UNIVERSITY OF AGDER

Natural Disasters impact on children, with a particular emphasis on girls and children with disabilities

A case study from Haiti assessing children's vulnerabilities to natural disasters and its underlying causes

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This master's thesis is carried out as a part of the education at the University of Agder and is therefore approved as a part of this education. However, this does not imply that the University answers for the methods that are used or the conclusions that are drawn.

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Abstract

This thesis explores whether children, and especially girls and children with disabilities, are more vulnerable in natural disasters. In addition, the thesis investigates what the underlying factors of children's vulnerabilities are caused by and how we can decrease their vulnerabilities, using Haiti as a case study.

Disasters poses substantial threat to both sustainable development and poverty reduction initiatives and can be argued to be the very "antithesis of human development". The impacts of natural disasters are not evenly distributed among countries, neither are the impacts evenly distributed among citizens. Impacts are determined by factors such as environmental degradation, poverty levels and location. Social inequalities such as age, gender, class and ethnicity also defines vulnerabilities to disasters in a given society and children, especially in developing countries, are extremely vulnerable to the impact of natural disasters. However, little literature addresses gender inequalities amongst children and children with disabilities in disasters. This shows that there is a great need for more research into children's vulnerabilities and what influences their vulnerabilities.

The analysis in this study indicate that children have specific vulnerabilities simply because they are children and that girls are more vulnerable because of the dangerous situation they are placed in, exposing them to abuse and exploitation. Children with disabilities are the most vulnerable group simply because they are not being prioritised by neither the government nor the NGOs, not only in disaster management, but also in development activities overall. Further, a key argument of this study emphasise that a country's historical and present context together with the presence of numerous NGOs contributes to and shapes children's vulnerabilities. There is therefore a great need for the Government of Haiti and the NGOs to come together to develop a comprehensive sustainable development strategy for Haiti, incorporating general development activities, disaster management and climate change adaptation.

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List of Abbreviations

BIPD	Bureau for the Integrations of Persons with Disabilities
BoCP	The Bureau of Civil Protection
CBTPA	Caribbean Basin Trade Preference Agreement
CCCD	Child-Centred-Community-Development
CIA	Central Intelligence Agency
CNG	Conseil National de Gouvernement
CRC	Convention on the Rights of the Child
CWD	Children with Disabilities
DRR	Disaster Risk Reduction
DM	Disaster Management
EU	European Union
FRAPH	Front for the Advancement and Progress of Haiti
Fad'H	Forces Armées d'Haïti
GDP	Gross Domestic Product
GPDD	The Global Partnership for Disability & Development
HDI	Human Development Index
HOPE	Haitian Hemispheric Opportunity through Partnership Encouragement Act
IDMC	Internal Displacement Monitoring Centre
IFES	International Foundation for Electoral Systems
IFRC	The International Federation of Red Cross and Red Crescent Societies
IMF	International Monetary Fund
INGO	International Non-Governmental Organisations
IPCC	Intergovernmental Panel on Climate Change
MINUSTAH	The United Nations Stabilisation Mission in Haiti
NACLA	The North American Congress on Latin America
NGO	Non-Governmental Organisations
NORAD	Norwegian Agency for Development Cooperation
NRC	Norwegian Refugee Council
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
OHCHR	Office of the High Commissioner for Human Rights
PWD	People with disabilities
UMCOR	The United Methodist Committee on Relief
UN	United Nations
UNDP	United Nations Development Program
UNISDR	The United Nations Office for Disaster Risk Reduction
UNHCR	United Nations High Commissioner for Refugees
UNCRPD	The UN Convention on the Rights of Persons with Disabilities
WB	World Bank
WHO	World Health Organisation

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1. Introduction

Disasters can be defined as "a sudden, calamitous event that seriously disrupts the functioning of a community or society and causes human, material, and economic or environmental losses that exceed the community's or society's ability to cope using its own resources" (The International Federation of Red Cross and Red Crescent Societies (IFRC) in Kumar, 2011). Because disasters pose substantial threat to both sustainable development and poverty reduction initiatives, it can be argued that disasters are the very "antithesis of human development" (UNISDR, 2002, p.2 and Baez, de la Fuente and Santos, 2010, p.3).

The last report from the Intergovernmental Panel on Climate Change (IPCC) published in 2014 state that climate change is happening and it is irreversible. There is a high risk of increased death, injury, ill-health, or disrupted livelihoods due to an increase of storm surges, coastal flooding's and sea-level rising (IPCC, 2014, p. 12). Because natural disasters are most likely to continue to increase in strength and frequency due to climate change in the future it can thus be argued to be the greatest challenge of the 21st century (Seballos, Tanner, Tarazona & Gallegos, 2011). However, the impacts of the above events will not be evenly distributed among countries, but are highly determined by the vulnerabilities of countries.

Further, social inequalities such as age, gender, class and ethnicity determine vulnerabilities in a given society (Wisner, Blaikie, Cannon and Davis, 2003). Children, especially in developing countries, are extremely vulnerable to the impact of climate-related disasters and according to estimates done by Save the Children in 2007, 175 million children will be affected annually over the second decade of the twenty-first century due to climate-related disasters (in Peek, 2008). Despite the fact that these children are in no way responsible for climate change, but feel its effect the most, "children still represent an understudied and undeserved group" (Seballos *et al*, 2011 and Anderson and Jabry in Peek, 2008). Although some literature on disasters addresses the gender gap in disasters, very little addresses gender inequalities amongst children and children with disabilities (Anderson in Peek, 2008 and Peek and Fothergill, 2009). Though the study done by Hemingway & Priestley in 2006 (p.64)

concluded that disabled people are disproportionately vulnerable in natural disasters mainly due to social disadvantage, poverty and structural exclusion, "researchers have not considered how disabilities can contribute to the short-and long-term impacts of disasters on children" (Peek and Stough, 2010, p. 1260). Hence, further research is needed to understand how or if gender and disabilities contribute to children's vulnerabilities in disasters and how we can better prepare for and respond to disasters to decrease children's vulnerabilities.

As will be discussed in chapter two, Haiti is a particularly interesting country in which to explore children's vulnerability to natural disasters because small island states such as Haiti, are considered to be among the most vulnerable. Haiti is, for example, exposed to sea level rises and experiencing existing environmental stresses which will be intensified by climate change (Slagle & Rubenstein, 2012). In addition, Haiti has high poverty levels with 80 % of the population living under the poverty line and 54 % in severe poverty (CIA, 2014). Furthermore, the country has had a declining GDP since 1982 and experienced political instability most of its history (Slagle & Rubestein 2012). Based on the above factors, Slagle & Rubestein claim Haiti is a "striking example of how this combination of physical exposure and socioeconomic conditions could lead to extreme climate change vulnerability" because they are already experiencing a wide range of environmental stresses such as flooding, droughts, hurricanes, earthquakes and landslides. Haiti was also due to the above factors ranked within the ten most vulnerable countries to climate change in 2014 (Maplecroft, 2015).

The aim of this research has been to fill some of the knowledge gap on children's vulnerabilities and investigate to which degree children, and in particular girls and children with disabilities, are more vulnerable in natural disasters. In addition, I wanted to explore and gain a deeper understanding on what the underlying factors of their vulnerabilities are triggered by and how we can decrease their vulnerabilities, using Haiti as a case study. Although the research primarily wanted to focus on natural disasters believed to be triggered or increase due to climate change, I realise that the earthquake that struck Haiti in 2010 has made profound impacts on the life of the children in this study. And because vulnerabilities are not shaped by type of disasters, but rather the context in which children live in (O'Brien, O'Keefe, Rose and

Wisner, 2006, p.70), I found that responses in relation to the earthquake would be relevant in regards to the research.

Based on the above, the overall research question of this thesis is a two-part question: *1) In what ways are children's vulnerabilities in natural disasters affected by gender and disabilities and 2) what influences children's vulnerabilities to natural disasters?*

The starting point for investigating the research question(s) above was to explore children's awareness around natural disasters, what type of disasters they had experienced and how it had affected them and whether girls and children with disabilities were more vulnerable. Activities in the communities related to disaster management were also investigated. This was done by using qualitative research methodology with the primary methods of data collection being focus group discussions with children and adults and semi-structured interviews with staff of NGOs and Government Institutions. The methodology, as well as the process of and challenges related to data collection are discussed in chapter four.

Because I wanted to analyse the findings and generate concepts based on the data itself, the initial categorisation and systematisation of findings was done through an inductive process inspired by grounded theory, where one uses the data instead of the theory found in the literature as a starting point for the development of codes, concepts and theories. However, I decided to bring in relevant literature in the introduction to the various sections in the chapters to explain the background and to put the findings in the right context. These empirical findings are presented in chapter six. At the last stages of the analysis, I turned to a more deductive approach where I brought in key concepts and theory from the existing literature, and analysed the findings from my research using these key concepts, also bringing in the historical and present context of Haiti. The analysis is focusing particularly on vulnerabilities identified and what causes these vulnerabilities in the context of Haiti. The analysis allowed me to suggest some analytical generalisations on what type of vulnerabilities children face in disasters and how girls and children with disabilities are more vulnerable. Girls are more vulnerable because of the dangerous situation they are placed in, exposing them to abuse and exploitation. Children with disabilities are the most vulnerable group simply because they are not being prioritised by neither the government nor the NGOs in not only disaster management, but also not in

development activities in general. Further, it also allowed me to propose some analytical generalisations on how a country's historical and present context together with the presence of many NGOs contributes to and shapes children's vulnerabilities. This analysis is presented in chapter seven, whereas chapter eight presents the conclusions of this thesis.

2. Study Area: Haiti

This thesis is exploring children's vulnerability to natural disasters using Haiti as a case study. An important starting point for this exploration is to get a better understanding of the particular context children of Haiti live in. This chapter will therefore provide an overview of the key characteristics of Haiti today and give an historical background. There will also be a focus on Haiti's exposures to natural disasters and climate change. These factors combined all contribute to the vulnerability of children in Haiti.

2.1 Key characteristics of Haiti

Haiti is situated in the West Indies and shares the island of Hispaniola with The Dominican Republic (Central Intelligence Agency (CIA), 2014).

Figure 1: Map of Haiti (Source: CIA, 2014)

In 2008, the country was hit by four hurricanes within a 30-day period causing serious damage, killing 1,000 people and affecting approximately 800,000 people (Slagle and Rubenstein, 2012 and Webersvik and Klose, 2010). Haiti was also hit by two hurricanes in 2012, but it was the earthquake that hit the island in January 2010 that really left the country in ruin. In addition, Haiti has experienced political instability for most of its history and the two factors combined have resulted in the country being the poorest country in the Western Hemisphere (CIA, 2014). 80 % of the population is living under the poverty line with 54 % in severe poverty. The country's Gross National Income (GNI) is $1,636. According to the United Nations Development

Program (UNDP), Haiti is ranked as 168 of 187 countries on the Human Development Index (HDI) ranking Haiti among the 20 countries with the lowest human development in the world (UNDP, 2014).

Haiti has a free market economy with two-fifths of the population relying on the agricultural sector. Agricultural products include sugarcane, rice, corn, sorghum, wood and vetiver[1], oils, cocoa, mangoes and coffee (CIA, 2014). The five latter are produced for export purposes. The apparel sector accounts for about 90 % of Haitian exports. This is mainly due to the US economic engagement under the Caribbean Basin Trade Preference Agreement (CBTPA) and the 2008 Haitian Hemispheric Opportunity through Partnership Encouragement (HOPE II) Act which helped increase exports by providing duty-free access to the USA (CIA, 2014). The most important imports are food, manufactured goods, machinery and transport equipment, fuels and raw materials. Most of the products are imported from The Dominican Republic (34,5 %) and USA (26,2 %) (CIA, 2014).

Haiti has a high population density with 9,9 million people on 27,750 square kilometres, putting increased pressure on the land. In addition, the country face a range of challenges related to poverty, corruption, high level of deforestation and vulnerability to natural disasters, low levels of education and widespread unemployment and underemployment. The country has a very young population with 55,6 % of the population being below 25 years of age (CIA, 2014). The country is also heavily aid-dependent with 70 % of the state budget coming from external financing in 2010 (Zanotti, 2010). Most of the services such as health and education are provided by NGOs and according to The North American Congress on Latin America (NACLA) no other country in the world has as many NGOs per capita as Haiti, with an estimated 10 000 being present previous to the earthquake in 2010 (World Bank, 2014 and NACLA, n.d).

[1] Vetiver is a plant that can be used to stabilise soil and protect against erosion, protect fields against pests and weeds and as animal feed. Oil is extracted from its roots and used for example for cosmetics and soap. It can also be used for handicrafts and ropes. Haiti is the worlds leading producer of vetiver, providing for half the worlds supply (Wikipedia, 2015).

2.2 Political history

Haiti's history can be said to be among the richest in the world, but also the most complicated and contradictory (Schuller, 2007a). Haiti was the first country to revolt slavery, creating a new nation in 1804. Today, however, UN forces occupy Haiti, reducing the country to a state of neo-colonial domination and from being the "worlds richest colony" it is now the poorest country in the western hemisphere (Schuller, 2007a). This chapter will try to shed some light into how this has happened.

2.2.1 Early history

In 1492, the Italian explorer Christopher Columbus landed on the north coast of present-day Haiti. The voyage was financed by the Spanish monarchy and his mission was to search for gold and other material resources. Columbus established the settlement of "La Navidad" and Spain named the island "Hispaniola" (Schuller, 2007a). Diseases brought by Europeans decimated the native people of Tainos, estimated to count at around two to three million people. In 1502 Columbus therefore brought African slaves to the island. As Spain turned its attention to Mesoamerica and South-America, France achieved control over the colony, now called Saint-Domingue in 1697 (Schuller, 2007a). During the control of France the colony became the world's richest, but the wealth was based on extreme brutality where sugar mills operated night and day. Not only was the life expectancy[2] of the slaves only seven years, but the plantations also consumed the landscape (Schuller, 2007a and Dubois, 2012). Large areas of the forests were cut down for construction and for exporting wood to Europe. However, despite the wealth the colony was highly unstable as the white people were greatly outnumbered by the slaves and were dependent on the free coloured people to be intermediaries. By 1788 there were only 28,000 Europeans left compared to nearly 22,000 free coloured people and 405,000 slaves in the colony. After the fall of Marie Antoinette in France and escalating conflicts between the different social categories in Haiti, the slaves revolted in 1791. However, it was not before 1st of January 1804 that the slaves defeated the French and Haiti was born as

[2] Life expectancy in this context is used from the time the slaves arrived Haiti to time of death.

the first black-led republic and first independent Caribbean state (Appiah and Gates, 2005).

Yet, Haiti's independence had been won at a terrible cost. Both the nation's ports and most of its plantations were in ashes, and combat, hunger and diseases had killed more than 100,000 people from 1802-1803 (Dubois, 2012). Furthermore, though recognising the freedom of the slaves, France refused to recognize Haiti's independence, a policy that both England and USA followed, leaving Haiti politically isolated. In addition, the surrounding nations, who were all still dominated by slavery, saw Haiti as a threat because the colonists were scared that it would trigger slave revolt in neighbouring countries (Schuller, 2007a and Dubois, 2012).

There was also a conflict within Haiti with a divide between the new rulers and the people of how they should rebuild their country. The rulers, many of them ex-slaves, saw the reconstruction of the plantations as the only solution to economic growth, while the people, also ex-slaves, had no intentions on going back to plantation work. Instead they took over land where they had once worked as slaves and created small farms where they could do all the things they had been denied as slaves. They built families, practised their religion and worked for themselves. This deep division over what Haiti should be has heavily shaped the entire political history of the country (Dubois, 2012, p.6).

When France finally recognised Haiti's independence they did it with conditions and demanded Haiti to pay 150 million francs (around three billion francs in today's currency) in indemnity to the slaveholders for their losses (Dubois, 2012). The Haitian Government had to take out loans from French banks adding interest payments to the crushing debt and by 1898 half of the Haitian Governments budget was spent paying France and the French banks. By 1914, the proportion had climbed to 80 % (Dubois, 2012).

2.2.2 1915- Duvalierism

France was not the only country taking control over Haiti. In 1915 Haiti became occupied again, this time by USA. The occupation lasted for 19 years where the

country saw a new constitution being made, Haitian land opening up to private, foreign ownership and French being made into the main language. During that time the US army also suppressed and killed the opposition that, according to Renda has had a profound effect on Haiti (Renda, 2001). Renda argues that the crushing of the rebellions and opposition and thus creating mechanisms for strongly centralised government control in Port-Au-Prince, the occupation by the US eliminated the very "safeguards against entrenched despotism that Haiti, for all its problems, had always successfully maintained". In doing so, the US helped to lay the groundwork for the two Duvalier dictatorships and a series of post-Duvalier military regimes (Renda, 2001, p.36).

In 1948, the UN mission to Haiti implemented the state-centred development plan funded by the World Bank (WB), International Development Bank (IDB), UN and USAID, and with the civil society crushed previously by the US Marines, foreign powers set stage for the 29 year dictatorships of Francois "Papa Doc" Duvalier (1964-1971) and his son, Jean-Claude "Baby Doc" Duvalier (1971-1986), in which tens of thousands of people were killed (Schuller, 2007b). The US helped secure the power to Jean-Claude Duvalier by keeping the people, especially exiled professionals, out of Haiti. According to Schuller (2007b) the US government's development plans during Jean-Claude Duvalier's helped starve the Haitian peasants and increased Haiti's cities with very low wage labourers for export processing zones. As the situation in Haiti deteriorated, migrations escalated and the US had to intervene in order to stop the "boat people"[3]. In 1986, US flew Duvalier and his family out of Haiti and installed an interim government, Conseil National de Gouvernement (CNG), consisting of a coalition of military leaders led by Henri Namphy. Under the supervision of CNG, an assembly set out to write a new constitution aimed at undoing the three decades of Duvalierism.

[3] Between 1972 and 1981, more than 55 000 Haitian people arrived Florida by boat, hence the name "boat people". The United States Immigration and Naturalization Service (INS) estimated that because as many as half of the arrivals escaped detection, the actual number of boat people may have exceeded 100,000. An unknown number of Haitians are reported to have died during their attempts to reach the United States by sea (*U.S. Library of Congress, n.d)*.

2.2.3 ”Duvalierism after Duvalier”- Present time

The resulting document was a turning point in Haiti's constitutional history with the first real attempt at creating a truly participatory democracy in Haiti (Dubois, 2012, p.360). The constitution identified the main challenge in the political culture of Haiti, namely the gap between the mass of the population and the political class. Historically, the governing elites in Haiti had excluded most Haitians from formal political involvement. An example is that the majority of Haitians speak Kreyòl, a language born out of a mix of French and different African languages in the eighteenth century. Despite this, the official language was French until 1987 when Kreyòl was made an official language alongside French. Before that most Haitians were unable to read the laws under which they had been governed (Dubois, 2012, p.7). The constitution prohibited those who had carried out torture or committed other forms of crime under the Duvalier regime from serving in office for ten years. Lastly, it created a new electoral commission responsible for overseeing the political process and making sure the legitimacy and fairness of elections (Dubois, 2012).

Unfortunately, the interim government of military leaders that asked the assembly to create the new constitution was determined to stay in power and refused to apply the new laws and transition into a democracy. Haiti was now stuck in what Michel-Rolph Trouillot dubbed “Duvalierism after Duvalier” as even though the dictator was gone, his generals and tactics were still in place (Dubois, 2012, p.361). Activists kept speaking out through songs, sermons, newspaper columns and street demonstrations, and after years of repression by the military, they triumphed. In 1990 the CNG named the Supreme Court justice Ertha Pascal-Trouillot to the post of interim president, putting her in charge of organising an election (Dubois, 2012, p. 361).

Mr Jean-Bertrand Aristide, an opposition priest and fiery speaker, was elected new President in 1991 only to be overthrown by a coup supported by both local and foreign powers eight months later (Schuller, 2007a). Although Mr. Aristide managed to escape to the USA, the army carried out brutal reprisals against his supporters, killing at least twelve hundred over a few days and many more in the following days after the coup (Dubois, 2012, p.363). In 1994, Mr. Aristide returned to power escorted by U.S troops ordered to Haiti by then President Bill Clinton with the support of the

UN. Mr. Aristide returned to a country weakened by the violence of the junta and the paramilitary group FRAPH[4] as well as the economic embargo placed by the international community. The US army failed to disarm Haiti's army and as a result it continued to suppress the popular movement (Schuller, 2007a, p.151). Within Mr. Aristide's period there were allegations of "electoral irregularities, on-going extra-judicial killings, torture and brutality" and a bloody rebellion together with pressure from the US and France forced Mr. Aristide to step down in 2004 and a new interim government was installed with help from the US and the UN (BBC, 2012).

With the departure of Aristide and another interim government in place, a power vacuum was created in many provincial cities such as Cap Haiti, Hince and Petit-Goave, which lacked sufficient governmental security presence. Heavily armed ex-Fad'H[5] and FRAPH members moved in to fill this vacuum and Haiti consequently experienced civil and political unrest with demonstrations and protests as well as killings and retributions of Lavalas[6] partisans throughout the country (Global Security, 2015a). As a consequence, the US State Department concluded that the authority of the interim government was limited to Port-au-Prince and as there was little prospect of change, The United Nations Stabilisation Mission in Haiti (MINUSTAH) was created on the 25th June 2004 (Global Security, 2015a). MINUSTAH was not popular among the pro-Aristide partisans, and from September to November 2004 they launched a campaign called "Operation Baghdad", kidnapping, decapitating and burning police officers and civilians as well as shooting innocent bystanders such as taxi drivers, students, parents and small merchants. Consequently, schools, public markets, seaports and the justice system in Port-Au-Prince, were closed for several weeks (Global Security, 2015a).

In addition to continued political instability, despite both the stabilisation forces and transition government in place, MINUSTAH has been highly criticised for failing to protect the human rights of Haitian citizens and investigations have also shown that

[4] FRAPH (Front for the Advancement and Progress of Haiti) was a paramilitary group organized in mid-1993. Its goal was to undermine support for Mr Jean-Bertrand Aristide (The Center for Justice & Accountability, n.d).

[5] Fad'H (*Forces Armées d'Haïti*) is the armed forces of Haiti made up from the Haitian Army, Haitian Navy, the Haitian Air Force, Haitian Coast Guard and some police forces (Global Security, n.d).
[6] Lavalas was the political party of Jean-Bertrand Aristide

the stabilisation forces have been involved in trafficking cigarettes, drugs and sex, including sex with children (Klarreich, 2015).

New elections that were held in February and March 2006 were relatively stable and peaceful, and Mr. Rene Préval (former President from 1996-2001) was elected with 51,15 % of the votes. In December 2006 and April 2007 new rounds of parliamentary and municipal elections were held and both citizens and international observers considered the election process acceptable and the results credible with few incidents of violence and fraud (Global Security, 2015b). During the period from 2008-2009, Haiti's political situation improved with the Préval government continuing the monetary, fiscal and foreign exchange policies initiated by the former interim government in collaboration with the International Monetary Fund (IMF) and the WB (Global Security, 2015b).

2010 was again a presidential election year for Haiti and despite the devastating earthquake on the 12th of January 2010, new elections were held in November 2010 and March 2011. Michel Martelly, a musician known as "Sweet Mickey" by locals, was elected, taking office in May 2011. International observers considered the elections to be generally free and fair although some allegations of fraud and irregularities were found (Global Security, 2015c). The country's political situation has been relatively stable since the inauguration of Martelly, but remains highly fragile hampering both the reconstruction efforts after the earthquake as well as passage of important legislation, especially a new electoral law. In addition, the municipal elections have been delayed since April 2011 and the term for two-thirds of the senate expired in January 2015. In December 2014, the Prime Minister Laurent Lamothe stepped down in an effort to stabilise the political tensions. However, President Martelly and the Parliament failed to reach an agreement on extending the terms of the members of Parliament resulting in the dissolvent of the government on the 13th of January 2015 leaving President Martelly now running by decree. This has again spiked political unrest and people have been hitting the streets demonstrating and protesting across the country, leaving the country at a standstill on many occasions (own observations from fieldwork). The UN Security Council was in Haiti in late January 2015 to try to solve the dispute showing their support to President Martelly and a statement issued by the UN Security Council on the 17th of March

2015 state that "municipal elections and the first round of the presidential election will be held on the 25th October 2015 with a second presidential round, if necessary, scheduled for 27 December 2015" (UN Security Council, 2015).

2.3 Civil Society

Despite the political situation described above, Haiti has a long tradition of civil society and resistance. According to Schuller (2007b p.70) this includes African-derived ritual (often referred to as "voodoo"), storytelling and literature and *chan pwen* meaning "composed-on-the-spot" songs critical of those in power. But, Schuller argues "the opposition of state and society and the oppression of civil society result from a collusion of internal and external factors" (Schuller, 2007b, p.70). This can be further elaborated by Americas Watch and The National coalition for Haitian Refugees who in 1993 (p.1) argued that the military forces that overthrew Mr Aristide ruthlessly supressed Haiti's once diverse and vibrant civil society with acts of killings, arrests, intimidations and beatings. The external factors have been mentioned above and include the continued interventions from foreign powers throughout history.

The press in Haiti is constrained by the absence of a working judicial system and violence against journalists remains a challenge with media outlets practicing self-censorship in order to avoid retribution for critical reporting (Freedom House, 2012). Also, even though the government generally respects religious and academic freedoms, the absence of an effective police force has led to poor protection for those who are persecuted for their views (Freedom House, 2012).

Violence against women and children has always been a big challenge in Haiti, but after the earthquake in 2010, the condition for women and children worsened considerably (Freedom House, 2012). Rapes were reportedly commonplace in the displacement camps with insufficient protection by police and inadequate housing adding to women's vulnerabilities. Child trafficking also increased severely and more than 7,300 children were thought to have been trafficked out of the country, mostly to work in the sex trade. Estimates done also show that up to 500,000 children work as

"restavecs", which is a form of unpaid domestic labour, both in Haiti and The Dominican Republic (Freedom House, 2012).

The Haitian society has been dominated and controlled by a small group of professionals and business elite since the independence (USAID, 1999). The elite have monopolised the state through foreign trade and the military resulting in that the richest 1 % of the population controls nearly half of Haiti's wealth (Schuller, 2007b and Shah, 2010). According to Schuller (2007b), the lighter-skinned urban mercantilist elite has maintained control over Haiti's economy by monopolising foreign trade. This group has also maintained an uneasy connection with black military leaders to subdue the population. In addition, this group of elite have competed against each other, oppressed and excluded the mass of rural labourers and peasants from power and as a consequence, generated social and political instability (Schuller, 2007b). Some Haitian intellectuals have gone as far as characterising this system as apartheid (USAID, 1999).

Due to the political history and the domination of a small elite in Haiti, USAID argued in 1999 that there has been a long tradition of mistrust and fear between the government and the population. For example, in rural Haiti "section chiefs" were appointed by the army governed communal sections. These "section chiefs" operated as police officers as well as judges and ruled with absolute authority. These chiefs were feared and avoided, as most of the population knew that they had little chance influencing local authorities, either individually or collectively (USAID, 1999, p.24).

However, USAID also argued that this situation somewhat changed in the late 1990s due to a more stable political situation were local authorities were elected by the population itself. As a consequence, the population begun to form associations to articulate, exchange ideas or plan and carry out activities in collaboration with local authorities (USAID, 1999, p.25). This is also argued by Schuller who claims that there is a strong and vital grassroots movement of Haiti's poor in both Port-au-Prince and the countryside consisting of peasant's, women's and worker's organisations that continue to work on building Haiti's society (Sculler, 2007a).

2.4 Aid Dependence

Zanotti (2010) and Ramachandran and Walz (2012) argue that the weakness of government institutions discussed above is largely due to the history of aid-dependence and foreign interventions. The country is heavily aid-dependent with 70 % of the state budget coming from external financing (Zanotti, 2010). Because of the limited capacity of the Haitian Government and weak national institutions most of the services such as health and education are provided by NGOs. According to NACLA, no other country in the world has as many NGOs per capita as Haiti, with an estimated 10,000 being present previous to the earthquake in 2010 (WB, 2014 and NACLA, n.d). No one has the exact numbers of NGOs and charities that exist in Haiti today, with numbers estimated to be anywhere from 343 to 20,000 (Ramachandran and Walz (2012). NACLA further argues that these NGOs received the bulk of the global relief funds after the earthquake while the Haitian Government remained marginalised in the recovery and rebuilding efforts. As little as 1 % was given to the government (Ramachandran and Walz, 2012). Thus, the NGOs play a very prominent role, even arguably one equivalent to a quasi privatisation of the state (Ramachandran and Walz, 2012). They further argue that because Haiti is dominated by international NGOs, a parallel state more powerful than the government have been allowed to develop and NGOs have created alternative infrastructures for the provision of social services. Consequently, there has been little incentive for the government to build its capacity to deliver services themselves (Ramachandran and Walz, 2012). As a result, NACLA argues, Haiti is being ruled by unelected organisations that are unaccountable to the Haitian people (n.d).

2.5 Natural Disasters

Although The Dominican Republic and Haiti share similar exposure to natural hazards due to the islands location in the hurricane belt, Haiti is far more vulnerable to natural disasters and its losses far greater (Webersik and Klose, 2010). This is highly due to the severe poverty levels, poor historical land-use management and political instability, making the people extremely vulnerable to natural disasters (Fordyce, Sadiq and Chikoto, 2012 and Webersvik and Klose, 2010). As the latter have already been discussed in a previous section, the two former will be collaborated

in more detail. First, according to Webersvik and Klose (2010, p.13), one of the major challenges in coping with a natural disaster is population growth that exposes more people to stronger storms. Haiti's population has grown steadily from 430,000 inhabitants in 1804 to 9,9 million in 2014. As a consequence more people are now settling in areas that are hazard prone. Income is also shaping vulnerability and in Haiti more than half of its population live on less than a dollar per day and as mentioned previously, 54 % of the population is living in severe poverty (Webersvik and Klose, 2010 and UNDP, 2014). Secondly, environmental degradation and exploitation of natural resources have been accelerating since the 1920's by increased population growth and rural poverty (Webersvik and Klose, 2010). In particular, the combination of extreme deforestation and soil erosion has caused major landslides and flooding in many parts of the country (Gauthier and Moita, 2010). According to Williams (2011) Haiti was once covered in forest, but now has only 3 % forest cover. This is mainly due to heavy logging that accelerated in 1954 after hurricane Hazel, which downed threes throughout the island. The country is therefore mostly deforested today and as a consequence most of the arable land is used beyond its carrying capacity. Further, Williams (2011) argue that at least 90 % of Haiti's soil has been severely degraded by both deforestation and inappropriate cultivation. In addition to the deforestation and soil erosion, there are many large sand quarries around Haiti providing raw materials for cement and concrete to the construction of buildings (Engle, 2009). These areas were previously used for agriculture and grazing areas for cows. Although the quarries are providing jobs for thousands of people, the quarries are also seriously hampering the environmental sustainability of the country. The unregulated growths of these quarries are creating even more erosion making the country extremely vulnerable to floods, landslides and erosion (Engle, 2009). In addition to the above, Haiti has no real waste management. Although the government passed a law forbidding the import of for example polyethylene and polystyrene in 2012 in a bid to counter the challenge of litter from plastic bottles, bags and polystyrene wrappings, no one is reinforcing this law today (Raymond, 2014). Adding to this, the 2010 earthquake destroyed most of the already fragile sewage systems causing waste to run through the street gutters in many of the poorest areas of Port-Au-Prince, resulting in the congestion of these gutters during heavy rains and tropical storms. This again is severely affecting the health of the population (Raymond, 2014).

In 2008 the country was hit by four hurricanes within a 30-day period. This caused serious damage with 60 % of agricultural crops destroyed, killing 1,000 people and affecting more than 800,000 people (Slagle and Rubenstein, 2012 and Webersvik and Klose, 2010). The earthquake that hit the island in January 2010 caused 250,000 deaths and destroyed over 80 % of the capital Port au Prince. As a result of the earthquake, 280,000 internally displaced people are still residing in camps and another 200,000 is living with host families or in informal settlements (UNHCR, 2014). In addition, the earthquake destroyed the "thin layer of administrative structures that were in place in the country" with most of the administrative buildings and hospitals destroyed (Zanotti, 2010). In the aftermath of this massive disaster, Haiti also experienced a cholera breakout in October and hurricane Tomas later that same year. In October 2012, Haiti was again hit by another hurricane, affecting hundreds of thousands of people (OCHA, 2012).

Below is a short overview over natural disasters in Haiti from 1980 – 2010:

No of events:	74
No of people killed:	233,919
Average killed per year:	7,546
No of people affected:	9,952,766
Average affected per year:	321,057
Economic Damage (US$ X 1,000):	8,823,906
Economic Damage per year (US$ X 1,000):	284,642

Source: PreventionWeb, n.d

2.6 Climate change

Small island states, such as Haiti, are considered to be among the most vulnerable to climate change since they will be exposed to sea-level rises as well as experiencing existing environmental stresses intensified by climate change (Slagle & Rubenstein, 2012). Slagle & Rubenstein continues to state that Haiti is a "striking example of how this combination of physical exposure and socioeconomic conditions could lead to extreme climate change vulnerability" because they are already experiencing a wide range of environmental stresses such as flooding, droughts, hurricanes, earthquakes and landslides (2012). The hurricanes affecting Haiti has resulted in more internal displacement, a higher mortality rate and greater infrastructure damage then any other environmental disaster or climate-related source of degradation. Slagle and

Rubenstein (2012) further state that climate change has the potential to increase the occurrence and severity of extreme weather events such as hurricanes, floods and droughts in Haiti.

As a result of the country's vulnerability to natural disasters and climate change, Haiti was ranked within the ten most vulnerable countries to climate change in 2014 (Maplecroft, 2015). Maplecroft argue that the unifying characteristics of the countries on the top ten list is that they depend heavily on agriculture and changing weather patterns are already impacting food production, poverty, migration and social stability. In their assessments, Maplecroft also takes into account government capacity, population growth and density, agricultural dependency, poverty, and history of armed conflict and emphasises the importance of socioeconomic contributors to climate change vulnerability (Slagle and Rubenstein, 2012).

2.7 Summary

This overview of the political history, the situation for the civil society, vulnerability to natural disasters and climate change in Haiti points out some key elements that are of particular interest to this thesis.

Firstly, the political instability has restricted Haiti to develop a state working for its people. Instead, decades of neglect, different international agendas and natural disasters has left not only a state in ruin unable to fulfil its obligations towards its people, but also left the people in extreme poverty. One of the main weaknesses of the Haitian state is that it is highly centralised in Port-au-Prince. 75 % of civil servants and government officials and 80 % of all industrial, banking and commercial facilities are located in the capital (Progressio, 2012). This has led to gaps in the distribution of resources from rural to urban areas since all political and administrative decisions are made in the capital, leaving little power to local authorities. In addition, because of the history, civil society and the population do not trust the state institutions. A report by Progressio (2012) shows that civil society believe the Haitian state has created a system of exclusion making it difficult for the civil society to conceive the state as a partner and hold it accountable (Progressio, 2012). In addition, the people do not see

any change regardless of who is ruling the country and feel they have little chance in influencing local authorities or the Government.

Second, Haiti is heavily dependent on foreign support with 70 % of the state budget coming from external financing in 2010. This is mainly due to the political situation, but also because generating income from taxation is minimal with over half of the population living on under $1 a day. Most of the services such as health and education are therefore provided by NGOs (Zanotti, 2010 and World Bank, 2014).

Third, Haiti is highly disposed to natural disasters and vulnerable to climate change. Not only is Haiti situated in the hurricane belt in the Caribbean but Haiti has also a high level of environmental degradation as well as exploitation of natural resources. Most of Haiti has been deforested and most of the arable land is used beyond its carrying capacity and as a result Maplecroft (2015) has ranked Haiti within the ten most vulnerable countries to climate change in 2015.

As such, Haiti can be argued to be a product of its history with political instability and decades of neglect by its leader. The combination of environmental destruction and other factors such as weak institutions, extreme poverty and rapid population growth raise the risk of serious new trouble in Haiti (The International Crisis Group, 2009). The country lack coherent national socio-economic development policies, mainly due to management and political limitations, but also because of the narrow interests of those holding economic power (International Crisis Group, 2009). As a consequence, the population is living under extremely vulnerable conditions and left defenseless and unprepared when disaster strikes.

3. Literature Review and theoretical framework

The literature review will draw upon the key theories and concepts relevant to the research questions. The first part of the literature review will introduce the concept of natural disasters and climate change, and the concept of human vulnerabilities and its relevance to natural disasters and climate change. I choose to focus primarily on climate change in the first section because many authorities believe, for instance IPCC, that the frequency and strength of natural disasters are directly linked to climate change (IPCC, 2013). It is therefore necessary to understand what climate change means and the consequences for both individuals and nations. In addition, the relationship between natural disasters and climate change are today discussed in both research theory and among institutions like UN, WB and International NGOs. In my study there will be a specific focus on children with disabilities (CWD) and girls. The specific focus on CWDs and girls are chosen because they are thought to be two of the most vulnerable groups within any society and therefore the most affected by natural disasters and climate change. Since there is a lack of empirical research and literature on these two groups, I find it crucial to put the focus for my thesis here.
The first part of the literature review will also look into the concepts of disaster risk reduction (DRR) and disaster management (DM), especially with relevance to children and people with disabilities' participation in DRR and DM activities.

The second part of the literature review will look into various conventions and legal frameworks that are particularly relevant to the topic of this thesis. I choose to bring in the conventions and legal frameworks because they are meant to protect vulnerable individuals.

3.1 Natural disasters

Barley argues that the literature on disasters has become saturated with discussions around what actually constitutes a "disaster" (Barley, 2011, p. 6). Earlier theorists such as Fritz (in Barley, 1961, p. 202) focused only on the biophysical nature of hazards, "comparing the active nature of a hazard event with is impact on passive human populations, which 'undergo' extensive damage and loss".

However, in 1976, O'Keefe, Westgate and Wisner published what Barley argues to be a ground-breaking paper entitled "taking the Naturalness out of Natural Disasters", condemning the environmentally deterministic viewpoint by highlighting the role of human vulnerabilities in transforming natural hazards into disasters. This, in turn, generated a paradigm shift in how scholars and NGOs viewed disasters, including the social aspect that see hazards as creating disasters when it exert an impact upon human populations (in Barley, 2011, p.6).

Thus, it has become an acceptable view today that "disasters occur when a certain group of people's vulnerabilities coincides in space and time with an extreme natural hazard" (Manyena, 2009, p.22). Hence, the root causes of disasters lie in the political and socio-economic arena rather than in the environmental arena, and this new way of looking at disasters has made a big impact on our understanding of the interrelationship between hazards, risks and vulnerabilities (Manyena, 2009).

It is therefore important to distinguish between "natural hazards" and "natural disasters". Hazards, such as floods and hurricanes, are natural events, but "it is the way in which societies have developed that causes them to become disasters" (O'Brien *et al*, 2006, p.70, Therefore, disasters are not natural and in some places it has been common for some time to define disasters as "failed development" (O'Brien *et al*, 2006, p.70). Thus, when referring to natural disasters in this thesis, it is based on this distinction.

The United Nations Office for Disaster Reduction (UNISDR) defines disaster as "a serious disruption of the functioning of society, causing widespread human, material, or environmental losses, which exceed the ability of the affected society to cope using only its own resources" (UNISDR, 2004, p. 17). An almost identical approach is taken by IFRC who defines disaster as a "sudden, calamitous event that seriously disrupts the functioning of a community or society and causes human, material, and economic or environmental losses that exceed the community's or society's ability to cope using its own resources" (in Kumar, 2011, p.2).

Many people around the world today are frequently experiencing natural hazards such as floods, droughts, cyclones, hurricanes and landslides, often due to unique geo-

climatic conditions (Singh, 2010). These hazards often turn into disasters because of the vulnerability of the population. According to reports done by Oxfam in 2009, more than 375 million people would be affected annually by natural disasters by 2015. This is an increase of over 50 % from the decade 1998-2007 (Oxfam, 2009). This increase will severely affect the world's capacity to respond to disasters. Estimates done by the Internal Displacement Monitoring Centre (IDMC) and the Norwegian Refugee Council (NRC) show that almost 22 million people were displaced by disasters in 2013. That is three times as many as were displaced by conflict and violence (IDMC and NRC, 2014, p.7).

Additionally, although there remain some uncertainties around the relationship between extreme climatic events such as floods, hurricanes, droughts and landslides and climate change it is now commonly accepted that it will be an increase in the types, frequencies and severity of the aforementioned hazards in the future due to climatic changes (Seballos *et al*, 2011 and IPCC, 2014). This can also be collaborated by UNISDR (2013a) who argue that we must stop calling natural disasters for "natural" as the science is telling us that climate change and the warming of the oceans will lead to, for example, more intense tropical storms. This can be illustrated by the figure below. Climate change will also be further elaborated on in the next section.

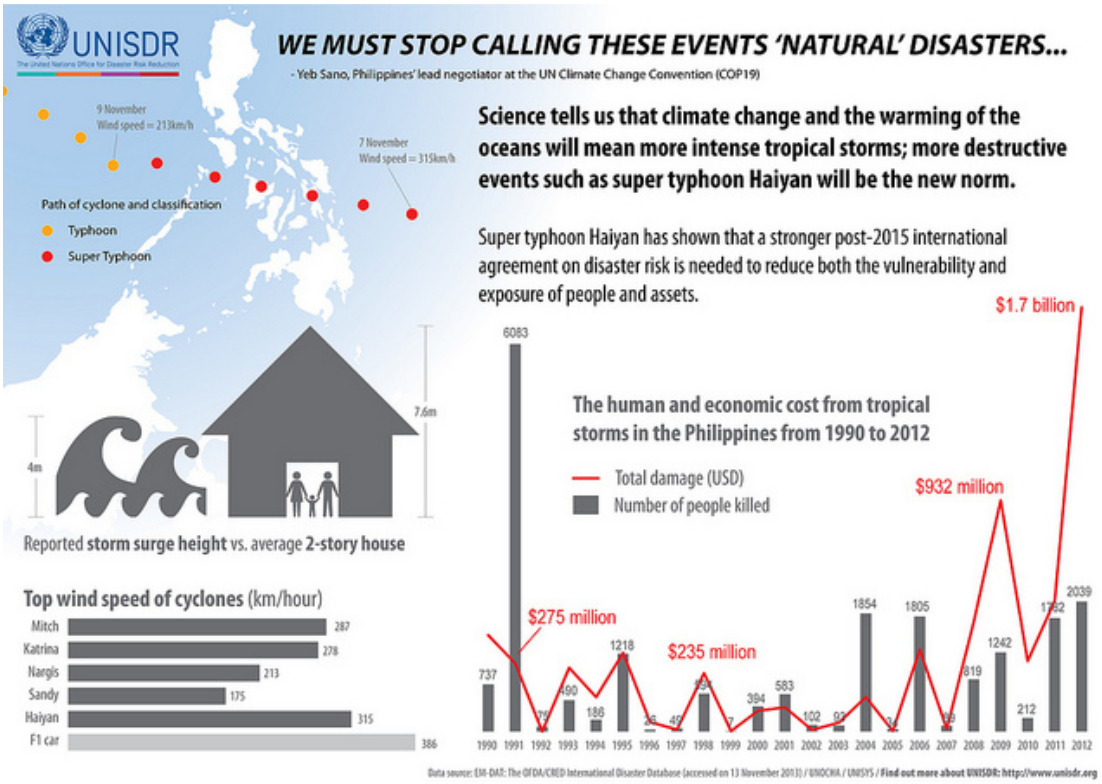

Figure 2 Not "natural" disasters (Source: UNISDR, 2013a)

3.2 Climate change

Climate change has to be seen in connection to the greenhouse effect and the natural and anthropogenic activities that create a change in the climate. The greenhouse is also known as the earth's atmosphere (Bjørke and Tawfic, 2011). The greenhouse effect in turn is natural and the earth is dependent on it for its survival since for example the energy of the sun passes through the atmosphere and warms the land and the water surface. The greenhouse gases (GHG) consisting of water vapour (H_2O), carbon dioxide (CO_2), ozone, methane and nitrus oxide (N_2O) create a natural greenhouse effect (Bjørke and Tawfic, 2011). The Anthropogenic greenhouse effect then is the human induced activities, and evidence shows that human activities such as fossil fuel extraction are causing the GHG levels to increase, especially in terms of CO_2 emissions into the atmosphere. The Keeling Curve, a graph developed by Charles Keeling in the 1950s to measure the concentration of CO_2 in the atmosphere, shows that CO_2 emissions have increased from below 320 ppm (parts per million) in the 1960s to 393 ppm in 2013, exceeding by far the natural range for the past 800,000 years (Keeling, 2008, CO_2Now.org, 2013 and IPCC, 2013). The rise of the GHG

emissions leads to changes in the climate and climate change can thus be defined as "a change in the state of the climate that can be identified by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer. It refers to any change in climate over time, whether due to natural variability or as a result of human activity (IPCC, 2007, p.30).

The IPCC have for the past two decades developed assessments on climate change impacts, vulnerabilities and adaptation. Between 2005 and 2011 the number of scientific publications on the above themes more than doubled, showing the importance of the subject (IPCC, 2014, p.4). Whereas the first assessment report from IPCC in 1990 stated, "there is concern that human activities may be inadvertently changing the climate", the fifth assessment report from 2013 left no longer any doubt that climate change was due to anthropogenic factors. According to IPCC this was "evident from the increasing greenhouse gas concentrations in the atmosphere, positive radioactive forcing, observed warming, and understanding of the climate system" (IPPC, 1990, p.xiii and IPCC, 2013, p.15).

3.2.1 Climate change impacts

It is expected that climate change will lead to variations in the frequency, intensity, spatial extent, duration and timing of extreme weather and climatic events. There is already now clear evidence that there have been changes in some of these extremes, but because extremes are rare happenings, it can be difficult to obtain enough information to draw conclusions (IPPC, 2012, p.5-6). However, the following assessments have been made for the 21st century:

- Substantial warming in temperature extremes
- Higher frequency of heavy rainfall, particularly in higher latitudes and tropical regions
- The maximum speed of tropical cyclones will increase
- Intensification of droughts
- Increased levels of floods
- Sea-level rises resulting in extreme coastal high water levels

(IPCC, 2012, pp. 9-13)

As can be seen from the table below, climate related disasters have seen a constant increase since the 1980s. Floods in particular have increased and can especially be seen in relation to deforestation, landslides and erosion. Additionally, we see an increase in temperature.

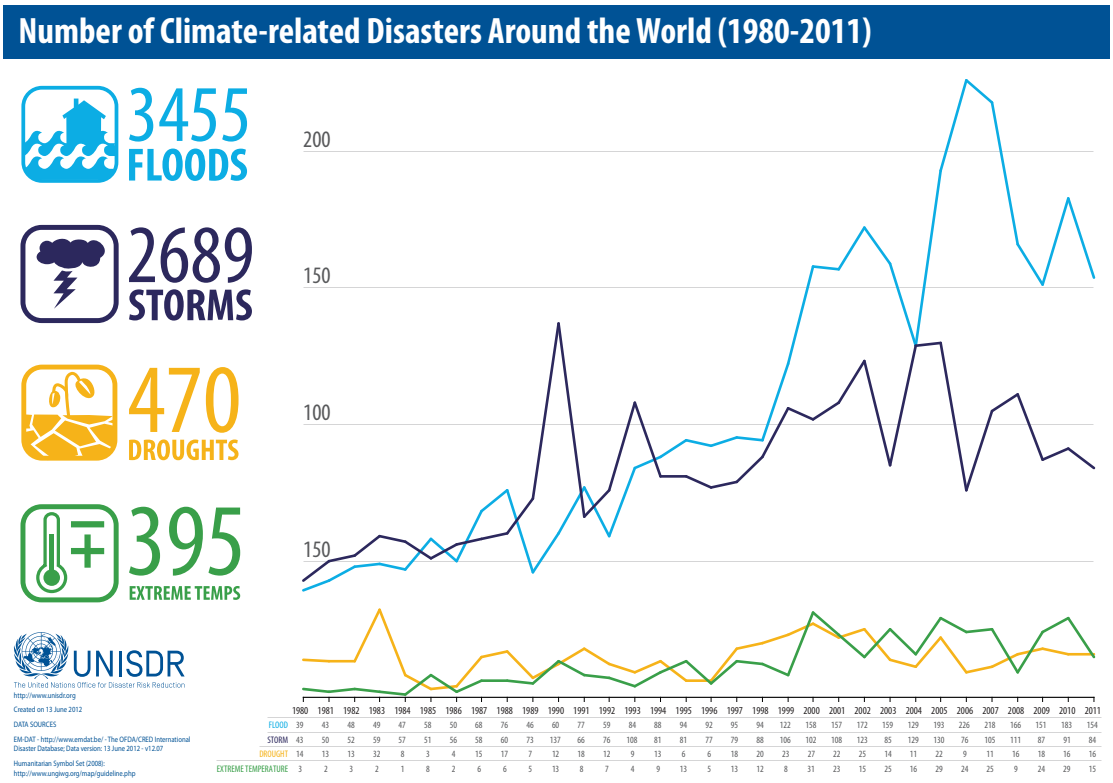

Figure 3 Climate Related Disasters 1980-2011 (Source: UNISDR, 2013b)

3.3 Vulnerability

The term vulnerability generally refers to exposure to contingencies and stress, and the difficulty in coping with them. Prolonged exposure to risks is an important source of vulnerability and can range from macroeconomic shock, natural disasters, health hazards, and personal insecurities (Philip and Rayhan, 2004).

Watts and Bohle identified three approaches to vulnerability, all from different vantage points, trying to shed light on the multi-dimensional space of vulnerability. The first approach centred on entitlement and capability and defines vulnerability as "the risks associated with the threat of large-scale entitlement deprivation" (Watts and Bohle, 1993, p.118). Further, they stated that vulnerability is a socio-economic space,

which is determined by market perturbations (economic exchange), coping thresholds (socio-economics of resilience) and social security limitations (informal "moral economies or formal welfare institutions). As such, vulnerability delineates those groups who are most exposed to "market failures, whose coping capacity with respect to unfavourable terms of exchange is low and who are insufficiently integrated into social security arrangement" (Watts and Bohle, 1993, p.119).

The second approach centred around empowerment where politics and theory of power is central. Here, vulnerability was defined as "a political space and as a lack of rights". Further, "vulnerability delimits those groups of society which collectively are denied critical rights within and between these political domains" (Watts and Bohle, 1993, p.119).

In the third and last approach, class and crisis, vulnerability is "a structural-historical space which is shaped by the effects of commercialization, proletarianization and marginalization" meaning that vulnerability is shaped by the history of a society that is class-divided and that the conflicts between the various classes creates for example market failures and overproduction (Watts and Bohle, 1993, p.120).

A key advocate of the vulnerability focus, Amartya Sen, argued that slow-onset disasters such as famine are related to people's entitlements within a socio-political context. He therefore defined famine as a situation in which some people do not have enough food rather than there not being enough food per se (1981). Swift and Curtis *et al* (1989 and 1988 in Watts and Bohle, 1993, p.118) also argued "poor people are usually among the most vulnerable by definition, but a nuanced understanding of vulnerability rests on a careful disaggregation of the structure of poverty itself". They further argued, "unlike poverty, vulnerability as a concept does not rest on a well developed theory; neither is it associated with widely accepted indicators or methods of measurement".

As stated earlier, the concept of vulnerability came into the disaster discourse with the paper from O'Keefe *et al* in 1976 claiming that disasters where more a consequence of socioeconomic vulnerability than natural factors. O'Keefe *et al* argued that:

"Disaster marks the interface between an extreme physical phenomenon and a vulnerable human population. It is of paramount importance to recognise both of these elements. Without people there is no disaster…Time is ripe for some precautionary planning which considers vulnerability of the population as the real cause of the disaster – a vulnerability that is induced by socio-economic conditions that can be modified by man, and it is not just an act of God"
(O'Keefe *et al*, 1976, pp. 566-567).

Blaikie, Cannon, Davis and Wisner (1994, p.275) defined vulnerability in relation to natural disasters as "the characteristics of a person or group and their situation that influences their capacity to anticipate, cope with, resist and recover from the impact of a natural hazard. It involves a combination of factors that determine the degree to which someone's life and livelihood are put at risk by a discrete and identifiable event in nature or in society".

The above are only a few of the different approaches taken to understand the concept of vulnerability and more than two dozen definitions of vulnerability exists today. According to Manyena (2009) this is a reflection on the philosophical and methodological diversities that has emerged from disaster knowledge and research. Some even argue that the concept of "vulnerability" has its roots in geography and natural hazards research (Füssel, 2005, p. 2). However, there seem to a be a general consensus that vulnerability to disaster is not only determined by lack of wealth, but is a product of various factors such as physical, economic, political and social susceptibility or predisposition of a community to natural hazards and anthropogenic pressures (Manyena, 2009). As argued by O'Brien *et al* (2006), risk is a function of both hazard and vulnerability. Since hazards are to some extent known and constant, vulnerability seems to be the major distinction between those who suffer and those who escape it. For example, do vulnerable people choose to live in a flood-prone area? If that is the question, we also assume that a choice is available, which in most cases it is not. For most people living in poverty, the choice to relocate or remove themselves from this situation simply does not exist and as a consequence, they are forced into a position where disasters, or disastrous situations are created (O'Brien *et al*, 2006, p.70).

Webersvik and Klose (2010, p.12) also argue that stability over time and whether a country is autocratic or democratic in nature, is important to build resilience to natural hazards. Because transitions are dangerous and destabilizing it increases a country's vulnerability to natural disasters.

According to Manyena (2009, p.27), most of the goals of disaster and development programmes are either directly or indirectly aimed at reducing vulnerability. This also seems to be the case if you look at both the NGO sector and significant sections of Poverty Reduction Strategy Papers of Governments. For example, Oxam International released a report in 2005 evaluating the disproportionately mortality of children and women in the 2004 Asian tsunami, stating that disasters are "profoundly discriminatory" as an individual's pre-existing demographic and social characteristic can ultimately determine how severely they are affected (Oxfam International, 2005, p.1 and Barley, 2011, p. 7).

When it comes to vulnerability to climate change, it can be defined as "the propensity or predisposition to be adversely affected" (IPCC, 2014, p. 5). As with Füssel above, IPCC also recognizes that "vulnerability encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and lack of capacity to cope and adapt" (IPCC, 2014, p.5). However, most scholars and researchers agree that vulnerability to climate change is highly related to poverty, and that the poor are the least able to respond to climate change. Hence, there is a common understanding today that the poor are likely to be hit the hardest because the capacity to respond to climate change is low in poor developing countries (Olmos, 2001, p. 2). Estimates done by UNICEF claim that 99 % of deaths that are attributable to climate-related changes are happening in developing countries, and 80 % of those deaths are children (UNICEF, 2014).

The IPCC has identified the following risks in relation to human vulnerabilities to climate change, all classified with "high confidence":

1. Risk of death, injury, ill-health, or disrupted livelihoods in low-coastal zones and small island developing states and other small islands because of increased storm surges, coastal flooding and sea level rise.

2. Risk of severe ill-health and disrupted livelihoods for large urban populations due to inland flooding in some regions
3. Systematic risks due to extreme weather events leading to breakdown of infrastructure networks and critical services such as electricity, water supply, and health and emergency services.
4. Risk of mortality and morbidity during periods of extreme heat.
5. Risk of food insecurity and the breakdown of food systems linked to warming, drought and flooding.
6. Risk of loss of rural livelihoods and income due to insufficient access to drinking and irrigation water and reduced agricultural productivity, particularly for farmers and pastoralists with minimal capital in semi-arid regions.
7. Risk of loss of marine and coastal ecosystems, biodiversity, and the ecosystem goods, functions, and services they provide for coastal livelihoods, especially for fishing communities in the tropics and the Arctic.
8. Risk of loss of terrestrial and inland water ecosystems, biodiversity, and the ecosystem goods, functions, and services they provide for.
(IPCC, 2014, pp.12-13)

It becomes clear from the above that vulnerability to natural disasters and climate change are heavily interlinked and should therefore not be looked at separately, but instead as two related concepts.

3.3.1 Children's vulnerabilities

According to Peek (2008) children represent a significant portion of those who endure the devastating consequences of disasters, and that at the end of the twentieth century, disasters affected an estimated 66.5 million children each year.

Psychological Vulnerability	Physical Vulnerability	Educational Vulnerability
• Post-Traumatic stress syndrome • Depression • Anxiety • Emotional distress • Sleep disorders • Somatic complaints • Behavioral problems	• Death • Injury • Illness and disease • Malnutrition • Heath stress • Physical and sexual abuse	• Missed school • Poor academic performances • Delayed progress • Failure to complete education

Figure 4 Types of vulnerability children experience in disasters. Adopted from Peek, 2008, p.5

As can be seen from the table above, children represent a highly vulnerable group in disasters. Infants and young children are physically vulnerable to both sudden-onset and chronic disaster events because of their partial or total dependence on adults. In addition, children and adolescents are at risk of injury or death and can develop several behavioral, psychological, and emotional issues in the aftermath of disaster (Peek, 2008). Research has shown that as many as 30 to 50 % of children affected by disasters develop post-traumatic stress syndrome that might persist for a long period of time (Udwin in Peek, 2008). In addition, increased rates of divorce, family violence, alcohol and drug abuse within families contributes to children's physical and emotional vulnerability in the aftermath of disasters (Peek, 2008).

Also, children's personal growth and development can be affected by disasters because disasters can disrupt children's daily routines, they can miss school and social opportunities. Because disasters often destroy school buildings and displace students and teachers, children's academic progress and long-term educational outcomes are severely disrupted (Peek, 2008, p.9).

Moreover, because of children's levels of physical development and immature immune systems, children have an increased exposure to illnesses like sanitation-related illnesses, malaria and other vector-borne diseases, malnutrition, heat stress,

and respiratory disease (Peek, 2008, p.8).

Lastly, children might also get separated from their family and friends in disasters. They can lose their loved ones and be displaced in unfamiliar and unwelcoming environments such as refugee camps (Peek, 2008 p.4). In these camps, children and especially girls, risk both sexual violence and human trafficking.

As stated in the introduction, children are in no way responsible for climate change, but will feel its effect the most. Climate change both feeds on and highlights inequality and undermines the world's capacity to care for its most vulnerable, namely the youngest citizens, those who should be protected by the Convention on the Rights of the Child (UNICEF, 2014). Estimates done by Save the Children in 2007 showed that 175 million children would be affected annually over the second decade of the twenty-first century due to climate-related disasters (in Peek, 2008). According to a joint statement issued by UN Agencies in 2008, "children will almost always suffer the most from disasters, whether through loss of life, psychosocial trauma, and disruption of education or long-term adverse impacts on their resilience and coping mechanisms…" (in Kumar, 2011, p.3). This can be further elaborated by Seballos *et al* who argue that children are "less equipped to deal with deprivation and stress due to their particular physical, social and psychological characteristics", making them particularly vulnerable to disasters (2011, p.12).

Because the bodies of children are growing and developing, they are extremely sensitive to the effects of malnutrition. Additionally, young bodies cannot regulate their body heat as easily as adult bodies, and in a world where people increasingly have to migrate due to extreme weather and sea level rises, children are at most risk because they are more susceptible to disease and least able to fend for themselves, making them particularly vulnerable to climate change (UNICEF, 2014).

UNICEF states that one of the biggest challenges for the children in the future will be to feed the 9 billion people who are projected to live on the planet in the middle of the 21st century. In a world ravaged by hotter temperatures, more extreme weather conditions and sea level rises, younger children are at most risk. Families can lose their livelihoods due to droughts or floods and as a result parents will not be able to

feed their children or have resources to send their children to school or provide them with healthcare (UNICEF, 2014).

3.5.2 Children with disabilities

The UN convention on the rights of Persons with Disabilities (UNCRPD) specifically outlines the obligations of states to protect and ensure the safety of people with disabilities (Kett and Ommeren, 2009, p.1801). UNCRPD (2006) defines People with disabilities (PWDs) as "those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others".

According to World Health Organisation (WHO) over a billion people, about 15 % of the world's population, have some form of disability (WHO, 2014). More than half a billion PWDs live in countries often affected by conflict and natural disasters and although it is a "fundamental principle" that PWDs should be given the opportunity to participate in a society with as few barriers as possible, this almost never happens in a disaster situation (Atlas-Alliance, 2015 and Alexander, 2011, p. 384). PWDs are extremely vulnerable in an emergency setting because they may be unable to evacuate, they lose their assistance devices or struggle to access shelters, camps and food distribution sites (Atlas-Alliance, 2015). This has been further elaborated by The Global Partnership for Disability & Development (GPDD) and The World Bank (WB) (2009) who state that it is a common experience that in a disaster, emergency or conflict setting, PWDs are more likely to be left behind or abandoned during evacuation. PWDs are also disproportionately affected when physical, social, economic and environmental networks and support systems are disrupted and are more likely to face discrimination when resources are scarce in the immediate response and long-term recover period (GPDD and WB, 2009).

CWDs are particularly vulnerable as they might be abandoned by family members, risk facing extreme isolation and vulnerability in displacement situations and are unable to access basic health care, food and shelter (Atlas-Alliance, 2015). In addition, disasters also lead to disabilities. For example, according to the Haitian Government it is estimated that PWDs rose from 800,000 to 1,1 million after the earthquake (Atlas-Alliance, 2015). According to Stough and Peek (in Alexander,

2011, p.386), hundreds of children lost their limbs and many other were forced to undergo amputations as a result of secondary infections after the earthquake in 2010.

According to Alexander (2011, p. 384), "the whole question of how to assist people with disabilities in emergencies, let alone how they might help themselves, each other, and assist planners, has been roundly overlooked" and is rarely a topic at emergency management conferences. CWDs have historically also been overlooked by disaster researchers and professionals and are, as a result, among the least prepared and most poorly served, consequently experiencing "amplified physical, psychological and educational vulnerability" (Stough and Peek in Alexander, 2011, p.386). In addition, CWDs are more likely to be poor and live in low-quality housing, exposing them to hazards.

CWDs not only encounter vulnerabilities before and during disasters, they might also experience barriers in the disaster response and recovery process. Public shelters set up after a disaster might not accommodate for wheelchairs and announcements might not be translated to those who are deaf. Disasters can be specifically dangerous for children with medical disabilities who rely on electricity and need medical care while they are away from home. In addition, the fact that their parents might be injured, dead or missing adds on to their vulnerabilities (Stough and Peek in Alexander, 2011).

3.5.3. Girls

Gender has profound impacts on all areas of social life and contributes to our understanding and knowledge of social processes (Fothergill, 1996, p. 33). Although there is a general consensus among researchers, scholars and professionals today that women's role, experiences and perspectives need to be both investigated and included in disaster research, gender has been ignored in a historical perspective. However, by including women in disaster research, we will achieve a more complete understanding of risk and disaster (Fothergill, 1996).

According to Fothergill (1996), gender directly influences vulnerability in disasters and exposures to risks. Women's increased vulnerability is highly influenced by gender inequality and social roles - such as caregivers - and a lack of mobility.

Women are also more disproportionately living in poverty worldwide, and there exists evidence showing that people living in poverty are more vulnerable to disasters. The poor will therefore suffer disproportionally when disasters strike.

The above has also been elaborated by Callister (2008) who states that women are more vulnerable during disasters because they lack access to resources such as land, savings and food. They are also the primary caregivers for children, the elderly and disabled people. They are constrained by gender stereotypes and family responsibilities leaving them with less freedom to decrease their economic dependency on their husbands or other family members. Women may also be victims of intimate partner violence and sexual violence and have more difficulty in accessing needed documents in order to receive food, healthcare and other social services (Callister, 2008).

To further explain women and girls vulnerabilities in and after disasters, one can use Neumayer and Plümpers (2007, p. 553-555) three main causes for gender differences, especially the mortality aspect. Firstly, the biological and physiological differences between men and women can be a disadvantage to women and girls in their immediate response to disasters. Men are physiologically better equipped to withstand a disaster's physical impact. Women, who are generally less strong, will be more easily swept away by wind or water, with pregnant women being the most vulnerable. Women run slower, and have more difficulties in climbing posts, trees and other rescue points than men because boys have often learned this skill in their upbringing as part of their tasks in bringing food such as fruits and animals and other resources to the family. Additionally, large-scale disasters can have severe negative effects on the social infrastructures of affected countries reducing access to food, hygiene, health services and clean water (Neumayer and Plümpers, 2007).

Secondly, social behavior may lead to a behavior of women that increase their vulnerability in the immediate course of the disaster. This was also collaborated by both Fothergill (1996) and Callister (2008) above. In many countries women's role is to look after and protect children and the elderly, as well as the domestic property. This may hamper their self-rescue in almost any type of natural disaster. A traditional division of labour can disadvantage women in the event of certain disasters. For

example, in fishing communities, men are often out fishing whereas the women are at home taking care of the house. In the event of a tsunami the waves only gather height and strength as they approach shore, meaning that most fatal impacts are directly at the coast. Also, during earthquakes men are more likely to be out in the open whereas women are at home in low-standard housing (Neumayer and Plümpers, 2007, p.554).

Thirdly, there may appear a shortage of basic need resources as well as a temporary breakdown of social order where competition between individuals becomes fiercer and existing forms of gender discrimination become exacerbated and new forms of discrimination can emerge. Women are much more likely to die or become victims of violence after a disaster because of discriminatory access to resources and the temporary breakdown of social order (Neumayer and Plümpers, 2007, p.554).

Neumayer and Plümpers (2007, p.556) also argue that a collapse of social order is more likely in countries where the political authority is weak. In overcrowded camps anarchy often rules leaving unaccompanied women and girls particularly vulnerable to sexual abuse and rape. Women and girls are also more often negatively affected by the, often terrible, health and hygienic conditions in refugee camps.

Disasters poses particular dangers to girls because they risk falling behind in their education and being exposed to gender-based abuse. According to Peek (2008, p.9) girls are particularly at risk for being taken out of school due to cultural expectations and their heavier workloads. Young girls especially are expected to fetch water, help with household chores and look after their siblings while boys are responsible for tending livestock and looking for food.

In emergency situations, women's needs are often ignored, leaving the girls even more invisible. Girls may lack the most basic skills to cope in a crisis, like the ability to swim, or even run and get the information they need forcing them to make poor and ill-informed decisions that may affect them for the rest of their lives (Plan International, 2013). It is evident that girls, especially adolescent girls between the ages of 10-14 years are at risk of sexual exploitation and abuse due to their dependence, lack of power and lack of participation in decision-making processes (Plan International, 2013).

3.6 Disaster Management and Disaster Risk Reduction

3.6.1 Resilience

Vulnerability was discussed earlier in relation to disasters. It can be argued that the antithesis of vulnerability is resilience. Resilience first came into the disaster and development discourse during the last decade of the 1990s (Manyena, 2009). The World Disaster Report released by IFRC in 2004 had a strong focus on community resilience and stated that the decade of 2005-2015 would have increased focus on what affected communities could do for themselves and how organisations and states could best strengthen communities to face disasters and its risks (IFRC, 2004). In 2005, the Hyogo Framework was also released, focusing on "building the resilience of nations and communities to disaster" (UNISDR, 2007). Resilience has become a widely used concept in the last decade of the humanitarian discourse due to the stronger focus of the term in humanitarian work, disaster risk reduction (DRR) and development work (IFRC, 2004 and UNISDR, 2007).

Just like disaster and vulnerability, resilience is difficult to define, as there are discussions on whether the concept is a process or an outcome (Manyena, 2009). However, the general consensus is that resilience refers to the ability of an individual or community to "bounce back" from the impact of hazards or disasters (Wildavsky, 1991, Pelling, 2003, Cardona 2003 and UNISDR, 2007 in Barley, 2011). However, Manyena argues that disasters resilience is first and foremost the ability to "bounce forward" rather than "bouncing back" following a disaster (2009, p.i). While "bounce back" implies the capacity to return to a pre-disaster state, failing to capture the "new" reality created by disasters, "bounce forward" relates to a community or an individual's ability to continue within the context of changed realities as a result of the disaster (Manyena, 2009, p.i).

It is also important to note that although resilience can be argued to be the opposite of vulnerability, people can possess characteristics that both make them vulnerable and resilient. The absence of vulnerability does not necessarily make one resilient, thus Manyena argues that the two concepts should be viewed as "discrete constructs" until the contrary is demonstrated (Manyena, 2009, p.264). Also, resilience building occurs at any phase or multiple phases of the disaster cycle (Manyena, 2009).

3.6.2 Disaster Risk Management/Disaster Risk Reduction

Because disasters pose major threats to sustainable development, disaster risk management has emerged as a core element of sustainable development (O'Brien *et al*, 2006). It is important to note that risk of disasters can never be eliminated completely, but it can be assessed and managed in order to reduce the impact of disasters.

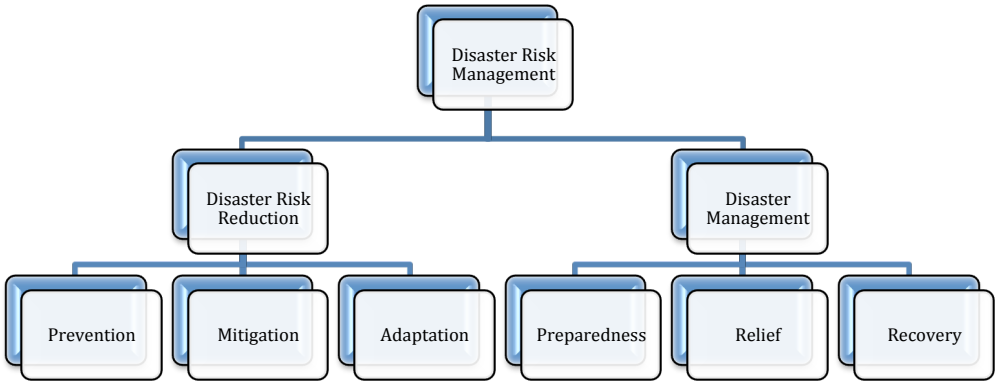

Figure 4 Disaster Risk Management and its components. (Source: UNISDR, 2010)

Nirupama (2013, p.164) defines Disaster Risk Management (DRM) as a "comprehensive approach involving the identification of threats due to hazards; processing and analyzing these threats; understanding people's vulnerability; assessing the resilience and coping capacity of the communities; developing strategies for future risk reduction; and building up capacities and operational skills to implement the proposed measures".

According to the South African Disaster Management Act, DRM aims to:
(a) Preventing or reducing the risk of disasters (DRR)
(b) Mitigating the severity or consequences of disasters
(c) Emergency preparedness
(d) A rapid and effective response to disaster, and
(e) Post-disaster recovery and rehabilitation.
(Louw and Wyk, 2011, pp.16-17).

Disaster Risk Reduction (DRR) is a component of DRM and according to UNISDR (n.d) DRR is the "the concept and practice of reducing disaster risks through systematic efforts to analyse and reduce the causal factors of disasters". UNICEF (2012) argues that the purpose of DRR is to "minimise vulnerabilities and disaster risks throughout a society in order to avoid (prevent) or to limit (mitigate and prepare for) the adverse impacts of natural hazards, and facilitate sustainable development". Examples of DRR is reducing exposure to hazards, decreasing vulnerability of people and property, wise management of land and the environment and improving preparedness and early warning systems (UNISDR, n.d).

Disaster Management (DM) can be defined "as the organization and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies, in particular preparedness, response and recovery in order to lessen the impact the impact of disasters (IFRC, n.d).

Together, DRR and DM are two comprehensive approaches under the umbrella DRM that works to ensure that communities and nations on a whole are prepared on every level if and when a disaster strikes. Thus, the goal of DRM is to ensure that there is minimal loss of lives and livelihoods in the event of a disaster and that the affected community or system returns to "normal" within the shortest possible time (Manyena, 2009).

Most countries have in recent years developed comprehensive disaster management programs that include "risk assessment, risk control, mitigation, preparedness, political will, economic feasibility, response, recovery, resilience building, and strategic and sustainable development activities" (Nirupama, 2013, p.169).

However, critics have argued that DRM work is isolated from development work, climate change adaptation and environmental management and calls for a more comprehensive and common approach to tackle the challenges of disasters (Thomalla, Downing, Spanger-Siegfried, Han and Rockström, 2006 and O'Brien *et al*, 2006). Thomalla *et al* (2006) argue that, despite efforts of all the discourses, the vulnerability of individuals and communities to natural disasters continues to increase. This is mainly because DRM has primarily focused on "short-term single stressor responses"

such as flood embankments, community shelters and more resistant buildings. This was intended to control natural processes that would either modify the threat or provide physical protection. O'Brien *et al* (2006) also argues that disaster management needs to change and evolve to cope with new and emerging threats, especially climate change adaptation. As such, climate change adaptation needs to become an integral part of not only comprehensive risk management, but also sustainable development policies. This will be discussed further in the section below.

3.6.3 Sustainable development, Disaster Risk Management and Climate Change

Regardless of the accuracy of climate change predictions, climate change is increasingly contributing to disaster risk and hampering sustainable development efforts. As argued by O'Brien *et al*: "disasters can erase the benefits of development investments, and poorly planned development interventions may become a source of hazard" (2006, p. 65). This was also recognised at the World Conference on Disaster Reduction in 2005 where it was recognised that "climate change is posing an immediate and long-term threat to the achievement of the MDGs and sustainable human development, and, as such, should be an integral part of disaster planning (O'Brien *et al*, 2006, p.65). Planning for extreme weather events supports preparedness for emergencies, sustainable development and climate change adaptation. As O'Brien *et al* argues, "Development investments and projects are never risk-neutral and can either increase or reduce vulnerability to hazards". Sustainable development, disaster risk management and climate change adaptation all have risk reduction as a shared objective. However, it is the promotion of resilience that offers the opportunity for a more holistic and proactive response (O'Brien *et al*, p.70).

Hence, despite difficulties in bridging the gap between disaster, development and climate change, policymakers need to realize the importance of creating comprehensive policies that can address all these elements together (O'Brien *et al*, 2006).

3.6.1 Children's participation

According to Seballos *et al* (2011, p.36) the primary focus on children in disaster management should be to ensure that children have safe spaces and places to go after disasters occur. These places are often called child-friendly spaces and provide

children with protected environments in which they participate in organized activities to play, socialize, learn and express themselves as they rebuild their lives (Save the Children, 2008). In addition, disaster management should enable their parents or caregivers to reduce the family's exposure to disaster through good decision-making in relation to health, education and livelihood activities (Seballos *et al*, 2011, p.36).

However, Seballos *et al* further argue that if DRR is to mobilise a shift from emergency response to disaster prevention and preparedness addressing vulnerability and building resilience, it requires engagement with communities to understand the structural causes of why some people are more vulnerable than others in disasters. Engaging the community also means engaging children as such processes can contribute to a shift from passive vulnerability to active agency (2011, p.35). This has also been elaborated by Peek who argues that while children are at special risk during disasters, they are never passive victims (Peek, 2008, p.4). Disasters also harm the physical spaces where children live, learn and play such as their homes, neighborhoods, schools, parks and playgrounds. By including children in DRR activities they can act as agents of change, both during and after disaster events and have creative ideas for helping both their families and communities recover from disasters (Peek, 2008, p.4 and Seballos *et al*, 2011).

As such, there is a growing emphasis on children's capacity in participating directly in DRR activities through child-centred programmes. And recent research also shows that children have a unique perception of disaster risks as they have the ability to combine external information with their own experiences (Tanner and Seballos, 2012). For example, they combine knowledge around local landslides or polluted watercourses with external information sources such as media, school curricula and training sessions. Research has also shown that children's understanding of the implications of for example global climate change to local livelihoods is often more advanced then adults (Tanner, Garcia, Lazcano, Molina, Molina, Rodriguez, Tribunalo and Seballos, 2009). Children also have the ability to reduce risk behavior within households and at the community level showing children's capacity to mobilise adults and external policy actors to create change (Seballos *et al*, 2011, p.35 and Peek, 2008, p.4). Children can for example be analysers of risk and reduction activities, they can design and implement projects, communicate risk, mobilise resources and people and construct social networks and capital (Tanner *et al*, 2009). It

is also expected that children who learn and practice DRR from a young age will integrate it into their adult lives passing it on to subsequent generations. Investment in child-centered DRR may therefore produce higher benefits and future savings than when adults acquire the same skills (Back, Cameron and Tanner, 2009).

Thus, in order to best protect children from disasters, children and their caregivers have to be involved and considered in all disaster risk reduction activities. Children rights to participate in decisions affecting their lives are also protected in the Convention on the rights of the child, which will be elaborated under the heading "Conventions and legal frameworks".

3.6.2 People with disabilities

One of the greatest challenges regarding the inclusion of disability issues in disaster response is the stigma PWDs face. As argued by GDPP and WB (2009, p. 11) "it is hard to legislate to change people's attitudes", but it is crucial that awareness is raised among relief organisations about situations where displaced PWDs are excluded from the rest of the displaced due to stigma and people's attitudes. It is extremely important to underline that PWDs who also belongs to minority groups based on gender, race or ethnicity face "double disadvantage" in a disaster situation because they are already being discriminated against based on their minority (GDPP and WB, 2009).

Though some guidelines and manuals supporting the specific inclusion of PWDs in emergencies exist, most programmes focus on disability as a crosscutting issue, or on protecting PWDs as a vulnerable group. Lack of standards and indicators to monitor inclusion together with lack of training and awareness makes it difficult to show that the specific guidelines have been used (Kett and Ommeren, 2009, p.1801).

WB notes that it has been observed that even when they are categorised as a "vulnerable" group, PWDs still tend to receive less priority than other "vulnerable" groups such as women and children (World Bank, 2006).

According to Kett and Ommeren (2009) local organisations working for PWDs are rarely included in planning and coordination meetings, particularly in crisis and thus the opportunity is missed to improve the coordination and inclusion of PWDs in

humanitarian aid. Additionally, there exist many misperceptions among staff in humanitarian organisations about PWDs, such as for instance that PWDs require expensive specialist care, that they are unable to help others, that they are unable to participate in education, work or community activities, and that in the case of emergencies such as earthquakes or floods PWDs will simply not survive (Kett and Ommeren, 2009). As such, it can be argued that the inclusion of disabled in disaster response is seen as only another "box to tick" than as an actual practice promoting human rights (Kett, Lang & Trani, 2009, p. 651).

3.8 Conventions and legal frameworks

UN Conventions and legal frameworks are created and ratified in order to protect the civil, political, economic and social rights of people (Amnesty, 2015). A convention becomes legally binding to a particular State when that State ratifies it and a monitoring body is often set up to assess State parties' progress in implementing the convention (UN, 2007).

Legal frameworks for humanitarian action provide guidance on delivering assistance in a variety of challenging contexts and can be powerful tools in advocating for, and achieving, the protection of civilians (Governance, Social Development, Humanitarian, Conflict (GSDRC), 2015).

I choose to bring in various conventions and legal frameworks because it set standards for how the Government and the NGOs develop their strategies. NGOs often refer to conventions when explaining the core of their work. For instance, Plan International states, "the foundation of all Plan's work is the UN Convention of the Rights of the Child" (Plan International, n.d). These guiding principles come with obligations as well as responsibilities and NGOs have to make sure that they develop strategies that ensure that these promises are held.

Below, the most important conventions and legal frameworks are presented.

First, the Convention on the Rights of the Child (CRC) is intended to guarantee children their rights for survival and development in all circumstances (Penrose &

Takaki, 2006). Articles 6, 12, 19, 23, 24, 26 and 27 are of particular interest in regards to this study[7] (OHCHR, n.d).

Additionally, it can be argued that the "four pillars" of the CRC – protection, survival, development and participation – "establish the fundamental rationale to create opportunities for children's voices to be heard in research, advocacy and policy on climate change and Disaster Risk Reduction (DRR)" (Eldis, N.D). Furthermore, the decisions made today, will affect their lives in the future and children should therefore be at the forefront of climate change policy, advocacy and research. Both disaster preparedness, response and adaptation strategies need to be child-centered, child-friendly and child-led (Eldis, N.D).

According to UNICEF (2014, p.3), "all states have obligations under human rights law to abate the effects of climate change on the human rights of those within their jurisdiction". Although the CRC does not mention climate change in particular, it does require the governments to protect children from the most harmful consequences of environmental pollution.

Second, because the study is also looking into gender and disability issues, it is relevant to bring in The Convention on the Elimination of all Forms of Discrimination against women (UN, n.d), especially in terms of sexual violence, security and trafficking[8] and the Convention on the Rights of Persons with Disabilities[9] (UN, 2006).

Third, The Children's charter for Disaster Risk Reduction (DRR) has been developed through the eyes of children in Africa, Asia and Latin America. The children were, among other things, asked about the impacts disasters had on their lives and identified five prioritized points in DRR. In terms of this research, three points are of particular interest:

[7] Article 6: Survival and development, Article 12 Right to be heard Article 19: Protection from all forms of violence, Article 23: Children with disabilities, Article 24: Health and health services, Article 26: Social security, Article 27:Adequate standard of living

[8] Article 6 States Parties shall take all appropriate measures, including legislation, to suppress all forms of traffic in women and exploitation of prostitution of women.

[9] Article 5: Equality and non-discrimination, Article 7: Children with disabilities, Article 9: Accessibility, Article 11: Situations of risk and humanitarian emergencies

1. Child protection must be a priority before, during and after a disaster

2. Community infrastructure must be safe, and relief and reconstruction must help reduce future risk

3. Disaster Risk Reduction must reach the most vulnerable

(Children in a changing climate, n.d)

Fourth, The Verona Charter on the rescue of persons with disabilities in case of disasters was agreed on in 2007 after a Consensus Conference was held in Verona. It was recognised that PDWs faced a much higher risk in a disaster then people without disabilities and hence needed other forms of protection and help. The Verona Charter therefore intended to be a "milestone in this process and a concrete contribution to the impact of the United Nation Convention on the Rights of Persons with Disabilities". However, the charter was not intended to lay down new rights with legal value, but rather link existing fundamental liberties and civil protection together making them more visible to citizens and institutions (The Verona Charter on the rescue of persons with disabilities in case of disasters, 2007).

3.9 Theoretical framework

The aim of this thesis is to explore children's vulnerabilities, and in particular girls and CWDs, in natural disasters and how we can decrease their vulnerabilities, using Haiti as a case study. This section aims to summarize the theories and concepts from the literature that are used to analyse the empirical data.

This thesis recognises that natural disasters are a result of a complex range of issues consisting of natural hazards, human vulnerabilities and risks. The root causes of natural disasters lie in the political and socio-economic arena rather than the environmentalist arena and as such the thesis adopts the definition used by IFRC; "sudden, calamitous event that seriously disrupts the functioning of a community or society and causes human, material, and economic or environmental losses that exceed the community's or society's ability to cope using its own resources"

(Manyena, 2009 and IFRC in Kumar, 2011, p.2). Extreme weather events that turns to natural disasters also need to be seen in relation to climate change and the thesis adopt the standpoint of both IPCC and UNISDR that we have to stop calling natural disasters for "natural" as science is telling us that disasters such as floods and hurricanes will increase in both frequency and strength due to climate change. In regard it is important to distinguish between "natural hazards" and "natural disasters". Hazards, such as floods and hurricanes, are natural events, but "it is the way in which societies have developed that causes them to become disasters" (O'Brien, O'Keefe, Rose and Wisner, 2006, p.70). Therefore, disasters are not natural and in some places it has been common for some time to define disasters as "failed development" (O'Brien *et al*, 2006, p.70). Thus, when referring to natural disasters in this thesis, it is based on this distinction. Also, the causes of natural disasters and climate change are linked to a country's, community or individuals political and socioeconomic arena and it is therefore important to understand the concept of vulnerability. In relation to natural disasters vulnerability is a "product of various factors such as physical, economic, political and social susceptibility or predisposition of a community to natural hazards and anthropogenic pressures" (Manyena, 2009). As such, this thesis adopt the view of O'Keefe *et al* (1976, p.566-567) who argue "without people, there is no disaster" and the definition used by Blaikie *et al* (1994, p.275) which state that "the characteristics of a person or group and their situation that influences their capacity to anticipate, cope with, resist and recover from the impact of a natural hazard". When it comes to vulnerability and its relevance to climate change the thesis adopts the definition used by IPCC (2014, p.5) where vulnerability to climate change is defined as "the propensity or predisposition to be adversely affected". As with natural disasters then, climate change is highly linked to factors such as physical, economic, political and social susceptibility or predisposition of a community. There is therefore a common understanding that it is the poor who are likely to be hit the hardest because the capacity to respond to both natural disasters and climate change is low in poor developing countries such as Haiti (Olmos, 2001, p.2). Thus, natural disasters needs to be understood as shaped by external and internal factors, both on a country and community level. This thesis will analyse the empirical data with a particularly focus on people's awareness around natural disasters and climate change as described above and if respondents link factors such as their physical, economic, political and social situation to their own vulnerabilities.

As the main objective of this thesis is to investigate to which degree children, and in particular girls and CWDs, are more vulnerable to natural disasters and how we can decrease their vulnerabilities, it is important to link vulnerability to children in particular. According to estimates done by UNICEF 80 % of deaths that are attributable to climate related changes are children (UNICEF, 2014). At the end of the twentieth century, disasters affected an estimated 66,5 million children each year and over the second decade of the twentieth century it is estimated that 175 million children will be affected annually by climate-related disasters (Peek, 2008).

Because of children's particular physical, social and psychological characteristics, children are thought to be more vulnerable in disasters and will almost always suffer the most (Kumar, 2011 and Seballos *et al*, 2011, p.12). However, as with adults, children are not affected equally and CWDs and girls are thought to be the two most vulnerable groups. CWDs are higher at risk of being abandon by family members, extreme isolation and vulnerability in displacement situations. Because of their disabilities, they can also have difficulty in accessing health care, food and shelter after a disaster (Atlas-Alliance, 2015). Gender has profound impacts on all areas of social life and directly influences vulnerability in disasters and exposures to risks (Fothergill, 1996). Disasters often lead to a collapse of social order, especially in countries with weak political authority. This makes girls more exposed to violence, sexual abuse and rape, especially in overcrowded camps where they are left unaccompanied and alone if they have lost their parents. Girls can also be more affected by the poor health and hygienic conditions that are often the case in both refugee camps and areas affected by disasters (Neumayer and Plümpers, 2007, p.556). Girls are often more at risk because they lack the basic skills often taught to boys for example the ability to swim, run and get information they need (Plan International, 2013). Based on the above, this thesis holds the assumption that children are affected differently, with girls and CWDs being particularly vulnerable and empirical findings will be analysed with a particular focus on if and how children, especially CWDs and girls, are more a affected in a disaster setting.

Given this context, the empirical data will be analysed to understand whether the above vulnerabilities are found in the empirical data, if people's awareness and understanding of these vulnerabilities exist or if the data shows inconsistencies and if other factors are found.

In order to decrease human vulnerabilities and instead create resilience it is important to look at concepts and mechanisms that can help trigger this. First of all, this thesis adopts the view that resilience refers to the ability of an individual or community to "bounce forward" after a disaster. The concept of "bouncing forward" refers to the ability of an individual or a community to continue within the context of changed realities as a result of the disaster (Manyena, 2009, p.i). However, the notion that people can possess characteristics that makes them both vulnerable and resilient is important to remember. Although risk of disasters can never be eliminated completely, it can be assessed and managed in order to reduce the impact. As such, disaster risk management has become a core element of sustainable development (O'Brien *et al*, 2006). Disaster Risk management is an approach that deals with many different components within the disaster cycle. The empirical data gathered will be analysed with particular focus on DRR, especially in regards to prevention and adaptation, but there will also be some emphasis on preparedness and recovery within the DM component. The main reason for focusing on DRR and DM is to understand the level of awareness of these concepts within communities, to see whether children are participating in such activities in their local community and if this is contributing to both their awareness around disasters and their vulnerabilities.

In this thesis, the empirical data will be analysed to understand if there exist DRR and DM activities in the communities, the awareness around them and if there are discrepancies between awareness and activities according to the NGOs and Government Institutions in this study. Also, because there is a strong need for comprehensive approaches and strategies to development that incorporates classic development projects, DRR and DM activities and climate change adaptation, the empirical data will be analysed to see if NGOs and Government institutions are adopting this approach.

The conventions and legal frameworks will as such be used to discuss whether children are having their rights to protection, survival, development and participation, fulfilled within the context discussed above.

4. Methodology

This chapter describes and justifies the methodology used in this study. It describes the choice of research strategy and research design, sampling, methods of data collection and data analysis. Finally, it will discuss issues related to doing research in Haiti and ethical considerations during the research process. Throughout the chapter, challenges encountered during the research process will be discussed.

4.1 Qualitative research strategy

According to Huges (2006), qualitative researchers "use a variety of tools and techniques in order to develop deep understandings of how people perceive their social realities and in consequence, how they act within the social world. They seek to make connections between events, perceptions and actions so that their analyses are holistic and contextual".

The key purpose of this study is to understand children's vulnerabilities, especially girls and CWDs, in natural disasters and how this influences their ability to survive and develop. This means going into depth in terms of understanding the relationship between natural disasters and children and why children are more exposed to risks than other groups.

In terms of epistemological considerations, i.e. "what is acceptable knowledge", an interpretivist approach is adopted since it is "concerned with how the social world is interpreted, understood, experienced or produced" (Mason in Huges, 2006).

When it comes to ontology, a constructivist approach is adopted because it sees the social world as "outcomes of the interactions between individuals, rather than phenomena "out there", and separate from those involved in its instructions" (Bryman, 2012, p. 380).

Based on these reflections, a qualitative research strategy is seen as most appropriate. Because Haiti is used as a case study for the research, a case study approach is chosen because this approach enables a "detailed and intensive analysis of a single case"

(Bryman, 2012, p.66). Further, Yin (2012, p.5) argues that a case study design should be considered when the focus of the study is to answer "how" and "why" questions and where you cannot manipulate the behaviour of those involved in the study.

When opting for case study design it is important to acknowledge the concern by some that case studies does not allow for generalisations beyond the particular case studied (Bryman, 2012). However, as emphasised by Yin (2003 in Greenaway, 2011), the purpose of the case study is to "expand and generate theory, or analytical generalisations, not proving theory or statistical generalisation". A case study research design is therefore an exploratory tool where one might be able to establish a link between wider theory and the particular case, which again might be applicable to other situations.

I believe it is possible to generalise children's vulnerabilities in natural disasters, as the impacts are rather similar within and across countries. This is especially true in developing countries with high poverty levels and where there are weak legal frameworks and disaster risk reduction strategies together with weak government institutions meant to protect children in such circumstances.

4.2 Sampling

According to Bryman, sampling is "an inevitable feature of most, if not all, kinds of social research and therefore constitutes an important stage in any investigation" (2012, p.12). One of the major reasons is that we as researchers are not able to interview or observe all individuals that are suitable to our research and we therefore almost always have to sample (Bryman, 2012). This is also applicable to a case study design since the members of the case study context have to be chosen based on criteria for the research in question (Bryman, 2012).

Because I had previously worked for Plan Norway for five years where I worked closely with Plan Haiti and they work with the topics in question, I found it an obvious choice when first exploring which organisations to contact. When I contacted Plan Haiti they were positive of me coming to conduct my research in collaboration with them and put me in contact with the disaster risk manager.

My initial plan was to only collaborate with Plan Haiti, but since I had to wait almost two weeks before going to the field with Plan and was worried that I would not have enough participants I decided to contact other organisations that was relevant for my research. I managed to arrange focus groups with both children and women in collaboration with Project Haiti and interviews with Act Alliance and Care Haiti. This helped me a great deal in terms of increasing the number of participants, especially children. It also helped me to understand the bigger picture of how NGOs and the Government operate in Haiti, the local context and the challenges both them and the people face.

This research is therefore based on data collected from children, parents and caregivers living in communities supported by Plan Haiti, SOS-children's Villages, Project Haiti, Act Alliance, Care Haiti and Government Officials.

The selection of participants, NGOs and Government officials was based on a mixture of both purposive and convenience sampling.

Before I went to Haiti I had selected four categories from where I wanted to sample:

1. Children

2. Parents and guardians of the children

3. NGOs based in Haiti working with children and disaster management

4. Local government members who works within disaster management and/or child welfare issues.

I also wanted to sample from two different locations to be able to compare vulnerabilities and awareness to natural disasters and climate change.

I did not have a definite number of participants or who they should be in mind before I left but I had sent my needs and thoughts before arriving Haiti. Unfortunately, I discovered that when I arrived no preparations had been done in terms of arranging focus groups or interviews, which delayed my research. I had meetings with the field staff who was to organise the focus groups the first week where I gave information about my requirements and needs. Together we agreed to have focus groups with children, parents, local staff and government officials. It was also agreed that I was to

interview SOS-mothers living in SOS-children's villages in Croix de Bouquets, an area within Port-Au-Prince.

I wanted to use purposive sampling because it entails sampling conducted with reference to the goals of the research and in order to answer the research question(s) (Bryman, 2012). I wanted that the selection of the participants to be chosen with the aim of getting a broad range of views since perspectives might differ highly depending on what role and position the participants have. The sampling was purposive in the sense that I tried to identify a range of participants with different age, gender, knowledge, backgrounds and geographical areas so that I could get a comprehensive understanding of the impact this might have on vulnerabilities and awareness to natural disasters. However, the sampling was also based on convenience, in the sense that I contacted several organisations and interviewed the people who were willing to be interviewed. Here my aim was to increase the number of participants in the research and maximise the data collected within the short timeframe I had.

Unfortunately, it proved difficult to have focus groups or interviews with CWDs because neither Plan Haiti nor Project Haiti had any specific programs with CWDs. Although efforts were made to get in touch with organisations that worked specifically with PWDs, I was not successful.

This might have affected the quality of my data, but based on the information gathered, I don't have the impression that the information would have been different if sampling had been done differently.

In addition to the participants above, I also had a set of key informants outside of the organisations, but these were not interviewed in a formal setting. These were more conversations in informal settings and I have not included this information in the collection of data as such, but rather used it as background information to understand the many different views and opinions that exists within Haiti on both natural disasters, the dynamics between the NGOs and communities as well as the Government and the people. In this sense, this information was more used as a "reality check" on my part, to see if my interpretations of the local context in Haiti were wrong and to get a better understanding of the dynamics and contexts described above.

4.3 Data collection

The most frequently used methods of data collection when adopting a case study, is interviews and observation (Bell, 1999). The primary method of data collection in this research was interviews with NGO staff, Government Officials and focus groups with children and adults. In addition, I reviewed a range of relevant secondary data sources such as journals, text and document analysis. Both interviews with NGO staff and secondary data sources was mostly for triangulation purposes in order to compare and discover any discrepancies between the two groups. In addition, using more than one method can increase the trustworthiness of qualitative investigations (Bryman, 2012).

4.3.1 Interviewing

Interview is probably the most commonly used method in qualitative research (Bryman, 2012). One of the advantages of using interviews is the flexibility it gives as well as allowing the researcher to explore a topic in great depth using a variety of people and informants.

Although my initial plan was to have one-on-one interviews with children and caregivers in the field, this proved to be difficult. This was mainly due to time constraints as well as lack of planning and cooperation with the field staff. These challenges will be covered in more depth in the challenges section below. Consequently I did not get to use the interview guide that I had prepared for children and youth.

One-on-One interviews were therefore only conducted with NGO staff and Government officials and took form as semi-structured. All of the interviews in Port-Au-Prince were conducted together with my fellow researcher, Pia Cecilie Wedø, as we had a similar approach to our study and because it was of most convenience for both the people being interviewed and us. We had both prepared an interview guide and took turns in asking questions. This worked fine for all and for Pia and me it was a good way of crosschecking the information we needed and also abled us to get useful information which we had not thought of ourselves.

Because the interviews took form as semi-structured, the interview guides was only used as a checklist to make sure that all the major topics and issues were touched-upon. Also, the interview guide was good to have in order to make sure that the common topics were covered in all interviews so that a comparison could be made. I found that the conversation flowed easier the less formal and structured we were and some of the best interviews we had, we barely used the checklist at all. In these interviews we touched upon important topics and relevant information that we had not thought of ourselves beforehand, mostly because we did not know the local context well enough.

One of my main worries before the research started was whether people would feel restricted speaking to me, saying what they thought I wanted to hear. I was also worried that they would be uncomfortable and not willing to speak to me.
According to Thagaard, the information shared in interviews is always influenced by the relationship between the researcher and the informers (2003, p. 98). As this is true, I also found that the information shared is also influenced by the relationship between the translator and the researcher in the sense that it is important that there is mutual trust between the two and that the translator understands the topic in question in order to translate correctly. In Cap Haitien this proved to be more of a challenge than whether the interviewees wanting to speak to me.

I also believe that I went into the interviews with an open and curious mind and it was important for me as a researcher at the beginning of the interviews to underline that I was here to learn and that I had a personal commitment and interest in the topic.
I also tried to follow Thagaards advice about having any difficult or critical questions in the middle of the interview (2003, p. 94). That way I felt we had some time to establish some form of mutual trust and understanding.

Although I had challenges with some interviews, most of the people seemed to be genuinely interested in talking to me about their experiences and knowledge. They had great knowledge about children's vulnerabilities in natural disasters and wanted to make change in Haiti. They were therefore open about the challenges they faced, both in the communities they worked in, within their own organisation and the difficulty of working with both disaster preparedness and development in general in a

country like Haiti. They were also eager for me to share the results of the research with them so that they could learn and make improvements to their work.

Most of the interviews were conducted in English, but a few were also done using a translator. Challenges of using translators will be covered in a later section.

All interviews were written up by hand using a notebook and typed up immediately after the interviews, crosschecking with my research partner. I also used a sound recorder during all interviews and found this useful in order to crosscheck afterwards. I did not feel that this inhibited the participants and they were all asked beforehand if it was ok to use the recorder. Most interviews were carried out in their own offices, but in a separate room like meeting or conference rooms. This way they could all feel at home and comfortable and feel free to talk, but at the same time it was done on more neutral grounds than their personal office which was important for me as a researcher in terms of power balances.

4.3.2 Focus Groups

The focus group is another important method of data collection in the case study design and is a technique of interviewing that involves more than one person (Bryman, 2012, p.501). Each focus group discussion had duration of 1-2 hours depending on the availability of time. The purpose of the focus groups was to discuss children's vulnerability in natural disasters, their awareness of what natural disasters are and why they happen and preparedness. As stated in the previous section I was unable to conduct one-on-one interviews with children and adults in the field and was only able to have focus group discussions with these two groups.

Focus groups with children were arranged at the schools for convenience purposes. Because the men were working in their fields during the day, we wanted to limit their inconvenience as much as possible and arranged for them to meet us in near proximity to their homes. The women were all living in SOS-children's villages "working" as SOS-mothers and had time to speak to me during the day when the children were in school.

All, apart from two groups, which were mixed, were divided into girls, boys, women and men. The age group of the children varied from 10-15 years of age in all groups. I am not sure whether the mixed groups had any consequences for the collection of information, but it might have hindered some of the participants to talk.

One of my main worries before the research was whether the people would feel uncomfortable speaking to me, especially the children. Because I wanted to conduct most of my research speaking to children in various age groups, I was worried that I would not find ways to engage them or that they were unable to express themselves.

This also proved to be one of the biggest challenges. Two of the focus groups with children were particularly challenging. It took more form of a group interview than a focus group discussion at most times, although some discussed among them too, especially the boys. The boys spoke more freely and were also more engaged.
The girls did not feel comfortable speaking to us. In general it did not seem that the teachers or staff from Plan Haiti had prepared them about us coming to speak to them. Because of the above, it was difficult to let the children speak freely as they did not want to speak in general. I therefore found myself asking many questions without getting any response. This was both frustrating for the translator and me. However, this can also be cultural difference and that they did not feel comfortable speaking to a stranger whom they had never met before is completely understandable even though it had consequences for the data quality of my research.
One focus group in particular went very well. The teachers had prepared the children about the topics that were up for discussion and the children were engaged. However, because the children had been prepared in advance, I was unsure of how much they actually knew about the topic before and whether the information they gave was only the information they had been given by their teachers the previous day. I did experience some challenges with the teachers interfering and "correcting" the children. As the translator told the teachers not to interfere, it did not become a major issue. However, I believe the teachers were only trying to help the children, not correcting them for giving the wrong answer.

In addition, it is important to mention that in two other focus groups I was asked by the children to explain the concept of climate change because they did not understand. I believe the children asked because they did not want to "disappoint" and because

they had a genuine interest in knowing. Though I knew this could affect the empirical data, I decided to explain the concept to them without giving too much information on for example the linkages to natural disasters, but rather give them the opportunity to reflect. However, I am aware that the two issues above can have hampered the credibility of the information obtained from both groups, especially in terms of awareness because vulnerabilities were based on personal experiences of the children.

As for the focus group in Cap Haiti, I had been promised three focus groups, two with adults (women and men) and one with children with disabilities. When I arrived, I found that they were all seated together and the children were either too young or had mental disabilities that made them unable to speak. This severely decreased my number of child-participants, but I still gathered useful information in regards to challenges CWDs face both in and after natural disasters as well as in general in Haiti through their parents.

All focus group discussions were written up by hand using a notebook and typed up immediately after. I also used a sound recorder during all but one focus group and found this useful in order to crosscheck afterwards. I did not feel that this inhibited the participants and they were all asked beforehand if it was ok to use the recorder.

Language was more of a barrier in the focus groups than the interviews. One of the main communication challenges in the focus group was that the participants did not always understand the questions, especially the children. Sometimes I found that my questions might become too abstract, especially those regarding awareness to natural disasters and climate change, but when I used concrete events or examples it went better. Although it came naturally to give concrete examples or events, Thaagard give this as an advice in his book about qualitative methods from 2003 (Thaagard, 2003, p.89).

Because people speak French Creole in Haiti it was necessary to hire a translator for all the focus group discussions and interviews in Cap Haiti. I worked with two different translators, one in Port-Au-Prince and one in Cap Haiti. The translator in Port-Au-Prince was a very experienced translator who was used to working with NGOs. He often took responsibility of organising and asking questions to the field

staff when we did not receive any information, which we appreciated. However, the translator in Cap Haiti spoke very poor English and was not used to translation work. He did not understand the concepts or the topics I was covering in the research, which meant that I had to spend a lot of time explaining him before he was able to translate my questions to the participants. I was therefore unsure whether he managed to communicate the right questions to the people I was talking to. This was especially evident when I received answers that did not match with the questions. I therefore had to ask the same questions many times, making sure that both the translator and the interviewee understood the meaning of the question. At one point, the manager of the organisation where I had the focus group discussions in Cap Haiti took over the translation job, creating some tension between the translator and the manager.

One major challenge and ethical dilemma I faced was that the adults wanted something in return for speaking to me. They wanted either money or other things and when I explained that I was unable to offer them this some decided to leave. It became clear in later discussions with Plan Haiti that it used to be common for the organisations to give people money, food or other resources in order to motivate them to talk or participate in various activities and work in the communities. Although they had stopped this kind of "direct benefits" ten years ago they faced major challenges with staff on the ground that was not loyal to this new policy and kept up the old policies of giving people incentives. This made the collaboration between some communities and Plan Haiti very difficult. In addition, I was asked by the local staff to pay for food and drinks to both the children and adults. For two of the focus groups with the children I was asked by the local staff to pay 10 000 gourdes (USD 215) for lunch. At that point it was obvious that it had been some misunderstanding and miscommunication between Plan Haiti and me, as I never agreed on this beforehand. I had to arrange a meeting with the management at the country office explaining that it was not normal to ask students or any researchers to pay this kind of money in order for them to conduct their research. We agreed that I would provide the children with water, but it still made me feel very uncomfortable to have to "pay" the people to speak with me. My translator in Port-Au-Prince also told me that the local staff told the focus group with men after finishing the discussions that they were sorry that I did not bring them anything even though this was a normal gesture, adding frustration to

the men who were already dissatisfied that I did not come with money or other resources.

In terms of practical challenges it proved difficult to control how many people participated in each focus group. I had initially asked for maximum of 5 people because of the challenges of getting everyone involved, but most focus groups consisted of 10 and one of 12. This was a challenge because there was neither much time for everyone to participate and some were also reluctant to speak in the group. I found that, in general, maybe only half of the participants in each group participated. I had also asked to do focus group with children separated into different age groups. Instead I got children in the same focus group from 10-15 years of age.

In addition, my aim before I went to Haiti was to arrange focus groups with a mix of adolescents, NGOs and Government officials. Although I had asked my contact-person to arrange this before I came the arrangements had not been done and it proved impossible to arrange on such short notice. This also meant that the number of focus groups was limited, enabling me to conduct only three focus groups with children and three with adults.

Lastly, my aim was also to adapt the method of participatory learning and action when conducting focus groups with children. PLA can be defined as "a growing family of approaches, tools, attitudes and behaviors to enable and empower people to present, share, analyze and enhance their knowledge of life and condition and to plan, act, monitor, evaluate, reflect and scale up community action" (Appel, Buckingham, Jodoin and Roth, 2012, p. 5). The PLA methodology is based on many central principles; one is to engage the full participation of people on the processes of learning about their needs and opportunities and the action required to address them. Second, the facilitator should allow the participants to describe their own reality and experiences, as they understand it. The role of the facilitator is to enable the participants to share among themselves through group work by using visual aids and tangible objects (Appel *et al*, 2012). PLA uses a wide range of visual methods such as mapping, model building, role-playing, ranking and scoring exercises. These methods are often applied to empower people to express and analyse the realities of their lives. It particularly encourage people who cannot read and write to participate and is generally un-

structured and open (Save the Children, 2004). Because its techniques are designed for use with those with limited formal education, many researchers working with children have been drawn to this approach. PLA tends to emphasise working within groups and have been criticised for working within communities as if power inequalities is non-existent or unimportant (Save the Children, 2004, p. 58). Due to the limitations already described above, I was unable to explore this approach.

An important limitation of my data collection was that, as stated before, I did not get the opportunity to interview or talk to children or adults on a one to one basis. Individual interviews could have provided me with important and interesting information and the participants might have been able to speak more freely. This would also have given me an opportunity to compare responses from focus groups, interviews with NGOs and Government officials and in-depth interviews with children and adults and go more in-depth on particular issues.

In addition, because I have based much of my research on focus groups discussions with children, it has been important for me to be aware of the limitations this have imposed on the validity and credibility of data obtained. One of the major reasons for this is because children are said "not to have fully developed the capabilities to render trustworthy accounts of their experiences and qualitative data historically depicted as less trustworthy, and at a lower level of science, than quantitative data" (Kvale, 1996 in Docherty and Sandelowski, 1999).

4.3.3 Conducting research in Haiti

Apart from the challenges already mentioned, I would like to elaborate more on the challenge of conducting research in Haiti. During the period we where there in January and February, Haiti experienced political unrest, strikes and demonstrations. This started before we arrived in January, but it escalated with the dissolvent of the Government in mid-January leaving President Martelly now running by decree. The background for this political deadlock is a dispute over a new electoral law, which opposition makers have refused to approve. In addition, the term for the locally elected mayors around the country went out in October, but because of the dispute there has been no new elections. This means that, in theory, no one is running the

country. The UN Security Council was there in late January 2015 to try to solve the dispute supporting to President Martelly. In addition to this, we experienced major strikes where the whole country went into a complete deadlock. The tap-taps (taxis and local buses) went on a three-day strike because of the high petrol prices. The Government and the Union agreed to lower the price already the first day of the strike and although the tap-taps went back to work, the students continued the strikes. During these days there was a lot of tire burning, blockades, throwing of rocks and so on, making it impossible to travel around. Offices were also closed and staffs were told to stay home because of security issues.
Because of the situation described above we were not allowed to walk outside without local guides and we were dependent on having a driver driving us to the meetings, the supermarket and so on. It also made it difficult to travel out of the city during the weekends since we had to go through some of the most dangerous slum areas of Port-Au-Prince to travel out of the city and could not travel after dark. In some areas there was a big presence of the UN stabilisation mission, which has been present in the country since 2004.

Lastly, the conflict on the border between Haiti and Dominican Republic has been escalating in the last couple of months with incidents of kidnappings, killings and general unrest. More people are trying to seek refuge in Dominican Republic because of the escalating unrest in Haiti. The border crossing by land from Haiti to Dominican Republic was therefore closed late January. We heard about this by chance and since our flight back to Norway was from Santo Domingo we were suppose to travel back to Dominican Republic by bus. We therefore had to find book a plane ticket from Haiti to Dominican Republic instead.

When adding the fact that I experienced poor planning and organisation from Plan Haiti, these challenges made it physically and mentally difficult. I was mentally drained when I came back to Norway and had to take a long break before I was able to start writing the thesis.

However, it is important to note that, although the country is not for “amateurs”, Haiti is probably one of the most interesting countries to conduct research in. Especially if one is interested in looking into state-society synergies and how development

corporation does not work, but also how continued natural disasters and climate change challenges put a tremendous strain on the people living there.

4.4.3 Document Analysis

Secondary data such as text and document analysis is an important part in gaining an overview of existing research and knowledge on the topic at hand. I therefore looked for previous research done on the subject as well as qualitative research like statistics and surveys to complement my own research and hence linking my research findings to existing literature after my primary data was collected. In addition I reviewed Plan Haiti's Country Program Progress Report and Country Strategic Plan (especially in terms of disaster management) to provide context and compare my findings from the interviews and focus groups discussions to the documents for triangulation purposes.

When assessing the documents, Scott's criteria for assessing the quality and usefulness of documents: authenticity, credibility, representativeness and meaning found in Bryman (2012, p. 544) have been important for me. The criteria of credibility have been particularly important, especially when assessing documents from organisations as they can often emphasise the positive and moderate any criticism because they want to please foreign donors and Government.

In addition to the above I used people I met as secondary sources. This was not part of my formal data collection, but more as a background to understand the broader context of Haiti and its challenges.

4.5 Data Analysis

According to Bryman (2012), grounded theory is the most commonly used framework for analysing qualitative data. This entails that data collection, analysis and eventual theory is in close relationship with each other. Further, data analysis in qualitative research is the search for a general statement about relationships and underlying themes (Strauss and Corbin, 1997 in Marshall and Rossman, 2010). In addition, interpreting and analysing qualitative data consist of three stages, the data need to be described, analysed and interpreted (Wolcott, 1994 in Marshall and Rossman, 2010).

The process of coding is the most central process in grounded theory and entails reviewing transcripts and/or field notes (Bryman, 2012). As described by Charmaz (1983, p.186 in Bryman, 2012, p.568) coding serve as a "shorthand device of label, separate, compile and organise data" and is an important step in the generation of theory (Bryman, 2012). Bryman recommend not waiting with coding until all the data has been collected (2012, p.93). As such I found myself dealing with data analysis throughout the fieldwork, especially the description, as I was transcribing interviews, coding and reviewing the findings on a daily basis. In addition, I also made some analyses and discussed findings with my fellow researcher. This was also important to us so that we could digest our experiences and debrief each other, especially when we had had a tough day in the field.

One of the challenges of conducting qualitative research is the vast amount of information collected. In order to systemize the data, I made a mind-map where I coded the documents and information into different themes, highlighting information that was mostly related to my specific research questions in order to get deeper into the material. Here I also added observations I made during the interviews and focus group discussions as well as challenges faced. As opposed to coding in quantitative data where there is a tendency to think in terms of data and codes as very fixed, coding in qualitative data tend to be in a "constant state of potential revision and fluidity" (Bryman, 2012, p.568). This is also something that I experienced as I started coding my findings. I kept changing categories and codes the more I got into the material. I started with coding my material into broad categories that was relevant to the research questions and as I got deeper into the coding I separated the findings into narrower categories separating findings from children, adults, NGOs and Government Institutions. I also separated the findings between the three different locations where research was conducted in order to compare findings.

Because I wanted to generate concepts based on the data itself, I chose not to use the theoretical framework as a starting point for my analysis. Naturally, the data collected and the findings presented are influenced by my pre-conceived ideas through the literature, my own knowledge and experience. Nevertheless, I wanted to minimise the way my preconceptions shaped my approach to the data and started exploring the data collected through an inductive process inspired by grounded theory, which used data

as a starting point for the development of codes, concepts and theories (Bryman, 2012, p.387 and 568). However, I decided to bring in relevant literature in the introduction to the various sections in the presentation chapter to explain the background for the questions and to put the findings in the right context. At the last stage of the analysis, I turned to the more deductive approach where I brought in key concepts and theory from the existing literature, and analysed the findings from my research using these key concepts also bringing in the historical and present context of Haiti. The analysis allowed me to suggest some analytical generalisations on how a country's historical and present context together with the presence of numerous NGOs contributes and shape people's vulnerabilities in developing countries often ravaged by natural disasters and are vulnerable to climate change.

4.6 Ethical considerations

According to Diener and Crandall (1978 in Bryman, 2012, p.135) ethics in research can be broken down into four main areas consisting of harm to participants, lack of informed consent, invasion of privacy and deception. Luckily, I did not come into situations where these ethical issues arose in a significant way. However, as stated previously, I did find it difficult to ensure that the participants were well informed in advance and that an informed consent was given, especially in terms of the children participating. As I have previously stated, I had given all the relevant information to Plan Haiti a couple of months before arrival and was told that interviews and focus groups discussions were to be organised prior to my arrival. As this was not done, I do not how, if any, preparation and information the participants were given in advance. I did however, take great care to inform all participants at the start of the interviews and focus groups about the process and purpose of the research and gave them a change to back out if they wanted. This was particularly important for me in regards to the children.

In regards to harm to participants there is always some risk involved in participating in case study research as the people share their views risking exposure as well as a loss of self-esteem and stress (Bryman, 2012). This was not a big challenge in my research, but some of the participants, especially the men, were a bit apprehensive in

sharing their thoughts on the Government because of repercussions. I therefore had to be very clear that the research was anonymous and that no names would be exposed. I also showed them that I did not write any names down during the discussions.

Since I was building a big part of my study with children, I had to be particularly aware of child ethics and one of the biggest ethical obstacles to consider when including children in research is the power imbalance between adults and children. Powell therefore suggest that as a researcher, we should use critical reflections on ethics, self-awareness of own pre-assumptions regarding childhood and how this might influence the research process and the choice and implementation of research methods (Powell, 2011). I did not find this to be a challenge between the children, and me but I sensed that it was an issue between the teachers, the local Plan staff and the children. I believe that it made the children uncomfortable and that they felt that they couldn't speak freely because they were worried they might say something "wrong", especially when asked questions about disaster preparedness, what they were taught in school and by Plan Haiti.

In addition, I had to bear in mind that most of the children participating in this study had experienced traumatic events, some have lost their families and homes, and that is difficult to talk about. I therefore had to respect that the children did not want to answer the questions I asked.

5. Overview over organisations and Government Bodies in this study

As explained in chapter 6 above this thesis uses a qualitative research strategy with a case study design. Plan Haiti, an INGO, has been the major source of information, both in terms of putting me in contact with respondents, but also in giving me relevant information in regards to the topic in general. The research also uses other INGOs in Haiti working with the same types of issues as well as government bodies. This chapter provides some key background information about Plan Haiti as well as the other organisations and Government bodies involved in this case study, which is important in order to understand the context in which this research has taken place. Since Plan Haiti was the main source of information, the chapter will mainly focus on them. It is important to bear in mind that the information given below is based on information found on the organisations websites, information given in interviews or in reports made by the organisations. The information is therefore not considered to be objective and needs to be understood as such.

5.1 Plan Haiti

Plan has been working in Haiti since 1973 and implements activities in 83 communities around Haiti, benefiting 35 040 children (Plan International, 2015a and Plan Norge, n.d). Plan Haiti is part of the international child rights and development organisation Plan International, which implements projects in 51 countries in Africa, Asia and Latin-America (Plan International, 2015b). One can therefore say that Plan Haiti is an International NGO in Haiti because it is part of Plan International and all its funding is generated by fundraising offices in developed countries such as Plan Norway, and channelled through Plan International to Plan Haiti. Plan Haiti receives most of its funding through Plan International, but they also receive funds from the European Union (EU) as well as other public funding sources.

In 2013, Plan Haiti marked the end of its emergency response period after the devastating earthquake that impacted Haiti in 2010, and entered into a regular development-oriented strategy period (Plan Haiti, 2013). The new strategic plan runs

from 2013 to 2017 and have four key programs focusing on maternal and child health, drinking water, sanitation and hygiene, nutrition and integral development of early childhood (Plan Haiti, 2013). Within these four main components focus is on the violations of rights of Haitian children, adolescents and youth. According to Plan Haiti (2013, p.5), the aim is to "achieve the four rights-based country goals[10] for sustainable, and positive changes in the lives of Haitian children, adolescents and youth and for the realization of their rights in both non-emergency and emergency situations". Plan's definition of children is based on the UN Convention on the Rights of the Child, where children are seen as below the age of 18.

Plan Haiti has one Country Office (CO), which is the national head office and is based in Port-Au-Prince. Most of the programme implementation is managed from four "Program Unit Offices" (PUs) in Fort Liberté, Croix Des Bouquets, Frere Brisetout and Jacmel (Plan International, 2015a) (for geographical location, please see map below). The vast majority of staff at Plan Haiti is Haitians.

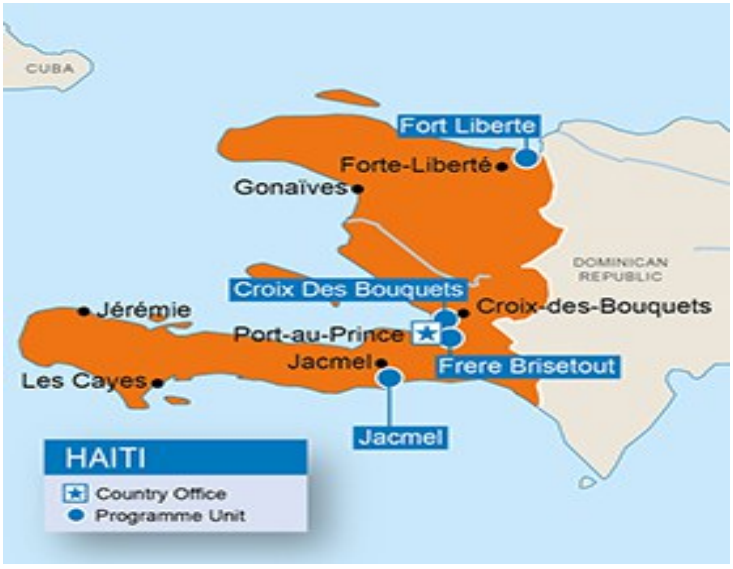

Figure 5 Map of Haiti (Source: Plan International, 2015a)

Before 2003 Plan was using a needs-based approach for their development work, focusing on service delivery and direct implementation in the communities. However, in 2003 Plan shifted the approach to Child-Centred-Community-Development

[10] 1) A good and healthy start to life, 2) Quality primary education for all, 3) Life and livelihood skills and opportunities for adolescents and youth and 4) strengthened systems and governance for child protection

(CCCD) and is defined as a "Child Rights approach to tackling child poverty" and "addresses the injustices and power imbalances at different levels of society that underlie child poverty and result in the violation of Child Rights" (Zuurmond (ed), 2010, p. 3). CCCD is guided by the principles and standards established in international human rights treaties and are made up of the following principles:

- Children at the centre
- Guided by human rights principles and standards
- Responsibility and accountability
- Inclusion and non-discrimination
- Gender equality
- Participation

(Zuurmond (ed), 2010, p.19 and 21).

The CCCD approach is working through partnerships and focuses on advocacy as well as capacity building in addition to service delivery in close partnership with the Government.

This shift from service delivery and direct implementation has created many challenges for Plan Haiti and was briefly discussed in the previous chapter and will be more thoroughly discussed in the chapters on findings and analysis.

According to the main source in Plan Haiti, the organisation started disaster risk programs in 2007. They have two focus areas. One is to strengthen the capacity of the state through financial and material funds to increase civil protection. Secondly, they focus on strengthening the capacities of communities by supporting local organisations, provide training and materials and organise various disaster risk and prevention activities in the communities. Plan Haiti is currently collaborating with UNICEF, targeting 14 schools and 7500 students where they distribute materials such as first aid kits and training guides in DRM. The project is also trying to integrate DRM at school level so that students will have this as part of their curriculum. Plan Haiti also collaborates with the World Bank on an 18-month project focusing on civil protection in disaster. This is implemented at community level. Lastly, another project under development focuses on gender based violence after disasters. This was a three-year project and they hoped to target 13 schools.

5.2 Project Haiti

Project Haiti is a Norwegian/Haitian foundation run by a Norwegian women called Ingvill Conradsen Ceide and her Haitian husband, Edwin Ceide. Their goal is to contribute to a better future for the people who are associated with their projects, and for Haiti as a nation. The organisation believe the best way to do this is to give people the knowledge and tools in order to enable themselves and hence improve their own situation. Project Haiti therefore focus on education, skills development and their projects will have added value to the participants (Project Haiti, 2012).

The organisation has been working in Haiti since 2000 and their first first project was the primary school Petit Troll in the capital Port au Prince. Today the organisation run a number of projects in both Port-Au-Prince and in the village of St.Luis du Sud south in Haiti. About 300 children are receiving basic education through their programs today. In addition, the children have access to youth clubs, sports, summer schools and seminars. Project Haiti also has programs for women focusing on capacity building and vocational training (Prosjekt Haiti, 2012). They do not have any specific programs on disaster management.

The projects are mostly funded through private donations, but they also receive some funding from the Norwegian Agency for Development Cooperation (NORAD). Most of the activity in Norway is run on a voluntary basis, but they have around 40 staff based in Haiti.

5.3 Care Haiti

Care has been working in Haiti for more than fifty years fighting “poverty and defending the human dignity of disadvantaged families” (Care, 2012). The program implementation is managed from six different Care offices in Artibonite, North West, South, Grand Anse, Port-Au-Prince and Léogane. The organisation invest in programs for economic and food security especially targeting women and youth, water and sanitation, basic education, sexual and reproductive health, inclusive and accountable governance and building more disaster resilient communities (Care, 2012).

In the last five years most of their work has been focused on relief efforts after the earthquake and have focused their efforts on building shelters and integrating gender-based violence prevention activities in the camps, delivering water and sanitation services and providing psycho-social support to children of displaced families (Care, 2012).

They receive their funds from Care International and are generated through offices in developed countries, in many ways the same way as Plan Haiti above.

5.4 Act Alliance/UMCOR

Act Alliance is a coalition of more than 140 churches and affiliated organisations working together in more than 140 countries worldwide in order to create positive and sustainable change in the lives of poor and marginalised people (Act Alliance, n.da). Members are all associated with the World Council of Churches or the Lutheran World Federation. ACT Alliance raise around $1,5 billion each year to three targeted areas; humanitarian aid, development and advocacy. The funds come from their various members who raise funds from both private and institutional donors.

The person we interviewed from Act-Alliance worked for the organisation The United Methodist Committee on Relief (UMCOR). UMCOR is a non-profit humanitarian aid organisation working in 80 countries worldwide (Act-Alliance, n.db).

UMCOR is mainly working in the earthquake-affected areas in western part of Haiti and is planning for longer-term involvement in three primary sectors including WASH-programs (water, sanitation and hygiene/health), Livelihoods and shelter and reconstruction. The main objective of UMCOR is to support the Government of Haiti in implementing sustainable post-earthquake reconstruction (UMCOR, 2015).

As with Plan Haiti and Care Haiti, Act Alliance and UMCOR receives its funds through Act Alliance partners and UMCOR funding organisations worldwide.

5.5 Government bodies

5.5.1 Bureau of Civil Protection

The Bureau of Civil Protection (BoCP) in Haiti is responsible for Haiti's domestic disaster response and is responsible for protecting vulnerable groups in disasters. According to what I was told in the interview it is state-owned, but funded by the American Embassy in Haiti. They provide emergency training in communities and schools and cooperate with various organisations in Haiti such as Plan Haiti.

5.5.2 Bureau for the Integration of Persons with Disabilities

The Government established the Bureau for the Integrations of Persons with disabilities (BIPD) in 2007. The north office in Cap Haiti where I conducted my interview was opened in 2009. Previous to the establishment of the bureau, PWDs received help from NGOs, churches and community organisations. According to the bureau, they are the "focal point on disability within the Government of Haiti and strives to develop inclusive policies and programs in favour of PWDs (International Foundation for Electoral Systems (IFES), 2014). According to information retrieved during the interview they focus mainly on helping PWDs on legal issues, social workers visiting peoples home, discrimination issues and creating job-opportunities.

6. Presentation of findings

In this chapter, the key findings are presented and discussed. As explained in section 4.5, I have used an inductive approach inspired by grounded theory where I distanced myself from the literature and did not use the theoretical framework. This approach was chosen because I wanted to approach and categorize the empirical data without having too many preconceived ideas of what I would find. For the most part, findings are presented according to the main codes and categories that came out of this process. However, I have brought it the literature where I thought it necessary, but the theory will be brought in to the analysis in chapter seven.

The first part of the findings is related to awareness on natural disasters and climate change. The second part will focus on children's vulnerabilities and the third part on awareness around disaster management and disaster risk reduction and what type of activities the organisations' interviewed have in the areas they work.

Because I have four main categories of respondents, children, adults, NGO's and Government Institutions, I will distinguish between them in the presentation. The NGO's and Government Institutions were not asked about awareness around disasters and climate change, but rather what type of disasters that was frequent, children's vulnerability, disaster awareness and risk reduction activities in the communities where they work, and if they had awareness activities around climate change. Hence, they will not be represented in the first section.

6.1 Awareness on natural disasters and climate change

As suggested in the literature (see for example Manyena, 2009, Kett and Ommeren, 2009 and UN in Kumar, 2011 in sections 3.3 and 3.3.1), one of the keys to become resilient and prepared when disaster strikes is awareness. The first part of the presentation of empirical data will therefore focus on the respondent's awareness around natural disasters and climate change. Here, I found that awareness could be labelled into three main categories, bad events, destruction and vulnerability. The first part of the findings is presented accordingly, but since vulnerability will be covered more extensively in the second part of the findings, it will only be briefly discussed

here. However, since the respondents mentioned certain factors related to vulnerability when asked about disasters, I found it important to mention here also.

Although natural disaster and climate change are two different concepts, they are strongly interlinked (see for instance Seballos *et al*, 2011 and IPPC, 2014 in section 3.1). I therefore wanted to learn about people's awareness around climate change and especially the children. I did not find that awareness on climate change could be divided into specific categories.

According to the findings, awareness on natural disasters did not differ according to location, age or gender. However, in terms of climate change, awareness among the children varied significantly depending on location. The children living in urban areas had strong awareness whilst the children living in more rural areas had no awareness. But, as stated in the methodology chapter, the teachers had prepared the children in the urban area beforehand. As a consequence it is difficult to know what level of knowledge these children had before the preparation. In addition, the children in the rural area asked to be explained the meaning of climate change, something I did, trying not to give out too much information. But, I am aware that this can have hampered the credibility of the information obtained from both groups, especially in terms of awareness as vulnerabilities were based on personal experiences of the children. The adults in both locations showed a good level of awareness on climate change.

6.1.1. Natural Disasters

6.1.1.1 Bad event

All respondents related natural disasters with a "bad event". Apart from the respondents in the north-western part of Haiti, all had experienced the earthquake in 2010. However, most of the respondents in both locations had been affected due to the loss of parents, siblings and other relatives or friends. According to one girl no one understood what happened when the earthquake hit Port-Au-Prince; "*I saw people running into houses. They did not understand that it was dangerous. I lost both of my parents because they ran into our house"*.

As the hurricane season in Haiti is between June and November the children and adults frequently experience hurricanes, floods, storms and landslides. As expressed by one respondent: *"We live in areas where we have ravines so landslides and floods are frequent"*. When asked why the ravines create landslides and floods, the children stated "*because there is too much rubbish in the ravines where we live. When it rains the rubbish blocks the water making the ravines overflow, creating floods and landslides*". Own observations also confirms this as most of the ravines or "rivers" that was suppose to keep the areas from flooding was filled with rubbish in both Port-Au-Prince and Cap Haiti. The respondents also experience droughts in the dry season and will be discussed in section 6.1.2.

In addition to the above, most of the respondents also mentioned tsunamis and eruption of volcanoes and *"weather problems in certain regions"*.

6.1.1.2 Destruction

Statements such as *"people living close to ravines lose houses", "floods that take houses to the ocean", big wind/storm that destroys houses"* also show that the respondents in both areas related natural disasters with destruction. Many had lost their houses either in the earthquake or in one of the many hurricanes and floods that had frequented the areas they live in. One woman was still living in a temporary shelter stating; *"We all experience disasters and some of us are still living in temporary shelters"*.

6.1.1.3 Vulnerability

As vulnerability will be covered in detail in a separate section, it will only be mentioned briefly. Some children cited certain vulnerability factors using statements such as *"a child who is having a bad time", "street kids who do not attend school", "we might die" and "kills lots of people"*.

6.1.2 Climate change

The women in the rural area believed climate change would lead to warmer weather and that they would experience more droughts, hurricanes and rain as a consequence. The children in the urban area mentioned the same, but also stated increases in the ocean level, changes in the atmosphere, increase in CO_2 emissions and that climate change was *"our fault"*. Furthermore, the children showed a high level of awareness to why natural disasters and climate change occur in the context of Haiti expressing for example that *"natural disasters and climate change happens because of deforestation. We cut down too many trees. If we cut down a tree, we should replace it by five, but we do not do that". "We are also polluting our air since we burn too much plastic and there is too much rubbish in the streets and oceans". "Our water resources are also being blocked by rubbish".*

The men in the rural area claimed they experienced more droughts than before because *"the weather was changing"* and as a consequence their crops were heavily affected; "*Farmers are facing difficult times due to dry season and we are not able to feed our children*". The men also thought climate change would lead to more diseases; *"When it rains the area we live in becomes covered in mud and mosquitoes leading to new diseases. Before we worried about malaria, now we have new diseases like chikungunya*[11] *to worry about"*. Also, old-fashioned farming methods and the lack of sufficient equipment made it difficult for the men to work their crops after heavy rainfall since the fields and the surrounding areas got covered in mud.

The respondents in the north-western region of Haiti believed that hurricanes, floods, landslides and droughts had increased in recent years and linked these events to changes in the weather. When asked why the weather was changing, one man stated; *"God is intervening, it is his punishment for our interference with nature. We are disobeying Gods law".*

The children in the rural area of Port-Au-Prince had less awareness on climate change. When asked the question "do you know what climate change means", both

[11] Although it shares the same symptoms as dengue fever, it is not the same. Chikungunya is a viral disease transmitted to humans by infected mosquitoes. It causes fever and severe joint pain. Other symptoms include muscle pain, headache, nausea, fatigue and rash. In recent decades mosquito vectors of chikungunya have spread to Europe and the Americas. Source: WHO, 2015

the girls and the boys responded *"no"* and asked me to explain. As stated earlier, though I knew this could affect the empirical data, I explained the concept to them without giving too much information. I believe the children did not want to disappoint and were eager to learn. Based on the explanation given, the children also reflected arguing; *"We understand that climate change will affect us and we want to learn more"*. The boys also managed to come up with many solutions to how we could tackle climate change based on my explanation. Some suggested solutions were to plant more trees to avoid further deforestation, to stop extracting sand from the sand quarries around Port-Au-Prince and develop waste management in their communities. The boys all thought the NGOs in the area should implement projects in the communities linked to the above and help the communities in combating for example deforestation and the extraction of sand.

6.2 Children's Vulnerabilities

Existing literature suggest that children almost always suffer the most from disasters (UN in Kumar, 2011 in section 3.3.1). Although some studies exist, little research has been done on gender inequalities amongst children and CWDs in disasters. Thus, one of the key elements of this study is to understand if and how children are more vulnerable in natural disasters, and if so, whether gender and disability enhances their vulnerability.

As I divided my questions between children in general, and girls and CWDs specifically, the findings will be presented accordingly. Here, I found that responses could be divided into three distinct categories, emotional vulnerabilities, physical vulnerabilities and the loss of resources. However, I did not find that the answers across the four main categories, children, adults, NGO's and Government Institutions, varied greatly depending on age, gender and location or if the responses came from the NGOs or government institutions.

6.2.1 Children's vulnerability's

6.2.1.1 Emotional vulnerabilities

Many responses were connected to feelings such as fear, sadness and anger. These feelings were generally connected to the loss of family and friends, but also because their own lives were threatened. For the children, disasters came with danger; *"The area we live in can be affected"* and *"we might die"* were some of the responses. The children continued by saying that they cried and felt sad after the earthquake as many people died and became disabled; *"Many were our friends or family members of friends. Everyone lost someone that day and it is a day we will never forget"*. Most of the children in this study had lost one or more relative or friend, either in the earthquake or in the hurricanes the following years. As a consequence, the children were extremely scared of losing the people closest to them; *"We are scared of losing our parents, our brothers, sisters and our friends.* The children also feared new disasters, especially hurricanes and floods. Not only because they could lose their next of kin and friends, but also because they were afraid of losing their homes. As one boy said; *"I lost my house because the water took it away"*.

In addition to the children's testimonies, the adults told me their children were scared to stay inside houses in case of new earthquakes or hurricanes. The children were scared because they live in poor housing where roofs are made out of iron sheets and mud, and make noise in the wind and leak in rain. Hence, the children are scared that the houses will collapse; *"Our children are scared that a new disaster will happen all the time. When they hear noises such as a truck using its horn or the police siren, they get scared because they think something is happening. The children are traumatised because of their experiences",* some of the parents said.

6.2.1.2 Physical Vulnerabilities

The adults also thought the children were more vulnerable since children do not understand what is happening or what to do in a disaster situation. And because they are children, they cannot run as fast as adults and hence not escape as fast in an emergency situation. The NGOs and Government Institutions also mentioned the above, claiming the children lacked experience and the ability to cope in disasters.

However, although the children also recognised the difficulty in running fast, the findings in the previous section 6.1 suggest that the children have a high level of awareness in a disaster situation and have experience as they live in areas that are often affected by disasters. As such, apart from the earthquake, the children did not mention a lack of understanding or experience as part of their vulnerability. Adults also indicated that it was difficult to access safe water leaving children more vulnerable to diseases after disasters. This was also recognised by the NGOs and Government institutions affirming that because the children's defence mechanisms are naturally weaker than adults, children are more vulnerable to for example diseases and infections.

According to responses in all four groups, many children also become orphans as a result of the many disasters in Haiti. These children are now living with other relatives, in orphanages or in the streets. According to the SOS-mothers interviewed, some of the children had come to live with them in the SOS-village, but the village did not have enough capacity to take in more children. Plan Haiti stated that the children living in the streets are particularly vulnerable to abuse such as trafficking, sexual abuse and violence. Plan Haiti also claimed children to be more vulnerable because children often got placed together with adults or adolescents in temporary shelters and camps after disasters. Consequently, Plan Haiti said, the children were more exposed to violence, abuse and trafficking. Children without parental care because their parents had died, or children who had been separated from their parents during a disaster were particularly vulnerable in this situation Plan Haiti stated. In addition, young children placed together with adolescents could be more vulnerable to abuse because adolescents could have bad influence on the younger children, leaving *"no safe places for children to be after disasters"* Plan Haiti argued.

6.2.1.3 Loss of resources

Another aspect of vulnerability identified by the respondents was the loss of resources. The children said for example that they lost their houses and their documents; *"When the hurricanes came we felt sad. We had to hide our things so it did not get lost. We learned that from the earthquake. We lost everything then*

because we were unprepared". The adults cited the same, saying their children had, for example, lost their birth certificates. The children need this document to, for instance, access school and health services; *"It is their only proof of existence and it is difficult to get back"*.

As a consequence of more frequent droughts in the area, some of the parents were unable to feed their children; "*Farmers are facing difficult times due to dry weather and they are not able to feed their children"*. Consequently, the parents felt they were bad parents since they were supposed to provide for their children. However, in droughts or major disasters such as hurricanes or floods they could not, and the children were forced to help their parents in providing food and other resources to the family instead of for example going to school. Some of the men in this study knew of young girls as young as ten years who had turned to prostitution to provide their families with food. "*It is not supposed to be that way,"* the parents said. This issue was also recognised by Plan Haiti who argued that because parents lose, for example, their crops after floods and hurricanes, they are not able to provide their children with food or other resources. The parents wanted to underline that *"even before the earthquake the children here were vulnerable to poverty. They lacked food and water, healthcare, they had no access to parks where they could play, no schools. After the earthquake and hurricanes it just became worse"*.

Another important aspect, especially for the children, was access to school. After first the earthquake and then the hurricanes, most schools in their areas were destroyed. It was a general opinion that it was extremely important for the children to go back to school. Not only because of the education, but also because for many, it was the only way to find out whether their friends and teachers were still alive; "*It was very important for us to go back to school because life had to go on. Although we were happy to be alive, we did not know if our friends were"*. In addition, the children claimed *"because our future depend on our education, our future is in danger if we can not go back to school."* Plan Haiti also argued that children were more vulnerable to abuse and accidents when they were not in school as children were often left alone in the house while the parents were out working or wandering the streets by themselves.

6.2.2 Girls

All the focus groups, both children and adults, agreed that girls were more vulnerable than boys after disasters. The respondents mentioned rape and abuse as a core factor to why girls were more vulnerable after a disaster. As stated in the section on physical vulnerabilities above, one man said he knew of girls down to the age of 10 who had turned to prostitution to get money for their families. This issue was also elaborated by all the NGOs. Act-Alliance argued, *"Gender is a fundamental problem in Haiti. Girls and women are always affected more than men and boys in disasters"*. Care Haiti stated that camps set up after disasters were physically dangerous for women and girls because the committees established in camps to distribute resources after disasters were all made up of men. As a consequence, Care Haiti said, women and girls have seriously disadvantages after disasters because many are raped or forced to give "sexual favours" in return for food and other resources. This was also recognised by Act-Alliance who claimed Haiti faced major challenges in terms of corruption and exploitation by community leaders who asked women and girls for sexual favours in return for help after disasters. This happened both in the communities and the temporary shelters and camps set up after disasters. In addition, Act-Alliance claimed that government representatives sometimes acted like the community leaders, making it hard for women and girls to trust the community leaders and the government. Analyses done by Care Haiti saw an increase in abortions after the earthquake in 2010 due to rape and sexual favours in camps. As abortions are illegal in Haiti many women and girls died due to complications, doubling their vulnerability.

The NGOs also stated that violence is a big problem in Haiti. Act-Alliance and Care Haiti said women had to fight with men to get resources after disasters. In an attempt to reduce both women and children's vulnerabilities in camps, Act-Alliance tried to distribute resources to only women in camps after the earthquake. Unfortunately, this created even more violence between men and women. And because children were left alone whilst their mothers went to pick up resources, they became more vulnerable to abuse.

Because separate sanitation facilities for women and men does not exist in temporary shelters and camps, all respondents, including NGOs and Government Institutions,

stated that girls and women are more vulnerable to get infections and diseases. Women and girls choose to go elsewhere and often get infected by diseases because of for example contaminated water. As stated by some women *"we felt uncomfortable because we didn't have safe places where we could take showers or go to the toilet in private"*.

Lastly, one interesting find was that the children argued that children were equally in danger during disasters because they were all exposed to the danger of losing their lives, parents, siblings or other relatives, their friends, homes and other resources. But all the children agreed that girls were more vulnerable after disasters due to the various factors stated above.

6.2.3 Children with disabilities

All focus groups agreed that CWDs are the most vulnerable group during and after disasters. All focus groups mentioned the CWDs inability to run as fast as able people, and their need for special assistance. In addition, the men mentioned that CWDs were more vulnerable if they lose their parents in a disaster because they do not have anyone who understands their special needs. The women also said that CWDs are always more vulnerable because they need help from their parents to *"eat, wash and get dressed"*.

During the focus group discussion with parents of CWDs some of the parents argued, *"We do not have the capacity to take care of our children on a daily basis, let alone in a disaster. We need more help"*. Most of the parents in the focus group discussion were women, and they told me that CWDs got neglected from their fathers more often than able children, making it even more difficult for the mothers and children.

One interesting discovery was found in one of the focus group with children, where some of the children distinguished between children who were disabled before a disaster and those who became disabled as a consequence of a disaster. The children argued that the latter group of children were more vulnerable in the long-term. Unlike the former group, these children were not used to their disabilities, especially if faced

with another disaster. The find is interesting because none of the other groups made this distinction neither did the NGOs or Government Institutions.

Apart from the agreement that CWDs were the most vulnerable group in a disaster situation, the children and adults did not show a high level of awareness on the topic of CWDs. The only understanding of vulnerability was their lack of mobility and that they had special needs. This lack of awareness and understanding was also found in responses from the NGOs and Government Institutions. Apart from The Bureau for the Integration of PWDs, they did not have much experience with CWDs and PWDs in general. The BoCP stated that their main aim was to protect vulnerable groups in disasters, PWDs being one particularly vulnerable group. I was therefore surprised to see the lack of knowledge the person interviewed had regarding PWDs. Nevertheless, it does not mean that the bureau does not have a specific focus on PWDs in their prevention work, only that the person interviewed does not have the main responsibility for this group. The same goes for Care Haiti where the person interviewed was the Gender advisor. None of the NGOs or BoCP could show to specific activities or programs focusing on or including PWDs despite recognising that this group was particularly vulnerable in a disaster situation. That said, Plan Haiti did have some local partners working on disabilities and the other organisations were working on including PWDs in their programs, but it was all in the initial phase. Some of the responses from the organisations were "*we just started to work on these issues so a lot more work needs to be done"* (Care Haiti) and *"when we are not able to help able people, how are we suppose to help disabled people?"* (Act-Alliance).

6.3 Disaster Risk Management and Disaster Risk Reduction

As disasters pose major threats to sustainable development, existing literature claim that disaster risk management has become a core element of sustainable development (O'Brien *et al*, 2006 in section 3.6.2). The last section of empirical data collection therefore focused on the various components in disaster risk management, specifically on response, prevention and preparedness, to understand people's awareness around this topic. I wanted to learn of and what type of help respondents had received after disasters and if the children had knowledge on particular DM and DRR activities in their communities. Responses are also related to climate change and how

communities can best adapt. As such, most of the findings below are based on outcomes from the focus group discussion with the children and adults, but section 6.3.3.2 will discuss whether findings from the focus groups corresponded with the information given by the NGOs and Government Institutions. The section will start with disaster response before moving on to prevention and lastly preparedness.

6.3.1 Disaster Response

Apart from the focus group in the north-west, all respondents said they had received some help from organisations after disasters. Both the girls and boys in the rural area received help from Plan Haiti after the earthquake. The girls said they were provided with temporary shelter and hygienic products. The boys did not know specifically what type of help they had received because other family members received it. In addition, Plan Haiti had a program called "cash-for-work" after the earthquake where participants received money in return for clearing their communities for debris for example. Some of the male respondents had taken part of this program stating that it helped in the short run, but it was not enough. It became clear in a later interview with the representative from Act-Alliance that these programs were highly debated and criticised. Organisations such as Act-Alliance claimed these programs only made people more dependent and unwilling to take responsibility in their own communities.

The women in the central area of Port-Au-Prince said they received temporary shelter, water, food and flashlights from the Red Cross after the earthquake, but nothing from the Government. However, the women recognised that the Government was also vulnerable after the earthquake and understood why it was difficult to help the citizens.

As stated above, the focus group in the north-west claimed that they had never received any help from NGOs or the Government after disasters. They were all parents of children with disabilities and needed more help, but felt forgotten they said.

The NGOs and Government Institutions did not elaborate extensively on their response activities given after disasters, but Act-alliance claimed to be one of the first organisations to respond after the 2010 earthquake. However, due to unrest and

conflicts, corruption among community leaders and government officials and a lack of collaboration between the various organisations, the relief efforts were extremely disorganised. As a result it was difficult to give help as quickly as they would have wanted to. In that respect, Act-Alliance stated, *"we need a strong Government that can handle disasters and help our people. We have not had that in the past and we do not have that today"*. The lack of organisation and collaboration between was mentioned by all the NGOs. The DRR-advisor in the north-western unit of Plan Haiti said during our interview; *"there is a lack of coordination between the organisations and many work on the same topics. There is therefore a great need for more coordination and we need to take more concrete action to protect and help more people before and after disasters"*.

In addition to the lack of coordination between the organisations, Act-Alliance mentioned that relief efforts were delayed due to the lengthy procedures and bureaucracy within the organisations themselves. As a consequence, there was a significant delay in incoming funds from both their mother organisations and international funding partners such as the EU, The World Bank and other institutional funders. This seemed to be a major challenge for all the NGOs in this study, perhaps with the exception of Project Haiti, which is an independent organisation funded directly by the mother organisation in Norway. However, as stated in section 5.2, Project Haiti does not have relief projects as part of their portfolio and is therefore not as relevant in this regard. The rest of the NGOs belong to International NGOs where funds are mostly being fundraised in the developed part of the world and then distributed through the International Head office.

6.3.2 Disaster Prevention Activities

The children and adults shared many thoughts on prevention activities they want implemented in their communities to decrease the effects of disasters. These are activities not only to be done by themselves, but activities that the NGOs and the Government should implement. However, the children in particular were eager for the people in their communities to come together and solve some of these issues and not wait for the NGOs or Government to implement projects. As will be mentioned below, this also created some debate among the men where some of them urged their

fellow men to take responsibility on their own instead of putting the sole responsibility on the NGOs or the Government. As stated by one group of men *"we can help the Government tackle disasters and climate change. We can create projects to reinforce the communities, create awareness and train everyone on how to behave. Then they can take initiative on their own. However, we need help to start and the NGOs or the Government should help us"*. This suggests that they are engaged when they understand that these issues will affect them. They want to be part of the change needed. As stated by one group of men *"our children will be more affected by disasters and climate change because they will not be able to attend school or have enough food. We (the adults) will have more financial problems and there will be more diseases in our communities if we do not do something"*. However, the major challenge for most of the communities where research was conducted was that they had limited resources to start their own projects. They were therefore dependent on help from either the NGOs or the Government to start.

The specific disaster prevention activities suggested will be presented below.

6.3.2.1 Constructing robust buildings

All focus groups mentioned the importance of constructing more robust houses; "*The NGOs and the Government should build better and safer housing for us so that our houses are not destroyed in disasters"*. The respondents further argued that the construction of both houses and schools had to be more robust so that the buildings do not collapse during disasters. Although one boy said Plan Haiti was constructing more robust houses in his community, most of the other respondents stated that their houses were either built using iron sheets or mud, and were not safe. In addition, both the children and adults believed the Government should inform people on how and where to construct houses in order to save lives; "*the Government need to be involved and tell people where they can and cannot build their houses. People should not be allowed to build houses or live in areas that are unsafe"*. All respondents believed that people should not be allowed to build their houses close to the ocean or the ravines. Some of the children also mentioned that people should not live in the mountains. It became clear after asking more questions that by "mountains" they meant the hilly areas around Port-Au-Prince. There have been plans to evict people

from these areas to safer areas outside of Port-Au-Prince as part of a flood-control project as these areas are subject to landslides during rainy seasons. But people have refused to leave, claiming they have nowhere else to go, sparking protests and unrest in the capital (Sanon, 2012). The area is therefore still occupied by thousands of poor Haitians. It should be added that in some cases, people actually have nowhere else to move. But it contradicts with the statements from the children and adults above that they want the Government to refuse people to build houses where it is not safe. The adults also stated that the Government was not present in their community today; "*There is no presence of the government in our community so how can we tell them what we need?"* At the same time, some of the men were conscious of the fact that they should ask for help or take responsibility themselves, not sit and wait for the government to implement projects.

6.3.2.2 Stop deforestation and erosion

Deforestation and erosion are both big problems in Haiti (see Williams, 2011 in section 2.5 for more information) and most respondents said Haiti should plant more trees instead of cutting them down. As mentioned by one girl; *"if we cut a three, we should replace it by five, but we do not do that"*. The boys in the rural area also said Haiti should stop *"extracting sand from the mountains"*, meaning the many large sand quarries in Haiti. These quarries are providing raw materials such as sand and limestone for making cement and concrete for constructing buildings and although the quarries are providing jobs for thousands of people, they are also seriously hampering the environmental sustainability of the country (see Engle, 2009 in section 2.5 for more information).

6.3.2.3 Waste Management

As stated by Raymond (2014) in section 2.5, there is no real waste management policy in Haiti today. All the respondents in the focus groups mentioned the need for waste management. The men said they had to keep the environment clean and that people had to for example stop burning tires because it polluted the air. When asked who was responsible, they replied that it was everyone's responsibility, but they needed help to begin with waste management. The children also saw the necessity for

waste management and thought the NGOs or Government should have projects in the communities where everyone were taught how to keep the environment clean. The children do not want to throw trash everywhere, but as they had nowhere particular to throw it today, the garbage ended up in the streets or ravines. The children in the urban area were particularly worried about the waste and its consequences, not only for the environment, but also for their health: "*We worry about the future. We worry about the chemicals and the air pollution because it will provoke more diseases and more people will die in the future because of it. We therefore want to learn more about how this will affect us".*

6.3.3 Disaster Preparedness

Most of the questions in this section were related to whether the respondents felt prepared for a new disaster, to preparedness activities in the communities today, and what type of activities the respondents would like to see implemented in their communities.

6.3.3.1 Prepared for new disasters

Most respondents instantly replied "*no, we are not prepared for a new disaster*" when asked if they felt prepared if a new disasters strikes. One woman in particular was very worried*, "I experienced the earthquake and moved here afterward to feel safe and start over, but I don't feel safe".* Also, as mentioned previously in section 6.2.1.1, the children were particularly scared of new disasters. One girl stated, *"yes, I am scared since I do not know when a new hurricane or earthquake will come. Near the ravine there will be landslides and we can lose our homes."* Another girl followed up by saying*, "some storms happen unexpectedly and we do not know what to do in these circumstances".* This view also came from the NGOs, where Care Haiti in particular argued, *"Haiti is not ready for a new disaster. We are still fighting off the consequences of the earthquake and the hurricanes that have hit us in the past five years, how can we be prepared?"*

Some men in both focus groups said they were not scared of new disasters because of their faith; *"I am not scared of new disasters, I have faith in God"* and *"we cannot predict the future, I believe in God and that is the only thing that prevents me from*

not having a good future. I need to believe that it is going to get better" were some statements. This raised some debate within the group of men, where some became angry at these statements saying *"things will go from worse to worse here, you cannot just have your faith. You need to take responsibility for your own and your children's future"*.

6.3.3.2 Disaster risk reduction activities in the communities today

Here, what type of disaster risk reduction activities that exist in the communities today according to the NGOs and Government Institutions will be discussed and whether the respondents know of these activities.

The children and adults showed little knowledge about disaster risk reduction activities implemented in their communities today. Yet, when I spoke to the NGOs and Government Institutions they could point to many such activities. I should mention here that my study did not involve communities where Act-Alliance and Care Haiti work, so I cannot confirm the information claimed by them.

According to one of the focus groups with children, Plan Haiti and the teachers told the children how to stay away from concrete buildings and to stay active in case of an earthquake. They had also been trained to stay away from trees in case of a storm. However, apart from two hours of training after the earthquake, they had not had any specific disaster drills. This was also argued by the men who said that Plan Haiti used to train the teachers and children after the earthquake, but there was no training today. Red Cross had also been present right after the earthquake and the hurricanes providing training, but not on a long-term basis. As stated by one of the men, "*we want it to be long-term training, not just a one-off activity because we forget"*. According to another of the focus groups with children, there were no activities in their community today. Their parents were not teaching them how to prepare for disasters either, but they had learned a few things in school.

Mothers in another focus group taught their children about disasters saying, "*we tell them to stay away from houses and iron roofs in case of earthquakes and hurricanes"*. The mothers further argued that the SOS-children's villages where they

lived or other NGOs did not have any disaster training in their communities even if it was needed. This was also confirmed by the focus group with men who stated, "*There is no training in our community. It is very important and we need it".*

When Plan Haiti was asked about the little awareness of activities in the communities they worked they said they were aware of the challenges, claiming they had major challenges because they trained people in the communities who were then supposed to train the rest of the people in their communities. These trained people should also operate as contact-persons between Plan Haiti and the community. This is based on the model discussed in section 5.1 that Plan Haiti (and other NGOs) are no longer focusing on direct implementation and service-delivery to the communities, but rather give the people the tools so that they can manage on their own. The challenge for Plan Haiti in particular was that the people who received the training often moved out the communities. As a consequence Plan Haiti found themselves in a constant "training-mode" instead of enabling the communities to continue the work on their own and for Plan Haiti to focus on other development activities in the communities.

Act-Alliance stated that they work with local partners to raise awareness on both natural disasters and climate change and have a high focus on teaching the people how to adapt to natural disasters and climate change. For example, they told me they teach the communities how to plant trees, new agricultural techniques, and how to build more robust houses. They also teach people how to change the way they feed their livestock in case of droughts. Due to the deforestation and erosion situation in Haiti, the livestock cannot live on grass alone, as it is not sustainable. As stated above, since research was not conducted in the communities were Act-Alliance was present I was unable to confirm these activities with respondents from the community.

Act-Alliance have also developed a new Emergency and Preparedness Plan which is closely linked to the government's own National Emergency Plan coordinated by the DRR secretary in the Haitian Government. The National Emergency Plan is divided into three levels, national, local and community. However, according to Act-Alliance, the National Emergency Plan is old and out-dated, but the NGOs are still forced to work with this plan. As such, Act-Alliance claimed that the government "owns" their (Act-Alliance) Emergency and Preparedness Plan because it has to correspond with

the national plan. The DRR Advisor in the main office of Plan Haiti also confirmed this.

Act Alliance also has workshops on climate change together with the Government and they try to make the Government run national campaigns on climate change in order to raise awareness among the population.

The BoCP claimed they had many activities going on in the communities. They mentioned the training of children and raising awareness by distributing leaflets in schools, telling children how to behave during natural disasters. They trained families on how they could plan for disasters, and had emergency training where they simulated disasters. According to the bureau they had prepared evacuation plans in order to teach people how to move to safe places. They had also distributed school kits, hygiene kits and food to children after disasters. The BoCP also tried to raise awareness around climate change through leaflets and radio programmes, and gave advise to the children on the topic.

The Plan Haiti office in the north-western part of the country had just started a new DRR project in collaboration with the World Bank and World Vision. The Government had developed the project, but it was funded by the World Bank and implemented by Plan Haiti and World Vision. According to Plan Haiti, the program they were to implement was aimed at strengthening 14 communities in the north-west region. Plan Haiti was going to have protection training and disaster risk reduction activities in the communities. The focus was on mitigation and awareness, and the idea was to train people on how to behave during disasters, for instance, how to evacuate. The project also aimed at training the communities to follow up the plans they had been given. Local committees had been formed to carry out these trainings, and to follow up the plans afterwards, the same approach they are having major challenges with elsewhere as mentioned above. In addition, the communities had not been involved in the development of these programs and apart from organising meetings with children and youth, there were no plans of involving children and youth in the implementation of the projects. Because the project was already developed and finalised by the Government, it was not possible to make changes.

6.3.3.3 Prevention activities wanted by the respondents

First of all, the respondents argued that storms and floods needs to be announced on TV, radio and other places so that people have time to evacuate. According to the respondents, hurricanes and floods have previously been announced by using SMS, TV, radio and newspapers, but the announcement have come too late. In addition, not everyone have access to these types of communication channels. As stated by one of the girls in one of the focus groups, *"deserted and remote areas do not have access to this information"*. Second, the children wanted the NGOs and the Government to give them resources such as flashlights and other things they needed in case of a disaster before the disaster happen. Third, all respondents wanted more long-term activities and training on disasters in general. They wanted to learn more about climate change and how this will affect them. As stated by one of the men in one focus group, *"We need more activities in general in our community. We need to learn more about climate change and how it will affect us and what we can do. The present training is insufficient"*. Maybe more importantly, the children all wanted to be involved in activities. They wanted to learn, participate and be active in their communities. When asked if they wanted to be part of a youth group in their community they all said yes, "*We want to be part of a youth group that work on disaster preparedness and where we learn about climate change because it is important for our future"*.

6.4 Summary of empirical findings

Both children and adults had a strong awareness of natural disasters due to the many natural hazards and disasters in Haiti and awareness did not vary according to age, gender or location. All respondents had experienced one or more disasters, and according to them natural disasters were perceived as bad weather events that brought with it destruction and risks. Awareness around climate change differed greatly in terms of age, gender and location, especially among the children. The children in the urban area showed a higher level of awareness than the children in the rural area. The adults in all areas showed a moderate level of awareness on climate change, but all claimed that the increase of hurricanes and droughts in their areas were because of

climate change. All respondents had decent awareness on why disasters and climate change happen and what could be done to decrease its effects.

In terms of children's vulnerabilities to natural disasters there was a general agreement among the respondents that children, and especially girls and children with disabilities, were more vulnerable than adults. In the case of children in general, vulnerabilities could be divided into three major categories, emotional, physical and loss of resources. Most of the children were traumatised because of their experiences with disasters, and were living in fear because a disaster could happen anytime. According to the adults, NGOs and Government Institutions, children were also more vulnerable because they were less capable of tackling disasters compared to adults who could, for example, evacuate easier and run faster. Although the children recognised the limitation in terms of evacuation, they did not mention that they were less capable because they were children. Responses from the adults, the NGOs and the government institutions also suggest that children were more disposed to infections and diseases because they have weaker defence mechanisms than that of adults (for example lower level of physical development and immature immune systems). The adults also stated that their children were more vulnerable because they (the parents) often could not provide for their children after a disaster due to the loss of crops and houses. Children therefore often had to find other means to provide for both themselves and their families, leaving them more exposed to violence and abuse. In addition, because the children might not have access to food due to droughts or other disaster, the children became malnourished, making them even more exposed to infections and diseases.

According to the children, one of the most important factors regarding vulnerability to or during disasters was access to school. For the children, the school was their ticket to a better a better future, and in disasters they could not attend school, either because the schools were destroyed or because schools were closed in the aftermath of disasters. They felt that their future was in danger.

In terms of the gender aspect, most respondents agreed that girls were more vulnerable. However, the children themselves disagreed that girls were more vulnerable during a disaster as they thought children were equally endangered,

independent of gender. The children agreed that girls were more vulnerable after disasters because they were more exposed to abuse such as exploitation, rape and violence. Temporary camps and shelters were identified as being particularly dangerous for women and girls (but also children in general) because women and girls were being sexually exploited in exchange for food and other resources in the camps. In addition, lack of safe sanitation places in camps where women and girls could take showers and go to the toilet privately expose them to more diseases because they, for example, washed themselves in contaminated water.

All respondents agreed that CWDs were the most vulnerable group during and after a disaster. However, there was not much awareness around this fact except for the mobility of CWDs. This negligence was especially surprising regarding the NGOs and government institutions who all claimed to protect the most vulnerable groups in disasters, including PWDs. The parents of children with disabilities interviewed all showed great frustration and felt they were not given priority. They wanted the NGOs and Government Institutions to be more present and help them.

In terms of disaster risk management and disaster risk reduction it was clear that there was inconsistency regarding the response, prevention and preparedness activities that the NGOs and government institutions claimed they had performed, and the responses given by the children and adults. The children and adults had received resources after disasters and some short-term training, but according to them there was no long-term activities in their communities. But according to the NGOs and Government Institutions many activities regarding disaster risk management and disaster risk reduction were being implemented in the communities.

The children and adults all wanted more activities in their communities. The children wanted specifically to be part of youth groups to learn more about preparedness, and be more actively involved in activities in their communities. This clearly indicate that there is a big job to be done by the NGOs and BoCP in terms of raising awareness and inform the communities about what type of activities they have in the communities and how the NGOs work in the communities. Plan Haiti did recognise the challenge of becoming less of a direct service provider, and instead enable the communities to do the work themselves through training key people in the communities. The problem

is that the key people often move away, leaving Plan Haiti and local partners in a constant “training mode”. This can explain some of the discrepancies found in the responses from children and adults and the NGOs and Government Institutions. The information and resources from the NGOs and the government are simply not being forwarded to the rest of the community as the “middle men” disappear.

In addition, challenges in regards to collaboration and information sharing between the NGOs and the Government were identified. Although some collaborating existed, most of the NGOs seemed to be working parallel of not only each other, but also of the Government. Relief and response efforts were therefore disorganised and delayed and the NGOs recognised the need for more collaboration. Overall, the government seemed to be non-present in most of the communities where research was conducted.

7. Analysis of findings

The aim of this chapter is to summarise and analyse the findings presented in Chapter six applying concepts identified in the literature review. The findings will also be analysed whilst taking into account the particular historical and present context of Haiti. Based on the findings, I have chosen to categorise the analysis into two sections; types of vulnerability identified and causes of vulnerability.

The analysis will hopefully allow us to suggest some analytical generalisations on children's vulnerability in natural disasters as well as climate change and the factors that are contributing to these vulnerabilities.

7.1 Types of vulnerabilities identified

As discussed in section 3.3.1, children represent a significant portion of those who suffer the often-overwhelming consequences of disasters and it is estimated that by the end of the twentieth century, more than 66.5 million children will be affected each year (Peek, 2008). As stated in section two, children in Haiti are exposed to numerous natural hazards due to Haiti's location in the hurricane belt (Webersvik and Close, 2010). But, due to Haiti's history of political instability leading to extremely high poverty levels and poor land-management causing deforestation and erosion, these hazards often turn into natural disasters (Fordyce, Sadiq and Chikoto, 2012). Consequently, children in Haiti are extremely exposed and vulnerable to natural disasters and the empirical findings presented in section 6.2 give us a better understanding of what type of vulnerabilities children are exposed to in Haiti and whether girls and children with disabilities are more vulnerable in natural disasters.

As discussed in section 6.2.1, findings suggest that children's vulnerability can be divided into three major categories, emotional, physical and loss of resources elaborating on Peek's research where it was argued that children can develop several behavioural, psychological and emotional issues in the aftermath of disasters (Peek, 2008). It also expands on Peek's existing table dividing types of vulnerabilities children experience in disasters into three categories, psychological, physical and educational vulnerability (Peek, 2008, p.5). However, Peek does not include the

general loss of resources such as losing ones homes, documents and access to food. Therefore, findings from this study also suggest that there is a fourth category of vulnerabilities, namely loss of resources.

First of all, most children expressed that they felt fear, sadness and anger when asked about disasters. These feelings were generally connected to the loss of family and friends, but also because their own lives were threatened, resulting in fear of new disasters. Many children were also scared of staying inside their houses because of the poor construction. The findings in this case study therefore suggest that many children live with what is usually defined as post-traumatic stress syndrome, elaborating on Udwin's earlier research that as many as 30-50 % of children affected by natural disasters develop post-traumatic stress syndrome. If left untreated, this can potentially persist for a long time (Udwin, 1993 in Peek, 2008). Further, Philip and Rayhan (2004) argue that prolonged exposure to risk such as natural disasters is an important source to vulnerability and children who develop post-traumatic stress syndrome or live in constant fear of new disasters like the children in this study do, can develop, for instance, depression, concentration problems in school and withdraw from social life in school and community. As such children who experience natural disasters or live with constant fear of new disasters, need long-term support to process the trauma they have experienced.

Second, the literature suggests that children are more physically vulnerable because of their partial or total dependence on adults (Peek, 2008). For example, it is expected that in the future, climate change will lead to families losing their livelihoods due to increases in droughts, floods and storms. Consequently, parents will not be able to feed their children or have resources to send their children to school or provide them with healthcare (UNICEF, 2014). This was an important feature of this case study, but one that was already existent. Due to an already increase in the frequency of hurricanes, droughts and floods in the area of study, the parents were unable to feed their children adequately, making the children more vulnerable to malnutrition, illnesses and diseases. Quite often, the children had to find other means for providing themselves and their families with food and other resources needed in the home instead of for example attend school.

Third, findings in this case study also imply that because children run slower they

cannot escape as easily as adults during disasters. Children were therefore more vulnerable of becoming separated from their parents and placed alone in temporary shelters or camps together with other adults or adolescents. Furthermore, the findings indicated that many children became orphans after disasters in Haiti and were now living on the streets, in orphanages or other homes such as SOS-children's villages. Plan Haiti stated that the children left in camps without parental care and the street children are extremely vulnerable to exploitation and abuse. This is in line with Peeks claim that because children can get separated from their family and friends in disasters and consequently be displaced in unfamiliar and unwelcoming environments such as temporary shelters and camps, they are more at risk of being exposed to sexual violence and human trafficking (2008, p.4).

Fourth, the literature also mentions that children are more exposed to illnesses and diseases because of their levels of physical development and immature immune systems (Peek, 2008, p.8) and the parents in the study feared for example for new diseases such as *chikungunya* (see p.73 for explanation of disease) as a result of an increased number of natural disasters and climate change, and felt that their children would be more affected than themselves.

Fifth, the adults, The NGOs and Government Institutions claimed that children were more vulnerable in disasters because children lack experience. However, findings in section 6.1 suggest that the children have a high level of experience as they live in areas that are often affected by disasters. As such, apart from the earthquake, the children did not mention lack of experience as a factor to their own vulnerability. This find is interesting because it shows that to some extent, adults see children as passive victims, whilst both existing research and the children themselves do not. Existing research argue that though children are at special risk during disasters, they are never passive. This study will claim that Tanner and Seballos (2012) argument that children have a unique perception of disaster risk because they have the ability to combine external information with their own experiences is also true in the case of the children taken part of this study.

Sixth, another vulnerability identified was related to the loss of education and resources. Most of the schools were destroyed in the earthquake or the hurricanes and

for many children that took part of this study, losing out of school was perhaps the most important aspect. As stated by themselves, going back to school was the most important thing for them. Not only because they feared for their future if they didn't, but also because it was their only way of knowing if their friends and teachers had survived. Peek existing research emphasizes that children's personal growth and development can be affected by disasters because disasters disrupt children's daily routines, they miss out on school and their social opportunities. Disasters often destroy school buildings and displace students and teachers, disrupting children's progress and long-term educational opportunities (2008, p.9). Also, Plan Haiti claimed that children who were not in school were also more vulnerable to exploitation and accidents because they were left "wandering the streets" by themselves. Thus, the findings in this study together with existing research stresses the importance of focusing on education in the aftermath of disasters.

Lastly, a regular feature in disasters, but one that is not mentioned as a vulnerability factor for children in the literature as stated earlier, is that families lose their homes and their most valuable possessions. Both the children and the parents in this study mentioned that loss of birth certificates made it difficult for the children to access health care services and education. In addition, because birth certificates often are the only proof of their existence it made the children vulnerable to abuse and trafficking if they got separated from their parents, highlighting the already mentioned vulnerability of exploitation above.

In terms of gender, Fothergill (1996) argues that gender directly influences vulnerability in disasters and exposures to risk. The findings from this study indicate that the children found it important to distinguish between vulnerable during and after a disaster. As discussed in section 6.2.2, the children argued that children were equally in danger in a disaster as they were exposed to the same risks. However, they all agreed that girls were more vulnerable after a disaster because boys were naturally stronger than girls and girls more exposed to abuse. This finding is important because it shows that children have the ability to see things differently than adults. The adults in the study, including the NGO and Government employees, did not make this distinction. Interestingly, literature on the topic does not make this distinction either.

As argued in section 2.3, violence against women and girls has always been a big challenge in Haiti. But the condition worsened after the earthquake in 2010, with rape being commonplace due to insufficient protection by police and inadequate housing for women and girls (Freedom House, 2012). According to existing literature, women and girls are more likely to become victims of violence in overcrowded camps where anarchy often rules and that such a collapse of order is more likely in countries where the political authority is weak. As a result, competition for resources get fiercer, gender discrimination is exacerbated and new forms of discrimination can emerge (Neumayer and Plümpers, 2007, 554). The findings in this study underpin this claim as some of the NGOs argued gender to be a fundamental problem in Haiti and that unrest and conflicts in Haiti only made it worse for women and girls after disasters. Experiences from the NGOs in this study implied that women and girls often were raped or forced to give sexual favours in return for food or other resources, but attempts to distribute resources only to women had created more violence between men and women according to Act-Alliance. According to Care Haiti, the number of abortions increased after the earthquake, and as abortions are illegal in Haiti, women and girls had to turn to illegal methods causing many complications and also deaths.
Neumayer and Plümpers (2007) also argued that women and girls are often more negatively affected by the, often terrible, health and hygienic conditions in refugee camps. This was also found in this study where it seemed that that women and girls did not have safe or adequate sanitation facilities to shower or go to the toilet making them more prone to infections and diseases. Consequently, Care Haiti argued that these camps were physically dangerous for women and girls.

In general, we may argue then that girls are more vulnerable because they are often left alone in dangerous places such as temporary shelters and camps. The chaotic situation that often occurs after a disaster only enhances their vulnerabilities. Women and girls are protected by the Convention on the elimination of all forms of discrimination against women, and especially in terms of sexual violence and security (UN, 2006). The Haitian Government and NGOs should therefore develop “safe-zones” for women and girls, and especially for those who are unaccompanied by their husbands or fathers in order to protect women and girls from abuse.

In terms of the disability aspect, the children and adults identified CWDs as a child with less mobility, making it difficult for CWDs to run and escape disasters. This is in line with existing literature suggesting that PWDs are extremely vulnerable in a disaster setting because they are unable to evacuate as they for example lose their special assistance devices (Atlas-Alliansen, 2015). However, one interesting find came from one focus group with children who distinguished between children who were disabled before disasters and those children who became disabled as a consequence of disaster. As argued in the literature, hundreds of people risk losing their limbs and are forced to undergo amputations as a result of secondary infections after disasters (Stough and Peek in Alexander, 2011, p.386). The children argued that children who became disabled after a disaster were more vulnerable in the long-term because these children were not used to their disability.

Unfortunately, as the findings indicate, this study was not able to gain in-depth knowledge in regards to CWDs in disasters. Nevertheless, one can argue that this is a finding in itself because none of the NGOs in this study had CWDs high on their agenda. And although the BoCPs main aim was to protect vulnerable groups in disasters, including CWDs, the bureau did not show a high level of awareness in regards to the specific needs of this group. BIPD helped PWDs in general, but did not have any specific activities in regards to disasters, but stated that they wanted to focus more on this in the future. As such, this study underpin the already existing literature from Alexander (2011, p.384) that although PWDs should be given the same opportunities to participate in disaster prevention activities or in development in general, this almost never happens. The parents of CWSs said they did not feel prioritised and did not have the capacity to take care of their children on their own in general, let alone in a disaster situation. The children also lacked education opportunities and basic health care and as a result these children were completely excluded from society. The NGOs only strengthened this view by arguing that it was a lack of awareness around the needs of PWDs and how to include them in their activities, informing me that they had just started to work on these issues. This also supports existing literature from GPDD and WB (2009) who argues that are more likely to face discrimination when resources are scarce in the immediate response and long-term recovery period after disasters. As stated in section 3.5.2, it is estimated that people with disabilities rose from 800, 000 to 1,1 million after the earthquake in

2010 (Atlas-Alliansen, 2015). These numbers are only taken into consideration the PWDs that lost one of their limbs either in the earthquake or those who had to amputate afterwards due to infections. In addition, many children in Haiti have disabilities such as downs syndrome, cerebral palsy (CP), blindness and deafness.

Hence, although the rights of PWDs and CWDs are protected in the Convention on the Rights of Persons with Disabilities (REF) and the Verona Charter in emergency situations (2007), CWDs are arguable the most vulnerable group simply because they are not being prioritized neither in disaster management nor in development efforts overall. Therefore, if the aim of the NGOs and the Government is to protect the most vulnerable groups in disasters, they cannot ignore PDWs. This study only emphasizes the greater need for developing more inclusive strategies where PWDs are included, not only in disaster programs, but also in general development programs.

7.2 Causes of vulnerability to natural disasters and climate change

The chosen definition of disasters used by IFRC (in Kumar, 2011, p.2) understood disasters as a complex range of issues consisting of natural hazards, human vulnerabilities and risks. Based on the definition and discussion in section 6.2.1, the children and adults in this study have a high level of awareness around natural disasters. Also, findings demonstrate that children and adults have a high level of awareness on vulnerability. This can be related to the frequency of natural hazards in their communities, which gives them solid knowledge on why disasters happen and the consequences since they have to live the consequences afterwards. Most respondents also showed a high to moderate level of awareness to climate change and interestingly, the respondents also linked the increases of natural disasters to climate change. Some respondents also understood that climate change was due to anthropogenic factors as a result of for example deforestation and pollution. As argued in the literature (Manyena, 2009, Kett and Ommeren, 2009 and UN in Kumar, 2011), one of the keys to become resilient and prepared when disaster strikes is awareness. Based on findings from this study, it can then be argued that children are resilient in the sense that they have awareness around natural disasters and climate change and have strong awareness on why and how they may become less vulnerable.

However, as stated previously, they lack the resources to do something about it, making them vulnerable. Manyena's theory (2009, p.264) that people can possess characteristics that both make them vulnerable and resilient can therefore be said to be the case in this case study. These findings are important because they imply that vulnerability to natural disasters and climate change in the case of Haiti is not necessarily connected to a lack of awareness. Instead vulnerability is a result of various internal and external factors such as physical, economic, political and social exposures or predisposition of an individual or a community to natural hazards and anthropogenic pressures as suggested by Manyena (2009). In addition, Webersvik and Klose (2010, p.12) argue that stability over time and whether a country is autocratic or democratic in nature is important. Because transitions are dangerous and destabilizing it increases a country's vulnerability to natural disasters. This study shows that although Haiti is vulnerable to natural hazards such as tropical storms and hurricanes due to its location in the hurricane belt, this location is not what causes the vulnerability. As such, O'Brien *et al* (2006, p.70) argument that hazards, such as floods and hurricanes, are natural events, "it is the way in which societies have developed that causes them to become disasters" seems to be the case in this study.

Hence, it is the opinion of this analysis that children's vulnerability to natural disasters and climate change in Haiti is a combination of three major shortcomings; 1) Weak Government Institutions due to political instability and aid and 2) Lack of collaboration and information sharing between NGOs and amid the NGOs and the Government and 3) Lack of involvement of children and communities in disaster management. The first shortcoming has arguably resulted in poor or non-existing environmental policies and sustained high poverty levels among the population. The second shortcoming has caused the relief and development efforts to be unorganised and inefficient, contributing to children's vulnerabilities. The third shortcoming also adds to children's vulnerability because they are not involved in issues that concern them. Consequently, vulnerability to natural disasters and climate change is sustained in the majority of the population in Haiti today, not only the children. These three shortcomings will be further elaborated on below.

7.2.1 Weak Government Institutions– Political instability and Aid dependency

As I see it, there is no doubt that the weak government institutions in Haiti are increasing children's vulnerabilities to natural disasters. As discussed in chapter two, the country is extremely poor due to a history of political instability, an instability that is still very much present today. In addition, increased population growth and rural poverty have accelerated environmental degradation and exploitation of natural resources, highlighted by poor historical land-use management resulting in weak or non-existing environmental policies (Webersvik and Klose, 2010 and Fordyce, Sadiq and Chikoto, 2012). A factor the children in this study all mentioned as a cause of their vulnerability. As discussed in section 6.3.2.3, the children wanted the NGOs and the government to conduct waste management activities, and for the government to stop extracting sand from the quarries around Port-Au-Prince, a major factor behind the increase of erosion in the country together with deforestation (Gauthier and Moita, 2010 and Williams, 2011). The fact that Haiti has weak, or actually no environmental policies at all weakens the work that is needed in order to decrease the country's vulnerability to natural disasters and climate change. As previously stated in section 6.3.2.1, most of the people living in the areas where the research was conducted has no choice but to live where they do and will therefore continue to live in hazard and disaster prone areas. Therefore, steps have to be taken to decrease the deterioration of the environment in Haiti and people need live in more solid houses that can resist for example frequent hurricanes and floods.

It has been argued by some scholars (for example Zanotti, 2010 and Ramachandran and Walz, 2012) that the weakness of the government institutions in Haiti is largely due to the history of aid-dependence and foreign interventions. The country is heavily aid-dependent with 70 % of the state budget coming from external financing in 2010 (Zanotti, 2010). Because of the limited capacity of the Haitian government, most of the services such as health and education are provided by NGOs. Thus, NGOs play a very prominent role, arguably even one equivalent to a quasi privatisation of the state (Ramachandran and Walz, 2012). NGOs received the bulk of the global relief funds after the earthquake while the Haitian government remained marginalised in the recovery and rebuilding efforts with as little as 1 % of funds given to the government. There has therefore been little incentive for the government to build its capacity to

deliver services themselves (Ramachandran and Walz, 2012). This was also found in the study where Act-Alliance argued that Haiti needed a strong Government that can help its people and where the NGOs for the most part, were being the service providers for the communities. Although the adults and the children lacked awareness around activities in regards to disaster management in their communities, they recognised the presence of the NGOs. The Government, they said, was not present.

7.2.3 Lack of collaboration and information sharing between NGOs and between the NGOs and the Government

Findings in this study imply that the lack of coordination and collaboration between the various relief and emergency actors in Haiti are contributing to, or even causing, children's vulnerability. Relief efforts have been extremely disorganised, and together with lengthy procedures and bureaucracy within the organisations, the delay of funds has resulted in people not receiving the help they need fast enough. This challenge has been recognised by the NGOs themselves, and although findings show that some collaboration exist today, Plan Haiti urged for more collaboration and for the NGOs to take more concrete actions to protect and help more people in disasters. My findings also suggest that, although the NGOs in this case study had coordinated their emergency and preparedness strategies with the strategies developed by the Government, the collaboration between them was weak. Act-Alliance tried to collaborate with the Government in having awareness campaigns on climate change, but for the most part, the NGOs seemed to be working parallel with the Government instead of together with them. This highly underpin the claim made by Ramachandran and Walz (2012) who argue that because Haiti is dominated by international NGOs, a parallel state have been allowed to develop alongside the Government. They further argued that NGOs have created alternative infrastructures for the provision of social services, generating little incentive for the government to build its capacity to deliver services themselves (Ramachandran and Walz, 2012). Thus, it becomes clear that the NGOs and Government have to collaborate and not work parallel to each other to make comprehensive development strategies incorporating disaster management, climate change adaptation and poverty reduction activities to create long lasting sustainable development in Haiti. Further, the strategies have to make sure that projects implemented in the communities are part of an overall strategy for the country, not just the strategy of separate NGOs or the Government. Although risk can

never be eliminated completely, it can be assessed and managed in order to reduce its impact and children's vulnerabilities (O'Brien *et al*, 2009). More research and attention is needed on the above because existing research on disaster management is not focusing on how lack of collaboration between the various actors are adding to children or people's vulnerabilities in disasters.

Another important factor that needs more attention and research is whether the fluctuations of NGOs and charity organisations present in Haiti today are contributing or hindering sustainable development in Haiti. As stated by NACLA (n.d), as many as 10 000 organisations were present in Haiti prior to the earthquake in 2010. And according to Ramachandran and Walz (2012) no one really knows how many NGOs and charities exist in Haiti today, with numbers estimated to be anywhere from 343 to 20 000. This fluctuation of different organisations does not necessarily create more improvements, rather the opposite. For example, own observations show that charity organisations, especially those stemming from churches in the US, are simply building schools and churches without engaging the local people in the project or the workforce. Although these people are donating their time to come to Haiti for a few weeks to construct houses, schools or churches, they do not have a plan for how the schools are to be run or maintained after they go back. There is therefore a great need for more research into how the different NGOs or charities are working, whether they are creating improvements or just leaving the people even more dependent on their help.

7.2.4 Lack of involvement of children and communities in disaster management

This study has also revealed that the activities the NGOs claim are organised in the communities are unknown to most participants, regardless if they are children or adults. One of the reasons for this situation can be, as previously discussed in section 6.3.3.2, that Plan Haiti found themselves in a constant "training-mode" instead of enabling the communities to continue the work on their own or focus on other development activities. Plan Haiti also struggled with disloyal staff, both within their own organisation, but also among their local partners who did not agree on Plan Haiti's decision to move from a direct service provider to an approach based on capacity building and advocacy in the communities. This was again reflected in the

work in the communities because the communities were still expecting direct service delivery. Plan Haiti therefore need to spend considerable more time in attracting people who are committed to stay in the communities so that training and knowledge is passed on from them to the rest of the communities. In addition, the NGOs need to engage the children more directly in their work as this study shows that children are not actively engaged in activities in their communities today. As discussed in sections 6.3.2 and 6.3.3.3, the children want to be part of youth groups where they can learn, participate and take part of the activities in their communities. As such, it can be argued that children's vulnerability in natural disasters and to climate change in this case study can partly be attributed to their lack of involvement in issues concerning them. This also suggests that children's right to be heard in issues that concerns them ratified in the CRC (OHCHR, n.d) is breached both by the NGOs and the Government. As stated previously, children have a high awareness of what is going on around them, and previous research has shown that the participation of children greatly enhance their ability to become agents of change in their communities (Peek, 2008, p.4 and Seballos *et al*., 2011). Seballos *et al* (2011) argued that engaging the community also means engaging the children since such processes can contribute to a shift from passive vulnerability to active agency. More research and attention is also needed on the above concerns because existing research on disaster management lacks in-depth knowledge on whether the absence of involvement of children in disaster management and development activities in general are contributing to children's vulnerabilities.

8. Conclusion

So, what conclusions can we draw from this case study regarding children's vulnerabilities in natural disasters? The overarching conclusion is that children's vulnerability to natural disasters is caused by various internal and external factors as suggested by existing literature. In this case study, these factors are related to political instability, non-existing environmental policies, inefficient relief efforts and constant exposure to natural hazards.

In terms of children's vulnerabilities identified in this study the following conclusions can be made. First, one can argue that the findings in this study indicate that children have specific vulnerabilities simply because they are children. Children are dependent on their parents to provide them with food and other resources and many parents are unable to after disasters. Because of their physical limitations, children are more vulnerable to illnesses, injuries, and death and of becoming separated from their parents and friends, the latter exposing them to abuse and exploitation. In addition, because many children are under education, they risk losing out on important educational progress because schools are destroyed during disasters or because they have to help providing their families with resources such as food, hindering them to go back to school.

Second, girls are more vulnerable after natural disasters because of the dangerous position they are placed in. The temporary shelters and camps people often have to stay in after disasters are physically dangerous for girls. The often chaotic situation that occur after disasters only enhances already existing gender discrimination and these situations often occur in countries where political authority is already weak, something that is highly relevant in the case of Haiti. Girls are more exposed to abuse and exploitation such as sexual violence and contract infections and diseases because the sanitation facilities are not safe for girls to use. It is therefore of the opinion of the author that safe zones should be established in shelters and camps for women and girls. Many NGOs have created so-called "child-friendly" spaces for children in camps as part of their relief response, but my findings suggest that this is needed for women and girls also in order to protect them from violence and exploitation. Third, this study suggest that children with disabilities are the most vulnerable group both

during and after disasters simply because they are not being prioritised and included in disasters management activities in Haiti. In general, it seems they are not being included in development activities at all. As such, there is an urgent need for the NGOs in this study to incorporate children with disabilities in their work. Children with disabilities need to become a comprehensive part of all their strategies and be able to participate in decisions that affect them. Without their participation, we will not be able to decrease their vulnerability during and after disasters.

The above conclusions on children's vulnerabilities in natural disasters indicate that there is a great need to protect children after disasters because they are left extremely vulnerable to abuse and exploitation. Unfortunately, there is still a long way to go before children's rights are fulfilled in a disaster situation. As this study shows, two of the main pillars of the CRC, protection and survival, are not being fulfilled in todays disaster management efforts in Haiti. Article 11, protecting children in situations of risk and humanitarian emergencies and article 19, protecting children from all forms of violence, specifically outlines the obligations of the government and NGOs in an emergency situation and should be the fundament in all DM and DRR activities (OHCHR, n.d). And it is imperative that children, including girls and the disabled, are allowed to participate in DM and DRR efforts on all levels, but maybe most importantly in their own communities.

This study also suggest that because children have a high level of awareness around their own vulnerabilities and what causes them, the children could be argued to be resilient. But because the children and their families lack the resources to change their situation, children remain vulnerable in disaster situations.

As such, the underlying causes of vulnerabilities in Haiti seem to be attributed to the three shortcomings found in the analysis. And though this study support already existing research that vulnerability in general is caused by a country's historical and present situation, the findings in this case study also suggest that NGOs are a contributing fact to people's vulnerabilities instead of decreasing them. Not only have the relief efforts been disorganised and inefficient, it also seems that development efforts in general is chaotic in Haiti with little or no collaboration between the various NGOs present or between the NGOs and Government. It appears that the NGOs are

working parallel with the government instead of with them. The same can be said concerning the fluctuations of NGOs, as the impression this study is left with is that there are too many actors working on the same topics in Haiti. However, they all have different approaches and ideas on how to solve the underlying factors of poverty in Haiti.

There is therefore a great need for a more comprehensive development strategy in Haiti, a strategy that includes and incorporates disaster management, climate change adaptation, poverty reduction incentives, democratic transition and civil society development. This strategy has to be first and foremost lead by the Haitian Government, but together with the NGOs. Without a strong government, Haiti will not be able to solve the underlying factors causing children's and the general population's vulnerabilities to natural disasters.

As a concluding remark, Haiti might be one of the best examples in recent history as to why disaster management, climate change adaptation, poverty reduction incentives, democratic transition and civil society development should be part of an overall sustainable development strategy in a developing country.

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