, with the initial response being a multi-sectoral needs assessment that spanned across six sectors: Food security, health, shelter, protection, water, and education. The response of the international organizations seems to have had a decentralized pull approach, with the initial multi-sectoral needs assessment leading to a flash appeal - mobilizing monetary funds and other resources.

This needs assessment created the framework and plans for the response. In this multi-sectoral response, the international organizations divided the work between them. This coordination of work seems to have been somewhat based on the different groups' expertise and main visions – particularly in terms of UN's subagencies. For instance, UNICEF focused its efforts on children and families affected by the explosion, UNHCR had a primary focus on affected

refugees, and OCHA took on more operational and coordinating roles. Beyond this, they also took on other duties in the response and provided aid where they could.

The LRC seemed to take on a bigger role in the multi-sectoral response, being categorized as the leaders of the multi-sectoral needs assessment. This is possible due to the LRC being based in Lebanon and having a more comprehensive knowledge of Beirut and its dynamic factors. Throughout the multi-sectoral response, the LRC worked across several sectors of the response. This included working with the WASH sector, mobilizing ambulances and medical teams, and working with the Shelter Partners throughout the response.

What the large presence of international organizations seems to have emphasized is the lack of state agencies being present in the response after the explosion, with these organizations seemingly taking organizational and coordinating lead in the response. In this sense, the HPC and their own disaster preparedness frameworks somewhat filled in the gap a missing disaster preparedness framework in Lebanon creates. This might not create the most efficient and functioning disaster response, as the international organizations have to implement their own frameworks into a foreign country with its own sets of cultural and socioeconomic dynamic factors. The large presence of the LRC in Lebanon might help mitigate the issues this can cause, which is probably the reason for them taking the lead in the multi-sectoral response.

What Did the Local Communities do in Response to the Explosion?

The Beirut explosion led to a large mobilization of volunteers and local NGOs, symbolically portrayed by the description of thousands of citizens gathering in the streets to clean up debris after the explosion. This act was described as instinctual by some citizens, proclaiming that the citizens of Lebanon have to fill the gap in a country where the government is not able to help out its citizens.

The initial response of the local communities was chaotic and uncoordinated, but they eventually created some mechanisms to coordinate the efforts. For one, Lebanon has a highly active civil society, with a large presence of NGOs. While these NGOs might not have disaster response as their main function, their already existing organizational structure and basis of volunteers create the possibility of refocusing their efforts towards disaster response in a more efficient way. Additionally, the volunteers and local NGOs created many initiatives and ad-hoc structures to coordinate the response efforts. Some of these initiatives were a result of citizens coming together to help out in the response, as with the Beirut Recovery Project. Other were local NGOs coming together to create a more organizational structure to

gather resources, as well as creating a more coordinated response. Basecamp Beirut is an example of this.

The civil society's large presence in Lebanon and the large mobilization of volunteers after the explosion seem to point towards a strong CBDP in Lebanon. With many already existing NGOs and local communities being able to create initiatives to help out with the response, the communities of Lebanon seem to have some procedures and skills instilled from previous experience, leading to a more efficient CBDP. However, CBDP in Lebanon is not formalized and a part of the countries disaster preparedness framework. This creates a chaotic and unorganized disaster response, with no clear roles being defined beforehand. For CBDP to be a major part of Lebanon's disaster preparedness, there needs to be major reform in the country's disaster management capacities. From this, the state can present some clear and defined roles for the civic society.

How was the Response After the 2020 Beirut Explosion Organized?

The response after the 2020 Beirut explosion was categorized by several different actors, a large presence of civil society, and little involvement by state agencies and organizations. Lebanon does not have a standardized disaster preparedness framework, which led to a largely informal decentralization of the response. This meant that the different actors participating in the response mostly had their own autonomy in the organizing of their own response efforts. The only real contributor the Lebanese government had in the response was the Lebanese Army, who has its own hierarchical centralized command structure. This structure can create somewhat of a structured response in smaller emergencies, but in a disaster like the 2020 Beirut explosion, this structure does not create a functioning disaster response. The international organizations participating in the response conducted a multi-sectoral response, consisting of several organizations, but with the UN and LRC being the largest contributors. This response seems to have followed the framework of the HPC. The response spanned across six sectors, and the organizations divided the work in between each other. The local communities' response was categorized by a large mobilization of volunteers and local NGOs. Many of the NGOs refocused their efforts towards the response after the explosion, with their existing organizational structures creating a framework for a more coordinated response. The response of the local communities was also categorized by the inception of many new ad-hoc structures and initiatives creating somewhat of a crisis management structure to coordinate and organize the volunteer efforts.

The key takeaway from the response after the explosion is the need for a standardized disaster preparedness framework in Lebanon. The informal decentralization of the response that is a result of a lacking disaster preparedness, creates an uncoordinated and ineffective response. A CBDP as a substitute for a real disaster preparedness can create an effective response to smaller and local events, but disasters require plans, clear roles, and already established and formalized cooperation between actors participating in the response. This informal CBDP is a result of an ineffective government, political deadlock, and resilient local communities with distrust towards their government. For Lebanon to be able to mitigate and manage future disasters and crises, there is a need for major reform within the countries institutional and political structures. Without this happening, it is hard to imagine the country being able to strengthen its disaster management capacities.

7.1 Further Research

The topic of this thesis is the organizing of the response after the 2020 Beirut explosion. One obvious topic for further research would be to locate disasters in other countries with a lacking disaster response framework. This could check for the transferability of this thesis, and whether or not the conclusions derived from this thesis could be applicable to similar situations. Similarly, by locating similar cases in other countries, it would be interesting to explore if disasters can be a catalyst for improving disaster management capacities in countries with similar capacities as Lebanon. If this is the case, the Beirut explosion could be a catalyst for change in the country. With the response after the Beirut explosion being as large and complicated as it was, I had to limit the scope of the study – particularly by limiting the number of international organizations mentioned in the thesis. This meant that I could only gather a generalized description of how they organized their response. A more comprehensive study on the organizing of these actors' response could make for interesting research.

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Appendix A – Interview Guide. Informant 1

NRC Affiliate - Beirut

1. Which actors were involved in the relief work after the explosion?

2. What did the government do in after the explosion?

3. What did the local communities do in response to the explosion?

4. What role did social media play in the organization of the relief work?

5. What role did INGOs play in the response?

6. How did the INGOs play a role in the local communities' relief work?

7. How did the government contribute in the relief work in the other stages of the response to the explosion?

    - How was the government prepared to a disaster in Beirut?

8. What are your overall impressions of how the organizing of how the relief work was organized?

9. Anything else you think could be valuable information for my thesis?

Appendix B – Interview Guide. Informant 2

NRC Affiliate - Beirut

1. Which actors were involved in the response?

2. What did the government do in response to the explosion?

3. What did the local communities do in response to the explosion?

4. What role did social media play in the organization of the relief work?

5. What role did international organizations play in the response?

6. How did the international organizations play a role in the local communities' relief work?

7. How did the government contribute in the relief work in the other stages of the response to the explosion?

8. What are your overall impressions of how the organizing of how the relief work was organized?

9. Anything else you think could be valuable information for my thesis?

Appendix C - Interview Guide. Informant 3

Graphic Designer and Urbanist - Beirut

1. What did the government do in response to the explosion?

2. What did the local communities do in response to the explosion?

3. What role did social media play in the organization of the relief work?

4. What role did international organizations play in the response?

5. How did the international organizations play a role in the local communities' relief work?

6. How did the government contribute in the relief work in the other stages of the response to the explosion?

    - How was the government prepared to a disaster in Beirut?

    - Did the government contribute in any port of the local communities' relief work?

    - What have the government done in the later stages after the explosion?

7. How has the international organizations work been received by the local communities?

8. Anything else you think could be valuable information for my thesis?