

Preparedness to Slow-Onset Emergencies:

An Investigation into Local Preparedness
for Drought in Lesotho



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Cover picture: Villagers enjoying the sun outside their home in Ha Senekane, Lesotho (2016)

All photographs presented throughout this work are the author's original work.

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With this, a chapter of my life has now been closed. I am able to say that although it was a very daunting couple months, I have come out stronger and more independent because of it. This thesis has made me push boundaries that I never knew existed. Although the thesis is now completed the memories and the friendships I have made through its development will remain with me forever. The different stages of the thesis all hold different struggles, from finding a topic to coming up with a proposal and then the most daunting part, going into the field and then the actual writing of the thesis. The most enjoyable part has to be the field work. It proved to be the most stressful but also the most adventurous part. I was able to call Ha Senekane my home. From home I was able to go out and conduct my research in the village, volunteer at the HIV/AIDS Clinic and the day-care where I chased children around for hours and read stories. Lesotho has shaped the person I am today, making me become more independent, self-confident, and adventurous.

While I was in Lesotho a friend's mum asked me why I study development and in particular disasters and why I want to work in this field. I responded by saying, "I do it so that I can make someone's day, help them smile, give them hope. I know I won't be able to change the world, but if I can make someone smile or change their world then that is my contribution to changing the world." I hope that within my time in Lesotho I have been able to do that. Every afternoon I spent giggling with the children, or laughing with my colleagues further affirmed that notion and my desire to continue to contribute to a better world.

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Abstract

Droughts, epidemic diseases, and desertification all have one thing in common. They are examples of slow-onset emergencies, emergencies that are predicted/forecasted ahead of time and unfold over a span of months or years. Drought is not new to Lesotho, however the 2015 El Niño impacted the country on an unprecedented scale which has been further worsened by the high rate of HIV/AIDS in Lesotho. This thesis explores the local and international preparedness 2015-2016 Southern African drought in Lesotho. A two and a half month qualitative research was conducted in Ha Senekane, Lesotho to examine the local and one week in Johannesburg, South Africa to explore the international organizational preparedness actions. The research uses theory related to risk and learning theory to examine local preparedness measures and to understand the reasoning behind the implementation of them or lack of measures. The results illustrate the lack of preparedness measures in the community and the lack of governmental and international organizational presence in the community in preparing and response to the drought. Although some people had heeded the early warning, the majority of the community were ill-equipped to prepare or did not even know about the forecasted drought. This has ultimately led to community members enacting coping methods that are detrimental further down the line in terms of health, malnutrition and risking sexually transmitted diseases. This topic needs to be further examined in order to understand the full benefit of preparedness and how to operationalize local knowledge into international preparedness measures.

Keywords: *Preparedness, Slow-onset emergency, Lesotho, Drought, Local knowledge*

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Abbreviations

ARVs	Antiretroviral therapy
CP	Contingency Planning
CRP	Contingency Response Plan
ERP	Emergency Response Preparedness
ESCO & El Niño/ La Niña	El Niño- Southern Oscillation
EWS	Early Warning System
FAO	Food and Agriculture Organization
FFW	Food for Work
HIV/AIDS	Human immunodeficiency virus infection and acquired immune deficiency syndrome
GDP	Gross Domestic Product
LVAC	Lesotho Vulnerability Assessment Committee
NDMA	National Disaster Management Authority
NGO	Non-Governmental Organizations
OVC	Orphans and Vulnerable Children
RP	Response Plan
SADC	Southern African Development Community
SARCOF	Southern African Regional Climate Outlook Forecast
SOP	Standard Operating Procedures
STIs	Sexually Transmitted Diseases
TB	Tuberculosis
UNDESA	United Nations Department for Economic and Social Affairs
UNISDR	United Nations International Strategy for Disaster Reduction
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
OCHA ROESA	United Nations Office for the Coordination of Humanitarian Affairs Regional Office for Eastern and Southern Africa
WFP	World Food Program

Chapter 1: Introduction

Natural Disasters are out of the control of humans. The past decade has seen a growth in man-made and natural emergencies which does not appear to be reducing in intensity or frequency. These events are occurring in a time when the world is already facing increased stress due to population density, reduced natural habitats, and climate change. Although man-made hazards have detrimental effects on the population, natural hazards have much larger (direct and indirect) impacts on the society and economies of a country and region. “It is estimated that, between 2000-2009, about one million people lost their lives and economic damage of about 1,000 billion USD occurred due to natural disasters” (Schryen, Rauchecken & Commes, 2015, p. 243). The cost of natural hazards, much like man-made hazards includes: human costs, environmental degradation and infrastructural damage, all which have far reaching consequences for years to come.

When it comes to natural hazards, there are two kinds: sudden-onset and slow-onset emergencies. These hazards are able to bring about a high level of casualties and economic damage. Sudden-onset emergencies include earthquakes, tsunamis, and tropical storms and can be defined as emergencies with direct impact and damage. They can be characterized by its clear start and ending point. Slow-onset emergencies can have the same impact as sudden-onset emergencies, however the impact can be somewhat predicted, meaning that the predictability and preparedness for this type of emergency is greater than for sudden-onset emergencies. This thesis will use The United Nations Office for the Coordination of Humanitarian Affairs (OCHA) definition of slow-onset emergencies, which is defined as “one that does not emerge from a single, distinct event but one that emerges gradually over time, often based on a confluence of different events” (OCHA and slow-onset emergencies 2011, p. 3). These events can be illustrated with examples such as droughts and disease epidemics (both animal and human). The lead time that slow-onset emergencies have, can allow for both the local as well as the humanitarian community to step up preparedness actions such as boosting current coping strategies as well as implement mitigation strategies which will ultimately help with the reduction of human suffering as well as increase community resilience for future hazards. Although some emergencies are very hard to predict, by having institutions and protocols in place beforehand allows for loss of life and infrastructure to be significantly reduced when an emergency takes place. As climate change increasingly impacts countries and livelihoods, the frequency of severe weather conditions are increasing as well.

A big aspect to the growing number of emergencies is the effect of climate change. Climate change has allowed for a rise in unpredictability with emergencies as well as an increase in the frequency of emergencies, both rapid-onset and slow-onset disasters. Major characteristics of climate changes are the increasing temperatures and significant precipitation fluctuations which are increasing the intensity and severity of natural hazards (Porfiriev, 2015, p. 187). These changes have resulted in some complex disasters as well as seeing some countries more frequently hit by large disasters. Climate change has had a dramatic impact on the intensity of both the El Niño and La Niña phenomena. The El Niño-Southern Oscillation (ENSO) is a natural phenomenon which occurs roughly every three to five years¹. ENSO occurs when there is a warming of the oceans as well as a change in the trade winds (National Ocean Service). The large deviations in the water temperatures as well as wind patterns creates large impacts on the global weather structures.

The Southern African region is one the regions around the world which has suffered significantly from El Niño. The year 2016 saw an El Niño which had been predicted in mid-2015 to be

¹ But can occur more frequently.

the strongest on record, records dating back to 1950's (Thompson, 2015). This cooperates forecasts made by the Southern African Regional Climate Outlook Forecast (SARCOF) in September 2015, which reiterated that predictions of a strong El Niño event, as well as stating that some authorities are expecting it to be the strongest El Niño recorded (Southern Africa Regional Climate Outlook Summary, 2015). The forecast for Southern Africa includes significant reduction of rainfall during the harvest season from November till March, which can lead to dry conditions and water shortages (Southern Africa Regional Climate Outlook Summary, 2015). Southern Africa is experiencing one of the worst droughts in their history.

"Drought[s] [are] considered by many to be the most complex but least understood of all natural hazards, affecting more people than any other hazard (Wilhite, 1996, p. 230). Droughts are classified as slow-onset emergencies due to its relative slow creeping phenomenon, and its long lasting impacts with no specific starting date. Due to its relative slow advancements the ability to prepare and mitigate the negative effects is significantly higher than other emergencies. One is able to predict, to a certain degree, the severity of the drought by: analysing weather forecasts, reservoir measures, and evaluating the groundwater tables which were all done in Southern Africa before the drought. For timely actions for the preparedness measures to be put in place as well as the ability for the government to implement these plans at a country and district level can mitigate the negative effects of the drought however, there are many obstacles which can delay these necessary actions.

The Southern African region is often forgotten by the international community as well as the donor community as it suffers mainly from natural hazards rather than conflicts. The Kingdom of Lesotho (Lesotho), a landlocked country in South Africa, is no exception in this case. Lesotho and the preparedness actions undertaken there will be used as a case study throughout the paper, due to the natural emergency that the country faced in 2015-2016. In late 2015 and early 2016 the Southern African region has been suffering from the negative effects of El Niño. For the Southern African region, El Niño has resulted in a significant reduction of rainfall levels in the majority of the agricultural provinces across the region. They have experienced extremely poor rainfall in the first half of their rainfall season (UN Resident Coordinator, Jan 19, 2016). Many of the negative effects that El Niño inflicted were forecasted in mid-2015, the reduction of rainfall and lower of the water tables due to the lack of rainfall. It is, thus, important to look at the various preparedness mechanisms that were used by the different actors in order to reduce those negative effects. The humanitarian apparatus as well as the locals have different ways in which they prepare for an emergency, as well as most likely having different definitions to the word emergency. This will be later examined in the thesis.

Although the humanitarian apparatus around the world has invested a lot of time and efforts into improving their preparedness mechanisms for the local populations and governments, many local populations have implemented their own mechanisms which can be overlooked by these organizations. The agency of the people and these mechanisms play an important role in the thesis, as through the examination of these home-grown and often passed-down tactics for preparing or preventing natural disasters the central question of the thesis will be examined.

1.1 El Niño Induced Drought Effect in the Kingdom of Lesotho

Lesotho is faced with a food insecurity issue in the second half of 2015 which saw predicted numbers surpass the numbers of the 2012 crisis when 725,000 people, roughly half the rural population were food insecure (UN Resident Coordinator Jan. 19, 2016). The relative high number of people who are food insecure is in part due to the poor crop production in the 2014/2015 harvest compounded by the drought conditions in late 2015, early 2016. The natural phenomenon, El Niño has

resulted in drought conditions in Lesotho, in “some parts of Lesotho this is the driest season in 35 years” (FEWSNET, 2016) and the Southern African region and is expected to last until April 2016, while having longer lasting impacts in both the country and in the region.

El Niño has resulted in drought conditions in Lesotho which have hampered crop production, increased deaths in livestock due to dehydration, the creation of a lack of available water sources (for both humans and livestock) among others. The negative impacts of El Niño are not limited to disease outbreak, water and food shortages, increased market prices, death and emaciation of people and livestock as well as livelihood impacts (FEWSNET, 2016). All these negative consequences of the drought have both direct consequences and indirect consequences which have both short term and long term effects.

Lesotho faced certain constraints in their capacity to respond to the food insecurity in the months leading up to the drought. The government already had 283,981 people under food provisions such as safety nets and school feedings; however there was a gap of 179,955 people which is expected to rise over the first quarter of 2016 (UN Resident Coordinator Jan. 19, 2016). The number of food insecurity in the country has also risen from 447,760 people in need in 2014 to 463,936 people in 2015 which is an increase in prevalence from 26% to 33% based of Lesotho Vulnerability Assessment Committee (LVAC) results at the end of 2015 and according to FEWSNET the numbers of people who will be facing Phase 2 (stressed) and Phase 3 (crisis)² are expected to exceed 600,000 people by September 2016 (FEWSNET, 2016). The government declared a state of emergency due to the drought conditions and seeks immediate help to alleviate stresses on their population as well as livestock, at the end of December 2015.

Many households in the worst affected areas³ (Butha Buthe, Leribe, Berea, Maseru, Mafeteng, and Mphahle's Hoek) are already unable to meet their minimum food requirements and many are getting governmental support. If households are unable to receive assistance, they most likely resort to negative coping mechanisms such as selling of livestock, which will be occurring in a context of already alarming rates of chronic vulnerability, this is both a preparedness measure that families use as well as a response mechanism. The lack of water already started affecting service providers in late 2015 such as hospitals and schools who unable to provide enough water in order to fulfil their services. It is also essential to consider the food insecurity issue of 2015-2016 in the context of the region, where region- wide cereal deficits and inflation due to macroeconomic factors have put upward pressure on staple food prices for Basothos⁴.

The food insecurity as well as the lack of safe water in the country, not only affects the people but also their livelihoods and livestock. The repercussions of a delayed humanitarian response as well as a little to no preparedness measures taking place, could see one third of the country's population impacted as well as significant decrease in livelihoods and loss of livestock due to dehydration and disease. With Lesotho having one of the world's highest HIV/AIDS epidemics, food insecurity also plays a role in the countries fight to reduce the number of infections and deaths due to HIV/AIDS.

The growing food insecurity has already been exacerbated by increasing food prices, the weak South African Rand, impacting the prices of food imports as well as by El Niño's harsh impact on the condition of livelihoods and livestock which was present already in the preparedness phase leading up to the response efforts. The scope of the impact of the El Niño phenomenon in Lesotho is likely to

² These Phases are referring to the Integrated Food Security Phase Classification which is used by FEWSNET (Famine Early Warning Systems Network).

³ This is based on rapid assessment done by the Government in January 2016.

⁴ This terminology refers to the people of Lesotho.

significantly increase in 2016 and according to forecasts and assessments done by the Southern African Development Community (SADC) reach peri-urban and urban areas, which will expose even more people to the natural hazard than previous weather phenomena.

1.2 Research Area

The research looks specifically at the 2015-2016 drought preparedness that was done by the local population in Ha Senekane as well as what the international actors did. Ha Senekane is a rural village located approximately 30 km from Maseru. The population of Ha Senekane are mainly farmers who produce maize and other products for personal consumption as well as to sell to the market. The village is located in the Berea Plateau which is one of the main maize producing area of Lesotho. The village along with other parts of Lesotho have suffered from the El Niño induced drought of 2015-2016 with many villagers already suffering from high rates of unemployment, Human immunodeficiency virus infection and acquired immune deficiency syndrome (HIV/AIDS) and poverty. The drought caused many villagers to go hungry during the 2015-2016 year as well as suffering from significantly reduced harvest.

1.3 Research

To juxtapose the enormity of slow-onset emergencies on a global scale, Lesotho will be used as a case study to look in depth into the preparedness mechanisms used by the local inhabitants and the humanitarian actors whom are active within the 2015-2016 El Niño event which has hit the Southern African region profoundly. Through the use of the Lesotho El Niño drought as a starting point, this thesis will examine how the local population's position themselves in the lead up to a natural disaster and how the relationship is between the humanitarian apparatus and the local people. The focus slow-onset emergencies such as drought or disease outbreak will allow for the analysis of preparedness mechanisms that are used by the various stakeholders as these emergencies allow time for preparedness actions to be implemented.

This thesis will seek to answer the question of: *How can local population preparedness to slow-onset emergencies be understood by applying the notion of risk? And, How does this relate to the understanding of the humanitarian apparatus in preparation to slow-onset emergencies?* The central research question of this thesis will be examined through the research of one village (Ha Senekane) in Lesotho as well as conversations with the humanitarian apparatus which is involved in both the preparedness phase during the lead up to the 2015-2016 drought as well as other emergencies in Lesotho over the past couple years.

In order to answer the central question of this paper, the thesis is broken down into chapters which will examine the different components of the research. The thesis starts off with the methodology of the qualitative research, followed by the literature review which gives the state of the art on the different concepts as well as informing the theoretical underpinnings of the research. After these chapters, the research will include the results and the discussion. The results and discussion are intertwined within the various chapters. The thesis will look into slow-onset emergencies that Lesotho faces and the different concepts that are intertwined with them, local preparedness mechanisms, Risk and preparedness to drought, international preparedness and looking at closing the gap between local and international preparedness actions. The thesis will be concluded by answering the central question of the research and recommend ways to further research on the topic as well as including possible recommendations on the type of preparedness mechanisms that the local populations of Ha Senekane could use with the potential be scaled up.

Chapter 2: Methodology

A natural disasters increase in frequency over time. It is important to study the ways in which people, the Government and organizations (both national and international) prepare for these disasters. In order to study the preparedness mechanisms, if they are even used by the locals or organizations, there needs to be an understanding of what research has been done previously on the topic, the context, and people beforehand. This research uses both literature analysis and qualitative research including conducting formal and informal interviews and living within the affected community to provide a more holistic approach to understanding the preparedness mechanisms used by the different actors in the field.

The qualitative research is conducted in Ha Senekane, Lesotho over a period of more than two and a half months and one week in Johannesburg, South Africa. My experiences during my internship at OCHA's regional Southern African (ROSA) office during September 2015 till February 2016 is also used throughout the research. Lesotho, which is mountainous, is highly prone to natural disasters on a perpetual state. The strength of the 2015-2016 El Niño was predicted to impact countries across the world with some countries facing a bigger burden than others. Lesotho faced the onset of El Niño in mid-2015, with the prediction that it would be one of the most sever El Niño the country has faced. The research will be conducted in Ha Senekane which is located in the Berea District in Lesotho.

This chapter delves into the various research strategies taken, first by examining the qualitative research methods, which talks about issues surrounding access and sampling, followed by interviews, consent, field notes and lastly the literature review.

2.1 Qualitative Research

This research uses a qualitative research approach. This approach allowed for a deeper understanding of the history, culture, and the people by employing "a wide range of interconnected interpretive practices" (Denzin & Lincoln, 2011, p. 4). Through the combination of living within the community with the conducting of informal and semiformal interviews, the research was able to delve into the question at hand. The research produced recorded interviews, field notes, and a field diary which were all used to "make sense of, [and] interpret" (Denzin & Lincoln, 2011, p. 3) the data. I lived within the community as well as volunteered at the HIV/AIDS clinic and the Daycare centre which allowed me to building relations with the community which ultimately proved pivotal in understanding the situation, their lives, and furthered my understanding of what the situation was like leading up to the drought. This is both relevant to the two different institutional levels which were interviewed. The two different institutional levels that are looked into include the local population in Ha Senekane and international organizations; however the latter is looked at to a lesser extent. The qualitative research was conducted both with in the field as well as incorporating my own personal experience⁵.

The use of the various different types of data as well as the countless meta-data that was collected throughout the two and a half months allowed me to gain a deeper understanding of the lives and hardships that this community faced and the resilience the Basotho culture upholds. The literature review further strengthened this notion and allowed a different insight into the large context of preparedness, drought, and Lesotho.

⁵ I was a humanitarian affairs intern at OCHA ROSA from September 2015 till end of February 2016, where I was actively involved in both the preparedness phase as well as early response to the Southern African drought.)

2.2 Access

Lesotho has a relatively small population, about 2.1 million people⁶. The majority of the population live in rural communities spread around the country's mountainside. This has implications of access to the informants. The country also relies on remittances from the South African mines, meaning that many men are living and working in South Africa rather than in Lesotho, however during the time of the research many mines in South Africa were shutting down. This has implications on the access to men of working age (18-40), however, the research interviewed those who live in Ha Senekane and makes the male mining demographic underrepresented into account. The research uses Paballong HIV/AIDS and TB Centre as the main access point into the village as I lived and volunteered at the Centre mainly working as a nurse's assistant in the clinic and the daycare centre. Through the Centre, I came into contact with HIV/AIDS and TB patients as well as OVC's⁷ and therefore initiated contact with informants as well as be visible to the Ha Senekane and broader community.

The research was conducted during the winter months in Lesotho, which impacted access to villagers during some days due to the freezing temperatures. The winter months see increased snowfall in the highlands which block roads as well as see an increased migration of people from the high lands to the low lands. This migration as well as migration back from South Africa to the health clinic allows for the researcher to also interview those living in the highlands or South Africa. Through the clinic a lot of information was gathered from a larger variety of people, from people outside of Ha Senekane⁸.

In order to gain access to the field, I was introduced to the Chief on my second day whom gave me permission to stay and conduct research in the village. The initial introductions to the Chief were conducted through the support from Paballong. These introductions were needed so that people are aware that I was going to interview people. The Chief was informed about the topic of the research and type of data that was collected during the initial meeting. Paballong Centre also provided a translator⁹ who guided me through the village, which is needed in order to be conscious about the customs and traditions in the villages.

Even though English is taught in schools as the primary language, children in Ha Senekane do not use English much outside of schools. The older generations speak more broken English. The most common language among the Basotho is Sesotho. As the research included interviewing adults, there was a need for a translator. The translator allowed for access to the village and people who would otherwise not be interviewed due to the language barrier. There was a possibility of double translation and certain concepts and phrases to be missed or mistakenly interpreted by the interpreter. By keeping questions simple and through the building of a relationship with the translator, this was minimized. Another way that the double interpretation was minimized was by living and volunteering in the area and therefore knowing more about the people, building relations with the community and understanding the environment. An initial list of questions which was used during the semi-structured interviews was given to the Paballong Centre in advance in order for them to translate the questions and provide some advice on the question structure and language. The translator was also told during

⁶ These World Bank figures are from 2014.

⁷ Within Lesotho, special authorization is needed for researchers in order to interview children. This is something that the researcher does not have, therefore no formal interviews will be conducted with children and there will be limited contact with children (0-18) throughout the research.

⁸ The Centre provides services for people on the Berea Plateau as well as people residing in South Africa for several months of the year.

⁹ The translator was a 25 year old male who was in university in Maseru but lived and grew up in the village.

the first meeting about the premise of the research and certain keywords which allowed him to use the correct language and words during the interviews.

As the research not only focuses on the local perspectives and agency of the people, access to the international organizations active within the preparedness and emergency response in Lesotho was also negotiated. I have previously worked in the Southern African region, and was able to set up the initial contact with a former colleague at the OCHA office for Southern Africa in Johannesburg, South Africa. This colleague, a Humanitarian Affairs Officer, was also interviewed during the research. She was used as an entryway into the humanitarian apparatus within Maseru, who were unable at the time to get interviewed. With her extensive knowledge on Lesotho and her abundance of contacts in the field, she has allowed the researcher more access as well as a good primary understanding on the issues which the country faced leading up to the El Niño induced drought.

2.3 Sampling

This research uses two types of sampling methods in order to get informants and provide a more holistic approach to the various preparedness mechanisms used by the stakeholders in the lead up to the drought. The research uses snowball sampling in order to reach less reachable informants as well as random sampling due to the nature of the geography and relative small population. Walters (2015) cited Noy (2008) stating that the snowballing technique in research can be used as a primary vehicle to access informants which can work complementary to other research methods to access populations which are harder to reach.

The research was restricted to Ha Senekane when it comes to interviewing local populations. The research does incorporate the humanitarian apparatus which is located in Maseru and covers the whole country. This research was conducted in the winter months of Lesotho which sees snow in the majority of the highlands. Therefore, by using snowball sampling, I was able to get a more diverse group of interviewees. The snowballing sampling technique is a “method [which] yields a study sample through referrals made among people who share or know of others who possess some characteristics that are of research interest” (Biernacki & Waldorf, 1981, p. 141). Although much of the country is facing drought, there are people who are more active in preparation mechanisms than others and therefore, with the snowballing effect this research hopes to be able to use them as informants. The Chief plays a pivotal role in establishing the initial contacts within the population. The Paballong Centre was also used to gather informants as well as build relations with the community, this ended up providing much meta-data and information regarding HIV/AIDS and TB as well as the impact of drought in the region and country.

For the interviews with the humanitarian apparatus¹⁰ some people were handpicked due to their involvement to the preparedness for drought in Lesotho, this includes employees of OCHA Regional Office for Eastern and Southern Africa (OCHA ROESA)¹¹.

Snowball sampling was also beneficial for the research because of the sensitivity surrounding the topic as well as for hard to reach places. Although drought preparedness is not very blatantly

¹⁰ UNDP was contacted for an interview but did not respond, however work that was done by them is used. WFP was not directly contacted but information was given about their work in Ha Senekane through a field worker who worked for WFP at Paballong

¹¹ UN OCHA ROSEA is the merging of OCHA Southern African regional office and East African regional office, throughout the thesis reference will be made to ROSA rather than ROSEA due to the merger happening after I had completed my internship at the southern regional office.

sensitive information, some of the coping mechanisms as well as information can be. Through the use of snowball sampling, some of this information were more accessible to me due to the built-in trust.

While snowball sampling was used throughout the research, this research also used random sampling and aspects of convenience sampling. The convenience sampling is based on people the researcher met while conducting research. This way a random sample of the population is “defined and all members have an equal chance of selection” (Marshall, 1996, p. 522). This also allowed the researcher to express some control in who is being interviewed. “Control is exercised in an attempt to ensure that the sample includes an array of respondents that, in qualitative terms, if not rigorous statistical ones, reflect what are thought to be the general characteristics of the population in question” (Biernack & Waldorf, 1981, p. 155). One example of this exercise of control was during one of the first days of interviewing when we (my translator and I) walked past a house which had a keyhole garden (which is not common in Ha Senekane) and thus told my translator to introduce us to the homeowner and ask permission to interview them. This turned out to provide me with a lot of insight into keyhole gardening as well as local coping methods.

Although convenience sampling is often criticized for not allowing generalizations to be made, it provides research with informants which could otherwise be overlooked. The reason behind this research is not to make a generalization about the preparedness mechanisms that people use in order to prepare for emergencies, it is however to see what these mechanisms are and investigate if institutional efforts to help prepare the population is what they need or want. Therefore, convenience sampling allows for the research to get in contact with informants, who the researcher met at events or on the street. In the case of Lesotho, which has a friendly and relative small population, this method when used alongside snowball sampling allows for a more inclusive respondents, which provides more insight.

The researcher has conducted 22 interviews and countless informal conversations during the research period. This includes people from the various different institutional levels who were active during the preparedness of the drought. It will include both members of the public as well as Non-governmental organizations (NGO's) and the UN. Although the research initially planned on interviewing 20 people, sample size increased slightly due to the nature of the research. As Marshall (1996) states, “an appropriate sample size for a qualitative study is one that adequately answers the research question” (p. 523). This sample size reflected the various different age brackets within the community as well as the different socioeconomic statuses seen in the community.

Within this research, a balance between male and female was attempted to be made in order to present a more unbiased perspective. This is important to get a balanced and nuanced view to the research. The women are normally the ones that farm and do the housework in Lesotho and work in the textile factories, while the men work as shepherds and larger scale farming as well as working in the mines in South Africa. Children were not formally interviewed due to restrictions set out in the Child Protection Act (*Children's Protection and Welfare Act 2011*) which require special permission from the Government, which the researcher has not obtained. However, through the work at the clinic and daycare as well as walking around town some children did talk about the topic openly.

2.4 Data Gathering

Throughout the research, different types of data gathering processes were used. This allowed for a large variety of data to be collected as well as increasing the variability of the data. Some techniques permitted for more detailed data while others are used to create a background for the data.

2.4.1 Interviews

Interviews play a crucial role in the research and data collection process. Interviews were conducted on different institutional levels including; the local population of Ha Senekane, the international humanitarian apparatus active within the country (to a lesser extent), OCHA's regional office¹². More emphasis has been directed on the local viewpoint, therefore a large portion of the interviews conducted were with locals rather than members of the humanitarian apparatus in Lesotho. Interviews were recorded, only if consent is given by the respondents (see 2.8 for more information on consent), it is then transcribed by the researcher.

In total, 22 semi-structured interviews took place. The semi-structured nature of the interviews allowed for room to ask varied questions depending on the answers and observations made. Allowing the researcher to ask relevant follow-up questions and questions which are relevant to the discussion at hand. The questions which were asked will be tailored to the different institutional level (see Appendix B for a list of interview questions). Some questions also targeted the understanding of the link between the different stakeholders; is there communication between the NGO's, the government and the local people and if so what are these relations.

2.4.2 Literature Review

A literature review was written before field research was conducted in order to gain insight into Lesotho, the country, and the various topics that this research attempts to contribute to. The literature review tackles some of the larger concepts in which this research is taking place. This includes examining; the issue of slow-onset emergencies observed in the country which includes drought, some of the humanitarian organizations preparedness mechanisms, as well as informing the theoretical frameworks to which the research revolves around. The literature review also examines grey literature from the international organizations as well as Government documents which were accessible to me during my time as an intern at OCHA ROSA.

The establishment of a state of the art through the literature review, the concepts and frameworks are more profoundly explained and analysed. This analysis will inform the discussion between the state of the art and the research results. The literature review links the theoretical framework to the concept of natural disasters as well as analysing the link between the two and preparedness.

2.4.3 Field Notes

Throughout the research, a field diary was kept which outlined the observations and conversations as well as feelings on a daily basis. During days when interviews were conducted the daily entry also included reflections of the day's interviews as well as feelings and comments pertaining to the interview. The field diary played an important role in collecting the meta-data from the interviews as well as making sense of the local way of life. It also provided an outlet for my feelings and worries which occurred during the field research¹³. The field notes were also taken in the form of photographs. These photographs depict the current state of the drought but also provide an insight into the lives of the locals as well as the environment in which the drought played out.

This research was conducted post hoc, roughly seven months after the declaration of drought emergency by the Lesotho Government, however the current state of the situation is important to

¹² UN OCHA ROESA plays a coordinating role in Eastern and Southern Africa which includes Lesotho under their jurisdiction.

¹³ This was especially important after certain days volunteering at the Clinic.

capture the severity of the drought and the impacts it has on the local population. This will then inform the need for more preparedness actions in the future or that the various different stakeholders need to tackle the preparedness in another manner in order to mitigate the negative consequences.

Although the research would benefit having the children's perspective, to the issue of consent, the research does not include formal interviews with children. Interactions that did occur with children while working at the Centre as well as when interacting with people in the villages will be included in the field diary. Through documenting these conversations in the diary the data would not be lost and can be used as an additional source of information as well as different viewpoint into the subject¹⁴.

Children were not be formally interviewed in this research, although children give a clear picture about what happened and often have interesting insight, this research will not focus on that. There is a high chance that informal conversations will be held with children. The coverage of these informal conversations will be documented in the field notes which this research will also be using as a source of raw data. Through the interactions between children and the researcher at the Paballong Centre, a lot of meta-data can be produced as well as lost.

2.4.4 Consent and Ethics

The issue of consent and ethics played a significant role in the research. All of the interviews were recorded only if verbal consent was given by the interviewee, which was asked at the start of the interview. The interview started with a clear explanation of the research that was being researched and a verbal consent is asked by the researcher to the interviewee¹⁵. If consent was not given, the interview would have been conducted but without it being recorded, notes were taken instead, however consent was given during all the interviews. The anonymity of the informants were kept as names were not recorded.

Consent was also asked when looking at grey literature. This includes either internal documents or documents that are confidential. The consent was given by the humanitarian affairs officer at OCHA ROSA. These documents include Lesotho Vulnerability Assessment Committee and Contingency Plans (CP) of the government which is not public information.

3. Methodological Reflections

The conducting of the research allowed much room for adaptation as not much was known before I arrived. I had left The Netherlands with only the knowledge that I would be able to conduct my research in Ha Senekane, have a room at the clinic, and be provided a translator and an introduction to the Chief. I did have a meeting with the head of the Centre before I embarked on my research which improved my nerves but many of the details would only be filled in once I arrived. I, consciously, took the first week to acclimatize and get familiar with the community and the culture of Lesotho, by volunteering at the clinic (which I continued to do for the duration of my research). This proved pivotal in gaining the trust and recognition of the community as I was the only foreigner (white and female) living in Ha Senekane.

The community in Ha Senekane is relatively small and therefore initially I also wanted to include the surrounding villages. However, I later decided against it because I was able to get some information regarding the different villages from my time at the clinic and the weather. As the clinic provided services to the Berea Plateau, I was able to gather information about the drought and some preparedness from the patients, through the HIV/AIDS counsellors. This allowed me to understand

¹⁴ Children experience emergencies differently than adults and therefore can be a good source of information.

¹⁵ The translator conducted the consent during interviews that were conducted in Sesotho.

that the surrounding villages faced similar problems and was not too different from Ha Senekane, but my main focus remained Ha Senekane.

The weather proved to be another aspect that I had predicted would hinder my research and access. During several weeks of the research, the weather prohibited the conduction of interviews. Temperatures were below freezing, it snowed, and with the addition of no central heating, many people did not leave the house. I also was unable to write as my hands were so cold. This meant that for two weeks there was no conducting of interviews. Although it proved to hinder my interviews, it did allow for more in depth informal discussions with the staff at the Centre which provided more information about drought, HIV/AIDS and the combining effect that drought had on HIV/AIDS.

The area which was lacking during the fieldwork was access to the international humanitarian aid and development community. This proved difficult due to access which I had not initially thought would be a problem. The research was conducted in Lesotho's winter, and the research coincided with their winter break, and the Northern Hemispherical summer vacation. This meant that many families and development workers were on holidays. Other than that, due to the level of the emergency within the country, many workers were inaccessible because they were too busy or out of the country attending conferences. Some of this was replaced with conversations within my international network in Maseru whom provided knowledge of what happened within the development and aid community in Lesotho¹⁶.

As I conducted research, I was actively conscious of the bias that is within my research. I am a white European female conducting research in a rural community in Lesotho. It is not uncommon for internationals to come and stay in the community for months at a time, however in the past it has been mainly for volunteering and not research. In order to lessen the bias in the research, I started the interviews with a clear introduction of who I was and why I wanted to conduct the research. The research also had a main objection of researching what was done and where they learned the information and therefore I was reporting and analysing what was being done. This allowed me to objectively analyse the data, as much as possible.

As with any research, this research had to make changes to its initial methodology which fit the situation on the ground. This meant more time spent volunteering and walking around the community as well as spending time away on the weekends exploring other parts of Lesotho as well as bordering South African towns. This allowed for a more general view on the situation in Lesotho and the effects of the drought. It also allowed for time for reflection. In the end, the field work experience and the data that was collected allowed for insights into a community and country which is overlooked. The field work experience was enhanced because I was able to focus on my interviews as well as incorporate my experiences from the travels and volunteering into my research.

¹⁶ I participated with the HASH in Maseru which met every Sunday to hike for an hour or two. Many of the participants are internationals working in Lesotho. Through the HASH I was able to build a network of friends which included various interns, fellows, and development workers who allowed insight.

Chapter 3: Literature Review

This literature review will delve into various different concepts that revolve around slow-onset emergencies as well as taking a look at the preparedness mechanisms employed by the various stakeholders. This chapter will also look into humanitarian aid and look critically into a possible disconnect between humanitarian aid, place, space and the social. The theoretical underpinnings of this research will also be looked at in more depth in the last chapter of the literature review.

3.1 Concepts

3.1.1 Emergency and Natural Hazards

Natural disasters are not a new phenomenon, however our vulnerability to these hazards are escalating (Wilhite, 1996). Natural disasters such as earthquakes, flooding, and droughts have been in existence for many years, however the intensity of these events as well as their frequency are increasing. Due to the increasing population of the earth, the impacts of natural disasters will be even greater for countries not employing prevention and preparedness measures. Natural emergencies and natural hazards are often multi-dimensional, bringing with them large scale impacts, both direct and indirect.

In 2015-2016, the global community has faced a multitude of different natural disasters which have been classified by the international community as emergencies. It is estimated that roughly 150 major natural disasters occurred in 2015. These natural disasters killed, displaced, and affected millions of people (Huber, 2015). This number could potentially be surpassed in 2016, between January and the end of April, there has been 34 natural emergencies reported by relief web¹⁷ (Reliefweb, 2016). The global community has witnessed the drastic consequences natural disasters cause, including the cost of human lives. As our, the global, community learns more about these natural disasters and what causes them, the more we are able to understand how to alleviate the negative consequences and more prepared we are for the disaster. Japan, faced with yearly earthquakes, is a prime example. By studying the seismic activity and building their infrastructure to withstand the seismic activity to a certain extent, Japan has significantly reduced the loss of life and infrastructural damage. The knowledge also allows for an assessment on the types of risks there are in the country, district, community and how to alleviate this risk which is beneficial for the population.

Natural hazards (disasters) can be categorized in either sudden-onset emergencies or slow-onset emergencies. Both have the potential to bring destruction on an unprecedented scale. There are ways to prepare or mitigate these negative effects. Sudden-onset emergencies allow for almost no time for preparedness before the event takes place, whereas slow-onset emergencies allow for, in some cases, months to prepare.

One of the big natural emergencies the globe is facing during the 2015-2016 and possibly in 2017 is El Niño and a possible La Niña. The 2015-2016 period has seen the rise of the El Niño phenomenon as well as the building of a potential La Niña, bring two dramatic weather forecasts. El Niño has been embodied, this year, as extreme drought to much of the world¹⁸ while alleviating drought with significant downpour in some places¹⁹. Whereas, La Niña is predicted to bring the

¹⁷ This number incorporates the drought in Southern Africa as one natural emergency rather than breaking it into separate emergencies per country.

¹⁸ Drought conditions are evident in the majority of the African Continent, South Pacific islands, and in parts of Latin America.

¹⁹ California has seen a drought be alleviated to a certain extent, while southern Asia has seen an increase of flooding and torrential rain.

opposite to the regions; regions who are currently facing drought conditions is expected to see an increase of rainfall and those regions that are facing increased rains can expect to see a significant decrease of rainfall. Historically, this year is no exception. This El Niño has brought with it major emergencies including; the Nepal earthquake in April, 2015, the Ecuador earthquake in 2016, the drought that has affected the majority of Eastern and Southern Africa, and a number of cyclones that hit the South Pacific island nations.

Cyclones, drought, and disease are classic examples of slow-onset emergencies. These natural hazards/emergencies have a relatively long lead up till the full blown effect of the natural hazard is felt by communities and individuals. Slow-onset emergencies are “disasters that take a long time to produce emergency conditions... which are normally accompanied by early warning signs” (World Health Organization, 2016).

The benefit to the lag time between identification and impact is that it allows governments, professional response and recovery organizations, communities and individuals time to implement preparedness mechanisms.

“Slowly unfolding emergencies can be mitigated by early response. If preparedness, early warning and early response systems are fully functioning, coordinated and integrated, the longer lead time means the humanitarian community can step in early enough to reduce human suffering and help prevent the downward spiral of increased vulnerability to future hazards” (OCHA: policy brief, p. 4).

If these preparedness mechanisms,²⁰ when employed correctly and are multidimensional, have the ability to lessen the loss of life as well as potentially reduce the infrastructural damage. The benefits and price of preparedness measures can outweigh the cost of recovery, as the recovery costs often exceed that of the preparedness costs. This is significant as properly investing in preparedness measures ensure that the cost of rebuilding infrastructure and rebuilding livelihoods will be lower. During slow-onset emergencies, the ability to increase local capacity is more likely to occur rather than during the recovery phase. “Many practitioners also consider capacity building as the most effective way to prepare local actors for future crisis” (Pouligny, 2009, p. 7). By incorporating capacity building into the preparedness phase, organization can implement appropriate programs, adapt existing programmes to tailor to the new circumstances, and incorporate local initiative within existing programs which would otherwise be overlooked due to the time sensitivity of recovery actions (Pouligny, 2009).

3.1.2 Drought

There is no consensus on the definition of drought however, many authors refer to Wilhite’s definition of drought which is a “relative to some long-term average condition of balance between precipitation and Evapotranspiration in a particular area, a condition often perceived as “normal”. [A] consequence of a natural reduction in the amount of precipitation received over an extended period of time, usually a season or more in length” (Wilhite, 1996, p. 231). This paper will follow Wilhite’s definition of drought when reference is made towards drought.

Natural hazards have larger implications in terms of socio-economic factors. One of the natural hazards many countries face is lack of water. This may range from lack of safe, clean drinking water to lack of water for livestock and agriculture. According to Falkenmark (1992) as cited in Wilhite (1996),

²⁰ When referring to preparedness mechanisms throughout the thesis, early warning and early response will fall under the umbrella of preparedness.

there will be an increase in the number of people living in countries with water stress or chronic water scarcity from 300 million to more than 3 billion by the year 2025. This was written in 1992, where much more recently the United Nations Department for Economic and Social Affairs (UNDESA) and Food and Agriculture Organizations of the United Nations (FAO) indicated in the Human Development Report of 2006 and the *Coping with Water Scarcity: Challenge of the twenty-First Century* report that “around 1.2 billion people, or almost one-fifth of the world’s population, live in areas of physical scarcity, and 500 million people are approaching this situation. And [another] 1.6 billion people, or almost one quarter of the world’s population, face economic water shortage (where countries lack the necessary infrastructure to take water from rivers and aquifers)” (FAO, 2007). This is a significant increase. Although many face continuous problems with access to water, some countries have this issue on a cyclical and temporary basis.

Drought is often considered to be one of the most complex natural hazards, but the least understood (Wilhite, 1996). More so than other natural hazards, its socio-economic impacts extend to a broader population and therefore cause long term damage. “Drought is also one of the most under-reported natural disasters” (Wilhite, 1996, p. 230) and can be characterized as being distinctly unique depending on “meteorological, hydrological, and socioeconomic characteristics” (Wilhite, 1996, p. 231). The span of implications on the population and the wider communities is extensive. Unlike other natural disasters, droughts seldom cause infrastructural damage. The ‘creeping phenomenon’ of a drought allows for a relative longer period of time to prepare for the drought and for the implementation of mitigation measures. Droughts have far reaching consequences and that requires a multidimensional approach to both preparedness as well as recovery.

According to Wilhite and Glantz (1985) as cited by Wilhite in *Combating Drought through Preparedness* (2002), there are four different categorizations of drought: meteorological, hydrological, agricultural, and socioeconomic. Although there are four categorizations, they can still be seen in effect together. The current drought affecting Southern Africa is characterized to fall within all four categories. The direct result is that the drought is more complex, has wider negative implications when it comes to responding to the drought, and the preparedness mechanisms need to be implemented. The types of preparedness mechanisms deployed by the humanitarian apparatus and those of the locals will differ depending on the categorization of the drought, and the overall circumstances that are being anticipated.

Drought has a large impact on the overall health of the population and livestock. With the significant reduction of water and clean water sources dwindling for the population, many people are reliant on unprotected water sources as their primary water source, often sharing it with the livestock. These unprotected water sources are breeding grounds for diseases such as cholera and malaria. It also increases the chance of diarrheal diseases. Drought, especially when combined with poor harvest and overall increase in market prices, severely impacts people’s eating habits. For children this can lead to malnutrition and stunting as their diet lacks the needed nutrients and nourishments. A World Food Program (WFP) study in Malawi has led to significant results which indicate that stunting, although there are immediate and direct effects; there are also long lasting ramifications. The study found that in 2012 due to child undernutrition, resulted in the productivity loss amounting to MKW 132 billion (USD 537 million), which is amounted to 9.3 percent of the country’s Gross Domestic Product (GDP) (World Food Program, Executive summary, p. 2).

The Southern African region and the south Indian Ocean states: Angola, Botswana, Comoros, Zambia, Zimbabwe, South Africa, Swaziland, Lesotho, Madagascar, Malawi, Mozambique, Tanzania, Seychelles, Mauritius, Namibia, have all been affected by El Niño during 2015-2016. This has translated

into low rainfall; an exception includes Tanzania, and northern areas of Malawi, Mozambique and Madagascar. The El Niño phenomenon has different impacts round the world depending on the region and the natural climate. In Southern Africa, low rainfall has attributed to drought which has caused the creation of severe water shortages affecting millions of people as well as livestock. The relative long time lag between the discovery of El Niño and the immediate impact allows the governments and locals to implement preparedness measures. For it to be effective, the various parties must be aware of the phenomenon and feel the need to implement prevention measures. A lack of funding also plays a pivotal role in the initiation of preparedness measures; this is an issue which has negative implications on both the local populations and the government. However, it is still relatively difficult to predict the severity of the consequences of El Niño both at a local scale as well as a national and regional level. When looking into the SADC, they discussed the possible effects of El Niño and the chance of the event happening already in August 2014. Even though they were already aware the upcoming El Niño, the countries within SADC as well as Comoros²¹, are suffering from an unprecedented drought which will most likely still be felt throughout 2016 and into 2017.

Countries that have previously faced drought experienced the suffering of thousands of their people and have often relied on international support in order to alleviate some of the negative consequences of the drought. “Post drought evaluations of government responses to drought have demonstrated that the reactive or crisis management approach has led to ineffective, poorly coordinated, and untimely response” (Wilhite, 1996, p. 250). This highlights the need for a new approach to the efforts made when preparing for a drought. Wilhite refers to the inadequacy of the disaster management authorities to properly and timely enact measures to reduce the negative impacts of drought. A reduction of rainfall levels in an area can often be forecasted by the meteorological agencies either in the country or the region. Therefore, providing time for the population to implement precautionary measures such as drought resistant plants or rationing their crops/seedlings.

3.1.3 Preparedness

Natural disasters are often a ticking time bomb as we, humans, do not know when it will strike, however we are aware of possible future events. One of the greatest example lies within the San Andreas Fault Line where a mega earthquake is expected to cause severe damage to California, this earthquake is expected to be significantly larger than the 1906 San Francisco earthquake (USGS) which killed 3,000 people. Although we can predict the natural hazard, the timing is often unpredictable. With sudden-onset emergencies, the event is normally already passed before preparedness actions can be effective such as early warning systems (EWS). However, with slow-onset emergencies such as cyclones, hurricanes, and droughts the time lag between the detection and the occurrence of the event allows for significant preparedness actions to be taken. Preparedness measures are initiated to facilitate the coping capacity for the locals from a temporary disruption and to minimize the damage (Paton & Johnston, 2001). Thus, disaster preparedness is implemented to speed up disaster relief efforts and reduce the impacts of disasters (Kunz et. al., 2014).

The United Nations International Strategy for Disaster Reduction (UNISDR) defines the term preparedness as “the knowledge and capacities developed by Government, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions” (UNISDR, 2009). When referring to preparedness, this paper is referring to this definition. The inclusion of all parties and

²¹ The Comoros is not a member of SADC.

stakeholders within the definition allow for a broad conceptualization of the term. UNISDR, other organizations and government bodies view preparedness as a segment under the umbrella term of disaster risk management²² by being part of the disaster management cycle. While disaster risk management refers to more administrative and policy level of risk reduction, preparedness incorporates more of the practical stance. Preparedness, in this sense is then the different practices that Government, professional response and recovery organizations, communities and individuals enact in order to prepare for the hazard. “Planning and preparedness are crucial steps in the process as (1) most models and decision support tools need to be set up a priori, and (2) collaboration and cooperation require trust and stable structures which can be acquired over time and with frequent practice (Bañules & Turoff, 2011, as cited in Schryen *et. al.*, 2015).

Preparedness can manifest in activities such as storing food and water, securing high furniture and water heaters, preparing household emergency plans help to reduce a family, or community’s risk of injury and damage as well as facilitating the coping capacity of the individual to the temporary disruption (Paton, 2003). These different measures are just a few examples of preparedness. Governments and locals initiate different preparedness measures. The mentioned examples are on a more individual level. Government preparedness measures can include: CP’s, emergency specific Response Plans (RP), and the stockpiling of products. As demonstrated, preparedness takes shape in various different manners with the main intent to save lives, reduce the economic damage and increase the (early-) recovery process after the emergency.

3.1.4 Preparedness Mechanisms

Drought is a natural phenomenon that has far reaching consequences and that require a multidimensional approach to preparedness and recovery. This section will be divided into two subsections; one focusing on the mechanisms used by the humanitarian actors, and the other section will focus on the local mechanisms already in place.

Some of the humanitarian organizations use the Emergency Response Preparedness (EPR) approach to emergencies which is then tailored to the local context (Figure 1). It is an “action-oriented approach [which] enhances readiness for humanitarian response” (OCHA, 2012, p. 1). Through the use of this approach the cluster system²³ is activated in

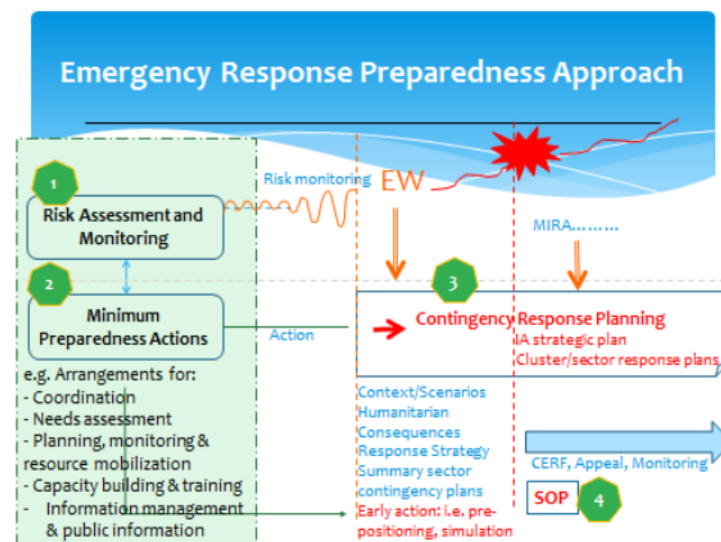


Figure 1: Emergency response preparedness approach diagram used by the UN agencies

²² UNISDR definition of disaster risk management is “The systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster” (UNISDR, 2009).

²³ The cluster system is a coordination tool used by the UN during emergency situations. This cluster system appoints a UN agency to head a cluster (food security: FAO & WFP, education: UNICEF) who is then in charge of overseeing the cluster during the full phase of the emergency (Preparedness through to disaster and ending with reconstruction) (UN OCHA, Cluster Coordination).

order to come together to understand the emergency, the potential risks, and to see if there is a change to mitigate the risks. The EPR approach takes on four components: 1) risk assessment and monitoring, 2) minimum preparedness actions, 3) contingency response planning (CRP), and 4) standard operating procedures. CRP is developed once a risk is anticipated as imminent with the objective to bring all relevant actors to an advance level of readiness to respond to the specific risk. It should include the identification of early actions which are implemented to strengthen readiness; this could include training or prepositioning of stocks. The early actions differ depending on the type of emergency. For slow-onset emergencies these priority early actions can be taken “well in advance to mitigate the effects of the emerging risk” (OCHA, 2012, p. 4).

One large proponent of the preparedness mechanism that governments and organizations such as OCHA want to have in place when preparing for an emergency is a CP and if possible a situation specific RP. These indicate both emergency plans, staff allocations, stockpiling of goods, and where the possible gaps are. During the preparedness phase, the acknowledgement and knowledge of the gaps will allow for those areas to be strengthened and allows the international community (if the country requests their support) to assist in the emergency response. These plans help in all phases of an emergency, the preparedness, early warning and response phase.

EWS also play an important role in preparedness mechanisms used both by organizations and the local populations. These EWS are put in place in order to provide the necessary warning and evacuation plan to the people. In the instance of tsunamis, it is nearly impossible to predict the timing of the tsunami, its size, destruction, or even if there will be a tsunami. The recorded seismic activity is recorded during an earthquake and then if the earthquake is large enough and in the right area (in water) than early tsunami warning might be given off (Castaños & Lomnitz, 2014). This is just one type of early warning system that is in place. Another method deployed is the use of radio and/or television by the government to notify its citizens about potential threats. The use of these warning systems allow people, in both cities and rural settings to understand what is happening and what the risks are. Often this revolves around the weather report and weather predictions as well as warnings. A limitation of early warning systems is that their efficiency solely depends on past experience and the reliability of the information given in previous warnings (Castaños & Lomnitz, 2014). Therefore if there have been numerous false alarm early warning signals, people are less inclined to listen to them as time progresses. It is, thus, crucial for early warning systems to be accurate. Also, information has to be able to reach the people and then circulated around otherwise the warning could not be received by certain populations who are more isolated.

Preparedness measures are not only implemented by international humanitarian organizations, local NGO's or the Government but many measures come from the people themselves. Examples of local people's preparedness measures are having prepared evacuation routes (Miller *et al.*, 2012). Preparedness measures occur for both sudden and slow-onset emergencies. Miller *et al.* looked into both wildfires and tornadoes in relation to preparedness measures. They found that families who were less prepared, suffered more during the response and recovery phases than those who had prepared. They also noted that the use of monitoring through radio and other media sources were actively used to monitor the advancement of the disaster as well as prepare them. This is something that is used not only for sudden-onset emergencies but can also be used with more efficiency in slow-onset emergencies.

Something that stuck out in Miller *et al.* article, *Families Coping with Natural Disasters: Lessons from Wildfires and Tornadoes* is the emphasizes on preparedness actions that were taken with children in schools. Through the implementation of preparedness mechanisms at schools, children are able to

learn techniques that can be emulated at home and it can act as an entry point for the Government and possible NGO's to preparedness mechanisms. It also allows for children to assist during the emergency. Although this is mostly the case for sudden-onset emergencies or emergencies with a relatively short build up, it is also beneficial for emergencies such as drought and disease outbreaks. This way, children are aware of the dangers and signs to look out for. There is a significant chance that this knowledge will be spread to the wider community.

3.1.5 Preparedness and Risk Perception

Preparedness relies heavily on the perception of risk by the local people. This is also the case for the humanitarian institutions involved in emergencies (natural and man-made and sudden-onset and slow-onset). If the risks of damage to livestock or self are relatively small, the likelihood that people will react to the emergency in preparedness actions is also relatively small. This is contrasted with the actions undertaken when the risk is high. Paton (2005) concludes in his article *Disaster Preparedness: A social cognitive perspective* that "people's judgements about preparation include[s] reasoning about their permanence and their ease of adoption" (p. 210) when referring to if people will take preparedness actions in case of emergencies.

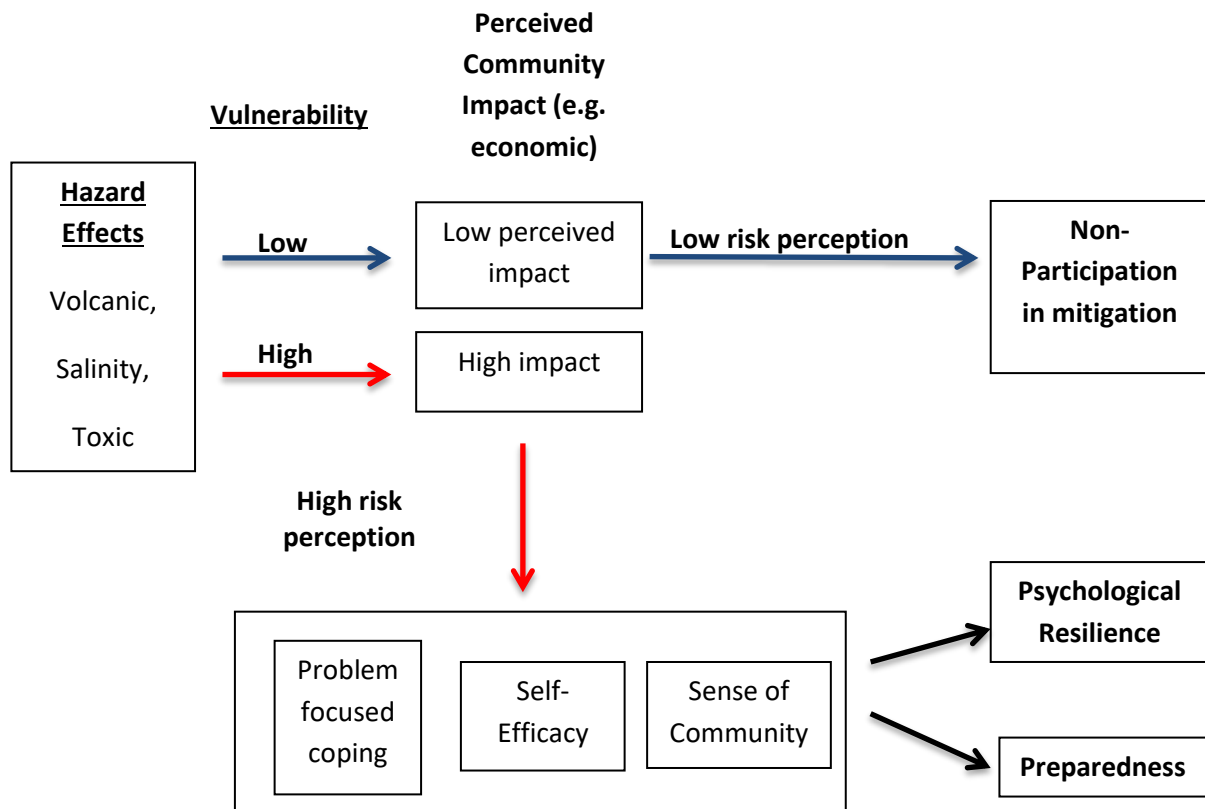


Figure 2: A model of resilience to hazard efforts, adopted from Bishop *et al.* 2000 and Millar *et al.* 1999

Natural hazards and risk perception in regard to people's action is expressed in the model for resilience to hazard effects (Figure 2) developed by Paton & Johnston, 2001 who adopted it from Bishop *et al.* and Millar *et al.*. This model refers, mainly, to the type of communication given to the community and individuals about the threat. Although this figure initially looks at the type of communication that is relayed, it gives a unique insight to the risk perception of people. It is only when there is a perceived high impact or high community impact that people will start to implement preparedness measures. If there is low risk then often times they are more likely just to respond to the

emergency rather than preparing in advance. Therefore, it is important for the Government and the humanitarian apparatus to incorporate the correct framework when relaying information. This figure also incorporates notions of community into the equation. When it comes to risk there is both risk perception of on an individual basis and community risk perception. The preparedness actions undertaken by individuals “is more likely to be sustained if supported by the social and structural environment” (Tobin, 1999, as cited in Paton & Johnston, 2001, p. 274). It is crucial to look at both the hazard, the people as well as the place in order to come up with the preparedness mechanisms when implementing them as outsiders. Bishop *et al.* 2000, and Millar *et al.* 1999, “found that risk perception, and support for collective mitigation initiatives, was driven less by hazard characteristics and more by their current implication for their livelihoods” (Paton & Johnston, 2001, p. 271). Risk perception is then greater if people perceive that there will be high negative impacts on their livelihoods rather than warning people about; let’s say mud slides and the actual hazard description. For the people which Bishop *et al.* and Millar *et al.* refer to, their willingness to initiate preparedness mechanisms hinges on how high the risk is on their livelihoods.

When looking at risk perception on a humanitarian institutional level, the risks are somewhat similar to that experienced by the local’s however; as locals focus on their livelihoods, humanitarian institutional levels focus on the loss of life and infrastructure. The distance from the humanitarian institutions to the local natural hazards allows for risk to be more than for people who are living within the risk. “People in distant locations are frequently more concerned than people residing near hazard facilities” (Rogers, 1997, p. 745). There is not much information pertaining to the when humanitarian institutions initiate their preparedness actions due to the differences between the different institutions as well as the commitment from the government to mitigate the negative effects of the hazard. More often than not, these institutions are based in capital cities or in a foreign country. By using Rogers (1997) notion of distance increases the risk perception due to them not being involved in the natural hazard and only hearing the negative information that is coming out of that region, then one can deduce that with humanitarian organizations operating outside the risk zones in some cases it means that their risk perception is greater. This can be done with the help of the model of resilience (Figure 2), then indicated that there is a high risk perception meaning that the humanitarian organizations are more inclined to perform preparedness mechanisms such as CP and stockpiling.

The above case refers to the humanitarian organizations stationed outside the perceived risk zones. This is not that case for many organizations. Some of the organizations are stationed in places where there is a relative high risk for natural hazards and emergencies. Does this then impact the risk perception and therefore the preparedness levels? When looking at the humanitarian organizational structure, many of the actions taken by the local duty station is referred to them by either regional or head offices. This adds another line towards the model of resilience. The community that is in charge in this case would be those that are stationed even further away from the risk zone and therefore follow the same lines of reasoning as the case stated earlier. This, however, can be complicated due to the idea that perceived risk and risk perception does not ultimately mean that the level of preparedness increases.

Another big aspect when it comes to preparedness and risk perception is the knowledge on what you base your perception on. The more knowledge one has on the risk and the natural hazard, the more it will impact their decision on either their preparedness mechanism or their response. When it comes to humanitarian organizations, they often have the resources and the contacts to come up with a very clear picture about the extent of the emergency as well as the long term impacts. An example of this can be the Humanitarian Outlook Scenario for Southern Africa: Special focus on El Niño

written by OCHA. This more wholesome information that they have accessed allows them to predict the negative consequences on a more community and district level. The information available to the humanitarian organizations is often times in direct contrast to the information that is available to the local people. This has an impact on the risk perception because the local people often only have information about previous events and relate the new threat to that one in order to develop their risk perception. Rogers (1997) argues that “risk perception could be changed if people were given additional information” (p. 745). The added information alters the risk perception of a person allowing them to make a more incisive decision to either preparedness or response.

Preparedness and risk perception are two elements that build off each other. One does not initiate preparedness mechanisms unless there is a perceived threat. Risk perception is done on both an individual level as well as on a community level which builds on past experiences and new information. Although the locals have the advantage of historically data, stories of past experiences of hazards on the lands and how to prepare/ respond to them as well as know their land, the humanitarian organizations have the new technologies to help them forecast, they know the statistics of the development level in the region and are able deduce the impact level that some slow-onset emergencies can have on the populations. Both of these types of information that the two groups use inform their risk perception. This ultimately plays a role in the preparedness levels that they undertake as well as the response effects that are in place.

3.2 International Organizations and Their Interventions

The international community has been providing humanitarian assistance and aid to many countries, which have allowed for many lives to be saved as well as rebuilding to happen. However, often those aid provisions and programs are done without local ownership or building on local mechanisms. These practises have caused criticism within the international aid discourse. “The humanitarian discourse is shaped by thinkers and policy-makers in the North. It leaves little room for indigenous approaches which may not fit comfortably with the northern humanitarian dogma” (Donini, 2007, p. 160). The interventions which are dealt with by the humanitarian community leaves little room to allow the agency of local or indigenous people to be added. This can be seen as a missed opportunity by the international community as well as increasing the dependency of the people to international aid through the failure to build local capacities²⁴. Through the implementation of local ownership into these humanitarian assistance programs the decisive condition would potentially increase both the quality and the accountability of the received humanitarian aid (Pouligny, 2009). An independent consultant working for OCHA, has stated within an OCHA policy brief that, “the first response directly supports normal household strategies is often overlooked” (OCHA, 2011). This statement refers to the inadequate communication between the local populations in question (either during the preparedness phase, the early recovery, or recovery phase in the emergency) and the international community. The disregard to local or indigenous preparedness strategies or recovery strategies can be seen as a missed opportunity for both the international community and the government. This missed opportunity would otherwise allow for more agency to be given to the community as well as possible strategies to be implemented which are tailored to the local context

²⁴ The UN Terminology Database defines capacity building as “a process by which individuals, groups, organizations, institutions and countries develop, enhance and organize their systems, resources and knowledge, all reflected in their abilities, individually and collectively, to perform functions, solve problems and achieve objectives” (Pouligny, 2009, p. 7).

which could be successful. It would also allow for possible more economic efficient strategies as well as community owned.

When it comes to the international community and their development programs as well as emergency response, the term or catch phrase 'local ownership' and 'community owned' is often used, also to make the program more appealing to the donor, however is hardly implemented (Pouligny, 2009). Not only is this catch phrase a common notion within humanitarian discourse, but it still remains to be an extremely vague notion (Pouligny, 2009). "The notion of 'local ownership' is sometimes perceived as more difficult to address in the context of humanitarian crisis (caused by a violent conflict or natural disaster) than in longer-term forms of assistance" (Pouligny, 2009, p. 5). When events occur in a short time as well as recovery actions are placed in order to save lives then it is hard to implement locally owned strategies. "The first response to an impending crisis by the humanitarian community should therefore be to look for ways to bolster existing coping strategies" (OCHA policy brief, p. 4).

However, during slow-onset emergencies such as droughts, there is more room to manoeuvre which can allow for international organizations to discuss with locals as well as allow locals to play a bigger role in the preparedness mechanisms and possibly recovery actions as well. This way capacity is also built up in the community which would allow them to be more resilient when a similar situation happens in the future. However, even though there is a slow-onset emergency, many organizations still respond to these emergencies in a similar manner as to sudden-onset emergencies; "ensuring that the first response directly supports normal household strategies is often overlooked" (OCHA Policy Brief, p. 4). This response, thus, needs to change which will ultimately save lives as well reduce the economic devastation that is the aftermath of natural disasters.

Although the international community has seen a somewhat shift in the paradigm from focusing on post-disaster relief and rescue to pre-disaster mitigation and preparedness efforts (Nakagawa & Shaw, 2004), this has not been enough as these efforts are often placed within development programs without discussing the efforts with locals. This top down approach has been criticized by Dosnini as being inheritably Northern in thinking rather than coming from a grass roots Southern origin. In order to be successful these preparedness as well as recovery mechanisms need to be "incorporated into the socioeconomic activities of local people" (Nakagawa & Shaw 2004, p. 6). Only when it is integrated by the locals and the locals have ownership of these mechanisms can they have the mechanisms to help them in future crises and lessen the loss of life and economic/infrastructural devastation.

Some strategies that international humanitarian and development organizations have implemented in times of crisis include Food for Work (FFW) programs. In Lesotho, FFW programs which are supported by both the government as well as the international community, are a popular way for families to supplement low family incomes as well as for international organizations to increase capacity building as well as increase infrastructure in the country. The FFW programs have been present in Lesotho since the early 1980's (Ferguson, 1994) and are still being implemented today. These FFW are mainly approached by women who were paid in-kind (food) and a little bit of cash²⁵ (Ferguson, 1994) in the late 1980's. Although these programs provide relief to families who would otherwise not have the necessary food or income, they have become a staple employment opportunity that people use when they are in need of supplementary cash.

When looking at these programs in the context of slow-onset emergencies, these programs can create a much needed buffer for families. If implemented early enough, families can build up/save

²⁵ When Ferguson wrote the book, in-kind consisted of maize meal, cooking oil, beans or peas, fish and M 7.50.

money which will be needed when market prices increase due to a shortage in the supply of the goods. This is often the case during droughts, where the market prices increase and therefore can become unaffordable for the locals.

3.3 Theoretical Framework

This section will delve deeper into two theories, risk perception and learning theory. These two theories, which make the basis of the theoretical aspects of this thesis, will be used later on in the discussion chapter of the thesis to help aid the explanation of the results. This section will look and examine the theories in respect to slow-onset emergencies as well as explain the link between the theory and the topic.

3.3.1 Risk Perception

Natural disasters and emergencies are understood, experienced differently among the population. The reasons behind a persons or communities actions to prepare as well as possibly mitigate against the consequences of the potential disaster differs per person, region, and disaster. Different processes such as cultural, psychological and social, all play a role in hazardous events which can ultimately increase or decrease the perceived risks that the person or community feel (Knuth *et al.*, 2014). Wachinger and Renn (2010) define risk in a social context as “the likelihood of an adverse effect resulting from an event or an activity, rather than an opportunity for desired outcomes” (pg 8). In order for people to create this perception of the potential risks they “involve the process of collecting, selecting and interpreting signals about uncertain impacts of event, activities or technologies” (Wachinger & Renn, 2010, p. 8). To make this more inclusive, the process also has to include the history of the people as well as their stories. This allows them to use all the information that is given to them in real time as well as use their historical background and past experiences in order to come up with the best perception of risk which will play a role in the type of level of preparedness they will undertake.

A persons or communities direct or indirect relations with natural disasters plays a big role in risk perception. Some studies mentioned by Brofman *et al.* (2015) showed that experience plays a big role in risk perception. People who had not experienced flooding, for example, directly underestimated the danger while an overestimation was done by people who had direct experience with flooding. Renn (2008) argues that “individuals perceived natural phenomena as cycles and that if they survive a catastrophic event, they possibly will not experience another one in their lifetime” (Brofman *et al.*, 2015). This has an effect on the subsequent risk perception related to preparedness because the risk might be great that something similar happens again to those people, however because they have the belief that since it has already happened before, it would not necessarily happen again. Then they are possibly less likely to enact preparation actions. When looking at weather phenomenon such as El Niño/ La Niña, earthquakes, cyclones and hurricanes, one can see that there is a pattern. Many of these weather events do not happen one in a lifetime, especially now with climate change making these events more frequent. This means that a previous notion does not necessarily carry weight today and that people could be experiencing once in a lifetime storms at a more frequent pace. El Niño and La Niña happen on roughly a three to five year basis while cyclonic and hurricane activity affect roughly the same regions and countries on a yearly basis. This means that although people assume that it will not happen again and at the scale that the emergency was, the likelihood that something similar or worse will happen is high and people are not preparing for that. Which ultimately leaves a lot of people suffering a possibly horrific aftermath.

To create a more accurate understanding of risk perception the use of the four context levels of risk perception (Renn, 2008 as cited in Wachinger & Renn, 2010) can be used (Figure 3). These four levels start from the bottom and work upward and look at risk perception from both the personal as well as collective influences. The first level looks at the heuristics of information processing which look at common-sense reasoning without taking into account emotions, the nature of the risk or personal beliefs (Wachinger & Renn, 2010). The second level looks at the cognitive-affective factors which refers to both the knowledge and the emotion based factors. The third level talks about the social and political institutions which have a sphere of influence on the risk perception and lastly, the fourth level is about the general cultural background (Wachinger & Renn, 2010). All the levels work cohesively to determine a person's risk perception during a situation or before. This then influences the type of preparedness levels the person or the collective will take to that emergency or hazard.

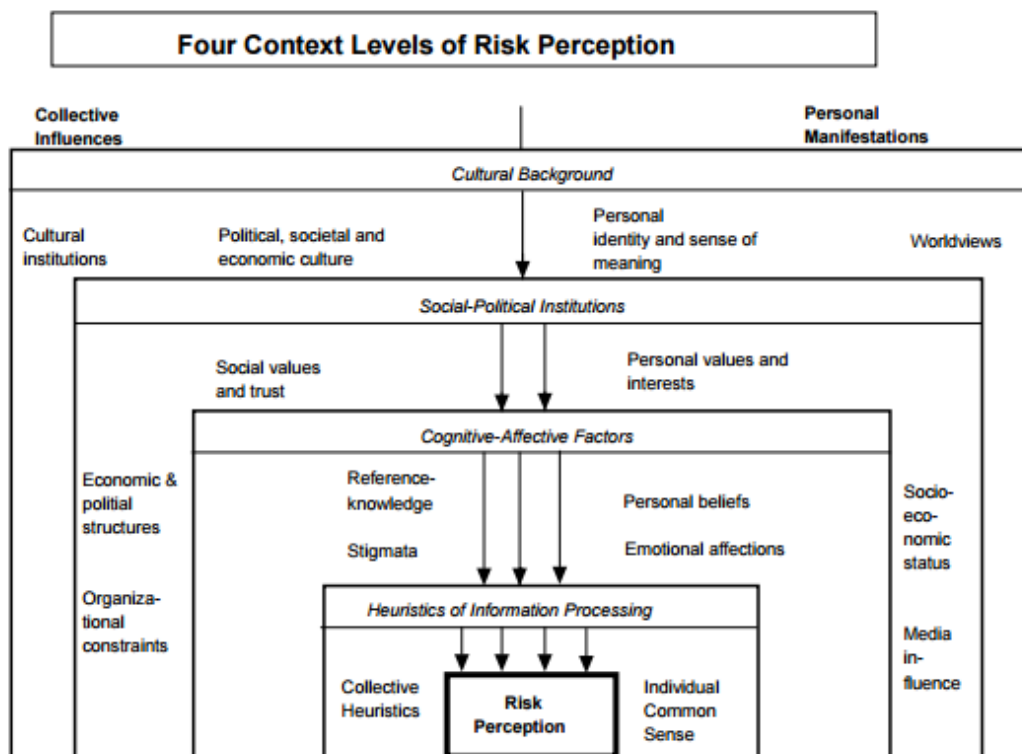


Figure 3: Four context levels of risk perception

Risk perception plays a role in the level of preparedness initiated by a person or an organization. It can be assumed that if the perceived risk is high then people are more inclined to increase their preparedness for the natural hazard and the opposite would occur if the perceived risk is low. However, several studies have found that there is a weak relationship between the two (this relationship refers to personal preparedness and not collective preparedness). 'Risk perception paradox' which was coined by Wachinger *et al.*, 2013 in Brofman *et al.*, 2015 refers to this contradiction. They give three reasons why this paradox exists. The first being that "individuals understand the risk, but they choose to accept it given the benefits the situation provides" (Brofman *et al.*, 2015, p. 311). An example of this is the floodplains in the lower Mekong region in Vietnam. This region is rich with fertile soil but suffers from frequent flooding with threaten the lives and livelihoods of the population. Although the government has invested significant efforts to migrate the population to housing on the hillsides surrounding the floodplain, the likelihood that people will reverse migrate back to the floodplain region is high (Ling *et al.* 2015). The population understands the risks that they

are dealing with by going back to the floodplains however, the fertile soil is enough of an incentive to go back to the region. The second reason is that “individuals understand the risk but transfer the responsibility of acting to others” (Brofman *et al.*, 2015, p. 311). This possible reason refers to the issue of trust in the authorities or others when looking at risk perception. An example that Wachinger *et al.*, (2013) refers to is the canals and dike systems of the Netherlands in flood prevention. The people of the Netherlands have placed their trust in the government and water management teams to prevent any floods from occurring which lowers the perception of the risk of flooding to occur in the Netherlands. This transfer of trust allows for the risk perception of the people be lower than the reality of it actually is. The third possible reason is that “individuals understand the risk but feel that they do not have the necessary resources to change the situation” (Brofman *et al.*, 2015, p. 311). An example of this can be that when people know the risk of a possible drought coming but they are unable to find other water sources other than unprotected water holes. The people understand the risk that they are taking with using the unprotected watering holes (which include a various of diseases) however, due to the nature of the socio-economic situation for those people, they are unable to purchase or rent the proper equipment needed to create boreholes deep enough to get the water. Therefore, they take the risk of contracting diseases because they are unable to get water any other way. Those are the three different possible reasons for the risk perception paradox to be present.

3.3.2 Learning Theory

Some natural hazards are, to many communities, a reoccurring event and have been for generations. Many cultures have a long history of relaying information onto the next generations either verbally through storytelling or physically through written documents such as journals. When natural hazards or threats are experienced, stories are often told about how people were able to survive and the methods which were used. Learning theory “addresses the process by which direct experience leads to learned perception” (Rogers, 1997 p. 747). Through the implementation of the learning theory, one can begin to understand the benefit of these century old mechanisms that are being used today by locals to prepare, mitigation, and respond to natural hazards and emergencies. Although the learning theory revolves around looking at the psychological reasons of committing crime, many of the principles are applicable to looking at natural hazards and the perception of risk. This can be looked at both from a local perspective as well as through the humanitarian interventions related to natural hazards.

The first principle is the principle of reinforcement. “Behaviours that accomplish their desired goals are reinforced; and reinforced behaviours are more likely to be repeated” (B. Lott and A.J. Lott, 1985, as cited in Rogers, 1997, p. 747). This principle can mostly be looked at from a more humanitarian organizational standpoint. One example is when it comes to government programs that help alleviate stress on families during times of hardship. Lesotho, for instance, has a relative high safety net program in order to help out families during hardships. These safety nets are used widely throughout Lesotho, with the Lesotho government appointing roughly 9 percent of the GDP on these programs (World Bank, 2013). The biggest safety net programs being old age pensions, school feeding programs and tertiary bursary schemes. These safety nets are thus reinforced through the UN system as a way to alleviate some of the poverty as well as provide food for the people. The UN and the World Bank already stated in the Lesotho: A safety net to end extreme poverty Report no. 77767-LS that the safety nets that are currently in place in Lesotho have the potential to scale up if need be. By reinforcing the benefit of the safety nets with the talk to scaling up, it reiterates that benefit that these programs have

on the people and therefore provides a program which will most likely be repeated for many more years.

The second principle that Rogers takes out of the learning theory which is relevant to natural hazards and emergencies is “the number of repetitions is monotonically related to the rated truth value of uncertain statements” (B. Lott and A.J. Lott, 1985 as cited in Rogers, 1997, p. 747). When it comes to hazard or emergency preparedness repetition is needed in order to successfully achieve the desired outcomes. Countries or regions who have consistently faced a type of natural disaster for example flooding, have learned how to alleviate some of the negative consequences. An example can be the raising of houses. The repetition in this case would be that all the houses after the first one or two are also elevated once people see that those first houses were able to successfully reduce the damage. This was the case in the lower Mekong region of Vietnam where the raising or elevation of the houses in a flood prone region reduced the household damage (Ling *et. al.*, 2015). This principle refers not only about the repetition of the action but also the learning process of it. If one repeats an action several times it can become a habit. Through the implementation of this habit in an emergency prone region, people often conduct preparedness measures or implement measures to reduce their risk which they are unaware of being a preparedness measure.

The third principle is probably the most useful principle when it comes to more of the local perception to risk. This principle states that “the imitation of the behaviours of others is a central form of learning” (B. Lott and A.J. Lott, 1985, as cited in Rogers, 1997, p. 745). This imitation can be looked at in two different ways, one on a local level and the other on a more institutional level. It can be the way that stories and practices are passed down from one generation to another. When looking at risk perception from this standpoint, it can link the learning of these practices to the reduction or the lowering of the risk perception or the increase. An example can be the practice of making beer when harvest is low in order to fill the income gap generated by a poor harvest. This practice, which is used in Lesotho by the women for many years and is passed down through generations (Ferguson, 1994). The learning through imitation has provided many families to overcome hardship, or agricultural hardship through the supplementary income that beer brewing creates. Another way that the third principle can be looked at from a perspective of the humanitarian apparatus. These organizations are given templates which they have to adapt and then implement into the local perspective. These templates are used on a global scale and thus are implemented by the different offices around the world. These templates are altered on an almost yearly basis with the main focus being adjusting the wrongs. The imitation of these documents is one of the main ways to learning for these organizations. This way they learn the various things to focus on and give less attention to items which are not requested in the template. An example of these documents is the Humanitarian RP or a CP (which is created by the Government with assistance of the UN when requested).

Although the learning theory is mainly used to look at the risk behaviour of criminals, the same concepts are applicable to examine natural hazards and emergencies. People are able to learn from previous generations as well as trial and error to come up with techniques that help reduce the negative effects as well as loss of life and damage. This is a somewhat simple theory which can explain behaviours around natural hazards which also gives agency back to the people. Through the implementation of the three principles by the local people, agency and responsibility is given to the people rather than having a view of the locals as stagnant people who are unable to initiate anything on their own. Many of the activities that they might have already been doing for some years could be seen as prevention activities which could lessen their risk perception.

The learning theory can be seen as a positive in terms of giving the local population agency and credit for the activities that they have implemented already. However, when looking at the humanitarian agency perspective, it is somewhat of a negative view. Throughout the years, they also learn about the different roles and activities which they implement and are able then to determine which ones best suit that situation. However, there is a somewhat of a discontent between the organizations projects and the local people. Projects and plans which are successfully implemented in one part of the region of the world does not automatically mean that it will be successful everywhere.

3.4 Conclusion

This literature review argued that it is important to understand all the different concepts such as risk and learning theory within a historical and cultural context. Only by understanding that these concepts and practices are mutually inclusive can one move forward in adopting new innovative practices which are suited to the local wants and needs. Drought plays a role in the culture and history of the country and is subjected to recurrent crises and restructuring of the (regional and local economy), but also that agriculture is not the backbone of homestead economies. Through looking at the existing knowledge on the topic and the current situation in the country, I was able to get a better understanding of what the situation was. However, this research also delves deeper into a region and topic which has only been limitedly covered by other research. Response to drought has been looked into, however in the context of Lesotho preparedness to slow-onset emergencies has not, especially with looking at the local and international perspective. Lesotho as a country is often overlooked when doing research into drought due the small scale of the country and the resilient nature of the people. Through applying the various different theoretical underpinnings, preparedness will be looked at in Ha Senekane through a new and different lens with the hope of trying to understand in what areas there can be improvements for the next natural hazard or emergency.

Chapter 4: Slow-Onset Emergencies Facing Lesotho

This chapter will look to conceptualizing and localize the various different slow-onset emergencies that Lesotho faces within the 2015-2016 Drought. “The effects of the drought in Lesotho concern multiple sectors: food security and agriculture, water, health, and nutrition as well as migration, protection, and security” (Lesotho: El Niño-related drought, Office of the Resident Coordinator, Situation Report January 19, 2015, p. 2). These concepts are not all natural hazards such as the drought yet they all play a role in the preparedness as well as response to the 2015 drought and without exploring these key issues, the local preparedness mechanisms as well as the institutional preparedness mechanisms cannot be understood. This chapter will focus on the key practices which were both observed and talked about during the field research. These concepts include drought, HIV/AIDS and TB, a changing social structure, the state transfer system, and issues of corruption.

4.1 Drought

“Life is with rain, without rain there is no life” (Interview 3).

Lesotho is facing one of the most disastrous droughts since recordings began, this is in line with the worst drought that Southern Africa has seen in 35 years (Lesotho: El Niño-related drought, Office of the Resident Coordinator, Situation Report January 19, 2015, p. 2). Lesotho is not new to the phenomenon of drought; however it was ill-equipped to handle the severity of the 2015-2016 drought due to the complexities of the drought. In previous years the drought was significantly less strong as the 2015-2016 with previous droughts “there was a little bit of rain but this time there was no rain” (interview 5).

A State of Emergency was declared in Lesotho on December 22, 2015. In order to meet the current needs, the State of Emergency aided in freeing up additional funds and resources as well as the government requesting additional funding from the international community in order to fill an estimated \$47.2 million dollar resource gap for the UN and NGOs to meet current needs (Lesotho: El Niño-related drought, Office of the Resident Coordinator, Situation Report February 20, 2016, p. 2). The 2015-2016 drought falls on the back of “the stresses of both the cumulative impacts of this agricultural season along with the previous two poor harvests” (Lesotho: El Niño-related drought, Office of the Resident Coordinator, Situation Report February 20, 2016, p. 2). The drought followed on previous poor harvests which has further devastated the population of Lesotho. This drought however needs to be understood in the broader context of Lesotho and their people. This section will bring more localized information about drought, its negative impacts, and the local perspective of past and current droughts.

Lesotho experiences droughts roughly every twice in a decade. The major drought emergencies in Lesotho were recorded in 1983-84, 1991-93, 1997-98, 2000-01, 2002-04, 2007, 2012 and 2015- this is according to the Lesotho Multi-Hazard Contingency Plan 2015-2018. This number will rise as “future climate scenarios show higher changes of further deterioration in rainfall amounts with projections of a water stress period by 2019” (Lesotho: Rapid Drought Impact Assessment Report, p. 3). The vast number of droughts, which has also recently in the past decade increased, shows the necessity for the local population to prepare for a drought as it will increase resilience to the droughts.

The drought itself has devastating effects on the population, which already suffers from extremely high rates of HIV/AIDS and Tuberculosis (TB). In May, 2015 the Lesotho Vulnerability Assessment Committee (LVAC) projected that roughly 11% of the rural population, around 180,000 people “were at risk of food insecurity even in the presence of safety nets that account for up to 9%

of [the] country's GDP" (Lesotho: Rapid Drought Impact Assessment Report, p. 3). "The current food situation in Lesotho is that 464,000 people will need immediate food assistance" (Southern Africa humanitarian Outlook for Nov 2015- Jan 2016, OCHA), this was said even being said in November 2015 before the El Niño had peaked; thus illustrating the severity of the drought. During the Lesotho Drought Impact Assessment "conducted in January 2016 the number of people that were affected was 534,502 people (which is over 25% of the total population)" (Resident Coordinator Situation Update 2 Lesotho: El Niño-related drought, Office of the Resident Coordinator, Situation Report 2 February 20, 2016, p. 2). This number was expected to increase over the course of 2016, as the effects of the drought become more prominent.

4.1.1 Local Interpretation of Drought

Drought for the Basotho population has a damaging connotation, as it significantly increases the stress level of the people. The drought has meant that "plants have died, animals have died and most natural things are not here anymore" (Interview 11 & 14). It also means that there is "a lot of hunger, and human and animal suffering" (Interview 17). As a largely rural population which relies on food production in their own plots (home gardens) and on the larger farm lands²⁶, the drought means that people are not able to provide food for their families and unable to make an income in order to purchase food supplies. One interviewee stated that drought was not an emergency for him because there were warning signs in previous droughts, however "there was no warning" in the 2015-2016 drought. This means that through his definition of an emergency this drought constitutes as an emergency.

The 2015-2016 drought resulted in a significant overall reduction of rainfall, and zero during the crucial planting season, which has resulted in a significant reduction of maize as well as the rise of food insecurity²⁷. The lack of water meant that there was next to no harvest from these larger fields "up to 70% of communities report[ed] not having planted their crops" (Lesotho: El Niño-related drought, Office of the Resident Coordinator, Situation Report February 20, 2016, p. 2).

The plots are occupied with vegetables such as rape, cabbage, corn, beans and sorghum. Although these plots are small and mainly filled with vegetables, these are one of the few produce that families were able to eat, however "vegetables do not keep you full" (Author's personal journal entry, July 7, 2016). These plots are relatively small and used to supplement the larger harvests from the larger lands. These plots are also irrigated by use of water from the taps (these are located on the streets in some regions and are known to have run dry for weeks on end, these taps were only opened relatively late in 2016) as well as streams. However in Ha Senekane, which is located on the Berea Plateau, many of the streams are located on the bottom of the plateau which takes about two hours to go down get water and return. As many of these streams are also shared with livestock and they have run dry. Obtaining water from these water sources are also benefitting families who are younger as they are able to carry the water, whereas elderly people are unable to access these water sources much less carry the water back to their homes (Interview 2). The water shortages have meant that water has become a valuable commodity during the drought, "many households [were] purchasing water" (Lesotho: El Niño-related drought, Office of the Resident Coordinator, Situation Report, page

²⁶ The term plots refer to home gardens, small plots that are within the garden of each household where food is grown for family consumption. In these plots, families grow beans, sorghum, rape, spinach. The bigger farm lands are more communal and are used to grow larger quantities of produce mainly meant to be sold on the larger markets.

²⁷ This played within the larger context of poor harvest in the larger Southern African region which increased the staple prices of corn and other produce in Lesotho and the region.

2, 20 Feb, 2016) which increases the food basket which is already significantly higher than previous years. Many times this has become unaffordable to families as the staple food price has also increased by 230% compared to 2009/2010 (Lesotho: El Niño- related drought Situation report update.02 Office of the Resident Coordinator, February 20, 2016).

The drought has also meant that people reliant on piece jobs (jobs in which they work on someone's land for planting or harvesting, they are paid either in-kind through a share of the produce or with money) have been unable to work during the 2016 harvesting season as there is no to harvest. Throughout the researcher's stay within Ha Senekane, the fields were empty and the farmers were all at home. The piece jobs enable families to bring home much needed salaries and food. One of the interviewees (Interview 10) further elaborated that this was the family's main source of income and now that she was unable to work as there were no piece jobs this year for her. She had to rely on purchasing food from stores which were significantly more expensive than previous years. It also meant that many nights, she and her family would go to bed hungry.

The drought also has an adverse effect on the livestock. The cattle and livestock play an important role in Basotho culture. They act as a savings account or an investment. Cattle are used to pay *lobola*²⁸. It also acts as a sort of pension fund for the parents of women. Cattle and livestock also are slaughtered for ceremonies and other traditions. Although they play a crucial part in the Basotho culture, they also fall victim to the drought. As the rivers have dried up and there is increasing food and water shortages, many livestock (cattle, pigs, chickens, horses and donkeys) have died due to dehydration. These deaths increases the financial strains on many families as a cow can sell for 6,000 Rand (which is equivalent to roughly 390 euros) according to some villagers. One interviewee used to have seven cattle but only one survived the drought due to the lack of water (Interview 12).



Picture 1: Herdboy in charge of the families remaining livestock after the drought killed seven of his cattle

Drought has pushed more people into increasingly more vulnerable positions with very little assistance from the community which in the past were able to help as well as little to no government support in Ha Senekane. Families are dependent on single income homes which is not enough to support the family let alone the extended family which is currently happening in Ha Senekane.

²⁸ *Lobola* is the dowry system used across the Southern African region. "*Lobola* is a payment which the bridegroom makes to the bride's family in order to take her for marriage. It can be in the form of money or animals like cattle, sheep, goats or donkeys. In the ancient days it could also be in the form of grains like sorghum or maize. When it's grand, a large number of grain bags were counted equivalent to one cattle. *Lobola* is paid in portions. Because of *lobola*, a bridegroom values the bride. It enables her to participate in cultural matters and have a say in decision making. When it hasn't been paid, the bride's sense of belonging is not fully satisfied; she feels she isn't a whole member of her spouse's family. It's a disgrace not only to her but also to her family" (Interview 22).

4.1.2 Previous Droughts

Lesotho has consistently been plagued by drought. The outcome of the interviews highlighted that many were unaware or unable to remember the previous drought and the extent of the hardship it brought with it. This can be explained in several ways. One is that droughts were not intense as to require much acknowledgement. Another explanation is that in the past people had enough support to bridge the drought period, or that they had adequate time to properly prepare for the drought. And lastly, it could be that people simply did not remember. Each of these explanations brings with it, its own set of questions and answers. Many times during the interviews the interviewee simply was too shy to answer the question or did not want to ask the interviewer to further explain the question and therefore simply answered with “I don’t know”. Although through the posing of different questions this was further explained. It also indicated that many did know about the other droughts but it just did not affect them as bad as this drought did.

The extent of the 2015-2016 drought is unprecedented. When compared many people view the other droughts as obsolete or insignificant. Past droughts were less severe. “If he didn’t [plant] it would be the worst, the worst one ever because there is much drought and no rains unlike before there was a little bit of rain” (Interview 3). That little rain in the past meant that some plants were able to survive and bridge the gap between the times of food insecurity and food availability.

When interviewed, some of the older interviewees alluded to the severity of the 1980’s and 1990’s drought. Some even stated that those were worse than that of the current drought. A key difference between those and the current drought is that during previous droughts there had been moments where there was sufficient rainfall whereas the current drought has seen next to no rainfall over several key months. One interviewee remembered that in 1984 the drought was a disaster because there was no food, his adobe house “fell apart” (Interview 17) and his son also died from hunger. Another interviewee remembered that one year the drought was so bad that she had to eat papa with dust, yet the 2015-2016 drought was worse than that year in terms of dust and the amount of cattle that had died (Interview 12).

The majority of the people who were interviewed experienced droughts before, just never to this scale. These past droughts did not prepare them enough for what they experienced and the broader situation in the country and the two previous consecutive poor harvest only made them more vulnerable to the negative consequences of the 2015-2016 drought.

4.1.3 Early Warning

Early warnings allow for the population to know ahead of time of an impending danger as well as provide the ability for government to give instructions on how the population should prepare. In order to effectively combat the negative aspects and effects of drought, it is crucial for the community to spot the early warning signs so to prepare for the oncoming drought. For the majority of those interviewed, early warning signs were not given, if they did receive them, they failed to spread the message.

There were limited early warning for the population of Ha Senekane for the drought. The majority of the people interviewed did not receive any early warning about the drought or the intensity that the drought has. However, those who did get some early warning either ignored it or did not spread the word to neighbours about it.

There are several ways in which the members of the community heard about the drought ahead of time, this early warning was normally given around September October while the official declaration of a state of Emergency by the government was given late December.

The most common form of early warning that was given to the people was through the radio. The radio is a common feature in many households and is normally always on. In a country where villages are located in remote locations, the only form of news distribution communication comes in the form of radio stations. According to a couple interviews, radio stations had given early warnings to the listeners about the upcoming drought as early as August. It was told that the radios announced the drought, the available information, as well as ways to properly prepare for the drought. The majority of the listeners failed to fully address the situation and prepare for the drought, while others stockpiled food as instructed. For those who did not heed to the government's advice, they were not able to benefit from the various techniques. Some were unable to implement these techniques due to the failed to make stockpiles, as previous harvests yielded little crop or did not have the financial means to make a stockpile.

A small number of people were able to see the warning signs through observing nature. Two of the interviewees referred to similar stories about the moon. This story was passed down through the generations in those particular families. If the horns of the moon (quarter moon) faces upwards that means that there will be no rain (or a drought) and if it is facing down there will be rain. This changes per month as the moon goes through its various cycles. This is one of nature's ways of providing an early warning system however it is based on a monthly basis. Another way someone uses nature as an early warning system is through looking at certain birds which are in the sky as well as seeing if the Aloe plants are blossoming. If the certain birds are not present in the country then there will be drought as well as if it Aloe Vera is not blooming then there will also be a drought.

What was surprising was the lack of consideration of others in terms of warning them about the oncoming drought. People only shared the early warning signs to their immediate family, not their neighbours or their community. This includes those who received SMS messages which heeded warnings about the upcoming drought. In this regard, a possible explanation is that the median age of reciprocates were 20. This shows that they have other things on their mind other than preparing for the drought or that they did not care about it. For many families the early warning was nice to have although many families could not do anything with these warnings as they had no harvest, very limited money, and little to no prepositioned food from the last harvest which was also a failure.

Early warning is an important aspect in the preparedness to drought and other slow onset emergencies; however in the case of Ha Senekane most people either ignored the early warning system or they were unable to do anything other than wait till the drought was over because the population is vulnerable.

4.1.4 Ubuntu

The concept of Ubuntu has played a prevalent role in South Africa and Lesotho. The concept of Ubuntu refers to the idea that we, humans, cannot be humans alone. "Ubuntu literally translated means 'humanness' in Nguni languages. It is usually associated with the phrase 'umuntu ngumuntu ngabantu', which translates as 'I am a person through other persons' and implies that you cannot be human alone" (Du Ploy, 2014, p. 85). The spirit of Ubuntu in Lesotho is about sharing and being a community. "Their personal histories of struggle alongside the vulnerable and oppressed embody the ethos of Ubuntu" (Palframan, 2014, p. 2). Due to the number of different emergencies and the negative impacts it has had on the community, the spirit of Ubuntu has somewhat eroded. This is not necessarily willed. People are just unable to help their neighbours because they themselves are facing the same situations. "Everyone is experiencing the same level of hardship and hunger" (Interview 3). As each year has passed, with the number of consecutive poor harvests, the ability for the community to help

each other out has become more and more limited. “There is no more culture of sharing or Ubuntu because the community doesn’t have anything either” (Interview 8). There are still members in the community that support other members but it is not nearly enough for those people to survive.

Lesotho has prided itself on having a resilient population that understands the complexities and limited foreign aid and governmental support in the rural areas. Those most affected have adapted and strengthened their community by supporting one another, as a survival mechanism. However, what happens when a community has run out of options, and the government fails? A prime example of the failure of the state in that is the recent drought of 2015-2016. The eroding nature of Ubuntu has meant that many people are unable to survive on their own produce. This means that the vulnerable populations become even more vulnerable and a country which has been mostly self-sufficient is no longer able to sustain themselves. This is when the numbers of one fourth of the population is hungry and this was stated in July 2016 (newspaper headline).

4.2 HIV/AIDS as a Slow-Onset Emergency

The HIV/AIDS pandemic in Lesotho has cost countless people their lives over the years, and has hindered many from working. Lesotho is ranked number two in the world for HIV/AIDS prevalence (UNAIDS) with stabilized 23% of the population having HIV/AIDS in 2015 (Ministry of Health, 2015, p. 2). HIV/AIDS affects about 1/4th of the population and therefore plays a pivotal role in most aspects of life, for the local population but also for the government. HIV/AIDS has plagued the country for many years and wreaked havoc on the population, the economy and the future of the country. Scattered around the cities are pop-up testing centres, as well as billboards advertising male circumcision and the use of condoms during sex. Although there is increased awareness about the dangers of HIV/AIDS, and the active role that government and NGO’s play in the prevention and treatment of HIV/AIDS the statistics on HIV/AIDS in Lesotho have remained static, neither seeing an increase but also no decrease in cases of HIV/AIDS rates (S. Schillings, personal communication, July 13, 2016).

Some consider the HIV/AIDS situation as a slow-onset emergency due to the nature and the extent of distraught that the illness brings. Taking into account the definition of slow-onset emergencies as, “one that does not emerge from a single, distinct event but one that emerges gradually over time, often based on a confluence of different events” (OCHA and slow-onset emergencies, 2011, p. 3). HIV/AIDS has long lasting effects on the population and the illness does not necessarily have a start or end date due to the effect on the population (having one person or a handful of people with HIV does not necessarily impact the whole population but once there is a significant percentage of people with HIV then it has larger implications). HIV/AIDS has long lasting implications on the community as farmers are unable to work certain days. There is a long list of confluence of different events which enable HIV/AIDS to become a slow onset emergency as well as influencing such a large proportion of the population.

4.2.1 HIV/AIDS and Migration

Migration has significantly influenced the spread of HIV/AIDS within Lesotho. The labour migration to South African mines has benefited Lesotho. It has, though, nonetheless had negative impacts, in terms of the health of the miners and that of their families, and it has significantly reduced the labour force within Lesotho. The miners work in South Africa are often engaged in extramarital relationships as they have had to leave their wives or girlfriends behind in Lesotho for extended periods of time and the women also engage in extramarital relationships as they were left behind. These relationships have increased the spread of HIV and other sexually transmitted diseases (STIs) on both spectrums as it increased the infection rates at and around the mines, and back in Lesotho. The work

at the mines brings considerable monetary value to the community and the country but also brought with it diseases. “Migrant labour has been identified as one of the key drivers behind the HIV/AIDS epidemic. Migrant labour almost always results in prolonged spousal separation that disrupts family life, encouraging marital infidelity and increased risk and vulnerability to HIV” (IOM, p. 2-3). Although migration is not something new to the region or Lesotho and has brought significant benefits to the country in terms of increasing the economy and boosting family incomes, it has also cost many people their lives in the mines as well as through diseases.

4.2.2 HIV/AIDS and Extramarital Relations

Migration is not the only reason why that HIV/AIDS has spread so rapidly throughout Lesotho. Basotho culture is very open about extramarital relationships. An example of this practice was outlined in an informal discussion, where the person states that also it is very custom for men to have multiple partners. An example is that if the wife just delivered the first born she moves back home for 3 months and it is normal for the man to have another partner, although this is something that isn’t openly discussed. The rather stark openness to having multiple sexual partners puts not only the direct family in danger of contracting HIV/AIDS but also the family of the other sexual partners. Thus, it affects a large portion of the population. Although the practise is openly known, many people choose to look the other way and refuse to acknowledge it unless one is part of the community. As an outsider this issue of multiple sexual partners and its openness is somewhat public knowledge because you are constantly asked about relationship status. While conducting research, I was constantly asked if I was married or had a boyfriend. When I responded that I have a boyfriend or husband, it was usually followed by “but he is not here now now.” This was a clear indication that they wanted to either start a relationship or they were just looking for sex. Although this is commonly and openly spoken about, due to the stigmatization, it is never directly addressed.

The notion of extra-marital relations plays a role in the drought of 2015-2016, as well as the increase of HIV/AIDS cases Lesotho experiences. There are many families both in Ha Senekane and in Lesotho who suffered from the drought, many of them were even suffering before the drought due to previous poor harvests. In Ha Senekane families were going a week without eating due to the drought and it could also be affecting the HIV/AIDS rates as well as possibly increasing the number of people who are contracting STIs.

“As many families and women are suffering hunger from the drought some are using their bodies to get dinner. She said it wasn’t prostitution but a necessity. These women will sleep with an older man so that they can have something to eat. Although it is widely known that this happens, it is not openly spoken. It also happens in Ha Senekane. This causes a lot of trouble because these men don’t necessarily want to wear protection and since they are doing her a ‘favour’ she can’t force him to. Therefore it influences the spread of HIV/AIDS. Drought therefore has a big influence not only in hunger and dehydration but also HIV/AIDS and TB” (Author’s personal Journal, July 8, 2016). To date, there is no data that indicates that more people have contracted HIV/AIDS during the 2015-2016 drought, nor the impact that it has had on the progression of those with HIV/AIDS (from WHO stage 1 to IV). It is very plausible that the practices mentioned above could have an impact. When I asked an HIV/AIDS counsellor at Paballong her opinion on where the drought has increased the number of people contracting HIV/AIDS. Her response was “it did, because people would exchange sex for money so that they could get something to eat. Also people would leave Lesotho and go to South Africa where they would just stay with foreigners in order to get money to bring back home” (S. Schillings, personal communication, October 11, 2016). This is not a new phenomenon, exchanging

sexual relations for food, however since the drought started has increased and will continue to rise until food security becomes more secure. This will continue to have a negative effect on the HIV contractions across the country.

4.2.3 HIV/AIDS and Long Term Effects

HIV/AIDS has lasting implications on the community. Farmers are unable to work certain days due to the frequent clinic visits that need to be made and illness. The high rates of HIV/AIDS has led to many farmers unable to work because they are sick or attending those who are sick or orphaned. Regularly farmers and other professionals, who have HIV/AIDS, are unable to work as they are frequently ill, have regular clinic visits, and may have to look after the risk and/or orphaned. This has been widely seen out of the sample of interviewees. This can be concluded when analysing the collected data. "This phenomenon has significantly reduced the potential of rural households to earn a meaningful income that would usually be translated into food access on the local market. Some household infected and affected by HIV/AIDS do not have access to nutritious meals, which could prolong their lives" (Molapo, 2009, p. 3).

Families are often disrupted, as one of the parents or both have died from HIV/AIDS related deaths, leaving behind vulnerable children. This places strain on the extended family who are already suffering from high levels of poverty (due to the poverty numbers of the country). Some children are thus neglected. During the time at Paballong, I witnessed a four year old child come into the clinic with her knees burned. The girl sustained second degree burns to her knee caps when a pot of boiling water fell on her as she grabbed the table. The caregiver²⁹, her aunt, waited two days before deciding to go to the clinic. She was treated and had her knees bandaged. The nurse at the clinic instructed the caregiver to bring her back in two days to redress the burns. Sadly, this did not happen. The caregiver only came back after four days. By this time the bandages were crusted over and attached to the scabs. The nurses were forced to pull both the bandages and the scabs off their four year old girl. The pain was excruciating for the child. Instead of caring for her niece throughout this agonizing ordeal, her caregiver was outside laughing with her friends about some minute issue³⁰. The nurse proceeded to tell me that these were not accidental burns, due to the lack of splatter or water marks. Sadly, these events are not unique to this young girl, they are far too common in Lesotho.

Although HIV/AIDS is a slow-onset emergency in its own right, the implications and complexities of the emergency further hinders the preparedness, and response capabilities of the government and NGO's in adequate responding to other natural emergencies due to the lack of funding. It also has the added negative impacts as it increases the vulnerability and resilience of the people in terms of bouncing back or taking risks for the emergency because they are already vulnerable and any type of additional emergency furthers their vulnerability. In regards to HIV/AIDS and the drought the issue of food intake for patients on Antiretroviral (ARVs) play a big role. "You know who we are, Basotho are farmers, now that this HIV/AIDS has c[o]me people are not able to do their work at the farms because they are always going to the clinics, those who are very very strong and producing a lot died" (S. Schillings, personal communication, October 2, 2016). People already have had to reduce their work output, due to the clinic visits and the lack of energy. On top of that, if they are unable to harvest or plant and thus unable to maintain proper nutrition, that affects ARV treatment and thus they are more vulnerable to increasing their stages of HIV as well as more prone to opportunistic

²⁹ Both her parents have passed away from HIV/AIDS related deaths, and the child herself is positive.

³⁰ This is the moment where I stepped up and held the girls hand and told her that it was okay while she cried her eyes out.

diseases. This was often witnessed during field study at Paballong Centre, where low-income patients come thus due to the drought were unable to farm, they saw an decrease in the CD4 count which makes them more susceptible to TB and other opportunistic diseases as well as further deterioration in the HIV prognosis.

4.3 Changing Social Structures

As the world changes into a more modernized environment, Lesotho is also changing. This change has been occurring within an environment of a weakening Rand, increased unemployment, drought, increased poverty and high HIV/AIDS and TB rates but also increased technology and more access to the global world. These are all contributing factors to the rapidly changing culture within Lesotho.

Basotho culture has revolved around land and farming for centuries. The majority of the people interviewed stated that they were unemployed. They were all farmers. They are self-reliant, with families, growing their own vegetables as well as often producing produce for local consumption. However, due to the drought in combination with previous poor harvests many families are no longer able to maintain this lifestyle as their farms fail to produce sufficient crops. In response, many families are sending young men and fathers to South Africa to work in the mines. In the past this proved to be the most reliable source of income. Through remittances, however with the weakening of the Rand on the global economy many mines in South Africa and in the region had to be shut. This meant that work for these men is no longer there.

Increasingly, women are seeking work in South Africa, as restaurant servers or as domestic workers. Although the implications of this change are not yet visible, some implications can be foreshadowed. For example, one can deduct that there will be a change in the family dynamic, as households are usually headed by the female. It can also lead to the possible increase of domestic violence, as men begin to feel emasculated. As rape and marital rape is already quite common in the culture, this is very plausible. Men are normally absent in child rearing, however this change will force men to take over many of the roles of women or have grandmothers or community members help. How these changes will impact the larger social structure or change the social structure is currently under-researched.

The youth are vessels for change in Lesotho. “Youth more into (or willing) to change but the elderly still want to stick with what they know” (Interview 8). With more youth looking towards the urban cities rather than rural life, the elderly are left to continue the Basotho practises of farming. Although the youth move more into the cities, many still partake in initiation schools³¹. The move to the cities is not necessarily in pursuit of better education but a search for more opportunities as well as going out. “The culture and way of life in Lesotho is changing, the youth are less interested in school and more about going out; they don’t believe in ancestors and dreams (dreams used to tell a lot about the future)” (Interview 21). The youth are also searching for non-traditional jobs, rather than following their parent’s footsteps.

As Lesotho suffering from extremely high rates of unemployment, large numbers of youths are unable to find jobs and are fully reliant on their family. Through that the youth are unable to find

³¹ Initiation schools is “a traditional practice common within the males but there are also female initiation schools. There they learn secretive male or female practices that subjects them to deep discipline. It’s done to turn young boys or girls into mature men or women and teach them manhood or womanhood. They spend almost six months and stay far from the village, there they are subjected to difficult circumstances and none of the things that they go through are supposed to be discussed after. It is very secretive” (Interview 22).

employment; there has been an increase of teenage pregnancy. This was both articulated visually to me through my work at the clinic as well as through the interviews. Many of the youth are becoming pregnant and more often than not the baby's father is no longer in the picture once the child comes, leaving the mother to care for the child without having any source of income. The social safety net of parents are also eroding, as they themselves do not have the financial means to care for their children, let alone their grandchildren. Take, for example, this 25 year old woman at the daycare centre, who would come and talk to us while we were working. She was a tomboy and got bullied because people believed that she was lesbian. In order to prove them wrong, she dated a guy and got pregnant. He left soon after. She has no source of income, and relies on her mother who has a child of her own. The woman cannot even afford the 100 Rand to visit a hospital in the city. This happens too often and has long lasting effects on the population as well as the poverty cycle. This can be seen as one of the negative drawbacks of the social changes that are happening. Yet these changes are happening and are changing so social structures in Lesotho.

Although the youth are seen as vessels for change, they are bound to social norms and customs of their community, however these social normal and customs have changed over the past couple years. Families were reliant on the husband's income or remittances from the mines in order to provide for their families, and once the children were of working age, they too would help support the family, as well as the extended family following the traditions of Ubuntu. This meant that the majority of the youth income would be sent home to the family in order to help them out. This however is something that has changed. This change has arisen due to several factors. The closing of the mines in South Africa, the high HIV/AIDS rates, the rising price of the family food basket as well as the drought have all contributed to this. The youth are no longer able to send as much money home due to the rise of living costs. It is more difficult for the youth to find employment in Lesotho or in South Africa due to the weakening of the Rand over the past couple years. HIV/AIDS has meant that some of the youth has passed away, leaving their children orphaned or raised by their grandparents who have little to no income. These changes mean that many of the youth are now supported by their parents rather than reverse which was the norm in the past. Several interviewees who were around the ages of 18-28, stated that they were unemployed, living with their parents as well their parents providing them with some money. In the past, youth between those ages would be working in the mines or other sources of employment. With the drought they are even unable to do piece jobs³² to bring food or money to their families. As stated in 4.1.4, the culture of Ubuntu has also somewhat eroded over the past years because communities in the rural areas are somewhat on the same playing field as they are in the same situation as other families and therefore cannot help. The loss of the Ubuntu spirit could be temporary or permanent. During the field research, I got a sense that it would be more temporary as interviewees stated that they want to help out their neighbours however they have nothing to give. Lesotho is seeing the influences of these different factors and how they are potentially impacting the social structure of the country.

Drugs, alcohol and crime have been on the rise as well over the past couple years. During the field research, I witnessed several people openly smoking marijuana, and people who had recently sniffed glue. Many people use drugs and alcohol to escape the reality which is exacerbated by the drought and their environment. The composition of alcohol is interesting as well to witness. In Lesotho

³² Piece jobs are jobs such as harvesting planting or other farm jobs that people do in exchange for a small percentage of the harvest or food or money. It is a popular source of food or income to families who are unable to farm on their own. It benefits the farmers who would otherwise not be able to harvest or plant their produce.

salaries are distributed at the end of the month, and the men who retrieve their money often spend the majority of their salary that weekend at the bar. Women do not enter the bar and do not drink beer but do drink cider and wine. The drought has increased the consumption of drugs and alcohol which has increased the crime rates as well (Interview 8). Crimes in the form of petty thefts in the city have been on the rise, but also crime in the agricultural setting has been increasing as well. In my short time there, I was victim to a house robbery as well as witnessing and stopping a robbery in the market place. This happened within a country which on the outside looks peaceful but the rise in poverty as well as the devastating effects of drought has meant that people are turning to crime as a source of income as many other options no longer exist.

Crimes occurring in rural areas are often cattle or livestock theft. This makes the role of herd boys more important. As previously stated, cattle and livestock play the role of a savings account or for future investment such as *lobola*. I was told that cattle equal roughly 6,000 Rand per head. Many families own a couple cattle. This is their wealth, especially for rural households. Therefore, the theft of cattle by other herd boys or people is a huge loss for the family. This practise place more undue pressure on the family, potentially bringing them further into poverty. Although these practises is not new, the 2015-2016 drought exacerbated the number of stolen livestock. It will also play a role, after the drought, as families have lost significant amounts of money which could otherwise be monetarized when they sold their livestock. Although many cattle died during the drought, more were stolen. Thus, crime has become a rewarding as an alternative source of income to many people in Lesotho.

The social structure of Lesotho is slowly changing into a more modernized society. The youth are retreating from agricultural practises; mainly due to the labour intensive farming methods, the risk and the lack of economic incentives. "People are also lazy so in the past if someone was sick in the community, the community would come together and help in the fields but now people are lazy too" (Interview 8). The people are not necessarily lazy however the agricultural equipment such as tractors and ploughs which simplify farming are too expensive for poor households to purchase meaning that labour intensive farming techniques are used. The youth is somewhat disinterested in these types of methods and on top of that many abled bodies are unable to help due to the consequences of HIV/AIDS. Also, with the previous poor harvests and the increase of droughts, the risks involved with farming have proven to be significant. Many farmers have not been able to produce any harvest, thus had no income. Farming has become an occupation with increased uncertainties which are not appealing for the youth who are seeking stability in their financial income. This is one of the incentives for the youth to migrate to the cities in search for better jobs. Another is that life is getting more expensive in terms of purchasing technology; this is where the need for a stable income plays a role. Students and the youth are extremely technologically savvy as well as want to show off their financial situation by flaunting their purchases. There is much competition between the youth to look the best and have the latest trends. One way this was illustrated was with the amount of time that is spent on social media as well as the sending of selfies and photos to other people. This is phenomenon which is not unique to Lesotho or the global south but is witnessed globally. However, in the rural communities such as Ha Senekane where people do not have this type of money to spend, they will spend it anyway. This reliance on technology has larger implications on society on a more basic level as well. Modern technology relies heavily on the usage of electricity. However, Lesotho does not have enough electricity let alone the infrastructure to sustain the transfer of electricity for the whole country. This type of infrastructure is limited mainly to the larger cities and towns. Ha Senekane lay only 16 km outside of Maseru, the capital, yet is had no power cables or electricity; the cables ran till about seven km outside of the city and then abruptly stopped. Driving from the city to Ha Senekane is eerie because

from one metre to the next someone just turned off the man made lights but turned on the heavens as the Milky Way and stars shine brightly. Households that use light bulbs to bring light to their households shift to candle light which flood the houses. These changes have much larger restrictions on the technology that one is able to bring to the community. Ha Senekane households did not have fridges or freezers because they were too expensive but also because there was no electricity to power them. This illustrates that there are different societal structural changes within Lesotho as well between those who live in the rural communities as well as those who live in cities.

The social structure which normally changes in slow progressions has seen rapid changes which leave many people on opposite spectrums. The elderly want to maintain the past and fear the changes while the youth grasp these changes. In Lesotho, the changes in society are bound to the levels of development. One is unable to fully grasp the modern era with technology if there is no electricity or if they do not have the financial means to buy the products. The push then is to move to the cities in search for more opportunities, and financial stability but that works for a relative few number of people. This also collides with the social family structures. The various different factors which are playing on the Lesotho stage have impacted the adherence to social norms and customs. Although some may be temporary changes, they are however altering Lesotho's social structure more rapidly than in the past.

4.4 State Transfer System

The state plays a somewhat background role within the rural settings of Lesotho. They are present in a sense that one sees their white trucks with 'Ministry of Agriculture' or Ministry of Health' drive through the main roads, however they rarely stop in Ha Senekane. During the 2015-2016 drought, they were even more withdrawn only coming to the village to register people but other than that never returned or did anything with the information according to Interviewee 12. The state transfer system plays a role within slow-onset emergencies as well as the resilience of the local community to combat the emergency. During the field work three different types of transfer systems became very visible as well as played the biggest role during the 2015-2016 drought.

The first type of transfer system is a state transfer system, the pension funds which is very limited. This is an area which is rarely looked upon within literature about Lesotho because of the life expectancy rates. With the very low life expectancy in Lesotho³³, many people do not reach the age where pensions are given by the state. People above the age of 70 receive a very small pension from the state. Out of the interviewees only two people received this pension fund while one other one was a year away from receiving it. Although the amount was not specified, it was low compared to other countries. It was enough for one person to live off of but in the instance of the interviewee that was not enough as she was supporting her 56 year old son and his six children as well as two women from the community. The son is a farmer but since this year's harvest was non-existent due to the drought, the only source of income was the pension. The family was able to grow veggies in their garden plots but that was not enough to sustain the family for a year, the family had been going to bed hungry for several months while only being able to purchase some food products from the market. Though there is a pension fund that the state awards, the majority of the population do not even reach that age and therefore are suffering tremendously. The government is unable to lower the pension funds to a younger age because they do not have money. This was illustrated by the inability of the government to pay scholarships of university students in September which led to the death of one student during

³³ "Between 1990 and 2005, life expectancy at birth declined from almost 60 years to 47 years and currently stands at 49 years" (World Bank, 2016).

a protest between the students and government in Roma (S. Schillings, personal communication, September 10, 2016). Pension funds allow for those elderly to receive some money because they are unable to work anymore. Many of them also have to rely on their family and community in addition to these funds as they are substantially low.

Another is the pensions received from the mining companies to retired miners. These pensions are significant sums for the Basotho and are hard earned, many people are unable to collect them due to death before from mine related deaths or HIV/AIDS or TB. Although these pensions are much needed in Lesotho, many of them are not handed out. One of the interviewees worked in the South African mines for 42 years and is currently 59. He has been waiting for his pension funds to arrive for more than 17 years. He currently substitutes the lack of funds through piece jobs however he will be unable to continue with those jobs in the next coming years because he is very ill. The mining pensions are held up in litigation between Lesotho and South Africa which means Lesotho is losing out of millions of Rand in pensions for the miners. The pensions that are not being received by those families are creating more impoverished families who rely on government support (which is extremely limited) and international support if they are unable to get support from their extended family or community.

The government has been successful in providing funding to school feeding programs as well as support funding for households with orphaned children. These additional funds are relatively little, however it has made a difference during the drought between children going to bed hungry and those being malnourished (S. Schillings, personal communication, August 12, 2016). The school feedings have allowed schools to remain open as well as providing children with at least one meal during school days, often times the children do not eat at home or eat very little. This phenomenon is mainly during due to the drought and the severity of hunger in the country. School feedings are conducted also during non-drought year, however was scaled up during the 2015-2016 drought. Although this allowed many children to have food, it also caused problems for the school as they had limited water to cook the food. As a school teacher, at the local high school, stated, "schools are suffering due to the drought; there is little water to cook with at school so the children go fetch water from the river". This water source is roughly an hour's walk away from the school and is a shared water source between animals and people. At Paballong Gerard, the head of the board of trustees at Paballong HIV/AIDS and TB Centre made the executive decision to leave the daycare centre open during the winter break because it was the only place where some children were given meals. At the daycare centre the children received breakfast and lunch during weekdays (Paballong Satisfaction Report, September 2016, p. 11). Households with orphaned children also get some financial support from the government which is meant to take care of the orphaned child as his/her parent/s are unable to financially do so and therefore the burden lies on the single parent or the guardian. This allows for more financial support to them with the hopes that the child will not be malnourished. Both the school feedings and the child support for orphaned children allow for an element of mitigation to malnutrition as well as allow a small group of children to not go to bed hungry. The government thus acknowledges the detrimental effect that malnourishment and stunting has to the population both in the short term as well as in the long term and use these two programs to counter that especially during the drought.

State transfer systems in Lesotho are nowhere near the standards seen in Europe or any other Western country. The government lacks both financial means to execute these systems as well as the willpower. The country faces a host of different problems which all converge into the developmental issues which the country faces. The little that the government does give acts as a Band-Aid on a much bigger problem of poverty.

4.5 Corruption

On top of the high rates of poverty in the country, Lesotho follows a trend which is common in many African nations of corruption. This has a larger impact on the credibility of the government in the eyes of the population as well as the way the international community is ready to help the country. It means that international donors have to be aware of corruption from the beginning and already plan for a percentage of the project's funding to be going towards corruption. This means that it is more expensive for the projects to be completed. Corruption is also an incentive for many organizations to refuse to fund a project. This has larger implications because that means that some projects which could benefit the community tremendously would not be implemented mainly on the basis of not trying to go into corruption. There was several times where I, as a researcher, witnessed corruption in Lesotho. One of these corruption cases was not as open and shut as some other ones but involved Paballong Centre. It was not necessarily a case where money was being distributed for a faster deliverance of products or in order to get your products over the border one had to pay an informal fee but more of purposely extending the hours of work to get more salary. This case had to do with the building of a conference hall at the Centre. It was expected to be finished in December 2015 but was still not finished during the summer of 2016. One of the social workers who worked at the daycare centre told me that the workers were actually not really working hard or were purposely slow because they knew that they would not have another construction job after this, so they are trying to make as much money as they can. This is something that is not only particular to this case but is something that is replicated throughout Lesotho and made especially worse with the high unemployment rates as well as the drought. These types of corrupt repel donors from important projects. It is more short term thinking rather than long term which is not only visible in Lesotho but also on a more global scale.

4.6 Conclusion

When looking at Lesotho in terms of slow-onset emergencies, their ability to prepare and respond to them there are many different factors that play a role in it. The two slow-onset emergencies that was evident throughout the field research was the drought of 2015-2016 but also the HIV/AIDS epidemic. The drought was something that was researched more intently than HIV/AIDS. HIV/AIDS epidemic was studied more in the side with my work at the HIV/AIDS Centre as well as my close contact with people suffering from the disease. Both these types of emergencies come with their own complexities which are both unique to Lesotho as well as global complexities. Lesotho faces shifting societies which are interlinked with the emergencies and whom collide with each other. Many of the complexities are reviewed as singular events or on their own while they are all interlinked. These complexities start with the emergencies themselves (drought and HIV/AIDS) and then get further complex with the changing social structures in Basotho culture, the issue of the state transfer systems as well as issue of corruption. Preparation for drought is made more difficult due to the various complexities with HIV/AIDS and the government. They all play a role in the ability for a community to prepare and mitigate against an emergency either a slow-onset emergency or a rapid emergency.

Chapter 5: Local Preparedness Mechanisms

Preparedness to any emergency matters. It has the potential to substantially reduce casualties and injuries and damage to infrastructure substantially and speeds up recovery time. Governments and some international institutions are more equipped with preparedness on a district and national level. However, local populations are often times overlooked within the role they play within preparedness. Local populations have significant inputs that they can contribute to the different preparedness strategies. The integration of localized knowledge which can be important while developing preparedness and recovery strategies for the population. Slow-onset emergencies which are relevant to Lesotho are both drought and HIV/AIDS, however, when looking into preparedness mechanisms used by locals, this chapter will only look into preparedness mechanisms implemented with drought and not HIV/AIDS. This chapter will look into local knowledge about drought and their preparedness techniques. By analysing the field work with the theory discussed during the literature review, this chapter hopes to gain a deeper understanding of local perceptions to drought preparedness on a grassroots (localized) level which could potentially play a role in government intervention or international programming to reduce drought impact within Lesotho. This chapter will focus on local knowledge and local preparedness strategies while integrating the learning theory.

5.1 Local Knowledge

The local population has lived on the land for many generations and therefore knows the land and the environment. This is particularly useful when they have to plant or work the land; however this knowledge is also useful for international organizations when, interested in preparing for natural disasters, mitigation and adaptation. This thesis follows FAO's definition of local knowledge which states that, "local knowledge is the knowledge that people in a given community have developed over time and continue to develop. It is based on experience, often tested over centuries of use, adapted to the local culture and environment, embedded in the community practices, institutions, relationships, and rituals, held by individual or communities and is dynamic and changing" (2004, p. 1). This knowledge is often times overlooked by these organizations which can have detrimental effects on the population as they do not receive the proper assistance they need. This local knowledge also allows the population to act on their agency. The Basotho in Ha Senekane and Lesotho, in general, are a very resilient population, more often than not acting within their own capacity without governmental or outside interventions. The local knowledge that they have therefore allows them to build on this resilience. Although the population is very resilient, the past drought in 2015-2016, has left many families and communities unable to use their common resilient strategies which they would implement if drought occurs. It resulted in a fourth of the population suffering from hungry (Newspaper headline).

Drought is not something that is new to Lesotho, with the Government recording significant drought emergencies in 1983-84, 1991-93, 1997-98, 2000-01, 2002-04, 2007, 2012, 2015 (Lesotho Multi-Hazard Contingency Plan 2015-2018). Therefore, roughly every four years a drought of a significant degree has impacted the country. With the experience of drought, the population has been able to build up knowledge to counter or mitigate drought to a certain extent. Although the country has seen a number of droughts over the past couple decades, the population are affected to different degrees depending on their resilience, their location (in the highlands, the lowlands), and remittance flows. These different experiences of drought became very evident during interviews. Some people responded with the years of the droughts, which aligned with the national drought determinations, while others did not know about any previous droughts, or did not know the years in which they took place, or only gave small detail like it was the year my grandmother passed away. The people who

were able to give me the years of which the droughts occurred more often than not had experienced a tragedy or lived through an ordeal during that drought which allowed the year as well as the drought to be more influential. One example of this instance happening was with interviewee 17. The 59-year-old father lost his son during the 1984 drought due to hunger. Not only did he lose his son but he also lost their house as it dried up which made the structure fall down (all the houses are adobe, therefore, susceptible to dryness as well as wetness). Others stated that they did not remember the last drought. This could be due to a number of reasons. One of the main reasons which I came across was that people compared last year's drought (2015-2016) to previous ones and through this comparison, the other droughts did not match the scale of devastation that the 2015 drought did. This occurred mainly with the interviewees who were on the lower end of the age scale in the sample group. Another reason could be that they were intimidated by me or that they did not understand the question. Although they did not fully grasp the initial question, further questioning on other topics which alluded to previous droughts brought up past experiences of drought and thus the majority of the people did witness droughts before. The further prodding of the previous droughts furthered the reasoning that previous droughts did not have a significant impact on the interviewees for them to remember the drought. The various droughts that Lesotho has faced have all varied depending on a variety of factors which has also influenced the collective and individual memory of the different droughts. There is no doubt; however, that the drought of 2015-2016 has left an impression on the population of Ha Senekane as well as made them more aware of the dangers of drought and the disastrous impact it has on them.

Some people have also been able to establish their own early warning systems which have been used for generations, not necessarily to warn for drought or possible flooding but to look at forecasted rainfall which impacts their crops. These early warning systems allow locals to prepare in advance for the type of weather they will get. These EWS techniques are used to estimate rainfall and therefore can be used as an early warning system for drought. Although these EWS can be used in other parts of Lesotho, it does not necessarily mean they are due to the change in a number of factors. Therefore people moving to and from the different villages have to adapt their different EWS to fit the environment of their new location. One of the EWS techniques families in Ha Senekane use involves the moon and the different stages that the moon is in throughout the months. One of the interviewees learned how to read the moon from his grandfather who told him that "you should look at the moon, if the horns are facing up then there will be no rain for the month, if they are facing down then there will be rain" (Interview 15). Another natural early warning system that was discussed was about plants and animal behaviour. Interviewee 18 talked about plants that were unable to grow due to the drought which were evident sooner than the official warning signs were given. Interviewee 19 also talked about plants, that if the Aloe plant does not bloom then there will be drought, also if there are no birds around then there will also be drought in the near future. All these early warning signs have been established by the local population who work the land they live on. They also came before the official drought emergency declaration by the government, allowing some of the population to enact preparedness mechanisms.

Ferguson (1994) talks about "a sense of temporal dimension of their lives" (p. 133) in *The Anti-Politics Machine* meaning that families are constantly shifting between class positions thus fluctuating between prosperity and poverty every couple years. It means they all experience the drought differently from even their neighbours but also during the different years. This can be explained through the use of interview 12, a grandmother living with her son, his six children and two wives. The grandmother experienced a drought in the past which left her eating papa with dust as there was a

high scarcity of water. During the current drought, even though she is faced with a hardship, she is able to use the small elderly pension funds that she receives from the government to pay for products from the market rather than not eating. Therefore, when she compares this drought to the other one, she is more resilient to the current drought as she has a buffer which she did not have during the other drought. Fergusons comment about shifting class positions also contributes to the ability of families and communities to develop different preparedness mechanisms as it depends on their financial state at the time leading up to the emergency. Therefore, the preparedness that they are able to do differs per year and depends on what type of emergency they are facing. Basotho culture does not necessarily account for saving money for harder times (Ferguson, 1994, p. 133), therefore leaving many families unable to enact in preparedness mechanisms during times when they are low on income. This leads to some families being about to either build rain water tanks for their houses or stockpile while other families are unable to do any type of preparedness actions because they lack the funds to do so. The financial situation of a household heavily impacts the ability to implement the various preparedness techniques. With the constant fluctuation between the different class levels, the level of preparedness that the household is able to implement is also changing. This not only influences the household level of preparedness but also the communities. In the past more households within the community were more financially stable or secure, meaning that there were always members in the community able to help others as they were at that moment financially stable. However, with the weakening of the Rand and the job cuts in the mines, less Lesotho households have that financial stability and thus households are unable to help the community as they would have done in the past.

Local knowledge plays an important role in allowing locals to increase their agency during emergencies as well as natural disasters. Local knowledge allowed some people to be more prepared for the drought of 2015-2016 while leaving those who did not have this knowledge with more hardship. Although people did have knowledge about the different preparedness mechanisms that they could implement during a drought, the previous poor harvests meant that families as well as communities did not the ability or sufficient resources or buffers to mitigate or prepare for the effects of the drought. Some families were warned of the drought and had learned from school that they had to stockpile food. However the limited funds and the poor harvests of the past year has meant that if families were able to stockpile it was only enough for two to three months while other families were unable to stockpile at all and are thus now facing hunger.

5.2 Building upon Local Knowledge through Learning Theory

The local knowledge of Ha Senekane comes from several places. It is passed down through generations, learned at school or from organizations and learned from neighbours. These are all different ways of learning about drought and preparedness to drought, but it is another step to actually put this knowledge to use. Learning theory places three principles within the context of looking at hazardous situations and emergencies. This section will look at these principles of reinforcement, repetitions, and imitation and develop them further within the context of Ha Senekane and the 2015-2016 droughts.

5.2.1 Reinforcement

The first principle of the learning theory is reinforcement. The principle states the behaviours that are reinforced are those who achieve their desired outcome and thus are more likely to be repeated in the future (Rogers, 1997:745). This principle is mainly directed at the governmental level as well at international organizations. However, it can be analysed with a local perspective as well. In the previous section, local EWS mechanisms were discussed which allude to this principle. The use of

analysing the moon to determine the amount of rainfall is a practise that has been reinforced over the generations because the mechanism is still relevant in predicting the amount of rainfall. Thus, the story about the moon is passed down from grandfather to father to son and implemented as well. This reinforcement, not necessarily from an organization or a person but from the correct outcome allows for this early warning mechanism to still be relevant today³⁴. The EWS techniques have allowed for some farmers (those who have this knowledge as well as believe in this knowledge) to be more prepared for the various climate changes that they have predicted over the course of the months, meaning that in some circumstances the farmers will sow their seedlings, while in others they will not leave their seedlings to be sowed the following agricultural calendar. Reinforcements are also given through the learning of what drought is and what to do about it. Agriculture is an elective in High School that some students can choose to follow. They are taught in school about drought, bringing dust and little rain as well and learning techniques to counter the negative aspects. These practises of making sure that the moisture stays in the ground through the use of manure, which is something the children learn from home as well, and through its reinforcement allows for practises that are used correctly to be reintroduced again and again due to the positive outcome it delivers. This reinforcement also allows for practises to be passed down from generation to generation.

5.2.2 Repetition

Some of the practises which are implemented by the local population of Ha Senekane follow the second principle of the Bayesian learning theory as discussed in *The dynamics of risk perception: How does perceived risk respond to risk events?* which is repetition. When learning a new skill or technique repetition is important in both remembering the skill but also to tweak the technique to fit the situation. The same goes for drought preparedness, through the repetitive nature of drought within Lesotho preparedness techniques can be tried and tested with each passing drought. The local EWS are a good example of repetition and the benefits it has on preparedness in Lesotho. Another example is in water management, although the practise was not maintained in the lead up to the 2015-2016 drought³⁵. Dams were built by the government roughly twenty years ago to help catching rain water and to act as reservoirs that can be used in times of drought. Some people have maintained those reservoirs and therefore benefit from the water than can be collected from there. The maintenance of these reservoirs must be repeated every couple of years otherwise they are unable to hold water. Through the repetition of these maintenance as well as the repeated positive contributions that these water dams have, people can learn that preparing for drought also means that one needs to maintain water sources. Ha Senekane itself had two of these dams as well as several which were dried up, therefore only a small proportion of the population had access to these water sources. In the drive up from the capital to Ha Senekane, the bus passes towns and many fields. There were many dams in place, filled with water which allowed the population to graze their cattle closer to home as well as have a much closer water source. There repetition on the dams was successful but in Ha

³⁴ With the changing environment and the inability to predict the weather changes on a year to year basis will mean that some of the local early warning techniques will become obsolete and unusable; thus, making the local population more reliant on the technical expertise within the meteorological department of the ministry.

³⁵ One of the biggest reasons that the water management systems such as local dams were not maintained is because Lesotho has two big dams which has enough water to provide to the people however, this water is being sold to South Africa and therefore the local population are not allowed to benefit from these large water reserves.

Senekane it was not³⁶. The repetitive nature of the building or maintaining of the dams by the government and the local people³⁷ was not enacted by the government in 2015-2016 due to financial constraints. It ultimately had severe negative consequences on a large proportion of the population, as the drought was one of the worst in terms of water shortages, meaning that clinics, hospitals, and schools were unable to continue to provide their services due to water shortages.

The learning benefit of the principle of repetition is that if repeated enough, it becomes a habit and people start implementing the practise without acknowledging or realizing the reasoning behind it. One interviewee made a keyhole garden without realizing the benefits it provides in drought conditions. She simply just made one because her grandparents had one and she had one in her previous house (Interview 10). Another preparedness technique which has ultimately become ingrained within their culture is the keeping of livestock. Livestock allow for people to have access to a market if they have no money as well as a source of food. An example is that some people in the village have chickens. Chicken is a potential food source because you can slaughter and consume it. Doing so entails short-term thinking, but it is also possible to keep the poultry and eat the eggs which are good sources of protein as well as satiating. The keeping of cattle and sheep are both of cultural importance as they are used for *lobola*, slaughtering during ceremonies as well as used as a form of capital which can be cashed when needed. One of the preparedness techniques which is used throughout Lesotho is the selling of cattle before the full impact of the drought has hit, so that the family has some income to buy food products. The selling of livestock was brought up during the interviews however it was a very touchy subject purely because of the cultural significance as well as the monetary value of the livestock. However, some people did indeed sell their livestock while others were forced to on a later date³⁸. The repetitive nature of maintaining livestock, though, added to the ability of some families to bridge the financial gap that was brought on by three consecutive poor harvests, while also providing food sources to the families who were not able to purchase product in shops.

5.2.3 Imitation

People learn a lot through imitation; this is how children learn their mannerisms as well as speech. When it comes to drought preparedness, it is something that also happens. Although imitation might occur in the following drought, there are some instances that imitation occurs within the same preparedness time to that drought. Imitation is the third principle of Bayesian Learning theory which will be looked at in terms of local preparedness to drought. One of the people that were interviewed learned all his farming techniques from looking and imitating his father's practises as well as practises done by his friends. He followed the same technique when it came to preparing for the drought. He had witnessed three previous droughts, a comparable drought to the 2015-2016 drought occurred in the 1980's but the previous one was worse than the one in the 1980's. He observed and then implemented various techniques which he saw as effective. He was the only farmer in Ha Senekane who had his own dam within his property (due to the extent of the water shortages the dam had dried up in the beginning of January). The dam allowed him to irrigate some of his fields for a relative short period. He had learned the techniques through imitating the Ministry of Agriculture who built dams

³⁶ This could be due to a number of reasons which could include the financial constraints or many workers being away from home during that time.

³⁷ The dams were built with government expertise but locals helped in the creation and were taught how to maintain the dams (Interview 2).

³⁸ This however was too late because the value of the cattle had significantly dropped as the cattle were either malnourished or dehydrated and therefore not worth as much on the market.

around the Berea Plateau twenty years ago as well as other villages who had maintained their dams. Through imitation he could profit for some time of water that was stored. He had several plans which he would like to implement ahead of the next drought, such as irrigation that would come from his dam to provide a water source to his fields and not only his plots as well as stockpile food products for his family and livestock. He was unsuccessful in doing so in the past year due to financial constraints. Though he learned significantly from looking at what other people were doing as well as asking questions to them. This however, is not something that was common throughout Ha Senekane.

Another example is the increase of planting trees and shrubbery within home gardens. One of the farm hand that works at the Paballong Centre's farm learned from an agricultural expert several techniques to help increase yields within the Paballong farm in order to make more profits. One of the techniques was to plant more trees and flowers around the garden to create shade for the crops. He implemented these techniques within the Paballong farm and they were successful. He imitated the farm at Paballong in his own garden. Ha Senekane as well as the rest of Lesotho is very bare. There are not a lot of trees that are growing or bushes, which increases soil erosion as well as the dust storms in August. By imitating Paballongs farm, he was able to have a successful harvest this year with an abundance of crops³⁹. The trees provided the shade to avoid evapotranspiration and conserving soil moisture. He, however, along with other people did not pass this knowledge on to other people who could have benefitted from these techniques. When I asked one man if he had told anyone else how to make keyhole gardens he simply replied, "[I] was unaware that it might help others with this information" (Interview 11). Imitation allows the learner to observe and possibly tweak the technique in order to implement it. It also allows the imitator to have significantly less risk if it fails as they have seen the benefits of it. This is something that is especially important when it comes to costly techniques, as he carries the risk if the techniques fails to deliver, and if another person imitates that technique they already know that the risk is worth it because the outcome outweighs the risk. Imitation is fundamental when it comes to learning something. It allows for the person to implement the technique with more confidence and success than the previous person.

5.2.4 Intertwining of the Three Principles within Drought Preparedness

Something that is entwined within the various different principles of the learning theory is the transfer of knowledge from father to son and the spreading of that knowledge to other people. In Ha Senekane, farming techniques are both learned in school as well as passed down from generation to generation. The same happens within the realm of disaster preparedness and response. Preparedness techniques are both learned and perfected through reinforcement, repetition and imitation. They are reinforced through the stories told of their use in the past, they are repeated by the different generations that follow and they are imitated by neighbours who see these practises being used. Although there can be three different principles within the learning theory, they are all entangled and are more valuable when put together. One of the big success stories within Ha Senekane as well as other parts of Lesotho is the introduction of the keyhole gardens. These gardens allow for families to maintain some crop growth during drought periods. This means that families were still able to grow rape, cabbage, beans within these small familiar plots when water supply was short. Although these vegetables are not enough to sustain a family of three to seven people in the long term, it allowed for families to cut significant costs while shopping for produce, not increase their financial strain because they would have to purchase these vegetables at the market, as well as feed their families and maintain their intake of correct nutrients to a certain extent. The different principles would be in cohesion with

³⁹ This is only regarding his home garden not his fields.

each other as well as strengthen each other as it allows for learning to be ingrained into the habits of the population as well as tweaked it the time calls for it. The climate is changing, and people are noticing, which means that some of their practices will become irrelevant or not productive and therefore learning different techniques from both international organizations, the government, and even from their neighbours is going to be crucial in the future.

5.2.5 Shortcomings of the Population to Implement Preparedness Techniques

All these different principles of the learning theory in principle should work, however some do not purely because people are not aware that a drought is impending or they simply forgot how bad the previous droughts were and therefore are not able to compare the events that happened last year and this year with previous droughts. People are also unable to implement preparedness techniques if they are unaware that a drought will occur in the immediate future. Although for the 2015-2016 Drought some people were warned about the drought, others were not and some ignored the early warnings given by the government through the media (radio and newspaper) or through SMS. This meant that people were ill-equipped when it came to the previous drought. During the interviews, it became evident that some people also forgot how bad previous droughts were or what they had to go through during those droughts in terms of rationing or spending money on food products. It could also be that they had a larger buffer which was not present during the drought of 2015-2016⁴⁰. The absence of the buffer during last year's drought meant that families were much more vulnerable to the negative consequences of the drought. It also meant that their previous preparedness techniques were not suitable for the drought that they faced.

Although the region has been negatively affected by the droughts every couple of years, many of the preparedness techniques are not implemented in time or at all. The timeliness of the implementation of drought preparedness was also crucial. It meant the difference of having three months' worth of stockpiled food compared to one month. Although out of my 22 interviews, only one person had stockpiled their food, they had done it too late which resulted in them having enough rations for three months instead of the recommended six months. This meant that they would have to purchase more produce when their stockpile had finished. The purchasing of food is another technique which is used both in preparations of drought (canned produce) as well as during the drought; it increases the financial burden of the family significantly. Households in Ha Senekane are already financially vulnerable as many of the households are living below the poverty line. Any increase of their household baskets places an extra burden on the family, which results in malnutrition and hunger. The 2015-2016 Drought caused many households to go hungry because they are unable to purchase produce.

The various principles of the learning theory help to explain why some techniques such as keyhole garden are repeated within the community and generations while others are scrapped and not used anymore. The building of dams for example in the 2015-2016 drought was not done, simply because no rain fell for the better part of a year. The theory gives agency to the people as they are in charge of implementing and sustaining these practices for their benefit. Especially in Lesotho, the population is very self-reliant because the government does not have the funds or the global influence to receive the needed funds to provide the necessary tools and trainings to their population. Therefore, it is crucial for the population to reflect and reinforce past practices, repeat them if they have had a

⁴⁰ The buffer used to be past good harvests which was not present in 2015-2016 due to consecutive poor harvests as well as buffers such as the remittances from the miners in South Africa or domestic workers. This buffer has become significantly lower due to mine closures within South Africa.

successful outcome and imitate other practises. This will allow for the population to maintain their agency as well as finding different preparedness techniques that are beneficial for them.

5.3 Conclusion

Local knowledge is often lost within preparedness or response plans of government and international organizations. Lesotho has been one of the countries which had to rely on their own resilience in order to overcome many disasters and emergency situations due to its relative small geographical position as well as importance in the world. Although this is sometimes seen as a negative, it allowed for the population to flourish in different preparedness techniques which allow the population to be almost self-reliant. This is also something that will play a bigger role in the future as the country is expected to increasingly witness natural disasters with less support from the international community (Interview 20). It is therefore important that the Lesotho population can increase their preparedness mechanisms in order to reduce loss of life or infrastructure.

The locals have established early warning systems that are very personalized to Ha Senekane and is not necessarily able to be reproduced in other parts of Lesotho due to the environmental factors. This knowledge has allowed for them to initiate preparedness mechanisms although many of these practises are already ingrained within their everyday lives. The building of keyhole gardens was not done ahead of the 2015-2016 drought because people noticed that there would be a drought but they were built several year prior to that with the intention to help reduce hunger during periods of drought. There are several different ways the locals implement their preparedness techniques as well as learn about them. It is either passed down to them by their family members, their neighbours, school or very seldom by government or international organizations. This shows the importance that the family network still plays in rural Lesotho. It also allows organizations to see where there is a gap within their trainings. Although locals have many different preparedness techniques (some even they are unaware of being beneficial for drought mitigation), there are several constraints that have led to increased vulnerability in the drought of 2015-2016. The population of Ha Senekane had to deal with the negative consequences of the drought and fully acknowledge the need for people to come and help them developing better preparedness techniques in order to be better prepared for the next drought.

Chapter 6: Risk and Preparedness to Drought

The perception of risk varies per individual, household and village. It depends on a large variety of different factors that all play a role in the assessing of risk. This can differ between families within the same village. Ha Senekane is no different. Risk perception is both a personal and collective concept that plays a vital role in preparedness to emergencies. Regarding slow-onset emergencies, due to the frequency of droughts, households and the community are able to prepare and implement the necessary measures. The perceived risk of drought and the influence that the drought would have on Ha Senekane was significantly low in the eyes of some of my interviewees. No one, other than those working within the international sphere understood the scale and impact the 2015-2016 drought would have on individuals and on all aspects of their lives.

Risk is assessed through different frames and thus by understanding the local cultures and traditions, one is able to gain and assess their risk perception. This allows for a more tailored of thinking approach to future emergencies especially in relaying information and preparedness measures.

This chapter focuses on applying the two frameworks of risk discussed within Chapter 3 (section 3.1.5) to the research uncovered during fieldwork in Ha Senekane. These frameworks are: the model of resilience to hazard effects discussed by Paton & Johnston (2001) and investigating the four context levels of risk perception outlined by Renn (2008) as cited in Wachinger & Renn (2010). The chapter will investigate the local risk perception to the 2015-2016 drought which has had significant effects on the population in terms of hunger and water accessibility.

6.1 Model of Resilience to Hazard Effects

People respond to risk in different manners. These are constantly evolving and progressing depending on the severity and type of emergency or hazard. It means that people have different ways of assessing of how much an event is going to impact them before the event happens.

“Rural communities in Lesotho are constantly at risk of highly frequent small scale extreme weather occurrences which result in destruction of houses, poverty and the environment. The cumulative effect of these events comprises of loss of livelihoods, and erosion of economic advancement or gains of the affected households, resulting in an increase in poverty levels which in turn renders the affected population highly vulnerable to shocks” (Ramoeletsi, 2015, p. 2).

As showcased within Ramoeletsi’s quote, Lesotho is no stranger to drought as it occurs on a cyclical basis; however, the extent of the drought and its impact is not constant. In 2015, the amount of rainwater as well as groundwater was a cause for major concern as it was unprecedentedly low, i.e. a water scarcity of this extent had not been witnessed in Lesotho before.

Bishop et al. (2000) and Millar et al. (1999) as cited in Paton & Johnston stated that “risk perception, and support for collective mitigation initiatives was driven less by hazard characteristics and more by their current implication for their livelihoods” (2001, p. 271). This alludes to the fact that issues such as financial status, social class and health factor are higher priorities for families than the hazard characteristics when looking at risk. To further Paton & Johnston’s statement, in Ha Senekane when people were asked about why some people planted while others did not in the previous agricultural season, the response was always different. There were some families who took the ‘risk’ of planting while there was extremely limited rainwater available. One family that planted, stated that “[I] took a risk because [I] knew that some of them [the plants] under the cover of god. Rain comes from God, so [I] just took the risk” (Interview 3). Although he planted, he did have far more favourable

resources than other villagers to his availability because he still had cash flows from the South African mines⁴¹. In addition, his home garden is significantly larger than others, which allowed him to grow some maize on his plot (where his harvest was successful, his fields however were not) and his plots have access to the taps that run along the street⁴². By having a more favourable situation, this family was able to take the risk. He went further to say that “[I] choose because if [I] fail[ed] [my] harvests [my] animals would get food” (Interview 3). The risk of planting outweighed the risk of not plant as if he did not plant then “there would [be] a lot of hunger” (Interview 3). The latter is the case for many families who are in a similar position as this family, however many were not in a position to purchase seedlings or plant their seeds as they had exhausted all their financial means and the risk was too high for them. People in Ha Senekane heavily on their harvests as both an income generator as well as food for household consumption. This means that families were not able to get a salary from their crops or have crops for family consumption. Although this would not have had much impact on the community if this occurred in a ‘normal’ year. It did, significantly, impact the community in 2015-2016 as substantial loss of production during the agricultural calendar occurred on the back of previous poor harvests and a regional maize shortage which increases the price of the family household basket.

Throughout fieldwork, it was evident that people were suffering from the drought, however many had not anticipated the devastating impact that this drought would have. Due to this, many families interviewed did not actively participate in preparedness measures in the months leading up to the drought. This is in line with the model of resilience to hazard efforts (see 3.1.5). When looking at this model, the hazard effect was considered low to the population due to people ignoring the warning signs or people never receiving them. The vulnerability level was high but with the hazard level being perceived by the community as low, the community as well as families failed to enact any preparedness or mitigation mechanisms. Unlike what the model states⁴³ most community members would not have been able to enact these preparedness measures due to the precarious situation the community was already in. Preparedness in this case was not enacted by the community in general,



Picture 2: Local covered keyhole garden in Ha Senekane

with some outliers, therefore with a low risk of drought opted more for responding to the emergency rather than preparing for it. The community also did not have the financial means to prepare as they were recovering from consecutive poor harvests, which this drought further devastated. The people all looked towards the government and international organizations for support during the 2015-2016 drought, however they received little to no assistance from them and therefore had to look for alternative means which were without risk.

⁴¹ Interviewee 3 was one of the only interviewee’s that still received a miner’s pension.

⁴² The taps were turned on roughly in April. This meant that water was flowing although not constantly and people had access to it. The water was mostly used by the local population for drinking, cooking and laundry. This meant that families did not have to walk down the plateau to riverbeds and streams to collect water as well as not sharing open water sources which are shared with the livestock. The water in the taps also reduced the risk of contracting waterborne diseases from open water sources from the population as well as livestock.

⁴³ The model states that in cases where the perceived community impact is high more preparedness and psychological resilience would take place.

The model, however, does not mention preparedness measures such as keyhole gardens and plots which are covered to retain soil moisture as seen around Ha Senekane. These preparedness measures were already in place before the announcement of the drought. It is unknown if the families who owned the covered plots did so from previous knowledge or through the implementation by an international organization⁴⁴. Nonetheless, measures were enacted by families in preparation for drier conditions, but not necessarily for a drought to the calibre of the last one. It could be seen as families and the community coming to realize that the current planting and harvesting methods are not suitable for the changing environment which is happening in Lesotho. People do acknowledge that the climate is changing which will have devastating effects on the population if they continue farming the way that is currently being done. These preparedness measures could then be put in place for a future emergency which is unknown at the time. Thus, these measures are not put in place as an immediate preparedness measure but they are part of the development program with or without recognition of that. This applies to families who were part of the training given on keyhole gardens from either Paballong Centre or from World Vision. The other measure could simply be knowledge passed down from generations as they were deemed beneficial. Nonetheless these measures have allowed families in Ha Senekane and other parts of Lesotho to supplement their diet with nutrients and save money on store bought goods. Although this has not alleviated the devastating effects of the drought, it allowed some to bridge the gap between going hungry and malnourishment.

The model of resilience to hazard effect has allowed for, to a certain extent, an insight to why the people of Ha Senekane have not prepared for the drought. For one, it indicated that due to the relatively low perceived impact people did not enact in preparing for the drought. However, many people were unaware of the drought and of the extent of its devastation, until it was too late to implement preparedness measures. Thus, being an indication for a need for more early warning as well as better information management on the governmental and district level. Compared to previous droughts, the local population was already suffering due to consecutive poor harvests and those who did receive adequate early warning and preparedness instructions from the government were unable to do anything with that knowledge as they were financially depleted and unable to use previous coping methods of relying on neighbours as the community suffered as a whole. Therefore, if one looks at the model of resilience to hazard effect, if there was a high perceived impact on the community, the different coping methods such as self-efficacy and sense of community could not be played out due to the “current implications of their livelihoods” (Paton & Johnston, 2001, p. 271).

6.2 Levels of Risk Perception

There are different levels of reasoning levels for why people perceive risk a certain way. “Perceptions may differ depending on the type of risk, the risk context, the personality of the individual, and the social context” (Wachinger & Renn, 2010, p. 8) therefore influence a person’s or communities’ reaction to the risk. Renn (2008) describes in *Risk Perception and Natural Hazards* (2010) four levels of risk perception from the perspective of personal manifestations and collective influences. These levels are: heuristics of information processing, cognitive-affective factors, social-political institutions, and cultural background. These different levels will be further explored in this subsection, linking the theory with the experiences in Ha Senekane.

⁴⁴ This is unlikely because the only international organizations which have been present in Ha Senekane for the past years have been WFP, World Vision and other Christian organizations.

6.2.1 Heuristics of Information Processing

People have different ways of interpreting information or risk, both from a collective as well as personal standpoint. When looking at the person's heuristics of information processing one needs to understand the common reasoning that the people put in place. The same applies to the collective heuristics where it entails looking at common sense of the collective village.

Personal common sense is relatively hard to uncover as people are complex. The complexity of the person allows for different thinking to take place and different common sense to take place depending on their background, their experiences and socio-economic situation at the time. As people are not all the same, they have different experiences, backgrounds and socio-economic situations; each person has a different understanding of common sense. However, due to the climactic situation, many are on the similar playing fields causing for some in regards to their risk perception. Most people who were interviewed stated that they did not plant this season because there was no rain. The lack of rain water, which is the main source of water for their fields, meant that the money and time spent on purchasing seeds and planting would be wasted because there could not be a good harvest. Therefore, for people it was seen as a big risk, one that people did not take to plant during the 2015-2016 planting season. There were some people that choose to take that risk, as from their standpoint, there was nothing to lose. For one farmer (Interview 3), the risk to plant was simple. It was not a lose-lose situation for him as if the harvest was successful, then he and his family would have food, but if it failed then his livestock would have food. Therefore, it made sense to plant and see what happens. Personal reasoning allowed some people to make a negative situation positive while others opted not to do anything as the risks were too high and the money invested could be used instead to purchase goods at the market rather than on risking the money on a more likely failed harvest in their opinion.

The community plays a strong role in Lesotho, and Ha Senekane is no exception. People talk about the weather, the agricultural forecasts and whether to plant. Although it is ultimately up to the individual to plant, the community is involved throughout the agricultural calendar to provide for extra labour or tools. Therefore, if the majority of the people in the community refuse to plant, others usually followed suit. This is the case regardless of the information they know, they would follow that of the community.

This level of risk perception is more focused on the individual and personal thought process rather than the community. The community does have a sphere of influence regarding the common sense of the individual but ultimately the individual is the one taking the risk.

6.2.2 Cognitive-Affected Factors

Cognitive factors such as personal beliefs and emotional affections play a role in personal manifestations of risk. In the collective influences, reference knowledge and stigmata play a role in the collective influences.

It is up to the individual to determine the risks they will take. With the drought of 2015-2016, many individuals chose not to plant for a spectrum of different reasons. The issue of God came up within interviews a couple of times to explain why there was no rain. As a very Christian country⁴⁵, God plays an important part in the lives of individuals (Religious freedom in the world report 2014). Churches have large spans of influence, which impact individuals. Several interviewees expressed the notion that rain comes from God and that God is the only one that makes it rain. This is something that influences the risk that people take. Interview 3 discussed that God was the one that makes rain and

⁴⁵ 91.7% of the population is Christian (Catholic, Protestant, other) and the other 8.3% are ethnoreligionist and other (Religious freedom in the world report 2014).

if it did not rain then God was angry. This is a factor in why people did not take the risk in planting. During interview 18, mention of a Christian organization was brought up. This Christian organization has come to several households within Ha Senekane to spread the word of the Bible. They reinforced that if people would pray then the rains would come. This enforces the strong personal beliefs of the people; that because people were not pleasing God with their actions, God was punishing them by withholding rainwater. Another thing that impacts the emotional affections is the idea that if they spend the little money families have on a failed harvest, they would have next to no money to spend on purchasing items from the market. This fear was present throughout the interviews; that people were constantly worried about where they would be getting their next meal from. The socio-economic situation people were in meant that they had to make a choice, either plant and risk losing it all and ending up with nothing or using the money instead to try to bridge the gap until next harvest. Most people choose the latter because they could survive going hungry but they could not survive starving. The notion of personal beliefs which is more affected by more emotion and cognitive realization has stronger influences about risk perception than only looking at common sense such as in level one. It shows more attention to a larger picture is needed but also adds the element of emotion to the thought process and outsider's influences such as this Christian organization which reinforce their beliefs.

The collective relies heavily on previous knowledge in assessing whether or not to engage with the risk. As a collective, when placing all my interviews together, the risk of the drought being as devastating as it was, was unprecedented. Many people were not able to recognize signs from previous droughts which would have helped them prepare or respond to the drought of 2015-2016. This meant that the risks they would be taking would be done with little to no knowledge about the devastations of previous droughts. Many people went into the drought without realizing the dramatic effect that it would have on them. Even though this was the case, the collective memory remembered that people lost their lives in previous droughts and witnessed the risk of medical emergencies such as waterborne diseases and TB. However, those who remembered were in the minority, and thus overlooked. Over time people failed to remember the hardships of the droughts, causing it to fade from the collective memory. The previous droughts, which acted as stepping stones for the impact of the 2015-2016 droughts, were relatively small and people were in different socio-economic standings at the time. This meant that they had different resources or coping methods which they could employ to counter the negatives of the drought. They looked at the risk much differently than during the 2015-2016 drought. The collective decision to not plant last year was taken because the collective realized that they were entering the drought in a more precarious situation than previous droughts. With that knowledge, Ha Senekane generally did not see much planting, other than a few households who decided to take the risk. Instead, other coping methods sought out.

The second level looks more at knowledge and emotional factors which play a role in the risk-taking decision that both the individual takes or the collective. As previously mentioned, factors such as God, personal beliefs, and past experiences are actively analysed before a communal decision is made.

6.2.3 Social-Political Institutions

The social-political institutions play a large role in influencing people's risk perceptions. This happens in personal manifestations and collective influences. Within personal manifestations personal values, interests, and socio-economic status as well as the media play a big role in the development of risk perception. Although the collective within level 3 (level 3: social-political institutions of the Four

Levels of Risk Perception) can extend outside the immediate realm of Ha Senekane and the Berea Plateau, there are certain influences that do extend to the collective within Ha Senekane. The social-political institutions play a bigger role through influencing the people on taking certain risks or not.

On an individual level, social-political institutions such as the media and personal values can push people to perceive certain risks more than others. Drought can be seen as a big risk to farmers but a small risk to weavers. Therefore, people will play with the risk differently. To sustain plant production and get a good harvest, farmers need to maintain a certain level of rainwater. When they receive an early warning indicating that there will be a drought around August, September, they are more likely to listen to the warning than if they receive the drought announcement in late December because it is too late then. The earlier the warnings are given and the more reliable the source of information is the better for the people who will make the ultimate decision. Media has a strong influence especially when it comes to rural communities. Many rural communities, like Ha Senekane, rely on information from radios or through SMSs to make certain decisions. The lack of internet as well as electricity in these regions means that the media has to be able to provide reliable and locally based information, what might work for one region does not mean it will work for another. People do not listen to the radio all day; therefore timing is also important but also the spread of the news. During the interviews, there were several people who either ignored the SMSs they received or if they did receive vital information about preparedness techniques they failed to forward the messages to other neighbours or members of the community, as was the case for interviewee 11. People used the information that they received from the media as well as personal values in order to help make the decision to make an educated decision in regard to the risk.

The media plays a powerful role within early warning as well as during times of emergencies. This is not different from the use of the media to encourage risk taking or not. During the 2015-2016 drought, much of the media was either too late with their messaging on preparedness or it was ignored. This meant that their sphere of influence was significantly deterred purely because it was simply not there or the message failed to be delivered. Rural communities suffer significantly from lack of electricity and cell phone reception which can have negative consequences on the transfer of information via SMS. Also, many people tend to ignore messages sent by phone companies, because they are mostly advertisements. In order to be successful, new systems need to be created when delivering emergency information. The radio is used by most families in the community and adds tremendously to relaying information to rural areas. Radio was also stated as the most used source of information about the drought however, much of the information was relayed too late. The socio-economic standing of families also did not allow for certain advertised preparedness measures to be enacted by the community or families because there was simply not feasible. The government also plays an important role in the collective decisions to take risks. The government, during the time of the drought, was not present in Ha Senekane. Only one interviewee stated that they came around to register the people but never returned. In the past, the government was more visible in the rural communities, helping with the creation of dams and other preparedness measures. This can be depicted as either that the government did not see the drought as a large risk and therefore did not invest money or resources in trying to counter it or it suggests that the government does not have the resources to enact these measures. The former aligns with the view of the collective in Ha Senekane, who states that the current government is very corrupt and does not care about the people but only wealth (Interview 19). As it was not evident from government behaviour that they feared the drought, people were not actively encouraged to take drastic measure to prepare for the drought either.

Social-political institutions are seen as leaders in risk taking and people follow. In the case of the 2015-2016 drought, the lack of social-political institutional involvement with the rural community in Ha Senekane subsequently left the community to view the risks as too big. This led to people having to rely on their coping methods in order to make up for the lack of harvest. Media plays a huge role in the spread of information, however in this case people did not plant because the information was not received or it was too late. Ultimately, people still choose to withhold information about preparedness measures that were relayed to them via the media because some, simply, did not know or understand the benefits that this information could have on others. Some households were, thus, had more coping methods within their arsenal or were able to be better prepared.

6.2.4 Cultural Background

Lesotho culture is constantly evolving. In recent years, the change is rapid, however certain aspects are reluctant to this change. The youth is more open to these changes while others are not keen in embracing these changes; this is especially brought to light when regarding the risk perception toward the 2015-2016 drought. Culture both manifests personally as well as through collective influences.

Personal identity and sense of meaning is used to explain the reasoning within level four of Renn's Four Levels of Risk Perception (2008) for personal manifestations for risk perception. The notion of external locus of control was another aspect brought forth from my fieldwork. External locus of control stems from Rotter's social learning theory which looks at the role of internality and externality in predicting human behaviour" (Angel, Angel, & Hill, 2009, as cited in Gwandure & Mayekiso, 2012, p. 1599). Individuals or groups who believe that they can have an influence on events that take place can be seen as people who have internal locus of control. While "individuals with an external locus of control believe in chance, luck, and powerful others; and they believe that events affecting them are unpredictable and beyond their control" (Chung, Chao, Chou & Lee, 2009; Rotter 1966; Rotter, Chance & Phares, 1972, as cited in Gwandure & Mayekiso, 2012, p. 1599). The concept of external locus of control thus explores the notion that people are not agents within their lives but that things happen because God willed it or because of fate. It allows people to take a more passive stance towards their situation. This was brought forth within Interview 18 where a Christian organization came to the respondent and his family, telling them that they needed to read the Bible and pray if they wanted rain. This type of instructions, although coming from good intentions, are harmful to the people as it makes them less actively involved in their own lives. It makes them believe that they are not in control and have no control over their lives. During the drought, many people therefore thought that the drought came because they did something bad as a sort of penance. "The construct is viewed as a generalized expectancy which operates across situations. That is, externals are viewed as having a negative expectancy for success to come from attempts at personal control, whereas internals have a more positive expectancy" (Bionado & MacDonald, 1971, p. 407). This also plays a role in the risk perception because they then feel they should not take the risk because if it was meant to be then God or fate would make clear signs for them to take the risk. It has resulted in some that could have planted even a small amount, to not do so as they believed that they did not deserve it. Interviewee 5 stated that "I thank God, I am expecting a good harvest". He was one of the only two people who planted because he had early warning and also only planted certain vegetables which required less water than maize. The thanking of god instead of himself shows that he believes that what he does not determine his outcome in life but that fate and God have already done so. This is one of the cultural backgrounds which has had a severe impact on the lives of the people, making them less agents in their own lives

but players within a larger chess game. Another large cultural background which plays a role in risk-taking is Ubuntu. This practise has been eroded in Ha Senekane, during 2015-2016, purely because most are in similar situations in regards to their socio-economic standing. Most families are unable to sustain their own way of life let alone produce enough or purchase food. This translates to the reality that some go to bed hungry. Whereas in the past families would help, this past year has seen little or no help. In the past, people were able to take much larger risks because they had family or the community to support them through the practise of Ubuntu. But since it has to a certain extent eroded to a certain extent, this fall back is not there implying that many families are simply not taking those risks anymore.

There are collective institutions that play a role within the collective influences of risk taking. These are more political, social, economic and cultural. Many of the collective institutions that would under normal emergency situations be active, were not during the 2015-2016 drought in Ha Senekane. As stated in section 6.2.3, the more active the government is in a region, the more people are able to take risks as they have a fall back if things go wrong. The government was almost invisible to the people of Ha Senekane, only making small stops in the village. This, along with the lack of social security in Lesotho has led to many people not taking the risk because they simply did not have anything to fall back on if it went downhill. Governmental body presence allows for confidence in the people, and it did not occur within the past two years. Also, the issue of corruption within the government further worsened the positive influence of institutions. "The government does not mind about others, they only care about their pockets" (Interview 19). This strong statement shows that even if the country was facing devastating effects of the drought, there was not much interest that they had towards their people. Although the government did release the state of emergency ahead of other countries in Southern Africa, its actions on the ground, in rural Lesotho was very limited since the beginning of the drought until the conclusion of the field research.

The cultural background of the people and the country play a small part of risk perception. The main issue that is brought up was the ability to rely on someone else when things do not go as planned. With the 2015-2016 drought, this was not the case; many people did not have access to previous coping strategies, something they were aware of before the onset of drought. Therefore, many families and communities decided against the risk of planting. Notions of Ubuntu have eroded over time due to the consecutive poor harvests and other poor socio-economic factors that have placed increasing burdens on the already low incomes families in Ha Senekane have.

6.3 Risk Paradox

The risk paradox refers to the notion that people do not necessarily enact preparedness measures when there is a perceived high risk. This paradox is explained by Wachinger et. al., 2013 as cited in Brofman et. al., 2015 in three reasons. These reasons start by stating that the individuals understand the risk while they: 1) choose to accept the benefits, 2) transfer the responsibility to a third person and, 3) do not have the resources to change the situation. These three reasons will be considered in further detail when gaining an understanding to why even with a relative high risk perception for some people in certain areas, people did not enact preparedness measures.

The first reason that Wachinger et. al., 2013 stated is that individuals choose to accept the benefits of the situation while understanding the risks that are involved (Brofman et. al., 2015). This is illustrated by the type of farming employed in. The majority of the household plots have a large variety of different vegetables that are being grown, for household consumption. However, the clear majority of the larger plots are all being used to grow maize. White maize is a staple food within Southern

African households, Lesotho is not different. Not many parts of the world produce white maize and it is cheaper for people in Lesotho to grow it themselves rather than importing it. Maize, however requires substantial amounts of water to grow. The farmers in Ha Senekane acknowledge the change in climate which brings with it reduced levels of rainfall and increasing temperatures. This means that crops that are more reliant on water as well as temperate climates are becoming riskier for farmers to grow. However, farmers in the region are not willing or uncomfortable to grow other produce. Therefore, they understand that there is increasingly more risk involved with the planting and harvesting of maize, yet they would rather continue growing it then change to a more drought-resistant crop. It can therefore be seen that the benefits in this case outweigh the risks. The benefits are that farmers are self-reliant on food produce if the maize harvest is successful and can sell their surplus for income while the risks are seen in the past couple harvests where there was either no surplus or no harvest. This explains why some people choose to deal with the risk rather than implement preparedness measures.

The second reason is that there is a transfer of responsibility (Brofman et. al., 2015). This is something that cannot explicitly be seen in my fieldwork but the notion of external locus of control does play a role in that. That an external force controls the situation and that there is nothing that the individual can do to change it, it is thus beyond their realm of control. Therefore, they do not enact preparedness measures for the risk.

Lastly, the third reason is because people do not have the necessary resources to change the current position they are in (Brofman et. al., 2015). This is the most plausible explanation for why some people did not enact the necessary preparedness measures. People simply did not have the resources to prepare. In chapter 3.3.1, this last reasoning is explained through the example of unprotected watering holes which open people up to the contraction of water borne diseases. This occurred in Ha Senekane. A teacher at the local high school indicated that many children and parents were contracting more diseases such as fever and diarrhoea because they were drinking from open water sources (Interview 7). These open water sources were shared with other villages upstream as well as livestock. This meant that it was a large breeding ground for waterborne diseases. The only reason why people took the risk of drinking from these sources was because during several months there was no other source of water available. The government only released water through the taps on the side of the road around April, meaning that for several months people had limited water supply as all the local wells were dried up. People did not have the resources to buy bottled water because they use the little income to purchase food. The risk of contracting a disease was taken even though there was a high risk purely because there was no other option for people during the drought. Another example of not having the necessary resources is when it comes to coping mechanisms. Some women in Ha Senekane have too little income and therefore are more vulnerable to disasters. Especially when their normal coping mechanisms become out of their reach due to insubstantial finances. As a coping mechanism, some women slept with elderly men in order to get some food or money. With the extreme high rates of HIV/AIDS in the country, the women had a big chance of contracting the disease as no adequate form of protection was usually used. This was because women lost the right to ask their partner to use a condom or to use a female condom during these exchanges as the power lay with the man⁴⁶. Usually women engaged in these practices understood the risk, but most simply had no choice as it meant that that no one in the family would eat. This is something that the women accept but are not happy about.

⁴⁶ If he did not want to use a condom and the women did, then all he had to do was saying he was not going to give her the food or money because she did not do what he wanted. The woman in this situation is powerless at that point.

Due to the lack of resources that they have, they are unable to change the current situation and therefore must engage in this type of practices as a form of survival.

The risk paradox can be used in Ha Senekane to describe various settings where people engage in risky behaviours even though they know that it holds a high risk. The risk for them is not outweighed by either the benefits, the transfer of the risk, or by their inability to change the situation due to resources. Although the risks can have devastating effects, during the drought of 2015-2016 many people choose to take the risk as it was the only way for them to survive. For many people in Ha Senekane, who already suffer from low levels of poverty, it was their only chance of survival.

6.4 Conclusion

Risk is perceived by different people in various ways, there are collective and individual risk perceptions. Those who are able to see risk and perceive it either as high or low, are able to react in a manner that fits their socio-economic status and the situation at hand. Through looking at the model of resilience to hazard affects, people in Ha Senekane can be described as not participating in preparedness or mitigation because there was a low perception of risk. Although the model does not describe how this perception is made, section 6.1 examples the lack of information as well as lack of resources as the main source of the inability to perform preparedness measures, this both in the case of low perception as well as high perception.

This chapter analysed risk perception through the use of the four level of risk perception by Renn (2008) as cited in Wachinger & Renn (2010). These four levels were used to explain both personal manifestations and collective influences that play roles within the perception of risk for an individual. All these levels were looked at through examples from the field. Although the four levels go into depth in explaining why people act the way they do when perceiving risk; the notion of a risk paradox is also brought to light. Risk paradox has gone further to explain why even if a risk is perceived; people do not enact preparedness or mitigation mechanisms in order to prevent loss of life or infrastructure. Risk is perceived at an individual and community level. In Ha Senekane, where the chief and local government have very small spheres of influence, it was up to individual households to determine the risk and to also determine how they were going to react to the risk. Some households are more successful while the majority of the households decided that the risk was not worth the money or time and therefore decided against acting. Thus, in order to survive, other risks were taken which could have more long lasting consequences.

Chapter 7: International Organizations

International organizations and the government play an important role in the preparedness, the response, and the recovery phase of emergencies. The government, along with international and national organizations create a nexus for aid delivery and development in the country. These work both in tandem with each other and independently. Each have different points of entry into emergency situations, with some entering the arena earlier than others. This is illustrated in the lead up to the 2015-2016 drought in Southern Africa and in particular Lesotho. This chapter will provide insight into the various roles that the organizations and government have, specifically analysing their role in the lead up to the past drought. To do so, the chapter will delve deeper into their roles during early warning and preparedness phases, examine the reluctance of organizations to put their words into actions, and the regional struggle in which Lesotho plays a small role. The chapter will then look into the government and their contribution to drought preparedness as well as examining ways in which the gap between the locals and organizations can be closed in order to provide more targeted assistance to reduce the loss of life and infrastructure in future emergencies.

7.1 Role of Aid and Development Organizations during the 2015-2016 Drought

Within the preparedness phase of an emergency, international and national aid and development organizations play a pivotal role. The programs and response employed by these organizations have the ability to reduce the human cost of emergencies and speed up the response and recovery efforts. Within the Southern African drought of 2015-2016, their role became increasingly important due to the fragile nature of politics within the region. The region is more often than not overlooked in terms of aid deliverance, media attention and donor funding. Therefore, international and national organizations have become advocates for this region on a global front. This section will look into their role within initiating early warnings with the support of local governments, preparing for the emergency, the reluctance of organizations towards the drought and the regional sphere in which this all evolved.

7.1.1 Early Warning

Early warnings are important for both the local population and international organizations. International organizations have more resources available determine if an early warning is necessary for a situation. Through the monitoring of the situation both on the ground and meteorological, weather forecasts and predictions can be made with some degree of certainty, months in advance. With the coming of an El Niño year, the region was already preparing for “less rain, and this year drought is expected particularly during the critical agricultural period of October to December” (Southern Africa Humanitarian Outlook for Nov 2015-Jan 2016, p. 8). SARCOF along with other organizations released meteorological data in late August suggesting that the El Niño for 2015-2016 would be strong or maybe even “the strongest ever recorded” (Southern Africa Humanitarian Outlook for Nov 2015-Jan 2016, p. 8). The Regional Climate Outlook Summary of 2015 (Southern Africa Humanitarian Outlook for Nov 2015-Jan 2016, p. 43), indicated that Lesotho would be facing normal to below normal levels of rainfall from November 2015 till March 2016. Along with the reduced levels of rainfall in the country, the forecast by SARCOF in September already reported above average temperatures during the same months. Although these forecasts are made for a couple months earlier, the early warning allows organizations and the government to prepare for the increasing probability

of a (severe) drought to occur in Lesotho in the year ahead. That means that plans can be made, people can be made aware and existing programs could be scaled up.

The early warnings have resulted in several reports and conferences to be had on the topic of a regional scale with the various organizations actively involved in the region, governmental bodies and regional bodies. In October 2015, SADC came together and held their annual pre-season conference. This conference was attended by regional government ministries for SADC members and NGOs and UN bodies active in the region. The predominant point of order was the upcoming El Niño and the government's capacity to respond. During the conference, OCHA also held workshops on Standard Operating Procedures (SOPs) and CPs which are strongly encouraged to have as a preparedness mechanism for governments. The conference highlighted the strong need for both the international and national communities to be prepared for a worst case scenario in terms of the El Niño impact for the region.

The conference was followed up with a postseason conference at the end of February 2016. This conference occurred almost at the epicentre of the drought emergency when the devastating effects of the severity of the drought became visible. At the conference, it was evident that organizations, both UN entities and NGO's, understood what was expected of them and how to handle the situation but that governments were not fully comprehending the extent of the impact that the drought would have on their country and region. Governments were still looking for ways to respond and funding to implement the response; something that should have been discussed and outlined months previously. That is one of the benefits that slow-onset emergencies have, one knows that it will happen in advance and thus can work up to the event. However, this did not happen in the 2015-2016 drought. The pre-season conference was used as an early warning for countries to start getting their plans and resources in place while the post-season conference was to see what needed to be done on a more response and recovery level.

Alongside from the SADC conference, OCHA's regional office for Southern Africa developed the Southern Africa Humanitarian Outlook 2015-2016: Special focus on El Niño which was published in mid-November 2015. This Outlook highlighted: the country specific forecasts, the current situation on the ground, and the state of preparedness of regional countries; allowing for a quick overview of the state of affairs regionally and country specifically. Its publication also highlighted the shortcomings that countries had regarding the drought in terms of the state of preparedness and funding gaps. This prepositioned knowledge would allow for more targeted response during the height of the emergency. For Lesotho, the report indicated that 0.5 million people would be facing food insecurity with \$23 million would be needed to respond and the biggest impact would be on food security⁴⁷ (Southern Africa Humanitarian Outlook for Nov 2015-Jan 2016, p. 20). Out of the 15 countries examined within the Outlook, Lesotho was rated number five as countries most to be impacted by the drought. Although these two events were just workshops and reports, they highlighted the need for attention to be given to the region early on. The Southern African Humanitarian Outlook which was published in November was already in the works in October. The meteorological forecasts and other relevant information mentioned during the conference was readily available to governments in August. It indicates that governments and ministries were already aware of the possibility of drought like conditions. Early warnings allowed these countries to already be thinking about possible up scaling of programs or writing up of CPs.

⁴⁷ This was later to be scaled up to a food security crisis which impacted severely the agricultural, water, health and nutrition as well as migration and protection.

The government was able to provide early warnings to its population in the form of SMS via Vodacom and through the radio. This EWS, which was running during the months before the onset of El Niño, allowed for many households to learn about the weather forecast and some of the dangers it would bring to them as well as learn about certain preparedness techniques which could help them bridge the gap between agricultural seasons. As noted from the field research, this method had limited success, as some received and implemented the information, while others simply ignored it or did not receive the message. Nonetheless, some early warnings that the government did implement were successful in deterring some of the negative consequences of the drought.

Early warnings are crucial when it comes to responding to an emergency. During slow-onset emergencies, early warnings are beneficial as they are given months in advance and as the event increases more specific data is given. This lead up time allows for governments and people to come into action even before the height of the emergency, thus saving lives and reducing the potential damage. The drought in Lesotho was already predicted roughly six months before the true effects of the drought became apparent to the government and the population. This slow advancement of the drought allows governments to have plans such as CPs and SOPs in place and pass on the early warnings to their population. This was something that did occur in Lesotho, with the spread of drought warning via Vodacom, however not to the extent that was needed.

7.1.2 Preparedness

As soon as indications of a natural hazard is forecasted, preparedness can be enacted by both the government and locals. Preparedness techniques can also already be in place, as was seen in a number of households in Ha Senekane. Therefore it does not always have to be initiated in response to an event specifically. Preparedness allows for people and governments to lessen some of the negative consequences of the emergency and react faster during the response phase. Some preparedness mechanisms that governments have within their arsenal are CPs and SOPs. The CPs allow for least likely to worse case scenarios to be written out for different events (drought, flooding, disease outbreak, etc.) as well as give an overview of what the government has stockpiled and what it needs to ask the international community for when the time comes.

In terms of the level of preparedness compared to other countries in the region Lesotho has significant preparedness mechanisms already in place and was ahead of other countries during the 2015- 2016 El Niño. Lesotho was also the first country to declare a state of emergency on December 22nd 2015 (Lesotho: El Niño- related drought, Office of the resident coordinator situation update 1, p. 3-4); following several provinces in South Africa who had declared a state of emergency several days before. This declaration allowed for the release of money to support the response activities. Before the declaration Lesotho already had a multi-hazard Contingency Plan in place as well as activating the Drought Preparedness and Mitigation Plan (Southern Africa Humanitarian Outlook for Nov. 2015-Jan. 2016, p. 20). The CP already indicated the allocation of resources, the funding gaps and the most vulnerable populations. Through having these preparedness measures in place, it made government resource allocations easier (financially and supplies) and provide assistance to those most vulnerable. It also allowed for international organizations to see the gaps and therefore try to fill those gaps or provide assistance to the government where needed before the emergency occurred. The contingency plan estimated that in the worse-case scenario 725,519 people would be affected by drought Southern Africa Humanitarian Outlook Nov. 2015-Jan. 2016, p. 237) while the contingency plan covers an estimated 463,936 people (Southern Africa Humanitarian Outlook Nov. 2015-Jan. 2016, p. 21).

Lesotho also has an established National Disaster Management Authority (NDMA) who works within awareness campaigns for disease outbreak and the raising and promotion of conservation activities as well as increasing the number of Cash for Work activities and irrigation at household levels (Southern Africa Humanitarian Outlook for Nov. 2015-Jan. 2016, p. 21). By having through plans in place, people understand the roles they play before the event occurs, allowing organizations to allocate resources to the specific programs and look for donor funding before the height of the emergency.

The Lesotho Government, with the support of NGOs and UN entities scaled up their existing safety nets such as; school feedings and support for OVC households. Through scaling up the existing safety nets early on during the slow onset, those most vulnerable were able to get assistance before the situation turned more drastic. The scaling up also possibly helped reduce the malnutrition and stunting rates within the population, which are already high in the country. The March update of the Southern African Humanitarian Outlook, states that an inter-agency assessment concluded that by January roughly 80 per cent of communities reported concerns of malnutrition (p. 14). This is a clear indication of the severity of the situation prior to the emergency, as well as the need to scale up efforts. This also indicates the necessity of the need for scaling up safety nets. Although the school feedings and the financial support for the OVCs are only targeted towards children, it allows Lesotho to protect the future of the country as stunting and malnutrition in children has severe consequences in their later lives. Organizations such as WFP and FAO have supported food distribution from early on, providing food aid to the most vulnerable families. In Ha Senekane, where Paballong is used as a distribution centre, people who are severely malnourished or malnourished according to their Body Mass Index are be given monthly food assistance. The scaling up of social safety nets was done early on during the emergency for several reasons. Lesotho has seen a relative high number of droughts with the last one in 2012 being a drought emergency. By having experienced this level or similar emergencies before, Lesotho was able to build on previous knowledge obtained from responding to the previous drought.

A massive obstacle for Lesotho in regards to preparedness is the operationalizing of plans. This is both due to the financial constraints that the government has (it is a poor country, although classified as a middle-income country) and resources available to them. It prohibited them for initiating many of the plans as well as leaving many people vulnerable with no support from the government.

As a governmental level preparedness translates to allocating the necessary resources prior to the event, properly plan for the various scenarios, and to increase the response capacities of both the government and district bodies. This allows for the population to be given warning ahead of the emergency so that they are able to retain some of the shock more than if it was a sudden-onset emergency. Lesotho was ahead of some countries in the region when it comes to preparedness to the drought in terms of a state of emergency declaration and having a CP in place. It allowed the country to have the necessary plans in place when it needed to respond to the emergency as well as reduce the severity of the drought on its citizens.

7.1.3 Reluctance from Organizations and Donors

Organizations are constantly in battle within their own organization and with donors for the limited funding that is available globally. With the increasing natural and manmade emergencies, there is a struggle to secure sufficient funding. The Southern African region is often times overlooked by large donors and donor countries as well as by the media. Big and sudden emergencies are often highly funded, if you look at the 2004 Indian Ocean Tsunami that affected South East Asia. Southern Africa

has been rocked by small but compounding emergencies all of which negatively affected the ability for governments and the region to effectively respond. The 2015-2016 drought occurred following consecutive poor harvests, a weakening Rand, increase of the average household basket and increased political instability in some countries. The smaller shocks have meant that countries and the local population are less able to cope with other smaller or larger shocks, this is illustrated when looking at the extent of the number of people affected by the drought.

From early on, OCHA was a key player in providing both early warnings and preparedness measures for the drought emergency. Many organizations were sceptical of the validity and accuracy of meteorological forecasts and the government's ability to respond. The implications of the scepticism meant that although organizations had a wealth of information to indicate the extent and impact of the emergency, many did not swiftly react or allocate sufficient resources at an early stage. This was observed during my internship at the regional office of OCHA in Johannesburg. Organizations only started acting with great urgency, around late January, early February, as it became increasingly clear that large portions of the population were going hungry. This sense of urgency was needed early on. Not only did it affect the relief given to the population, organizations were struggling to deliver assistance to the population. The organizations were scrambling to find adequate resources and labour, within their organization, to provide the needed assistance and funding to implement the plans and projects. This is not an isolated incident. It is growing increasingly more common as there is less funding given to aid and development organizations by both governments and donors. As stated repeated throughout, with the increase of sudden and slow - onset emergencies, more is desperately needed to combat the devastating effects. A positive aspect of implementing preparedness measures is that more resources can be pulled together by different organizations, who work in tandem. This ultimately means that costs are lower than if this was not the case. By responding early, a structured approach to response and recovery can be enacted as well as reducing the initial costs of the damage as mitigation and preparedness strategies were already implemented. A clear example of this practice is the keyhole gardens in Ha Senekane. Most families in Ha Senekane are self-reliant as they grow their own food. This, of course, is hindered during times of drought and various other natural emergencies. For families who had both keyhole gardens and livestock were, mostly, able to remain self-reliant. In the long run, those that are self-reliant allow for resources to be allocated to those in dire need, and cutting the costs for organizations. Although preparedness is proved to reduce long term costs, as well as provide agency to the people, many organizations did not enact preparedness measures during the 2015-2016 drought due to their reluctance, or lack of appropriate resources to adequately implement these measures.

Much of the limited funding available for humanitarian/ environmental disasters have been allocated to conflicts such as Syria or Iraq. The internal struggle within the organizations is not only in regard to funding but also media attention for local struggles. The increase of attention towards the rise of terrorist attacks and the Syrian crisis has diverted attention from the Southern African drought, where the WFP estimates that more than 49 million people (Southern Africa Humanitarian Outlook Scenario March – August 2016, p. 4) are affected by drought, food insecurity, and disease. This region is already suffering from extremely high rates of HIV/AIDS.

The fight for the limited resources as well as funding will continue to be a problem in the future as climate change will mean more natural disasters. Some countries are more prone to disasters than others while other countries are more resilient towards them. The situation in Southern Africa and Lesotho has indicated that some countries are less visible to donors when disasters happen. Even the

extremely high number of affected people did not bring in more donor to support response and recovery in the Southern African region.

7.1.4 Regional Fight

The Southern African region, although very similar is very diverse. The region is considered to be middle income with some countries holding more wealth than others. Lesotho is one of the smallest country within the region. The region has been plagued by a weakening Rand, low agricultural harvest, increasing food prices, and more social unrest. These different factors all play a role within the drought crisis. The El Niño drought did not only affect the level of water availability in the region but also other factors which include social-economic and agricultural factors.

Lesotho has limited resources and power within the region on a geopolitical level. This means that they are mostly reliant on their neighbour (South Africa) for many things. The weakening of the Rand made importing more expensive for Lesotho, whom relies heavily on importation for their produce. “According to miller’s, the cost of food today is approximately 80 per cent more expensive than one year ago... [which is] a serious concern to [the] access to food” (Southern Africa Humanitarian Outlook for Nov. 2015-Jan. 2016, p. 20). With Lesotho having little manoeuvring power within the region it is dependent on South Africa.

Lesotho provides South Africa with much of their water via the various dams situated in Lesotho. This is one of Lesotho’s biggest export. Therefore, even when the country is facing severe water shortages, Lesotho still does not release water to its population. This water has supplied much of South Africa’s agricultural community but has been seen as very neglectful by the Basotho. The Basotho, due to the water shortages have been paying the price in terms of potential loss of human and livestock life, and risking high rates of dehydration and the spread of waterborne diseases. Some clinics, hospitals and schools are unable to provide their services due to the lack of water. During the field research in Lesotho, this is one topic that was constantly brought up; how does a country with so much water suffer from extremely high rates of drought and dehydration? Lesotho’s role in the geopolitics and its export of water and labour to South Africa play a key role in its effectiveness in preparing and combating the drought of 2015-2016.

7.1.5 Wrap Up

International organizations are crucial during emergency situations especially for countries such as Lesotho who have little resources to combat the extremities of the 2015-2016 drought. Although the preparedness and early warnings were not satisfactory, what was done allowed for some alleviation of the stress, it was however not enough to counter the negative aspects. Preparedness can reduce the initial cost of response and recovery actions as well as provide a foundation for the local people to build up their resilience to similar future events. It is an essential component within the emergency response. Governments and organizations are leaders when it comes to determining what type of preparedness mechanism to employ and when to initiate them. Although both institutions suffer from lack of funding and resources, it is still crucial for them to play their role in efforts to reduce the loss of human lives. There are many lessons to be learned about the preparedness phase of the 2015-2016 drought which is beneficial for future droughts. Lesotho is “going to continue to see events like that and in an environment where there is going to be less help” (Interview 20).

7.2 Lesotho Government Preparedness Response

In any type of emergency the government plays an important role throughout. A timely response from the government has the ability to save lives as well as reduce the negative impact that

the hazard or emergency has on the population and infrastructure. The Government of Lesotho has been facing small scale emergencies or hazards for several years; flooding, snow storms and drought are common. During the 2015-2016 drought the government took a proactive stance in relation to the response and recovery aspects. The preparedness and early action phases are areas for improvement. This section will look at the preparedness actions enacted by the government, the progress they have made in connection to previous droughts, shortcoming, and improvements that can be made for the following drought.

The Government had several preparedness measures in place which enabled them to find sources for funding, releasing additional government funding, and researching the vulnerable communities. The Lesotho Multi-Hazard Contingency Plan of 2015-2018⁴⁸ was released in October 2015. The CP is an important element of the preparedness phase for the government. Although it does not directly impact the people, it provides the government with an oversight of the available resources, any shortcomings, and outlines several plausible scenarios per hazard. In the CP of 2015-2018, drought was rated highly likely and having a major estimated impact on public health, safety and property damage. The severity of the 2015-2016 drought was already predicted due to the meteorological forecasting report of October as well as the increase of maize prices in the region and in Lesotho. The government had outlined the impacts of the drought: human and animal deaths, disease outbreaks, shortage of water and food, and emaciation of people and livestock affecting the whole region for an estimated time of a year (Lesotho Multi-Hazard Contingency Plan of 2015-2018). The CP allowed the country to see where their stockpiles were located, and where to increase their stockpiles as well as indicating the need for water sources other than taps. This allowed for the implementation of water trucking, much sooner than other countries in the region, as the need and plans were already in place.

Although the government had previously witnessed droughts, the full extent of the drought was unprecedented. Another measure implemented by the government, along with the CP, was the declaration of a state of emergency in December. This allowed for the Government to request additional funding from the UN Central Emergency Response Fund in February, and to release additional internal funding going towards the response. The extra monetary resources made available to the government allowed for a larger response aimed at aiding those most vulnerable. By declaring the state of emergency, additional donors and aid organizations were pulled into the response and recovery efforts, and existing programs of organizations within the country was scaled up. The government used the additional funding to scale up of existing social safety nets, mainly aimed at children and vulnerable households, with the support of the UN and other partners. In terms of early warning, the government was able to partner up with companies such as Vodacom, a telecommunications company, and several radio stations to release media messages about the upcoming 2015-2016 drought as well as provide methods for households to prepare such as: stockpiling of food, storing of water, lowering water usage, and early selling of cattle (Interview 11, 13, 16, & 5). These media messages were sent roughly three to four months ahead of the government's declaration of the state of emergency. Thus, allowing people, if they received and listened to the warning, to react. Overall, the government implemented several levels of preparedness on both a governmental and ground level.

Lesotho faced a massive drought emergency in 2012, deemed less severe than that of the 2015-2016 drought, but had comparable impacts on the population. The drought preparedness,

⁴⁸ This is not an open source. This is a government document which is not handed out to the public due to the information inside. I was able to have access to it, through my previous internship at UN ROSA.

response, and recovery of the government was, for the most part, initiated and led with the support of OCHA in South Africa (Interview 20). The government felt that they were in over their heads as well as OCHA ROSA not seeing enough being done to support the people who were facing the drought; proving to be a massive learning experience for the government. With support from OCHA ROSA, the government wrote out a response plan outlining the government's and partner's response during the drought. It also demonstrated the benefits of declaring a state of emergency at the early stage. The scaling up of social safety nets was done early for several reasons. Lesotho has seen a relative high number of drought, the last declares as a drought emergency being in 2012. Through having previous experience dealing with similar levels of emergency, the country was able to build upon that knowledge.

Although the government took a more proactive stance, there are still areas for improvement. Due to the high likelihood of increasing droughts, it is important for the government to take shortcomings from previous droughts and use that to progress into future drought response. One of the biggest shortcomings in 2015-2016 was the visibility of the government in rural areas. In Ha Senekane, the vast majority of the people interviewed and living there received no support from the government. A governmental official only visited the area once to take a registry, leaving the locals with confusion as no follow up actions were taken by the government. The visibility can be improved by implementing programs, or doing outreach to those most affected. Another area of improvement, which is already known by different partners, is the implementation of the action phase. The Lesotho government has learned from previous emergencies what they have to do when an emergency strikes. However, planning on paper has no made little impact in actuality. Many of the programs that were initiated by the government had no real follow up. This is both a waste of resources and skill. It does not benefit anyone if the plans are not properly implemented and followed up. OCHA ROSA stated that they had set up an emergency operating centre within the government but the room was not being used. This effectively reduces the ability of the government to react to new vulnerable groups and new progressions on the ground. To increase the ability of the government and partners to respond, implementation of plans is something that needs to occur in the future as it reduces loss of life and damage. Development programs from the government are crucial for the progress of the country. However, these development programs can also be used to reduce damage done by hazards such as snow storms, drought, and flooding. The addition to resilience or mitigation within development programs provides these programs to have more of an impact in the development of the population as well as making the population more resilient or enable to the people to mitigate against natural hazards. This in turn could potentially impact the need for large recovery and response actions in future droughts. An example of this is Paballong HIV Centre. This Centre was built to provide the Berea plateau with a HIV/AIDS and TB centre. Within the building of this Centre, a larger picture was thought of rather than only looking at the HIV/AIDS epidemic. The Centre runs on its own electricity, solar energy, and shorts rain water in roughly six water tanks. This allowed the Centre to have enough water during the 2015-2016 drought, whereas other clinics around the country were suffering due to the lack of water. Through the implementation of resilience techniques the negative effects of the drought was lessened, it also saved the Centre from having to truck water from other areas to the clinic. The integrating resilience or mitigation strategies alongside development programs is something that Lesotho should invest in, in order to reduce the social and financial cost of future hazards and emergencies.

Due to climate change, Lesotho will only see an increase in the amount and severity of the emergencies and hazards in the future. This is all happening within a global climate of less donor

support and increasing donor need. Through the learning process of the various different preceding hazards and emergencies, the government has the tools and experience to implement programs and responses that will benefit the people and save lives. Although the government's 2015-2016 response to the drought can be seen as more of a response on paper, the government did do more than during the 2012 drought response. The timely declaration of a state of emergency allowed for a scale up of social safety nets, and water trucking. These initiatives allowed many families to bridge the gap between going hungry, severe malnutrition, and dehydration. Each emergency is a learning process for both the government and the people.

7.3 Conclusion

Preparedness and early warning allow for countries and communities to better respond to hazards and emergencies and tailor their response. Lesotho's financial situation along with their limited exports causes each emergency to have harsh consequences on the local population. The drought has drastically impacted the country's main source of food, maize, in which the people rely on for their food but also for revenue from the markets. The inability for the population to access the market⁴⁹, and the reduction within their home gardens meant that many people became dependent on the aid from the government and international organizations. Not only were the people dependent on international organizations, due to the negative impact of the drought, the government became dependent on aid from international organizations as well. The natural crisis became an economic crisis for the government as well. The international community stepped up their efforts in terms of providing response efforts and the preparedness phase. The government was supported by the international community to write their CP, to run assessments as well as provide a timely response. Without the financial as well as a technical expertise of the international community, many more people would have suffered from the extent of the drought.

Although the international community did play an important role within the disaster cycle of the 2015-2016 drought in Lesotho, the government acted proactively by requesting support within the various different steps. The learning opportunity of the disaster has provided an additional platform in which the government can grow and exercise their own initiated disaster cycle if or when another disaster strikes the country. This will ultimately help the government in their future emergencies as they have the tools and knowledge to adequately prepare for natural hazards.

⁴⁹ The population has nothing to sell in the markets and therefore impacts their source of income significantly.

Chapter 8: Bridging the Gap between International and Local

The international community is often separated from the local community, with the locals getting little say in what is happening. During emergencies there is lack of input by the local population to whom the aid is given. During the preparedness and response to the 2015-2016 drought in Lesotho there was still a big gap particularly in rural communities. There was a lack of international and governmental presence, limited dialogue between the local population and the government, as well as a lack of information given to the population. These are all issues which can be addressed or further looked into with the ability to be amended to provide better preparedness for future emergencies.

When this thesis talks about the lack of international and governmental presence in rural Lesotho, it stems from the experience of the researcher in Ha Senekane. There are some areas within Lesotho which were more affected than the Berea Plateau, those areas received more international support. However, due to the rurality of the country and limited support Lesotho received compared to other countries such as Ethiopia, and Zimbabwe, this phenomenon can be seen as being reproduced in many other parts of Lesotho. During my time in the field, the only international organization that was active in Ha Senekane and doing work to respond to the drought was WFP, through food distribution, and World Vision. WFP provided food aid to families who were both suffering from HIV/AIDS and malnourished or severely malnourished, while World Vision was aiding the most vulnerable family within the village who was deemed most vulnerable by the community. As stated before, there was also a Christian organization that provided support. This support was limited to prayer and Bible reading. During the research it was noted that these organizations, WFP and World Vision, stepped up their aid leading up to the emergency, by providing food for the most vulnerable. Although this is an indication of the presence in the region, the aid offered was minimal. There is hardly any governmental presence. This leaves the impression that the government is not fully aware of the extent of the suffering the country. A registry was conducted of the people by the government in early January⁵⁰. Those who were interviewed were all requesting more support from the government during their time in need. Many were going hungry and did not understand the lack of government support. There were some, Interview 19 especially, who stated that issue such as corruption inhibited the government as the government, “don’t mind about others”. Through the increase of international and governmental presence in rural areas, the programs and interventions that are planned are based on the needs of the population not the predicted needs of them. Therefore it is crucial to conduct rapid assessments or have assessments ready that not only focuses on the universal needs of the Lesotho population, but that are tailored to the specific regions. This is one of the reasons why Lesotho is so hard to assist during emergencies. The country hosts a variety of different climates which are impacted differently thus in need of tailored programs. A program implemented in the lowlands does not imply that the same program will be successful in the highlands. Therefore an understanding of the region and location is crucial. This is where cooperation with the local population comes in play. By using their collective knowledge, tailored plans can be implemented that target the specific areas and allows for effective aid and development to be provided. This leads into the next area of improvement for the international community and the local population in terms of preparing for a natural hazard or emergency.

⁵⁰ This was most likely part of the Rapid Drought Impact Assessment Report which was conducted in January 2016. This report outlined the early effects of the drought. This report looked at the impact on water scarcity, health and nutrition, agriculture and food security, as well as providing an updated projected food security outcome for the remainder of 2016 and providing recommendations.

The dialogue between all parties, especially that of the international and local community need to be improved. It is understandable for larger organizations, such as the UN or Oxfam, not to have a presence in every region, through partnerships with grassroots organizations, this can be enhanced. It also does not mean that additional bureaucracy is given to these grassroots organizations but when natural hazards occur that information is delivered between the two. An example is in regards to healthcare. As a result of high rates of HIV/AIDS, the Ministry of Health has established a wide network of smaller clinics and centres around the country that relay information back to the ministry. This allows the ministry to maintain an oversight on the health care, especially in regards to HIV/AIDS patients, the rise of new cases and possible interventions. This can be replicated in regards to natural disasters, possibly even through the NDMA. This can already be in place or the setup of these centres can already be in place before the drought occurs possibly via an emergency operating centre on a district level. Therefore real-time data can be delivered to a central command, one who fully understands the needs and desires of the people. Although the population would not immediately see the benefits of this plan, it allows the central government, districts, and the international organizations to target their responses to the needs of the community, benefiting the population in the long run. It also allows for the population to have a direct line to a government official or counterpart of the NDMA, to voice their concerns and areas of improvement. The increase in dialogue will also highlight other issues that might be overlooked by programs.

People are also at a loss when it comes to trying to find aid. The Pabalong Centre, which houses a working farm, provides lessons on conservation agriculture and keyhole gardens. This proves to be an invaluable resource. People are unaware, unfortunately, that they are able to go to the Centre for advice and training. This lack of dialogue between the organization and the people is a wasted asset to the people and therefore shows the necessity to increase dialogue. A question during the interviews was where people go to for information. The interviewees did not know the resources available to them or where to access it. With the increase of dialogue between the organization and the people, this should be eradicated. People in Ha Senekane who otherwise would have gotten support, were not receiving any as they simply did not know to whom they could get that support. This is something that within the context of Lesotho plays a big role due to the rurality of the country, many places are not easily accessible and therefore can be overlooked at times. The increase of dialogue between the parties: national, international, government organizations and the local population, would increase the accessibility of aid to certain people as well as the targeted programs and aid for the people.

Another important aspect that can lower the divide between the different stakeholders through the sharing of information. It became apparent through the fieldwork that some people in Ha Senekane had not received the information about the upcoming drought nor any information on preparedness mechanisms. The main source of information detailing the drought was the media. While in the cities, the people have access to the media outlets such as: newspaper, radio, and cell phones or the internet; this is not the case for other parts of the country. Media coverage is, again, restrictive because of the rurality of the country. Not all parts of the country have cell phone coverage, let alone electricity. Therefore the messages about the drought failed to reach many, or people were told when it was too late for them to do anything. The internet is expensive for many people. It was witnessed in and around Ha Senekane that the younger generations were the ones that had cell phones capable to have internet access. The older generations use the radio as their main source of information as they listen to talk shows while the younger generations use the radio to listen to music rather than as an informational outlet. This combined with the lack of information sharing amongst the population is a reason for organizations and the government to find alternative methods of information sharing. Also

the sharing of information should be actively encouraged. This is something that should especially happen when it comes to preparedness techniques. Chapter 4 mentioned that some households learned how to make keyhole gardens from World Vision programs, but had failed to pass this information to other members of the community as they did not know that it could be beneficial for other people. This need to be remembered when planning and implementing programs. If used properly and made accessible, the media is a powerful tool in preparedness for all involved parties.

All parties, especially international organizations, are instrumental in the preparedness phase to natural hazards and emergencies. They are able to provide the key roles and instruments that are needed to reduce loss of life or infrastructure during this pivotal time. However, they are limited as they do not act on their own accord, thus their programs and interventions have to be both needed and beneficial for the local community, if not the programs are useless and abundant⁵¹. It is therefore crucial for the success of programs and preparedness to ensure there is good dialogue between the various stakeholders, and the spread of relevant information to and within the population. Organizations and the local population work within the same arena when it comes to preparing for emergencies. Both the international community and the local population are interlinked and need to work together in order to be successful in increasing agency and reducing the negative effects of the hazard. Therefore it is crucial that there is a positive relationship between the various different parties involved within the sphere of preparedness and any further phases within the disaster cycle.

⁵¹ Lesotho is scattered with programs and infrastructural projects that were deserted after several months either due to lack of funding, money being used for corruption, plans were just abandoned by the people, or just not used by the local population.

Chapter 9: Conclusion

Every country in the world faces emergencies, may it be small ones or ones that rock the nation. Preparedness steps can be undertaken both in regard to the various levels: national, district, community, and family. Some emergencies are easier to prepare for than others, some come out of the blue and others take a while to materialize. The differences between the emergencies cause great concern especially for countries who are ill equipped to handle emergencies on the various different levels. Slow-onset emergencies allow for people, governments, and the international community to have some time to come together and prepare for the emergency. This, of course, depends heavily on the scale and scope of the hazard and the socio-economic resources that are available at the time. When analysing Lesotho as a case study, the country has faced the effects of compounding emergencies. 2015-2016 saw an unprecedented drought emergency which caused most water sources to dry up, leading to huge water shortages. The lack of rainfall, which the agricultural sector is reliant on, meant that farmers failed to produce a good harvest, or others choose to not plant. This poor harvest falls on the back of two consecutive poor harvests. Although the figures are high, but low considering other ongoing emergencies at the same time, for a country with a population of two million, 1/4th of the country is at risk of food insecurity (Lesotho: Situation report May, 2016). This is further compounded by the country's high HIV/AIDS rates. The drought in Lesotho and the HIV/AIDS epidemic, are considered as slow-onset emergencies which impacts a large portion of the population. Both emergencies have no definitive start date nor end date which both simplify and make the situation more complicated. This thesis explored the 2015-2016 drought which affected the Southern African region, primarily focusing on the preparedness mechanisms deployed in Lesotho. This chapter will conclude the thesis by answering the central question of the thesis: *How can local population preparedness to slow-onset emergencies be understood by applying the notion of risk and learning theory? And, how does this relate to the understanding of the humanitarian apparatus in preparation to slow-onset emergencies?* It will also provide recommendations on further research which can be conducted to further investigate the issue.

9.1 Preparedness to Slow-Onset Emergencies in Lesotho:

The Mountain Kingdom of Lesotho is a country which is normally forgotten or fused together with South Africa. The general oversight of Lesotho on the global scale when looking at the 2015-2016 drought both in Eastern Africa and Southern Africa has meant that many donors have overlooked the country, especially in regards to potential aid recipients. 2015-2016 has seen a rise in aid dependency for emergencies, and a surge in the rise of manmade and natural crises, all within a world recovering from an economic crises. As climate change continues to wreak havoc on different countries, there will continue to be events such as droughts, earthquakes, and flooding that will affect thousands of people but within an environment where there will be less help.

Lesotho has already experienced the decrease in aid and has been, for the most part, self-reliant for the most part. However, the compounding effects of the consecutive poor harvest, high unemployment and high HIV/AIDS rates played a role alongside the impact of the drought which has eroded the ability of the Government to support its people and thus international support was asked. Many emergencies require substantial response and recovery efforts from both the government and international communities support, thus requiring substantial financial and resource support. One method of decreasing financial burden of the government and the international community is by implementing effective and well-rounded preparedness action, at a national, regional, community, and household level.

The benefit of a slow-onset emergency is the ability for all parties to prepare. Due to its early indication and slow progression, there is some lead time between when the forecasts indicate the hazard and when the emergency has reached its peak. When looking at the 2015-2016, forecasters within SADC and Lesotho had already noted in August that there was an increasing possibility of a drought around the end of 2015 and the beginning of 2016. This meant that there was a three to six month advanced warning allowing for adequate time to implement preparedness mechanisms. In the case of Lesotho, the Government increased their preparedness phases earlier than other countries in the region, but also too late to make any significant reductions on the number of people who were impacted. On a household level, the fieldwork conducted in Ha Senekane indicated that many people were not in a socio-economic position to prepare for the drought and, thus, have suffered by going hungry, loss of their agricultural crop, and the death of livestock.

The research in Ha Senekane resulted in findings which are insightful and can be used on a larger scale to impact future preparedness measures undertaken by both the government and the international community. There are several different findings that the research brought to light. One of the main ones is the scale of unawareness of people on the scale of the drought and the subsequent lack of water. People were, thus, inadequately warned and if they did receive warnings that they were not in a socio-economic position to respond in terms of preparation to them. The community of Ha Senekane, although located close to the capital, is a poor rural community with high unemployment rates. The families rely on produce from their own plots and their fields to sustain their live, by eating their produce and selling the excess. One poor harvest has negative repercussions on the community whereas the combination of previous poor harvests and the drought has eroded the usual coping methods that were in place as well as pushed many families into negative coping methods, which was the case in 2015-2016. Another finding was that some households had actually implemented preparedness measure without realizing or acknowledging those methods as preparedness methods. Families in Ha Senekane all had home gardens where they produced a variety of different crops: rape, cabbage, beans, sorghum, little maize, and beets and had livestock: cattle, donkeys, chickens. By having the different crops, the families had some source of food when their fields failed. Although it is not a balanced meal, it allows families to have a meal every night. Alongside the home gardens, some families, although relatively few, had keyhole gardens which retained moisture in the soil longer than conventional home gardens which is perfect for growing crops during times of reduced rainfall. These keyhole gardens allowed some families to have an increase of crop yield for their familiar crops whereas other families would have to spend more money on the market. The livestock, although cattle are mainly used for cultural reasons, provide families with protein if they were to slaughter their livestock or can be used as a financial payout⁵². Raising poultry is an excellent source of protein to be added to the diet as chickens can both be slaughtered or be used as a continual source of food (through the production eggs). Though the families were unaware of the fact that some of their practices were in fact preparedness mechanisms, they acknowledged the benefits that these practises have during a drought.

The last crucial finding of the research was the need for better communication between all relevant stakeholders, especially between the Lesotho government and its citizens. As the government and international aid and development organizations are unable to successfully address each community within the country, there is an increased need for the spread of information among the

⁵² This financial pay out comes from selling cattle or other livestock and then using the money to buy food at the market

population themselves. This was evident within the Ha Senekane community. People were unaware of where or whom to turn to when the situation was drastically turning worse. During previous poor harvests, families would turn to their neighbours for support but that was made inaccessible because everyone in the community was facing similar or worse situations due to the drought. This indicates an erosion of Ubuntu and a rise in individualism during times of emergencies. Some families did receive aid or support during the drought, or had previous knowledge of ways to alleviate the negative consequences of the drought, however that knowledge was not shared amongst the community because people were unaware that other people would need that information. Lead to more people being negatively affected by the drought than, possibly, if the information was shared. Thus, the sharing and circulation of information is important in order to make the most impact.

Droughts are not a new phenomenon in Lesotho, yet people were unaware of extent of the 2015-2016 drought. The drought had an unprecedented impact on the water availability that people in Lesotho had. This occurred in a country who was exporting its water to South Africa, while its people was suffering. It can be presumed the people who have gone through an event before would alter their preparedness measures when it was announced that a similar event would take place again. However, this was not prevalent in Ha Senekane. The majority of the people who were interviewed for this thesis either forgot or did not learn from previous droughts. As discussed in previous chapters, this impacts the level of preparedness that is done by the people and the different coping methods employed during the response and recovery phases of the emergency.

It is noted that the drought emergency on the scale of the 2015-2016 was unprecedented; however, the combination of previous droughts did prepare some for the response needed. This is not only looking at the local population but also at the government and the international organizations that are active in Lesotho. The government did learn from previous droughts in order to access emergency relief funds as well as scale up existing social safety nets and start water trucking. However, the government has repeated issues with the implementation and execution of their plans. This is something that the government needs to acknowledge and can take from the response of this drought to use it in their preparation and response to further droughts or emergencies. International institutions were reluctant when it came to the preparedness and early response to the drought due to the lack of international recognition of the extent of the severity of the drought, donor support, and the funding allocation which favoured the funding of aid programs in Eastern Africa and the Middle East.

The scale of preparedness that occurred in the lead up to the 2015-2016 drought limited on the ground. While some were aware of the drought, they did not have the necessary resources or knowledge on what to do. Even with the implementation of certain preparedness mechanism, the government was unable to help the population effectively prepare for the drought. A reason being, as stated throughout this thesis, the relative high rurality of the country making many areas isolated and almost fully self-reliant. Although a geographically small country the lack of development in roads, telecommunication services, and electricity make it harder to provide the country with knowledge about the drought as well as impacting the level of aid given to isolated communities. Due to limited available government funding, the government focuses their efforts on the worst affected regions. The preparedness to the 2015-2016 drought should be used as a learning experience for preparedness and response to future droughts, just as the knowledge gained during the response to the 2012 drought was used by the government during this drought. By initiating different levels of preparedness, response and recovery actions can be scaled down and become more cost efficient. This is crucial for

Lesotho as it is not a large receiver of international donations. The levels of preparedness would then also allow the population to be more self-reliant.

For international organizations, resilience is brought to the forefront of many discussions in development. However, building resilience programming into existing or new development programs also allows people to express their own agency and alleviates negative effects in times of emergencies. Building levels of preparedness within the larger existing development programs has the added potential to reduce the erosion of levels of development during an emergency; this is linked not only to slow-onset emergencies but also sudden-emergencies.

9.2 Main Question:

The main question that the thesis examines is: *How can local population preparedness to slow-onset emergencies be understood by applying the notion of risk and learning theory? And, how does this relate to the understanding of the humanitarian apparatus in preparation to slow-onset emergencies?* The subsequent chapters come to an answer to the main question.

9.2.1 Local Population

Local perspective play a major role within this thesis and regarding preparedness. In a general sense, the majority of the people in Ha Senekane did not position themselves in preparation for the drought. This has resulted disastrous consequences on the population as people had to enact negative coping methods. This includes a type of prostitution for food, further impacting HIV/AIDS, or going hungry which has long lasting impacts on the economy and health due to various levels of malnutrition and stunting. Most people were ill-equipped to cope with the drought because their usual coping methods have been exhausted. The population of Ha Senekane suffers from significantly high rates of unemployment which has been impacted by the closing of the mines in South Africa and the lack of employment opportunities in Lesotho. If some levels of preparedness was done, which was only seen in a couple of households, this preparedness was limited, allowing the families to survive a couple months longer than others. The lack of preparedness by the people shows a significant gap in the disaster cycle that was not adequately filled; which had a significant influence on the impact of the drought on the local population and how they dealt. The acknowledgment of the gap can influence the type of future development programs as well as which different aspects of the program is implemented in order to reduce the effects of the emergency.

Integrating both risk and learning within the preparedness mechanisms present in Ha Senekane and the knowledge that the people had preceding the drought also allows an insight on why preparedness was done to the extent that it was. The economic situation for many households meant that they could not afford the risk to plant in the 2015 planting season. For those that had the financial means, a select few, access to seedlings was strictly controlled by the government, as stated in Interview 5. Irrigation planting is not practiced in Lesotho, let alone Ha Senekane due to the scarcity of water. The farmers thus rely on rainwater. The drought brought no rain to the region and therefore even if farmers had risked the planting of their seeds, they would not have grown because there was no rain. The people that did understand that there was an increased risk of hunger were unable to do much due to a lack of resources. This falls in line with the risk paradox where there was an understanding of the risk but the household situation dictated that there was nothing for them to do to avoid the risk or change the situation. This ultimately had an impact on the rise of disease: waterborne diseases, diarrhoea, and possibly an increase of HIV/AIDS, and possibly impacting teen

pregnancy⁵³. Risk is something that the people of Ha Senekane are familiar with as they are farmers. As the climate changes, likely reducing rainfall significantly, farmers in Lesotho will increasingly undertake unprecedented risks to ensure that food will be put on the tables and provide a source of income. Risk is something that the people of Lesotho are accustomed to, however as the climate changes, risk will continue to increase.

The erosion of cultural concepts such as Ubuntu also means that families become reliant on their extended family rather than the community. This is clearly illustrated in Ha Senekane where families are looking towards one or two family members who have jobs to feed the rest of the family. This places increasing strain on the familial bonds and young adults who are seeking jobs. Ubuntu is still strongly acknowledged by the community; however its practice has been curtailed due to the drought because there is not enough to share. The drought has caused the community to suffer in unprecedented ways which has meant that people have become individualized and focus on their families rather than the community. This is not only when looking at taking risk but also when it comes to sharing knowledge and expertise. The research found that if someone received early warnings about the drought, it was not shared within the community but only with the family, the same goes for the sharing of information regarding the building of keyhole gardens. The learning process has become household oriented due to the scale of the emergencies among other reasons. This has been something that is relatively new to the society as people are used to sharing information and produce. It also had significant impacts on the level of preparedness and response to the drought that the people were able to do on the household level as well as the community level.

An interesting aspect that provides intriguing insight into preparedness of the people as well as general insight of the people is looking at them through the lens of the learning theory. By doing so, it demonstrates that even within a culture of sharing and more community living than individualistic as seen in the global north, people in Ha Senekane are still very family bound. Information is passed down mainly within families but not shared to other community members, which is significant when looking at the notion of Ubuntu, which seems to have eroded during the drought. Families pass down information relating to weather forecasting through picking up natural triggers, may it be the shape of the moon at a certain point or the blooming of flowers, and building of dams or keyhole gardens. Passed down information has been used by families during the 2015-2016 drought, while some of the examples were not used because of the lack of water⁵⁴. This shared information has allowed certain families in the village to better prepare against the drought. Families who did not possess that knowledge looked at what other people were doing which was successful and then implemented it within their own household however, there was no or little information passed from one family to the next. This gap of information sharing has had negative consequences for families who were

⁵³ It was observed that there were a lot of teen pregnancies in Ha Senekane during the winter months. Most of the teens were roughly 3-7 months pregnant. This could be due to a number of different reasons but the drought can be seen as a contributing factor to the rise of poverty could potentially be one reason that explains the sudden rise in teen pregnancy in Ha Senekane.

⁵⁴ The issue of building dams for the community but also for the family was not done for the drought, as there was no rain that fell during the last months of 2015 and the beginning of 2016. For dams to be used as a preparedness technique for drought, the dams have to have been put in place months ahead of the drought when rain was still falling or where water could be brought from other sources to fill the dams. Both of which did not occur during the 2015-2016 drought. The dams that were already in place, not in Ha Senekane but on the road leading to Ha Senekane were built years before the drought and therefore had retained rainwater from previous months and therefore allowed these dams to be beneficial during the drought to the neighbouring families.

unprepared for the drought as well as unable to financially do anything once the drought was in full effect.

9.2.2 Humanitarian Apparatus

The latter part of the research question looks into the humanitarian response and the input of the local population in regards to preparedness in slow-onset emergencies. Although the research focuses mainly on the local population, some insight into the humanitarian apparatus was given through my work at OCHA ROSA during the preparedness phase and early response to the drought in 2015-2016 and a later interview with a humanitarian officer at OCHA ROESA. The international apparatus mainly focuses on strengthening the governmental preparedness and response to the emergency it faces. Lesotho suffers from the lack of financial resources to effectively mitigate the effects of drought and lack in the ability to implement their proposed programming. Both of these issues have hampered the government's response efforts and means that the government and the local populations become more reliant on international support. In respects to preparedness at governmental level, OCHA and other international actors within Lesotho proved to be crucial in guiding the Government and the NDMA in preparing for the emergency; ensuring that essential instruments are in place (CP, SOPs, and RP). The humanitarian apparatus has been able to fill in the gaps government has in regard to emergencies and, thus, provide for much needed support. The government was able to build up the needed expertise and knowledge to better respond to emergencies by attending and actively participating in various trainings given at the ministerial level and to the NDMA. Each emergency, thus, provides a learning experience.

9.2.3 Difference between International Preparedness versus Local Population Preparedness

The difference between the international and local preparedness is the different levels it targets. The international level is more focused on the governmental level of preparedness. Making sure that agencies and the government understood the need to scale up existing operations in the country and implement tailored programs. This is in contrast to the local population who are specifically looking more at the household level and then community level. In respect to the current situation in the country, many people feel neglected by both international organizations but more so by their government. This can have lasting negative repercussions in trust in the government. Issues of corruption were brought up the conversations I had throughout the country.

Many people who would normally turn to their neighbours for assistance were turned away because they were facing similar circumstances and, thus, the government would be expected to fill that gap. However, because of certain levels of corruption and the limited financial resources available to the government, they were not prepared to assist the people to the extent that was needed to avoid the level of hunger or malnutrition that resulted. The government relies heavily on foreign aid when it comes to medical issues because they themselves do not have the resources or expertise to combat the epidemic of HIV/AIDS, TB, and malnutrition.

Although there are differences between the two various different levels, they need to work in collaboration with each other as they are both mutually inclusive. The humanitarian apparatus works because the local population is in need, while the local population needs the support from the humanitarian apparatus to learn about different preparedness methods. Therefore, the humanitarian apparatus needs to understand and know what the local population has done for preparedness and where improvements can be made. It is important for the humanitarian apparatus to know what is

currently happening on the ground and to understand the culture in order to implement programs and initiatives that are successful and can have a long lasting impact.

9.3 Conclusion

Lesotho along with countless other small developing nations are often overlooked when emergencies occur within the region. Often times they are in more need of support due to their political structures, financial and socio-economic situations. Lesotho started off as being a big player within the Southern African region due its contribution to the labour force, and the agriculture. However, over the years misfortune in terms of health and natural disasters has left the country suffering year after year. This research hopes to show that although the people seem to be forgotten on the global level, locally they have been able to

The field of preparedness and slow-onset emergencies has not yet been research as the extent of other parts of the disaster cycle. Other research has grouped it together with adaptation and mitigation or part of early response. My research hopes to add to the literature on specifically preparedness to slow-onset emergency from a local perspective. It highlights the lack of preparedness on this level as well as indicating a need for more communication between the different levels when it comes to disasters.

This research has highlighted to interesting notions and practises that have been conducted by the people of Ha Senekane in preparation for the 2015-2016 drought as a way to examine preparedness to slow-onset emergencies from a more local perspective. This research should not be stop here and it should be furthered in order to assess local preparedness at a national level. This can be done by conducting the research on a larger scale by looking into the difference between preparedness levels within the districts worse affected versus the least affected districts. Or looking into the various different preparedness techniques employed in the different geographical locations of Lesotho (highlands and the lowlands) as they have to use different techniques depending on the local situation. In order to further understand the interplay between the local population and the international apparatus within Lesotho, further investigation has to take place. This research would then examine several organizations and a community that they support. Through researching the dialogue between the two, the programs and projects implemented, and the local needs and wants, this interplay could be examined. This type of research could benefit both the international community as they would be able to implement programs and projects that are beneficial and wanted by the people and would allow the local population to receive support that is helpful to their community as well as have them take ownership. Further research is needed to better understand preparedness to slow-onset emergencies and how to get the information and techniques to the local populations as it has the ability to reduce the loss of life and infrastructural damage.

Preparedness is something that needs to be implemented into existing and future programs, this is valid for both slow-onset and sudden-onset emergencies. It is an essential aspect of the disaster cycle that is oftentimes overlooked, however if implemented properly and with recognition of the local population within the plans it has the potential to save lives and cut costs during the recovery phase. The global community will continue to see disasters of this calibre in the future. There needs to be increased recognition that the local population and local knowledge is a key ingredient to a success preparation and recovery from disasters. International organizations, governments, and the local population need to, thus, work in tandem to save human and animal lives as well as livelihoods and one way to do this is to embrace the emergency by preparing ahead of its arrival.

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Appendix A: Interview list

# of interview	Gender	Age	Occupation
1	Male	26	Herder and unemployed
2	Male	70	Retired builder
3	Male	51	Farmer and retired miner (SA mines)
4	Male	24	Unemployed
5	Male	76	Farmer and retired miner (SA mines)
6	Female	29	Piece jobs
7	Female	34	English teacher at local high school
8	Female	40	Social worker
9	Female	46	Teacher and farmer
10	Female	35	Piece jobs
11	Male	41	Unemployed and farmer
12	Female and Male	89 and 55	Retired and her son is unemployed (takes care of family livestock)
13	Female	20	High school student
14	Male	19	High school student
15	Male	24	Farmer, in early stages of becoming a police man
16	Female	23	Unemployed
17	Male	62	Piece jobs
18	male	35	Piece jobs
19	Male	50	Farmer
20	Female	33	Humanitarian Affairs officer
21	Male	25	University student
22	Female	53	School teacher

Appendix B: Interview questions

List of interview questions for Ha Senekane:

Opening questions:

Please, tell me about yourself and your family life?
How long have you lived here?
How many people are in your household?
What is your profession?
What is your main source of food?
Where do you get your food and water?

About preparedness to overall emergencies:

What do you call an emergency?
How does the lack of water (rainwater) affect you?
How often does drought happen?
How do you know that drought is happening?
Do you do anything to prepare for drought? If so, what?
What were the reasons you learned them?
Where did you learn these preparedness practices? Are your methods different from your neighbours? If so, how?
Do you have any memories of this type of hardship happening before? How is this year different from previous droughts? Did you do anything differently?

Early Warning:

When did you know that there would be a drought?
How did you get this information?
What did you do with that information?
Did the early warning help you?

Preparedness to the 2015-2016 drought:

How has last year's spring been different from other springs?
Tell me a little about how you experienced the drought.
How did you keep moisture in the soil last year, for both your plots and fields?
What information was passed down to you about drought? From who did the information come from?
Did you learn anything from previous droughts and then put them in use?
Who taught you about farming in these conditions?
What are some things you wished you had known about or done before the drought last year?
Can you tell me a little about your activities last winter and how was that different to previous winters?
What did you do to prepare for the drought?
How did you learn about keyhole gardens?
What type of preparedness did you do for this year's drought?
Have you received any support from any community members, organizations, or government this year?

List of interview questions for international organizations:

When do you say a drought is an emergency?

How far in advance do you know that there is a likelihood that a country can face drought?

What are some preparedness techniques that people can use so that they are able to lessen the burden of a drought?

What are things that the government can do ahead of time to support the country?

Can you please tell me about the lead up to the 2015-2016 drought in Southern Africa?

What was the preparedness phase for Lesotho in that drought?

How often does Lesotho have drought?

How does the 2015 drought compare to others in the past for Lesotho?

How was the government response to the drought different to other droughts?

What preparedness did the government do for the drought?

How was the preparedness within the international community as in NGOs, UN entities for the drought in Lesotho?

What could be some improvements?

Do you think that both the government and the international community were prepared enough and did they learn from previous droughts?

What are some points of improvements for next drought?

Do you think the preparedness measures allowed locals to better equip themselves for the drought?

Appendix C: Sample of author's daily journal

June 30, 2016

Paballong

Last night was an interesting night, the smell of gas doesn't necessarily give me a headache but it also doesn't make me feel good. I am wondering how these people's lungs are with the inhalation of both the gas fumes and the fires in their homes. Lung cancer must rank highly when it comes to diseases. Probably not as important to tackle as HIV/AIDS and TB in this country.



Ha Senekane at sundown

This morning we got all the patients together to give a health talk and it is family planning day. I don't understand any of it because it is all done in Sesotho, but looking at the dynamic of everything is interesting for me. Today there were only women and about 3 children. After the morning session, I went back to the clinic where I have been working for the past 3 days. I did the same as yesterday which was rewriting the doctor's notes in the patient files while he was writing it in their own green booklet. What was different today than in the past was that the women were getting their contraceptives. Many of them first had to do a pregnancy test and if that was negative then they would get their shots. I was told that some women want to take the contraceptives because they think that it works as a way to have an abortion. However, it isn't. One surprising thing that came out of the morning session was regarding pregnancy. One of the women, who was 31, was not married but was using contraceptives which in my eyes was a good thing. However, the doctor said that this was a major problem in the country. Many women are more worried about getting pregnant because one is able to see that they are pregnant, however you cannot physically tell if someone is HIV positive. So some women use contraceptives but not a condom to protect themselves. I also found it interesting that there were children as young as 10 who were going to the doctor, without their parents. Although I was told that normally a parent was present, it is still interesting. That a trip to visit your HIV doctor is so normalized. This is just one indication of how severe the HIV/AIDS epidemic is in the community. I took a walk with Gladys and Miriam this afternoon after lunch (papa, rape, and boiled egg) and talked about my research. They both seem to be very interested in it. Gladys told me that she only heard about the drought when the government declared the emergency (last December, early January). She said many people doesn't do preparedness but not specifically why. She did say that people are really suffering now. Mainly because they are unable to plough the fields due to there being nothing to plough. So they/many are reliant on their jobs to bring them an income which can be used to purchase the food. The drought is also becoming more frequent and increasing in intensity. It is therefore getting much harder for some families to survive each disaster. The majority of households do not have access to water in their home which means they use communal wells as their main source of water. The water is, in this region, supplied by the municipality. However, it is not drinkable water. At Paballong, solar cells are used as the main source of energy and there are multiple rainwater tanks (which is also not drinkable water). Many of the surrounding houses doesn't have this type of energy and have to go without.

This afternoon was very slow after a fast morning, we saw roughly 30 patients. I am also becoming more familiar with the terminology and the different effects that HIV has. It is still heart breaking to

see people who are already suffering from poverty, struggle again from HIV. It is not an easy disease to live with, and yet many are positive early on in life. It means that every 3 months, they are heading back to the clinic to receive their refills and every six months they need to get their blood drawn. One of the benefits is that they do get lunch while they are here and are able to get a free supply of female and male condoms. Many patients seem to deal with it the best that they can.

-Sophie

July 14, 2016

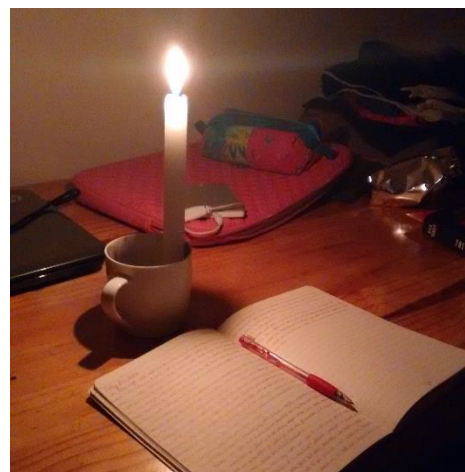
Paballong

I ran out of clean drinking water today (or last night). I was promised both water and gas two days ago and haven't received them yet, however it is still early in the morning. I am hoping to get it soon as I slept very poorly due to thirst.

This weekend has been a slow progress with my research, seeing as I have yet to do any interviews. I did however get a lot of transcribing done, which I wanted to type out yesterday but due to electricity being out that didn't happen. The centre is really feeling the drought now (or slightly) because 2 of the several water tanks have run out of water.

So I just came back from doing interviews. It takes me about 2 hours to walk, do my interviews and then come back. I was able to do three today, 2 15 minutes ones and 1 that lasted a bit more than 30 min. It was an interesting mix of people. The first interview was in English but I have a feeling that I would have gotten more out of her had it been in Sesotho purely because of the quality of the English and she found it hard to understand me. The second woman who we interviewed lived in a beautiful Basotho thatched rondavels. She had a keyhole garden where rape and cabbage was grown. She had learned how to make them (keyhole gardens) from her grandparents, she was taught about how they keep the moisture longer. I didn't fully understand if she fully grasped the benefits it has during the drought as she isn't aware of any other drought and this was the first drought that she witnessed. It is both interesting and scary. Her memory was also lacking a little as she forgot a lot, or she just didn't want to answer the question. The last interview today was a man. We passed his flock (sheep, lambs, 2 cow and a donkey) as well as a home that had covered plots before we got to his place. He had 3 dogs, 2 of them were puppies and you can clearly see that they were suffering from the lack of food, you could count all the ribs. He had lost a lot of cattle and sheep this year due to the drought, but he also sold some. This was only conveyed to me after we had already left the man's house. He also had a keyhole garden but was taught by World Vision who came 2 years ago and gave training. I asked him if he helped or taught anyone how to make them since and he said he was unaware that he needed to. He did however teach it to his older son who also attended the training and he will teach it to his youngest son.

It amazes me that in such a close community, where everyone is suffering, that information is not passed around. I mean, I understand it but little things like keyhole gardens or holding a meeting to let people know that there is a drought coming can help save people. In these situations, it is the little information that can do a long way. Many people also believe that this year 2016-2017 will be another drought year. I hope for them that it isn't. Oh, the man was also the first to talk about government SMS as well as saving or stockpiling food. I wonder why no-one else hasn't said it, maybe they aren't using Vodocom?



My nightly activity of journal writing by candle fire

Am now writing my journal by candle light again, thank god it isn't as cold as the night before because otherwise I wouldn't be able to write. A bunch of girls just came to me this afternoon, while I was literally sitting on the stoop of my place writing and listening to music. One of them was 16 and had a 6 month old son who she immediately gave to me. I don't know exactly what they wanted but I think they wanted food or money. I just wanted to talk to them. One wanted to be a doctor, the other an English teacher. So the rest of the afternoon was free, I must ask for water seeing as I have none and thankfully I still had long life milk.

So this afternoon I was back to working at the clinic where I helped with the filling of syringes with Noristrate! Exciting stuff. There was one mum with her child and she was there for family planning. We took out the syringe and the baby just starts screaming and crying thinking that it was meant for her. Poor thing, but we just all started laughing.

-Sophie