



UNIVERSITY OF ZIMBABWE

**DISASTER PREPAREDNESS AND MANAGEMENT: AN ASSESSMENT OF THE
EFFECTIVENESS OF THE ZIMBABWEAN GOVERNMENT DISASTER
PREPAREDNESS IN THE WAKE OF CYCLONE IDAI DISASTER IN
CHIMANIMANI DISTRICT**

**A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE MASTER OF
SCIENCE IN SOCIOLOGY PROGRAMME**

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DEDICATION

To my loving husband Clever Tom, dearest children Tendai, Tadiwanashe, Takudzwa, Tinotenda, my parents and siblings. I am proud to be part of you and I love you all.

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I owe allegiance to the Almighty God for seeing me throughout this effort even in moments when I found myself at the end of my wits. Although my name goes on the cover as the writer it would be terribly remiss if I do not acknowledge my supervisor, Dr I Gutsa for the undying support and guidance he gave me throughout the course of this dissertation. Also my sincere gratitude goes to the lecturers, staff from the Sociology Department and people in Ngangu, Chimanimani District. Welcome assistance and support was also received from Gamuchirai P, Brenda and comrades of my stream for their support in this study. Thank you and God bless you all.

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ACRONYMS

CARE	Cooperative for Assistance and Relief Everywhere
CPU	Civil Protection Unit
DDF	District Development Fund
DEO	District Environmental Office
EWS	Early Warning Systems
FEMA	Federal Emergency Management Agency
FGD	Focus group discussion
DRAF	Disaster Risk Assessment Framework
IDP	Internally Displaced Persons
IFRC	International Federation of Red Cross and Red Crescent Societies
MOHCC	Ministry for Health and Child Care
NEPA	National Environmental Protection Association
NGO	Non-Governmental Organisation
PIC	Pacific Island Countries
SADC	Sothorn African Development Community
UN	United Nations
UNDAC	United Nations disaster assessment and Coordination
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
UNICEF	United Nations Children’s Fund
UNFPA	United Nations Population Fund
ZDF	Zimbabwe Defence Forces
ZIMSTATS	Zimbabwe National Statistics Agency
ZNA	Zimbabwe National Army

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ABSTRACT

This study was an assessment of the effectiveness of the Zimbabwean government disaster preparedness in the wake of Cyclone Idai disaster, using Chimanimani District as a case study. The research was mostly interested in establishing the level of effectiveness of government's response and preparedness to disaster in the current natural disasters such as Cyclone Idai that hit Chimanimani. The study adopted a qualitative research design. The sample size was comprised of people who were in Chimanimani when the Cyclone Idai occurred. Data were collected through interviews, questionnaire and focus group discussions which were held at Ngangu in Chimanimani district. The literature review was used to engage various scholarly views on the issue of disaster preparedness and management. The methodology of the study comprised gathering and analyzing both primary and secondary data. Secondary sources of data consisted of recently published information from journals and other printed materials. The findings were analysed thematically, and they were presented on an objective by objective basis. The study revealed that the government of Zimbabwe was not well prepared to deal with the Cyclone Idai disaster. The study recommended among other things, that there is need to develop better ways of dealing with disasters in time before the loss of lives through developing a very good system of dealing with any forecasted disaster.

CHAPTER ONE: INTRODUCTION

1.1 Introduction

Disaster management and preparedness is a critical facet that each government needs to possess in anticipation of any kind of disaster. The Zimbabwean Government, through the Civil Protection Unit (CPU), has been on the ground in preparing the country for disasters before, during and after the occurrence of these. Challenges have, however, continued to emerge in the management of disasters in each and every disaster that has hit Zimbabwe as a nation during the course of the events. In line with this, Ayanji (2004) explains that in as much as disasters can be prepared for, it is not always the case that organizations both governmental and non-governmental organizations' preparations are enough to match the extent of the damage caused by the disaster. Hence, the government of Zimbabwe also in the wake of Cyclone Idai did a lot in order to save lives using many departments on the ground together with supporting departments and governmental facilities. Against this background, this research sought to establish the extent of preparedness of the Zimbabwean government in responding to the Cyclone Idai disaster that hit the country with a focus on the epicenter of the disaster which was the Chimanimani district.

1.2 Background of the study

According to Bhaiseni (2017:26) Zimbabwe has been greatly affected by natural disasters mainly in the form droughts and floods. In February 2017, Tsholostho district in Zimbabwe was hit by a tropical cyclone Dineo, a natural disaster. This left a trail of destruction in various villages and caused a lot of flooding. Livelihoods were destroyed, one life was lost and hundreds of people were left homeless (Bulawayo24, 2017: 21 February 2017). Hills and Nhamire (2017) notes that seven people were killed in the first day of Tropical cyclone Dineo occurrence which thrashed Zimbabwe's Tsholotsho district. A lot of infrastructure like roads, schools and government offices were damaged and closed. Crops and livestock were destroyed by floods which also destroyed approximately 4 000 homesteads, houses and government structures (Hills & Nhamire, 2017).

As revealed above, natural disasters created a lot of socioeconomic challenges which threatened the understanding of social justice in society. Knowingly or unknowingly, disaster management and intervention remains undistinguishable before and during disasters and is

mostly noted as post the disaster (Muzingili, 2016). In line with this, Bhaiseni (2017:27) believes that sociological research in Zimbabwe still focuses on welfaristic and residual interventions in societal troubles but neglecting disaster issues. Natural disasters are intricately linked to the concept of social vulnerability. Social vulnerability is a term that is familiar in literature on disasters and its impact on humanity especially the poor groups of society (Mavhura et al., 2017:1). Natural disasters disrupt social functioning of people by destroying the common forms of survival such as food security, health, education and other related aspects of humanity. So often, issues related to quality of life, welfare and human interaction in disasters are also encapsulated by the social in how Non-Governmental Organization (NGOs) function. This however, provides the foundation with which the disaster management department can demonstrate its role in disaster related situations.

Buttressed by social science generic principles, values, ethical decision-making frameworks and human theories, the praxis of professional disaster management is quite necessary in Zimbabwe. It is important to note that, the configuration of disaster management in professional practice does not entail the dismantling of the current master social science lens rather a consideration of holistic practice. Several scholars (e.g. Gray & Coates, 2015:509; Iravani & Parast, 2014; Mathbor, 2007; Pyles, 2017:630) consider the role of sociology in regards to disaster management work as indispensable to achieve the principle of environmental justice. This notion is echoed by Muzingili (2018:11) who argues that “the polemics of environmental justice and sociology practice are closely coupled in contemporary society”.

However, in Zimbabwe, the concept of disaster in social sciences was relatively unknown. The Civil Protection Act (Chapter 10:06) remains the main piece of legislation governing disaster-oriented work in Zimbabwe. While, Nemaikonde and Niekierk (2017) note that the usage of disaster risk reduction frameworks in countries all across Southern Africa Development Committee (SADC) is gaining momentum, its percolation in social science practice was somewhat secluded. Though largely proactive in nature disaster response in Zimbabwe was mostly reactive and remedial (Belle et al, 2017). Against this background, the study analysed the disaster preparedness of the Zimbabwean government in times of crisis such as that of Cyclone Idai.

1.3 Statement of the Problem

In as much as many studies on disaster management have been conducted in Zimbabwe, little focus has been put on governmental preparedness in times of natural disasters. Most articles that have been documented have targeted the NGOs and left the government which is the main player in the management of natural disasters in Zimbabwe. In line with this, a number of studies that have been conducted on natural disasters have looked more at the impact and causes of natural disasters together with the assessment of NGOs intervention strategies in disasters. Adding on top, most of the studies focused mainly on the impact of cyclones and intervention. The studies carried out have been done decades ago which left gaps to understand the nature of preparedness to disasters in the natural disasters such as Cyclone Idai that hit Chimanimani. Hence, it can be noted that just as the nature of disasters management and intervention was changing so should also be the extent of preparedness of the government. Thus, against this background this study analyzed the effectiveness of government's response and preparedness in the Cyclone Idai disaster that affected Chimanimani.

1.4 Objectives

- To determine the extent of disaster preparedness of the government of Zimbabwe in the wake of Cyclone Idai disaster that hit Chimanimani.
- To analyze the effectiveness of government's intervention in the scourge of Cyclone Idai disaster in Chimanimani.
- To explore the challenges faced by the government of Zimbabwe in responding to the Cyclone Idai disaster in Chimanimani.
- To explore ways in which the government of Zimbabwe can improve its disaster management system basing on the Cyclone Idai experience.

1.5 Research questions

1. How effective was the Zimbabwean government's disaster preparedness and management systems in the wake of the Cyclone Idai management?
2. What is the nature of Zimbabwe's disaster preparedness, management and response system prior to the Cyclone Idai disaster in Chimanimani?
3. In what ways was the government of Zimbabwe prepared for the forecasted Cyclone Idai to come?

4. How effective were the means and ways that were used by the Zimbabwean government in intervening in the Cyclone Idai disaster in Chimanimani?
5. What challenges did the government of Zimbabwe face in intervening in the Cyclone Idai disaster in Chimanimani?
6. In what ways can the government of Zimbabwe improve its disaster management and response system basing on the Cyclone Idai experience?

1.6 Justification of the study

Disaster preparedness and management for long has been skewed towards an analysis of the interventions done mostly by non-governmental organizations with limited focus being placed on analyzing the government's interventions and preparedness in times of disaster. In light of this, this study sought to establish the extent of preparedness of the Zimbabwean government in the wake of Cyclone Idai that hit Chimanimani in March 2019. In as much as studies have been carried out on the nature of disaster preparedness in Zimbabwe, these have been bracketing in nature because the nature of disasters differ as others are manmade and others are natural hence necessitating the need to understand the government's preparedness to the unique Cyclone Idai that affected Chimanimani. This study sought also to add to already existing literature on the challenges that can be faced by governments in dealing and intervening in natural disasters taking a leaf from Zimbabwe's Cyclone Idai disaster. From the review of existing literature, the nexus between the level and state of disaster preparedness in the 21st century Zimbabwean government has not been reviewed with most researches targeting how the government has responded to natural disasters such as cyclones hence this research was worth undertaking as it brought new knowledge in terms of sociology of development.

In addition to this, with the changing socio-political and economic conditions, the level of preparedness for disasters and how they are prioritized changes thereby making this research valid as there was need to evaluate the effectiveness and level of disaster preparedness for the new government in light of the economic turmoil's that were in the country during the time of the disaster. Though studies have been carried out on different issues around the Cyclone Idai disaster and intervention, there was also need to compile concerns raised by various stakeholders who include government officials, civil society, political parties and court rulings, in the way in which the government responded to the Cyclone Idai disaster so as to proffer ways to improve government's disaster preparedness and response mechanisms.

Thus, the study raised possibilities that answer the unclear elements in the issues of policy making in line with the disaster management and responses henceforth adding knowledge value to both the researcher and also the body of knowledge on sociology of development in Zimbabwe and the rest of the world.

1.7 Assumptions of the study

This study operated on the hypothesis that there was a causal relationship between the level of disaster preparedness and the nature of the impact of intervention offered by the government. The relationship was, such that failed disaster management leads to the death of so many people in disaster situations was due to the complex and ill-preparedness and the bracketing nature of the response mechanism or approach that have been used. On the other hand, failure of good awareness and evacuation procedures for people on the ground in a disaster setting perpetuates the scourge of disaster in the setting leading to poverty in the society which further created impediments to their emancipation, a situation that consequently limited their potential to excel in life. In fact, failed disaster management was an impediment to the socio-economic development of communities as these further created a situation that recycled poverty in society.

1.8 Limitations of the study

The most likely limitation of the study that was faced in this research was that Zimbabwean rural areas are highly politically volatile hence not easily accessible. With now the case of the Cyclone Idai, it was difficult to access the people there for research as it was misinterpreted as a political strategy to cause instability in the nation. Another limitation that was faced is that it was barely two years, since the disaster struck in Chimanimani hence the people still have vivid pictures of what transpired on the ground hence the research turn out to be very emotional. In addition to this, issues of bureaucracy and red tape affected this research as it involved more officials working in disaster management under the government. Against this background, the research used several techniques of gaining entry including using her past experience of working in disaster management in NGOs to get access to government officials and people in Chimanimani.

1.9 Delimitations of the study

As the idea of delimitation was concerned with establishing the boundaries of the research, this study was confined to assessing the effectiveness of the Zimbabwean government

disaster preparedness in the wake of Cyclone Idai in Chimanimani District. The research particularly focused on Chimanimani district because it was the district that was heavily affected by Cyclone Idai in Zimbabwe. In as much as there are many areas that cover issues of disaster management, the study has chosen to focus on the assessment of government's preparedness in the wake of Cyclone Idai as it is the main player in civil protection. The rationale behind this undertaking study was that soon after the Cyclone Idai struck in Zimbabwe there was major uproars in the media and on social media that the government was not prepared enough to save lives in Chimanimani hence why so many lives were lost.

1.10 Overall study layout

The study comprised of six chapters. These chapters are arranged in chronological order with chapter one being the introductory chapter giving an insight of what the whole project was all about. Chapter two has the related information of studies and literature which was conducted by other researchers that are in line with disaster preparedness and management. Chapter two also helped in the drafting of the questionnaire guide and the Focus Group Discussion (FGD) interview guide. Chapter three discussed the theoretical framework that was used to outline the study. Chapter four was the methodology section and it was outlined showing how data was collected and analyzed. The chapter also highlighted some of the limitations which were encountered during the study. In chapter five, all the findings from the field work as they were given by the participants were presented. Chapter six has the findings discussion and the conclusion of the study. The chapter discussed the findings linking them to all chapters of the study.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter reviewed literature on disaster preparedness and management. Babbie and Mouton (2012) points out that it is important for the researcher to know how other scholars have theorized and conceptualized on issues of the subject of the study, that they have found empirically, what instrumentation they have used and to what effect. This also acknowledges the works that was done by other scholars on disaster preparedness and management as well as justify this study from the literature point of view by showing the gaps that exist on the disaster information that has been published.

2.2 Conceptualizing disasters

Sawada (2007) highlights that in general, there are four major groups in which disasters can be classified into. The first type is natural disasters which consist of floods as hydrological disaster, typhoons or storms under meteorological disasters, climatological disasters such as droughts, geophysical disasters popularly known as earthquakes, tsunamis and volcanic eruptions and biological disasters usually in the form of epidemics and insect infestations.

The second major group of disasters is technological disasters, which includes industrial accidents which involves chemical spills, collapses of industrial infrastructures and transport accidents which occurred in the mode of transport like by air, rail, and road or water means of transport (Sawada, 2007). The final two disasters are manmade which include economic crises (hyperinflation, banking crisis, and currency crisis) and violence (terrorism, civil strife, riots, and war).

2.3 Global perspectives and disaster variability

African Union (2006) posits that the ability of governments in the region to deal effectively with the altogether predictable disasters is uneven, although virtually all of them acknowledge their responsibility to meet the challenges of assisting and protecting victims. In support of this, Unganai (2016) notes that each country has an established system for national disaster management, as well as criteria for engaging the international community. Actual institutional capacities to prepare for and deal with disasters vary considerably. In line with this, Sighn (2006) posits that countries bordering on one another and more often

than not experiencing the same storms and subject to the same kind of earthquake damage. Nonetheless have quite different levels of preparedness and organizational arrangements (for example the range of response capacity among the Andean nations Colombia, Peru and Bolivia or the Caribbean island nations of Cuba, the Dominican Republic and Haiti. Governments in the region have usually looked to their respective Armed Forces to meet the emergencies that strike, but to varied degrees have installed civilian leadership for broader disaster management functions and lead to recovery efforts (UNDAC 2008).

2.3.1 Dealing with disaster vulnerability, shocks and poverty in the global world

The overwhelming of natural calamities is directly associated to the vulnerability of the population, which exposes how considerably a social system is (not) able to face or overcome the adverse effects of the exposition of individuals or social groups to unexpected changes, causing ruptures in their ways of living (UNDAC, 2008). Thus, the significances of phenomena of equal physical magnitude can be very distinct according to the degree of articulation of the afflicted population. For example, Haiti was affected by earthquake in January 2010 and it was not much intense as compared to the earthquake that affected Chile in March the same year which was much more intense. However, the impacts of the last were incomparably greater. The earthquake in Chile caused about two hundred thirty thousand (230 000) casualties and more than one million homeless (Busch and Givens, 2013) and shows that the Haitians' exposure to earthquakes is much greater than the Chileans' exposures earthquakes which are physical phenomena that are a share of the natural dynamics of both countries. In March 2011, Japan was also affected by the earthquake trailed by tsunami and nuclear contamination which is a technological disaster clearly shows that no nation, is exhaustively equipped to face natural disasters even the most technologically advanced countries in the world.

However, ENDA (2008) highlights that regardless of the advantages of livelihood swapping, there are a lot of restrictions to this approach and hindrances to its execution. Livelihood switching as a short-term coping strategy, livelihood switching might be drawn in, in poverty ruses and where they do not hamper the opportunity of longer-term adaptation or makeover. Ababe et al (2008) notes that diversification may be an inferior coping strategy to specialisation depending on the context, mostly if the extra social excess produced can be financed in risk transfer (insurance) or in reducing vulnerability (education) or exposure (housing). Carswell (2000) in Ababe et al, (2008) highlights that the rich households may

apply diversification as a way of development and wealth accumulation whilst the poor households may employ diversification for quite different ends which mainly for survival. As a result it must also be admitted that shocks often distress incomes in various and seemingly unconnected sectors, thus lessening the success of diversification.

A drought, for example, may cause a downfall in demand for local amenities, thus damagingly affecting crop revenue as well as non-farm earnings (Hulme, 1983; Sen, 1981). In other words although in some cases where diversification is desirable, however, such a plan might not be possible. There can be a lot of extensive entry-problems to diversification such as working capital or skills (Adger, 2014). The richer household might be able to meet the expenses of the advanced entry costs to real risk-spreading activities, on the other hand poorer households will normally enter into undertakings with lower entry costs and lower usefulness in risk-spreading (Chambers, 2010). Some of the households' commitment to particular livelihoods may also be non-material.

Cultures values, taboos and norms can be determine the choice to choose particular livelihood pathways and can limit the prospects of changing to others (Arce 2003 in de Haan and Zoomers, 2005). For example, the destruction of cultural identification related with specific livelihoods may be alleged as too high a price to pay for adaptation. Furthermore, structures of power, property relations, and other institutional aspects may limit the capacity of household's to shift strategies (de Haan and Zoomers, 2005). All the same, flexibility may positively enhance to resilience, it can frequently be clogged by the institutional context.

2.3.2 Human intervention in the environment increasing risk and poverty in the world

Ababe et al (2008) posits that human interference in the surroundings intensifies the risk of natural disasters, which is mainly preoccupying in metropolitan centres. They create the most visible form of alteration of the natural scenery because of the considerable adjustment in the production flows, the population movement and in the changing aspects of physical practices. The Social Investment Fund of Honduras researched about the effects on hurricane exhausting the data on ruined social infrastructure as per geographical area so that they can bring up-to-date poverty map (Ayanji, 2004).

In line with this, Adger (2014) postulated that the poverty rate enlarged by a projected 4% on average as results showed, with the exclusion of the 10 metropolises that did not suffer

destruction from Mitch. On the antagonistic, results from studies done in June 1999 in Nicaragua showed that the state's poverty rate slightly declined between 1998 and 1999 in spite of Hurricane Mitch. However, Ababe et al (2008) explains that in the Central Region rural poverty increased by 2.6% as a result of the effect of the Hurricane on agriculture and the region's problematic access, whilst the Pacific Region profited from international help and the refurbishment process. These unclear results showed that more investigations needs to be done to scrutinize the short -term effects of the hurricane on income as well as longer-term consequences as a result of the loss of assets.

2.4 Laws and Regulations put forward in dealing with natural disasters

Christie and Halon (2001) posits that disaster laws serve a number of critical functions which are crucial in managing disasters. They set out clear roles and responsibilities among agencies and the various levels of government, establish funding and accountability mechanisms and regulating private behavior that might increase disaster risks. They can also create a supportive environment for the engagement of civil society and communities in reducing disaster risks and mitigating their impacts. Gadain et al (2006) further highlights that without a comprehensive disaster management act, has often proven difficult to guarantee that disaster risk reduction and preparedness measures are accorded proper priority among the many daily tasks facing government and that the many agencies and sectors of society that need to be involved are adequately motivated and coordinated.

Regulatory frameworks are also important to facilitate international cooperation in situations where disasters exceed domestic coping capacities (UNDAC 2008). For example, if the customs department does not employ a special regulation that applies to a disaster situation, humanitarian goods may be treated as if they are regular imports. Hence, customs duties must be levied and inspection requirements may be extensive. A case in point is Namibia. When responding to the heavy floods in the northern part of the country in the last years, even Namibia's National Disaster (Chambers, 2010). Management experienced significant delays transporting relief goods from Harare to Windhoek. Regulatory barriers were encountered at every boarder the relief consignments had to cross. This can never have been the intention of the parties concerned. In response, Unganai (2017) highlights that Namibia has embarked on a project with the Namibia Red Cross to investigate how it can improve its legal framework both for domestic disaster response operations as well as with regard to its role as a transit state in the Southern Africa.

2.5 Responding to natural disasters

Christe and Halon (2001) explain that when it comes to disaster risk reduction, it is important to recognize that governments cannot succeed alone and their laws should reflect this. In other words, it is not enough for disaster law to create and define governmental institutions. “In the long run, we will not be successful in reducing the impacts of disasters if our laws merely distribute responsibilities among dedicated agencies and expert groups,” notes IFRC Secretary General Bekele Geleta, “Communities must also be empowered to take responsibility for reducing their own risks and influencing decision-making and planning in disaster management.”

2.5.1 Governmental and non-governmental actors' responses

UNEP (2008) posits that there are many things that civil society actors the private sector and communities themselves can do to mitigate their exposure to hazards. As communities have first-hand experience with the risks that they face, they often have unique insight into how to reduce their own vulnerability. Empowered communities are also more likely to be supportive of governmental efforts to restrain risky behaviors and practices. Likewise, National Red Cross and Red Crescent Societies in Africa have been working with vulnerable communities across the continent for many years to strengthen frontline capacity to respond to disasters and to ensure that community-based disaster risk reduction is included as a part of a comprehensive approach to disaster management (Christe and Halon, 2001).

Unganai (2016) explains that the NGOs plays an important role in engagement in civic and development initiatives. A lot of factors such as partnership amongst various actors', disillusionment with centralized structures, long-drawn-out civic engagement and emphasis on diversity explains this change in perception. The growing significance of NGOs can also be credited to the understanding that neither the state nor the market can completely address vast glitches facing the world currently (Singh 2006). In the last few years, NGOs have become significant players in the growth process across the world, involved in wide ranging activities beginning with community development to training, policy research, and advocacy. Their organizational flexibility, informal work style, and close engagement with grassroots communities enable them to deliver services to people at lower costs. Belle et al (2017) posits that these supplement government initiatives by acting as a conduit between development

programmes and beneficiaries, informing and concertize people about their privileges and rights. Their skill to organize people and comprehend people's worries allows them to well articulate difficulties met by people.

Furthermore, Ababe (2008) et al highlights that NGOs play a significant part in disaster response and mitigation in various regions. Their main focus specifically is to provide humanitarian aid to disaster victims. In South Asia local NGOs have also played an active role in disaster management in recent years. In India, NGOs are also involved in emergency response and rehabilitation after recent disasters. 7 601 people were killed at Latur after the 1993 earthquake, Orissa super cyclone in 1999 killed 8 931 people and 13 000 people were killed in Gujarat earthquake in 2001 (Singh, 2006).

Government Organizations and Non-Governmental Organizations Collaboration after 1999 Cyclone in India increased as there are many problems to be dealt with (Singh 2006). After the cyclone, organization of efforts and partnership between government and NGOs overpowered initial misunderstandings to established during the restoration phase. Acknowledgement for the genuine part of NGOs backed the process. In line with this, Ababe et al (2008) explain that highlights of GO-NGO cooperation involved regular coordination meetings at Block and District levels to observe recovery process, combined knowledge sharing, planning and vision construction exercises. UNDP's efforts to organize a database on NGO initiatives and collaboration with NGOs enabled information sharing and organization.

Ababe et al (2008) highlight that previously NGOs did not even took part in disaster response on such a huge scale. It was difficult for the government to identify those eligible for facilitative support or who are not because of the nonexistence of a clear outline for information sharing and coordination of NGO activities. As better established NGOs take attracts the attention of the media because of greater documentation expertise, lesser established NGOs received neither funds nor media attention. Some non-existent NGOs gain of this misunderstanding and unscrupulously get funds from contributors keen to donate. In line with this, the credible NGOs will continue with their efforts as the rest will withdrew from the scene as time progressed (Ayanji, 2008). On their part the NGOs felt that the government was cold to their efforts and unsuccessful offer them needed support. The absence of any institutional apparatus for regular discussion between the government and NGOs was a major obstacle. To address such worries, Adger (2014) posits that the

government should set up an NGO Coordination Cell and appoints a Secretary whose responsibility is to guide NGOs, researchers, and volunteers coming from outside the state, and enable interface between NGOs and government departments.

2.5.2 Households' different responses to disaster in different contexts

Households have established and engaged in formal and informal mechanisms as a response to the wide range of surprises triggered by natural and manmade disasters (Adger et al, 2003). First, household risk management strategies are defined as activities for mitigating risk reducing income instability before the resolution of uncertainties. These strategies include investments in earthquake-proof house, insurance contract subscription, and access to the early-warning system. It has been known that these ex ante management strategies are cost effective instruments to mitigate losses due to disasters (Adger, 2014). This is driven mainly by the significance of welfare costs of disaster risks.

UNDP (2004) highlights that shocks are abrupt events that have effects on wellbeing. Entire countries or communities are affected by events known as covariate shocks while individuals or households are affected by idiosyncratic shocks. There are three categories for shocks and these are: (i) economic shocks, which include reduced employment as well as covariate price shocks; (ii) natural disasters that typically have effect on communities; and (iii) other shocks which are idiosyncratic in nature which affects on specific households such as crime and theft, job loss, death or illness of a household member, and crop failure (UNDAC, 2008).

Adger (2013) posits that households during 2007 and 2008 have felt the increase in the cost of living severely. This is supported low-income households in the Pacific, which spends almost 50 per cent of household expenditure on food, even in rural areas (Adger, 2003). Furthermore, most PICs are heavily hooked on imported fuel for energy and transport. This shows that the escalations in fuel prices make transport more costly and rise the cost of getting goods to market, mainly for the majority of the population that lives in rural areas and outer islands. The research was conducted in 2010-2011 and involved of 1 000 household surveys, more than 50 focus group discussions, and a number of key informant interviews across 12 sites in Solomon Islands and Vanuatu. It discovered that in both rural and urban areas, households have a high degree of exposure to international macro-economic shocks, in specific price shocks, which include a range of other shocks disturbing households, as well as

natural disasters and idiosyncratic events (Busch and Givens, 2013). The vegetable patch and the neighboring coral ridges are clearly significant in providing resilience to families.

Moreover, Aldrich (2012) notes that while a considerable percentage of rural and urban households revolved to the maintenance of relationship networks to cope with the effect of shocks, usually almost one in eight households showed that, to some point, they had abandoned their tradition family responsibilities, choosing out of the payments to extended family and *wantoks* as they became excessively burdensome. The most mutual responses to food or fuel price increase are shown in Figure 2.1 which evidently highlights the garden as an vital source of resilience. Nearly 85 per cent of households turned to their garden in order to source more food. This was an overall response in the rural societies of Baravet and Malu'u and was less common response in the urban communities of Honiara, Auki and Luganville. In Port Vila was common reflecting the access that communities in Ohlen and Blacksands have to urban gardens, regardless of uncertainty of land tenure (Robert et al, 2009).

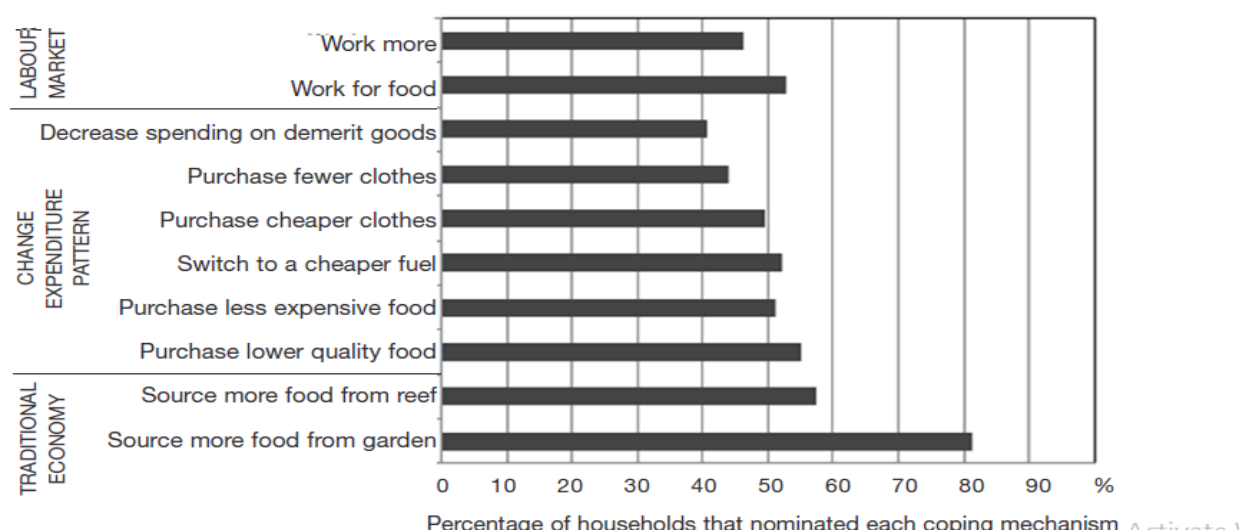


Fig 2.1 showing coping mechanisms in disaster situations in SEAN rural areas

In general, the existing literature identified the following different ways of risk-coping mechanisms. First, diverse market mechanisms such as credit markets to move future resources to today's consumption, insurance market dealings to remove losses from disasters, and ex post labor market contribution to use market earnings to human capital can be employed at households level (Pyles, 2017). Second, people can implement self-insurance coping strategies such as consumption rationalization by reducing luxury incidentals while

preserving total calorie intakes and dissaving of financial and physical assets, i.e., utilization of precautionary saving. Finally, Adger (2013) highlights that households can implement non-market insurance coping strategies such as public transfers from the government and informal private assistances from nets centered on extended family, relatives, and communities. Against unforeseen natural disasters, ex post risk-coping will be very necessary.

2.5.3 Classification of insurance mechanism into ex ante risk management and ex post risk-coping behaviors.

Pelling (2009) is of the opinion that it is important to distinguish between strategies to cope with risk versus shock. While the former refers to strategies to deal with the prospect of being affected by an uncertain event, the latter refers to measures taken in response to a realized uncertainty. Ex ante and ex post risk coping strategies can be literally defined as measures taken before and after experiencing shocks respectively. However, Chambers (2010) opines that although this chronological definition is useful in conceptualizing behavioral response to shocks, it can be misleading. Some measures adopted after experiencing the shock such as migration can later become a permanent measure to reduce exposure to potential shock in the future. Similarly, some ex post shock response will not be available to the household unless it was done ex ante. For example, selling livestock during emergency requires efforts in planning, caring and raising the livestock before the occurrence of the risky event.

Adger (2013) highlights that to avoid this potential confusion, chronology and its functional objective are combined to define ex ante and ex post risk coping strategies. Measures that are taken before the risky event occurs to avoid, transfer or reduce risks or exposure to risk are considered ex ante risk coping strategies. On the other hand, Ayanyi (2008) is of the opinion that measures taken after the shocks to mitigate or insulate welfare impacts of the shocks are called ex post shock coping strategies. The ex-ante and ex post risk/shock coping strategies may be distinguished by their behavioral objectives. While the ex-ante risk coping strategies are for long-term survival, the ex post shock coping strategies are merely for short-term survival adjustment (Pelling, 2009).

The primary goal of the ex-ante risk coping strategies is to smooth income. The income smoothing strategies are ways in which households use to protect themselves against income shock before it actually happens. This is often achieved by adopting conservative production

choices and diversifying economic activities. The income smoothing strategies may be grouped into three main categories, that is, risk avoidance, risk transfer and risk reduction.

Moving to a new location that is less prone to the risk is an example of risk avoidance. Relocation is not only a costly but also risky process. The expected return must be sufficiently high to justify the move. The second category of risk coping strategies is risk transfer to a third party via an insurance market or publicly provided safety net. Agricultural insurance is a form of risk pooling and risk sharing that works particularly well with covariate shocks which fail other less formal forms of small-base risk sharing. However, an absence of insurance market or an imperfection of insurance market makes this option unlikely to be available to the rural poor. Social safety net is also not likely to be put in place when the government, for example, Zambia is in serious fiscal distress and has high external debt.

Consumption smoothing and asset smoothing are two main methods of ex post shock coping strategies. The consumption smoothing refers to shock coping strategies that aims at defending consumption level by either involving in alternative income generating activities or drawing down either buffer or productive assets. The asset smoothing refers to shock coping strategies aims at defending a threshold level of asset that may be called “Micawber threshold” (Lipton 1994). While the wealthy households tend to use consumption smoothing as their primary strategy to cope with shock, poorer household tend to use a combination of consumption and asset smoothing. The impoverished adopt consumption smoothing at first by drawing down asset until the productive assets approach the Micawber threshold at which point the households tend to switch to asset smoothing (Zimmerman and Carter, 1999).

2.6 The community, the market and state in dealing with disasters

The Community, the Market, and the State in the Economic System

a la Hayami (2009)



Fig 2.2 showing cooperation of the community, state and the market in an economic system

According to Hayami (2009), the market is the mechanism that coordinates profit-seeking individuals and firms through competition under the price signals. Naturally, the market has an advantage in matching demand and supply of private tradable goods. The state is the mechanism that forces people to adjust their resource allocations by the command or legal enforcement of the government. Normally, the state plays a significant part in providing worldwide or clean public goods. In contrast, the community is the device that guides community members to charitable assistance centered on severe social relations, enabling supply of the local public goods such as the provision of mutual social safety nets, the discussion of commons, and the implementation of informal dealings.

To address the roles of the market, the state and the community in enabling disaster management and coping, would be classified into two different types of risks by the level at which they happen. With idiosyncratic risks affects specific individuals or firms whilst

aggregate shocks affect an entire community, region, groups of households or a country as a whole. This difference is key because the ecological level at which risks arise regulates the efficiency of market and non-market organizations against risk.

On one indicator, a risk that disturbs a specific individual can be dealt with other people in the similar protection system through informal mutual insurance as well as a well-functioning formal insurance or credit market. In the last two eras, micro-development economists have revealed that families have established formal and informal risk coping strategies against a wide range of idiosyncratic risks to some extent (Townsend, 1994). The community-based mutual insurance mechanism, one of the important components of “social capital,” can be active, providing all members contributing informal insurance payments according to the value of mutuality governed by customs and norms (Hayami, 2009). The community can impose the collection of due contributions from community members by means of the status or contempt or shunning mechanism. In other words, community can perform an essential part in enduring damages initiated by natural disasters if such losses are mostly idiosyncratic.

The role of social capital is not necessarily confined to the community-based mutual insurance mechanism. Aldrich (2012) examines the coping strategies through which collective investment and nets support with disaster management, including modifying the responses of exit and voice, overcoming barricades to shared action, and providing informal cover and reciprocated aid. Through cases such as the 1923 Tokyo earthquake, the Kobe earthquake in 1995, the Indian Ocean tsunami in 2004, and the 2011 compounded tragedy in Tohoku, Japan, this section seeks to highlight a possibly actual and cost-effective response to catastrophes. Aldrich (2012) has proposed a new model for thinking about disaster recovery and for planning backup management responses. Moving beyond “brick and mortar” methods to recovery, it has emphasized that the connections between dwellers may serve as a critical engine during what may be a long and difficult rescue procedure. Rather than simply reacting to disasters as they happen in the forthcoming, far-sighted decision makers in these and other countries should change to embrace a social-capital centered style to policy making. To ensure a strong future for these countries they should increase community based planning and bringing the residents to the forefront.

2.7 Gender and natural disasters

Numerous studies highlights that women's role in society as caregivers for additional family members and their lack of flexibility escalates their exposure to disasters. Studies on disaster-related mortalities provides mixed results, as more women than men likely perish in earthquakes, whereas the contrary grips for weather-related events. A possible clarification is that women have a habit of staying at home which is a riskier site in times of earthquakes, whereas men work away from home putting them in riskier place in the event of hurricanes or tornadoes. A practical study after Hurricane Mitch offers similar suppositions about women's physical vulnerability to disasters. Gomariz (1999) finds that in Nicaragua more men perished than women (46/54% as share of total losses) and in El Salvador (43/57%) for the reason that of Mitch and there is no data for Honduras and Guatemala. The clarification for this difference seems to be that men were more likely to undervalue risks.

Research about risk awareness by gender displays that women are more worried with danger, human anguish and loss of life than men. In the case of natural hazards, studies settled that women were more dreadful of earthquakes than men, while less well-informed about the hazard itself. In addition to these behavioral variances, several disaster cases, such as the 1985 Armero mudslide in Colombia, illustrates that assistance responsibilities are usually distributed along gender lines, with men in custody of rescue processes or property safeguard against looting while women housing children and fix communal food.

In the regaining and rebuilding phases, women (particularly when head of family) are more likely to feel pain for a long time concerning their wellbeing than men, according to numerous studies in developing and developed countries. In India, when a family have to decrease consumption after shock, girls tend to suffer more from malnutrition than boys because of prejudices in the distribution of food among family members. Additionally, women have less entree than men to rebuilding jobs and credit. Two years after the incidence of Hurricane Andrew in the United States, households still wanting stable housing were the very poor mainly marginal group of women-headed households.

In the case of Hurricane Mitch in Central America, the proportion of women living in shelters in the instant aftershock of the disaster was equivalent to their percentage in the total population. This percentage meaningfully enlarged as the weeks passed, exclusively in the case of female-headed households, probably showing their problems in finding stable housing

solutions. According to Gomarz (1999) estimates of open unemployment for women in Honduras were expected to double in 1999 to above 9% though unemployment would stretch to 60%.

A Portion of this growth in unemployment is due to the point that a lot of women were working in activities predominantly susceptible to disasters, such as wrapping fruits for exports. They also had fewer opportunities to food-for-work programs and were downgraded to unpaid work regardless of the fact that many of the affected households are single female-headed. All these facts seem to verify the belief that women experience more problems in recuperating economically from disasters. At the same time, disasters can also establish chances for female headship and empowerment, as revealed by the fact that more than 30% of the housings in Honduras were run by women.

2.8 Early warning systems in disaster management

In Sri Lanka, over 34,000 people lost their lives due to the lack of a tsunami early warning system. While there would have been sufficient time to warn some of the coastal population, the lack of awareness regarding tsunamis, the lack of an early warning system, and the lack of training to respond to a warning inhibited the authorities and the local population from executing the proper measures which would have significantly reduced the loss of lives.

The traditional framework of early warning systems is composed of three phases: monitoring of precursors, forecasting of a probable event, and the notification of a warning or an alert should an event of catastrophic proportions take place. An improved four-step framework being promoted by national emergency agencies and risk management institutions includes the additional fourth phase: the onset of emergency response activities once the warning has been issued. The purpose of this fourth element is to recognize the fact that there needs to be a response to the warning, where the initial responsibility relies on emergency response agencies.

Operative early warning systems need robust practical bases and good facts of the risks. But they need to be strongly people centered with clear communications, distribution schemes that reach those at risk, and trained and well-informed responses by risk administrators and the public. Public consciousness and training are essential in addition to numerous sectors

involved. Real early warning systems must be entrenched in a logical way and appropriate to the communities which they serve.

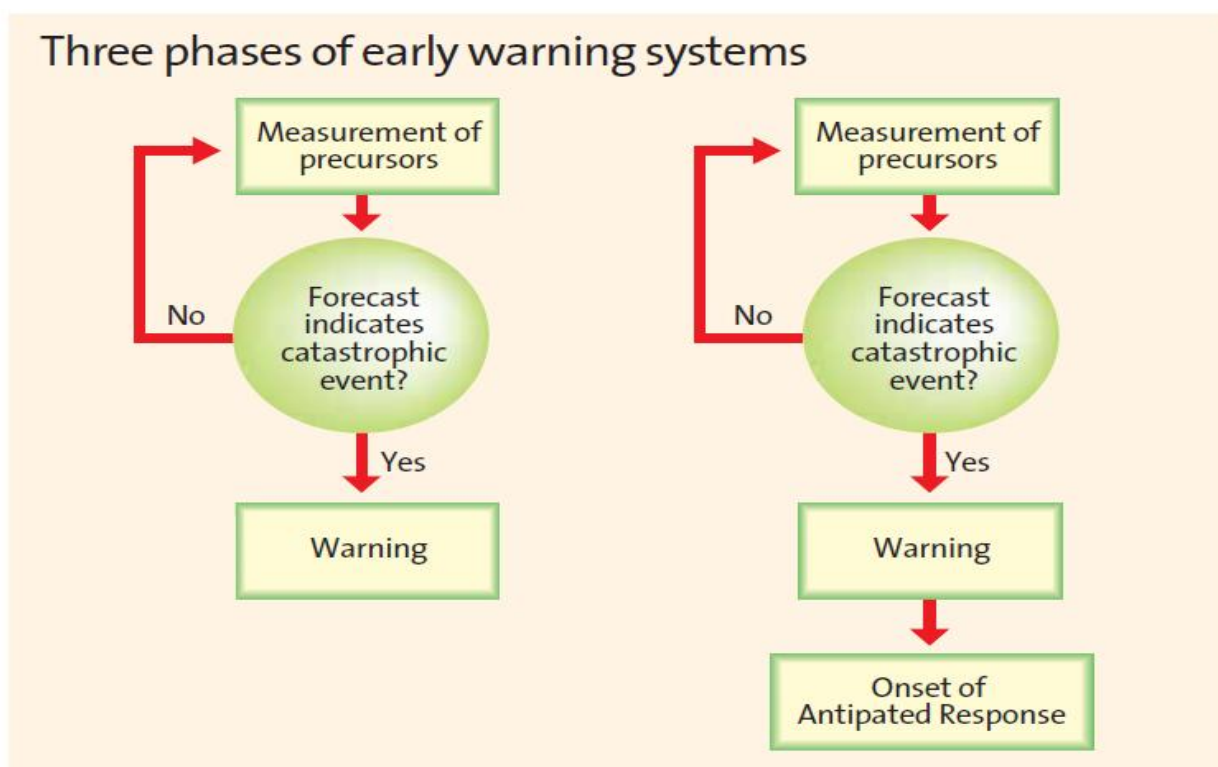


Fig 2.3 showing the three phases of early warning systems

A complete and effective, people-centred early warning system – EWS – comprises four inter-related elements, bridging understanding of hazards and susceptibilities through preparedness and ability to respond. A flaw or disappointment in any one of these basics might result in disaster of the entire scheme. Greatest practice EWS also have strong inter-linkages between all elements in the chain. While good governance and appropriate institutional arrangements are not specifically represented on the «four element diagram», they are critical to the development of effective early warning systems. Good governance is encouraged by robust legal and regulatory frameworks and supported by long term political commitment and integrated institutional arrangements. Key players anxious with the diverse features should meet frequently to guarantee that they comprehend all of the other mechanisms and what other stakeholders require from them.

Different hazards require different early warning systems: the needs for the warning of a drought or a tsunami, for example, are very different. Experiences gathered around the world show that some hazards are difficult to predict. For example, the forecast of catastrophic

eruptions or tsunamis in any part of the world is still facing major difficulties due to the lack of adequate measuring techniques to capture the true magnitude and timing regarding these potentially catastrophic events. Nevertheless, efforts are underway to advance such knowledge and improve the precision of such forecasts.

At present, a lot of systems that are capable to issue cautions for a number of natural hazards are in place. A common issue, however, is the frail connection between the technical ability to disseminate the warning and the public's ability to respond efficiently to the warning. In other words the aptitude of the warning to generate the suitable response by emergency management organizations, community- based organizations and the public at large.

2.9 Disaster preparedness in Zimbabwe

Activities or programs and systems developed and implemented prior to a disaster that are used to support and enhance mitigation of, response to and recovery from disasters or emergencies is the definition of disaster preparedness given by the NFPA. FEMA defines disaster preparedness as the leadership, training, readiness and exercise support and technical and financial assistance to strengthen citizens, state, communities, local or tribal government and professional emergency workers as they prepare for disaster, mitigate the effects of disasters, respond to community needs after a disaster and launch effective recovering efforts (www.fema.gov). It is against this definition that this research is going to assess the various disaster preparedness measures that are being under taken in Chimanimani. Nyahuye (2000) notes that natural disasters affect people in different communities in different ways, but the most usual and common results are hunger and poverty. Communities which are socially and economically marginalized have greater vulnerability, hence, effective community-based disaster management is limited (Bolin and Stanford, 1998).

Busch and Givens (2013) wrote about the various disaster preparedness partnerships that can take place between government and the private sector for example in information dissemination private radio stations may play an important part. This research is going to asses and identify if any such partnerships are existing in the Zimbabwe and Chimanimani as a district. Koichi Shiwaku, et al (2011) wrote about the role that education can play in both disaster preparedness and disaster management at large. Disaster information is supposed to be disseminated in two ways which are informal and formal ways if disaster education has to

play a significance role in disaster preparedness. This study sought to investigate how effective have disaster education been in disaster preparedness in Chimanimani district.

Elia Romo-Murphy (2013) examined the role played by the media in disaster preparedness in west Sumatra, Indonesia, by analyzing the role played by newspapers, community radio stations, contacts of neighbors and family. This research assessed the preparedness of Chimanimani district in Zimbabwe and establishes whether the local media is doing anything about disaster management or not. Gwimbi (2009) highlights that there must be effective early warning systems if the adverse impacts of disasters are to be reduced in Zimbabwe. This research identified the early warning systems that are in place for certain disasters and asses how effective are they in reducing the impacts of disasters.

2.9.1 Zimbabwe's national policy for CPU

Existing national policy for Civil Protection Unit (CPU) requires every citizen of this country to help where possible to prevent or limit the effects of disaster. Central Government pledges hazard lessening processes through appropriate sector ministries with the local administration captivating the accountability for applying and preserving its efficiency. The Civil Protection Act (Chapter 10: 06) provides for the establishment of the Civil Protection Organization in Zimbabwe. The CPU aims at firming the ability of the government at all levels to promote local communities to be well equipped for disasters and to be more effective in reacting to disasters when they happen. As a product of this involvement, communities will become more alert of disaster risks and how they can be abridged.

The key target recipients are central government through the Department of Civil Protection, local government through Provincial and District disaster management committees and local population at grassroots. The CPU has validated the fact that the country experiences a number of disasters, primarily droughts, floods, traffic accidents, veldt fires, land mines, epidemics, lightning and heat waves, with devastating consequences. As a result of these disasters, socio economic infrastructure is destroyed, lives are lost and livelihoods disrupted and sometimes completely destroyed. An institutional arrangement at national, provincial, district and in a few areas at community level exists and is functional, albeit with capacity challenges (financial, human, material and equipment).

2.10 Chapter Summary

This chapter is an account of published information on disaster preparedness and management. It deals with literature review which served to acknowledge works of other scholars who have researched in the disaster topics before, this was mainly influenced by the fact that this research is not the first one on disaster preparedness and management in the world hence why have a full chapter that deals with literature review only. The chapter also shows the importance of the study as it shows what have been researched thereby showing the gap that exist in the published literature on the topic which the research aims to cover.

CHAPTER THREE: THEORETICAL FRAMEWORK

3.1 Introduction

This chapter discusses the DRAF theoretical framework upon which the study will be underpinned. The theoretical framework presented in this chapter was the basis of analysis for the discussion that ensued later in the chapters to follow. Adding on to this, through the lenses of this framework recommendations and ways forward were suggested later.

3.2 Conceptualization of the DRAF Framework

This study was informed by the DRAF theory of disaster management postulated by Borison et al (2003). The DRAF theoretical framework distinguishes four categories of disaster risk: hazard, exposure, vulnerability and capacity measures (Figure 1.4)



Figure 1.4 The conceptual framework to identify disaster risk.
Source: Davidson, 1997: 5; Bollin et al., 2003: 67.

Fig 3.1 Conceptual Frame work of disaster risk identification

3.3 Application and criticism of the DRAF Theoretical Framework in the study

According to the DRAF theory, risk is viewed as the sum of hazard, exposure, vulnerability and capacity measures. In line with this, this thesis explained the hazard, exposure extent of vulnerability and capacity measures found in Chimanimani thereby determining the extent of preparedness for the Cyclone Idai disaster. While hazard is defined through its probability and severity, exposure is characterized by structures, population and economy. In contrast vulnerability has a physical, social, economic and environmental dimension. Capacity and measures which seem to be closely related to the subject of coping capacity encompass

physical planning, social capacity, economic capacity and management. Thus, these variables were assessed so as to discover the extent of preparedness in the area.

In contrast to the framework of the double structure of vulnerability developed by Bohle (2001), this approach defines vulnerability as one component of disaster risk and differentiates between exposure, and coping capacity (Davidson 1997; Bollin et al., 2003). Villagra'n de Leo'n also explains vulnerability in the hazard and risk context. He defines a triangle of risk, which consists of the three components of vulnerability, hazard and deficiencies in preparedness (Villagra'n de Leo'n , 2004: 10). Figure 3.2 reflects the "risk triangle" developed earlier by Crichton (1999).

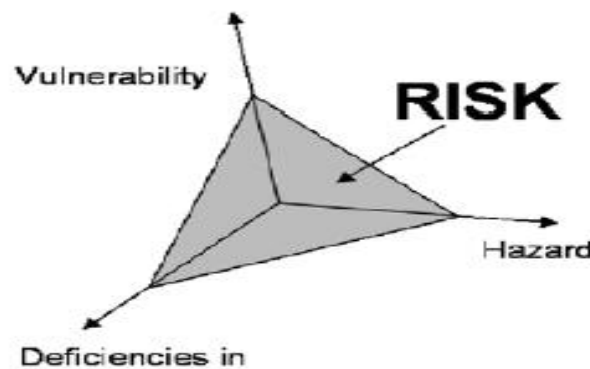


Fig 3.2: Risk Triangle by Crichton (1999)

However, he defines vulnerability as the pre-existing conditions that make infrastructure, processes, services and productivity more prone to be affected by an external hazard. Thus, in this case the concept of vulnerability was used to assess the government's preparedness in dealing with cyclone Idai in Chimanimani. In contrast to the positive definition of coping capacities, he uses the term "deficiencies of preparedness" to capture the lack of coping capacities of a society or a specific element at risk (Villagra'n de Leo'n , 2001, 2004). Using this conceptualization, the coping capacities were assessed thereby bringing out the extent to which the government was prepared for the disaster. Although the term exposure is not directly mentioned, he views exposure primarily as a component of the hazard (Villagra'n de Leo'n, Chapter 16)

3.4 Chapter Summary

This chapter discussed the DRAF theoretical framework upon which the study was underpinned. The theoretical framework presented in this chapter is the basis of analysis for the discussion that ensues later in the chapters to follow. Adding on to this through the lenses of this framework recommendations and ways forward were suggested later.

CHAPTER FOUR: RESEARCH METHODOLOGY

4.1 Introduction

Research methodology was defined by Denzin and Lincoln (2007) as a science of why and in what way research is done and conducted scientifically. Within research methodology the importance and thrust is on the stages and procedures taken by the researcher in studying his or her study problem and the reason behind each step or procedure adopted. Rajasekar (2013) notes that methodology is vital for any branch of research or scholarship because an untrustworthy methodology undermines the value and meaning of the study process as a whole. This segment highlighted the organized plan and procedures followed in conducting the research. The study design, study site, data collection methods, sampling technique and sampling size, data analysis method, fieldwork dilemma, ethical consideration and the limitation of the study are at the core of this chapter.

4.2 Study Design

The study was based on mixed methods approach in nature as it sought to fully evaluate the government's disaster preparedness in the wake of Cyclone Idai disaster. Rajasekar (2013) defines the mixed approach design as a systematic objective approach used, and procedure followed to describe events based on both qualitative and quantitative means. Denzin and Lincoln (2007) also postulates that, the mixed method research design is vital and crucial when a researcher seek out to objectively gain insight; explore the depth, richness and complexity inherent in the phenomenon. This study used the mixed method research design not only because of its capacity to improve in-depth analysis but also due to the fact that it is entrenched in the voices and socio-political facts and experiences of the research participants.

4.3 Study Site: Ngangu in Chimanimani District

Hall and Howard (2008) notes that there are various aspects that one has to reflect when selecting a study site for a research, and these factors include the tenets of the place that concur with the study demand, the accessibility of the place, time and cost factors etc. These aspects informed the selection of Richmond (Fig 6) in Ngangu town in Chimanimani as the location or site where the study was conducted. Basing on the study to be conducted, Nemaconde and Niekerk (2017) highlighted that Chimanimani was key in studying disasters as it was heavily affected by the recent Cyclone Idai hence bears the brand of how disasters affect communities. Secondly, conforming to the convenience sampling technique, the

researcher chose Chimanimani because it was closer to where the researcher lives, which made it an advantage when it came to gaining entry, rapport and identifying the study participants who live in affected areas of Chimanimani such as Ngangu and Rusitu. The proximity of the researcher to the study site inevitably enables the researcher to cut travelling costs and also minimize the time spent travelling to the study site. Above all, Chimanimani met the characteristics of how the government's disaster management plan works.

4.4 Recruitment of Participants

Denzin and Lincoln (2007) accentuates that the presence of research participants into an inquiry or study is determined by the participants meeting the study's criteria, features and objectives. For this study, the participants were selected from the people who have witnessed the Cyclone Idai and those who have worked in helping the government during its course who live in, around and close to Chimanimani. The researcher used a list of the people who live in Ngangu Township and Rusitu from the DEO's office and randomly selected houses when she was on the ground in Chimanimani which was used for randomly selecting the participants. Through employing the snowball chain referral technique, the researcher was referred to participants who have knowledge and experience of phenomenon under study. In recruiting the study participants, the researcher took into considerations the social categories of age and gender, in order to capture the different viewpoints which might or might not be influenced by the social categories. Bergman (2008) notes that gender, race, class and age issues should make the basis of any social research which seeks to capture the different and diverse experiences and perception of a phenomenon under study. To meet this goal, the researcher was creative and used the chain referral process to include the different gender and age groups. The researcher asked each participant to refer and nominate another cyclone victim who is of the opposite sex. For example, the first participant was male and the researcher asked him to nominate a female who meet the study criteria. This strategy enabled the study sample to be representative in terms of age and gender.

Given the need to achieve a detailed account and detail of the participants' objectivities, subjectivities, experiences and perceptions, it is of greatest importance to limit the sample size to a manageable, achievable, practical and theoretical sensible numbers in terms of time and cost (Bazeley, 2004). In terms of the sample size, the initial purpose of the study was to have a gender and age sensitive sample. The researcher took advantage of the chain referral

to recruit participants until the researcher realized that the study had reached the stage of saturation.

4.5 Data Collection Methods

According to Creswell et al (2007), data collection methods are procedures for the systematic collection of information. Data collection methods entail the process and procedures of gathering data on a targeted variable in a reputable and methodical fashion, which then allows the research to answer relevant study questions. The study used interviews, questionnaires and Focus group Discussions (FGDs) as the three data collection methods. The main aim of using in-depth interviews was to garner information on individual knowledge, experience and comprehension of government in disaster management, while the questionnaires was employed to gather the statistical, quantitative knowledge and direct observations to gather collective experiences and the socially constructed through people's activities.

4.6 Data Analysis Method

Data analysis or analysis of data is defined as the procedure of analytically applying logical techniques to describe and demonstrate, classify, organize, shorten and unify data. According to Shamoo and Resnik (2009), several data analytical approaches offer a technique for making inductive inferences from the collected data and also allows the grouping of the data into relevant subsections. This study was purely qualitative in nature which automatically qualified the use of the thematic data analysis method which is associated with the qualitative paradigm.

Data analysis was multi-layered. The first layer comprised document analysis which lasted for entire research process. The second layer revealed quantitative data analysis using SPSS to produce descriptive statistics such as frequencies, percentages and averages. The third layer comprised of thematic qualitative data analysis which was primarily inductive. Creswell (2007) highlights that due to the intuitive and inductive nature of qualitative data, thematic analysis consisted of three specific activities, first entailed scrutinizing the data for themes, concepts and propositions; the second required manually coding the data and refining one's understanding of the subject matter, and the final activity involved understanding the data in the context it will be collected.

4.7 Ethical Considerations

Bazeley (2004) notes that in research ethical issues and considerations are crucial and they are of great significance as of the entire study. Ethics are the norms, values or standards for behavior that distinguish between wrong and right throughout the study. Hall and Howard (2008) states that ethics help in defining the variance between desirable and undesirable behaviors. In addition they also set about the proper procedures that rule or regulate the researcher-researched relations. Therefore, pursuant to Munhall (1988) view that the handling of these ethical issues significantly affects the truthfulness of the research, this lead the researcher from the beginning of this study to be very attentive to ethical issues such as principles of informed consent, confidentiality, anonymity and protection of participants.

4.7.1 Informed Consent

Munhall (1988) postulates that when doing social research human subjects are involved, therefore they should decide to voluntarily without being forced. The researcher made sure that he or she explained fully so that participants voluntarily choose to participate. Informed consent entails that the researcher informs the participants on every single aspect of the study, so that the participants are in a well-versed position to decide on whether to partake or not (Denzin and Lincoln, 2007). This ethic ought to be observed in order to give assurance that participants are at liberty to choose participating in the study after they have been fully educated on the study processes and any possible risks.

The researcher furnished the study participants at the very moment of approach before the beginning of an interview, with the essential information on the study purpose, design and procedure so as to equip them with the information of the study that would let them make an informed decision on whether to participate or not. The researcher also openly advised the potential participants that the researcher would not give out any form of payment, imbursement or motivation for participating in the study. The minute a participant voluntarily decided to participate in the study, the researcher then provided them an informed consent form which they signed before the interview started. However, this did not deter some participants to ask for compensation or payment for the time and information they gave to the researcher. The researcher could not pay or force the participants to participate but resorted to approach other participants willing to contribute without receiving any payment.

4.7.2 Anonymity and Confidentiality

Moral principles of secrecy and discretion were careful and highly treasured from the process of data collection and presentation to the concluding stage of publication. Munhall (1988) posits that the researcher ought to put into place the approaches and stages that he or she would take to safeguard the identity of the participants from being revealed. This study was governed by the value or ethic of anonymity. The researcher held the opinion that some participants might divulge their involvements, perspectives or discernment which might not want to be linked to their names or evidence that helps recognize them. Therefore, during the course of the research process, false names or pseudo names were used to stand in place for the real names of informants. The actual names or any material that pinpoints the participant was not captured or requested. This allowed the participants to openly share without fear of having their personality being revealed.

4.7.3 Debriefing

Denzin and Lincoln (2007) highlights that every research interview starts with the procedure of informed consent and closes with the practice of debriefing. The practice of debriefing provides opportunity for the participants to let out their remarks, criticisms and views of the interview process. Subsequently every FGD discussion and interview the researcher took time to relate with the participants off record. The post-interview interaction was used to ascertain and make sure that the research process did not harm any participant in any way. Some participants used this time to highlight some of the issues that they felt were left out during the interview and FGD or to know more about the researcher and the study. At the end of the discussions, the researcher extended her thankfulness to the participants for their time, data, involvement and endurance during the course of the data collection procedure.

4.8 Chapter Summary

This chapter focused on research design which was used by the researcher in data gathering. It further explained the study design, study site, recruitment of participants, data collection methods, data analysis and issues to do with ethical considerations such as informed consent, anonymity and confidentiality, debriefing., population, sample, research instruments, data analysis and presentation plan. The researcher used interviews, questionnaire and focus

group discussions to gather data from the participants. Research ethics were also observed so that the researcher would not encroach into the research participants' privacy.

CHAPTER FIVE: PRESENTATION OF FINDINGS

5.1 Introduction

This chapter is the presentation of the study findings directed by the research objectives. The results are discussed in relation to the data that has been discovered in the study. Both qualitative and quantitative data are presented and deliberated concurrently augmenting each other thereby strengthening the trustworthiness of research results. The chapter is divided into different themes drawn mostly from the objectives of the study.

5.2 Demographics

Table 5.1 Demographic characteristics of participants

N=80 95% Response rate		FREQUENCY	PERCENTAGE %
Age of respondents	10-19years	15	18.75
	20-29 years	20	25
	30-39 years	35	43.75
	40-49 years	6	7.5
	50+	4	5
Gender of the participant	Male	30	37.5
	Female	50	62.5
Marital status of the respondent	Single	35	43.75
	Married	30	37.5
	Divorced	8	10
	Widow	7	8.75
Educational level	No formal education	10	12.5
	Primary	15	18.75
	Secondary	35	43.75
	Tertiary level	20	25

Source: Field notes

From the statistics above, it can be noted that the majority of the people who are involved in the study are the adults that are mostly economically active that is those from the age of 20-50+ who form about 81.25% of the population of people in Rusitu ($n=80=100\%$). As shown by the statistics above, most of the participants (87.5%) (primary+secondary+tertiary) have formal education whilst 12.5% of the participants do not have formal education. In addition to this, the statistics clearly show that most of the participants are females who constitute 62.5% of the participants whilst 37.5% of the participants were males. The participants as also shown through the demographics, 43.75 % of the participants are single and not yet married whilst 37.5% are married and the remaining ones are divorced and some are widowed.

5.3 Disaster preparedness of the government of Zimbabwe in the wake of Cyclone Idai disaster that hit Chimanimani

In the study, it was noted that the government was ill prepared in the wake of Cyclone Idai disaster that hit Chimanimani. The CPU gave warning signs late to people in Chimanimani. In an interview with the village leaders in the area, these cited that the government was ill prepared as shown through the weak communication systems which made it difficult to pass on the message to people in Chimanimani in time. In light of this, one village head Mr Mandipa explained that:

“the communication systems were down and are even still down it happens every year during the rainy seasons that our televisions and radios barely get a signal hence in this time it was difficult to get even information from our radios and televisions.”

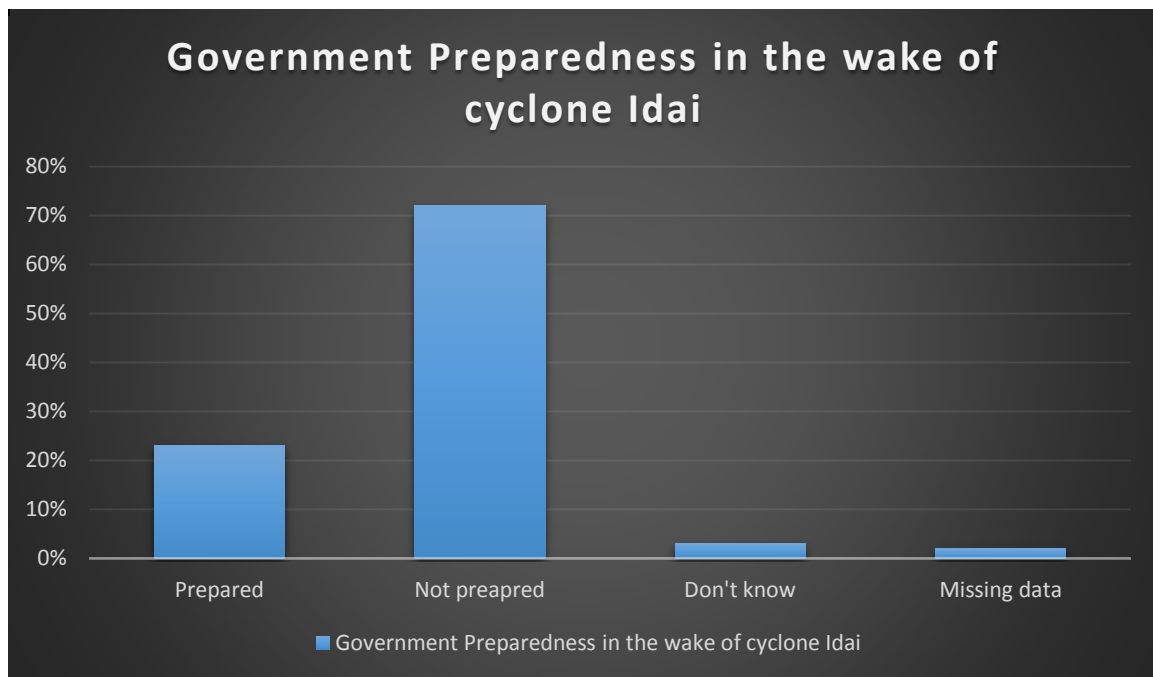


Fig 5.1 showing extent of government's preparedness in the wake of Cyclone Idai

From Figure 5.1 above, it can be noted that the government was not fully prepared for the Cyclone Idai disaster that hit Chimanimani from the perspective of the participants in the survey. 72% of the participants highlighted that the government was not prepared to deal with the disaster when it struck in Chimanimani whilst about 24% stated that the government was prepared to deal with the disaster that struck in Chimanimani. However, it can be noted that from the participants interviewed about 4% of the participants highlighted that they did not know whether the government was prepared or not.

In line with the above, it was also noted that the state of unpreparedness could also been seen in the reserves that were needed for the study. Most participants highlighted that in the first weeks after the cyclone the government failed to provide food, tents and even blankets to those that were affected. Most provisions came through NGOs such as Red Cross, CARE, World Vision and United Nations agencies such as UNICEF and other private organizations such as churches. The role of the government was to coordinate and facilitate the smooth clearance of such goods to Chimanimani. This was noted in the FGDs that were conducted in the study.

As was noted also in the key informant interviews that were conducted in the area, the government preparedness is questioned in the time it took to react to the disaster. Key informants from the CPU explained that:

In the pre-cyclone times, the government took time to warn people and even pool resources together to deal with the cyclone. The reaction started days before the cyclone whilst the cyclone had been forecasted two weeks before it even struck. In addition to this even though the government reacted after the cyclone it took many days and up to a week to get organised and save lives hence causing the loss of lives along the way.

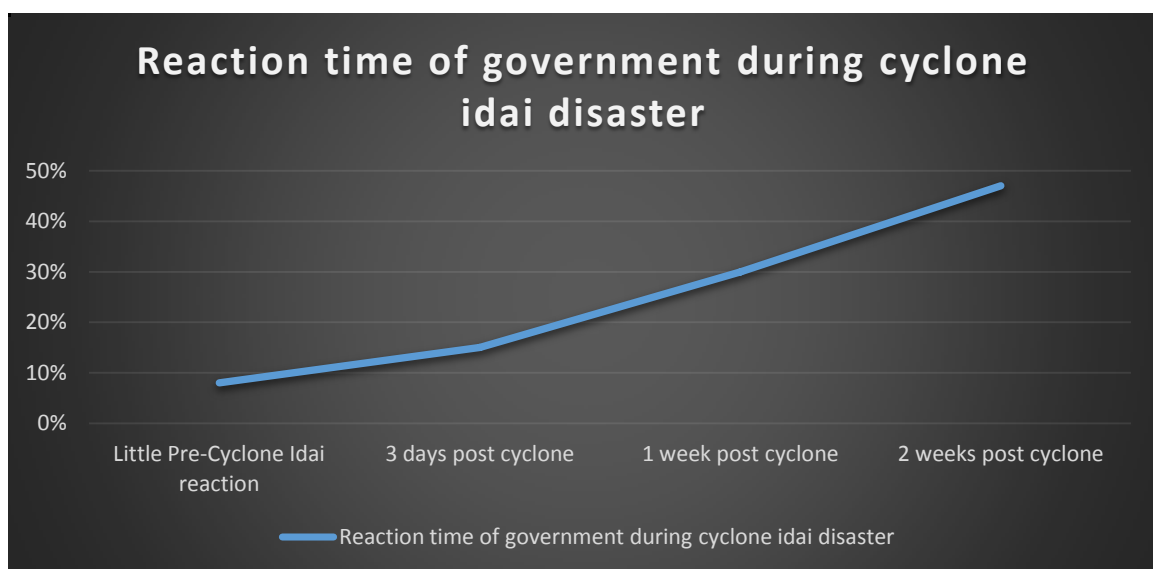


Fig 5.2 showing the rate at which government reacted to Cyclone Idai

From the line graph above it can be noted that the reaction of the government before the cyclone Idai struck was minimal and actually hit the peak two weeks after the cyclone had struck in Chimanimani Zimbabwe based on the different perspectives of the participants in the survey. In the graph before the cyclone hit, 8% of the participants highlighted that the government was involved in dealing with cyclone issues before it happened, whilst 15% of the participants highlighted that 3days after the cyclone hits its involvement grew up. However, 35% of the participants highlighted that a week after the disaster struck the government reacted whilst 45% of the participants highlighted the reaction after two weeks.

In addition to this, another village head Mr Nerutanga explained that

the state of preparedness affected the government reaction as this starts from the infrastructure that is put in the area. The government neglected us as can be noted with the roads in this area, from this you can note that in the event of a disaster we would perish as a result of failing to get essential supplies.

Adding on to this, Jane aged 35 highlighted that

Hurumende yakange isinia kugadzirira nokuti yakanzwa nezve cyclone idai nevemamiriro ekunze asi hapana chayakaiita. Hapana zvikwanisiro zvakatumirwa nekubviswa kwevanhu munzvimbo dzaive nejnodzi zvinoratidza kushaya hanyakwehurumende. (The government was ill prepared in that through the forecast of weather it heard of the disaster but nothing was really done or even to send supplies earlier or early evacuations. That alone shows some negligence on the part of the government.)

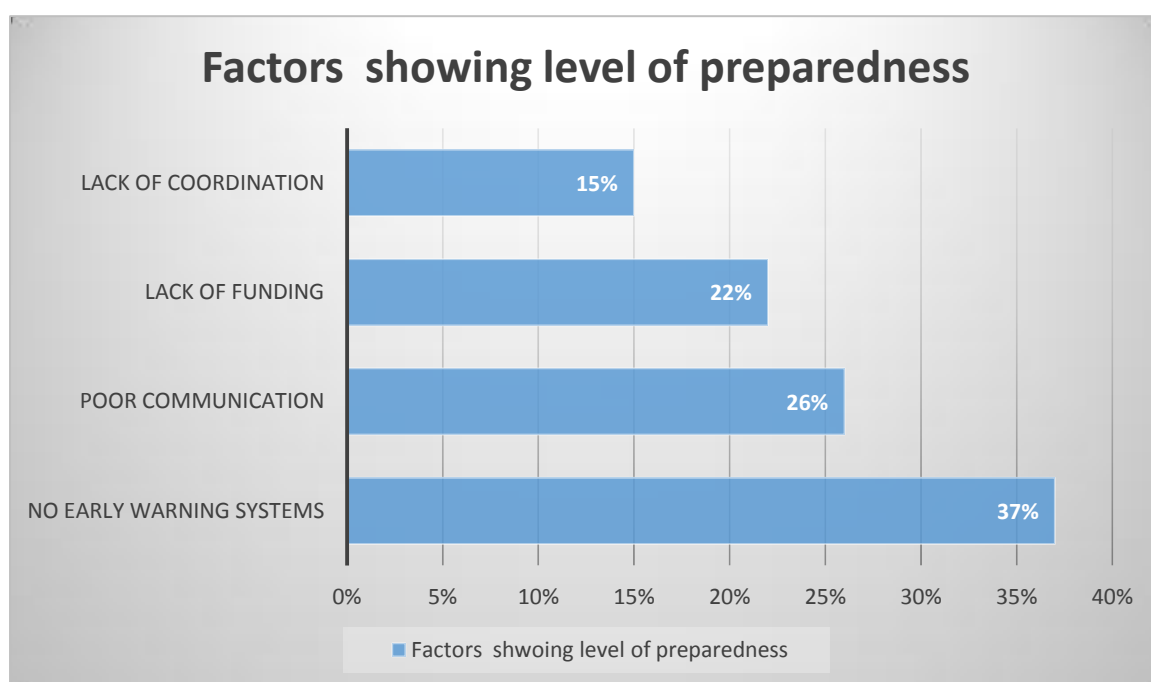


Fig 5.3: Factors that show level of preparedness

From the survey conducted most of the participants highlighted that the government was highly un prepared for the cyclone idai disaster that hit Chimanimani areas. 37% of the participants highlighted that there were no early systems that were put in place before the disaster struck whilst 26% of the participants also highlighted that there was poor communication about the disaster and its severity. Adding on to this, 22% of the participants

highlighted that there was lack of funding allocated to disasters before even the cyclone struck and in the whole process of dealing with the disaster coordination was poor.

In line with this, it can be noted that also in the FGDs conducted that the arms of government were caught unawares by the disaster. In an FGD that was conducted with experts in disaster management in Chimanimani, most of these agreed that arms of government responsible for disaster management such as the CPU were not even prepared to save lives. Most of the participants highlighted that the CPU at the time did not even have vehicles to move in to help people, supplies such as blankets and food together with essential communication equipment that would be needed.

Furthermore, in an interview with some government official Mr Chitsa in the area he acknowledged the challenges that were faced before during and after the disaster. In his words he explained that:

no one even knew that the cyclone was coming, however we tried to react with the limited resources that we had. We even had to ask our neighbors South Africa with helicopters to help with even those of the Airforce that we had. Thus, we had difficulties as result of the economy and other challenges that we are facing locally but eventually we save lives with the help of other stakeholders that saw our challenges.

In addition to this, in the study it was also highlighted that too much centralization was another basis that clearly explains the governmental delay. The government was ill prepared in that it had no direct access to funds for the disaster as there was no arm that was given the sole responsibility and resources to deal with disasters. In line with this it was discovered that arms of government work hand in hand hands no department was prepared enough to deal with the disaster at hand. Most experts highlighted that when the CPU wanted to react it had to go through the Provincial officers that had no data of the extent of the disaster who would also go down to the District offices also that and no personnel to deal with the emergency hence the delay that ensued in the intervention in Chimanimani.

In line with the above, in the FGDs conducted it was also noted that the government was now fully prepared because there was little money that had been set us aside for emergencies. In the budget of 2019, the largest amounts of money were allocated to the defense, health and

education; however, there was no stand-alone fund for any emergencies. Experts in the discussion highlighted that each ministry after receiving money from the treasury was supposed to put aside money for emergencies though this was not done. In line with this, Mary aged 27 explained that when you see citizens starting issues such as the go fund Idai, one can note that the funds needed to save the people will not be available at the time.

Moreover, in the study it was also noted that even the food sector was not prepared for any disasters forecasted in Zimbabwe. In the FGDs conducted it was highlighted that in as much as the cyclone had been forecasted weeks before no level of preparedness in terms of movement of food to areas closer to where the disaster was about to hit was done. Other participants highlighted that in the food reserved there was nothing that had been allocated yet for disasters hence the difficulties to respond in such a short time after the disaster struck. Adding on to this, Fidelis aged 24 a victim of the disaster weighed in by stipulating that the government had nothing in stock saved for disaster hence relied more on the NGOs donations to come and give us.

In addition to this, another factor that came in was the issue of coordination in times of the disasters. The state of ill preparedness can be noted in lack of coordination that can be noted in the government in intervention efforts. In the study it was highlighted that the intervention efforts were not structured properly as sectors poorly coordinated. In the discussion held it was noted that MOHCC and Ministry of Labour and Social welfare had different ways of interviewing. In the FGDs it was noted that the statistics given of dealing with the disasters varied and some were in error. The research wing of the government in disaster remained not functioning well due to ill preparedness of the government in dealing with the disaster.

5.4 The effectiveness of government's intervention in the scourge of Cyclone Idai disaster in Chimanimani.

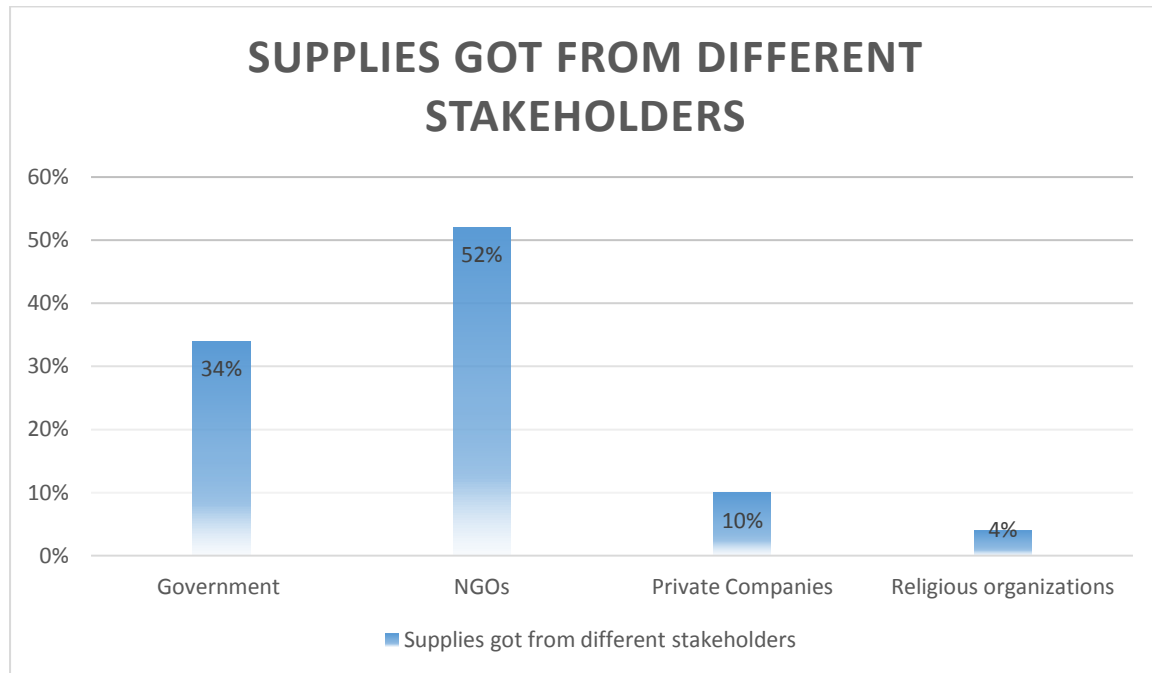


Fig 5.4: Supplies received from different stakeholders

In the study, most of the participants highlighted that the government effort was now minimal when the cyclone hit Chimanimani. These explained that the government was limited as result of the challenges that were mainly financial and the economic woes that they were going on in the country. As highlighted in the graph above, 34% of the participants highlighted that they had received supplies from the government whilst 52% of the participants highlighted that they received supplies from different NGOs. Adding on to this, 10% of the participants received supplies from private companies whilst the remaining 4% of the participants highlighted that they also received supplies from the religious organization that also supported people during the Cyclone Idai.

However, other participants highlighted that the government intervention though minimal was very fundamental in the interventions that were done in Chimanimani. CPU officials highlighted that

“the government played a pivotal role as it coordinated the interventions of other NGOs and private companies into Chimanimani. The government had insights into the most affected areas of the are through the structures that worked at village level, district level and also provincial levels which are very vital in any intervention.

Though it had limited funding to deal with the disaster, government provided the personnel need to trace bodies and even also reconstruct infrastructure that was damaged.”

In addition to this, Mr Chimbo another key informant highlighted that the government was crucial in the cyclone Idai intervention. He highlighted that

“the government rescued people during the disaster through the ZNA. The ZDF wing of the Airforce managed to rescue people that had been trapped during the cyclone just a day after it had struck Chimanmani. In addition to this, the ZNA managed to clear roads and built temporal bridges in the area which were very crucial in bringing in supplies in the area.”

In the study, most participants highlighted that the effectiveness of the government could be seen in coordination roles and also on the ground hands on roles. In the FGDs conducted, participants acknowledged that the government role was seen through the ZDF that operated in the area who were very excellent in building temporal shelters, tracing bodies and clearing roads. These further added that the government also played a pivotal role in processing papers of NGOs to operate in the area. The clearing of goods was done on time which further added to the swift reaction by the NGOs to come to the area which all emanated from the government.

However, though the coordination was praised in the study, some participants highlighted that the coordination sometimes would be faulty which resulted in goods not reaching the intended beneficiaries. In an interview with Dorcas aged 23 she highlighted that;

Ehe hurumende yakabviroiita zvakakanaka kufambisa tsamba dzokuti masangano anoparubatsiro apindire munguva yeCyclone Idai asi pane imwe nguva vainonoka sepavakaita kuti chikafu chioore chiri kuWarehouse maMutare chsina kusvika kwatiri nekuti Provincial Officer vavasina kusigner. (Yes, the government did well in coordinating NGO to intervene during cyclone Idai. However, during this, some food supplies became stale and went bad without reaching us because of the bureaucracy of the government, as the Provincial Officer had not signed for its dispatch to us.)

Moreover, in the study, the effectiveness of the government intervention was questioned also based on the politicization of aid that was received. Most of the participants highlighted that the coordination of the intervention was heavily politicized. In most interviews with the

community participants these highlighted that at the distribution of the supplies that even had come from NGOS was very partial as it was distributed using the ZANU PF party data bases making sure that party members are the priority. Angela aged 19 highlighted that *zvinhu zvacho zvaitwa pachi Zanu Zanu zvekuti kana wanga usiri wemusangano zvainetsa kuwana*. (The distribution was very partial as it was done based on how its run in the ZANU PF party putting their people first.) In addition to this, the participants highlighted that as a result of this partiality in the intervention by the government then their sincerity in helping during the cyclone Idai disaster would be questionable as it left some of the people behind.

5.5 Challenges faced by the government of Zimbabwe in responding to the Cyclone Idai disaster in Chimanimani.

In the study the first challenge that was raised was that of poor communication. Most participants highlighted that as a result of how mountainous the area is, they had not heard the communication about the coming cyclone that was going to affect the area. In the FGDs conducted, most participants highlighted that the information only reached them through radios but there was no directive as to what to do when the cyclone was to hit the area or even before it hit the area. The communication that had been done was hazy in nature and lacked the final details that would help the people in the area to react to the challenge as the information came with the normal weather report that they would hear every day. However, others highlighted that the signal was very poor hence could not hear of anything from both radio and television.

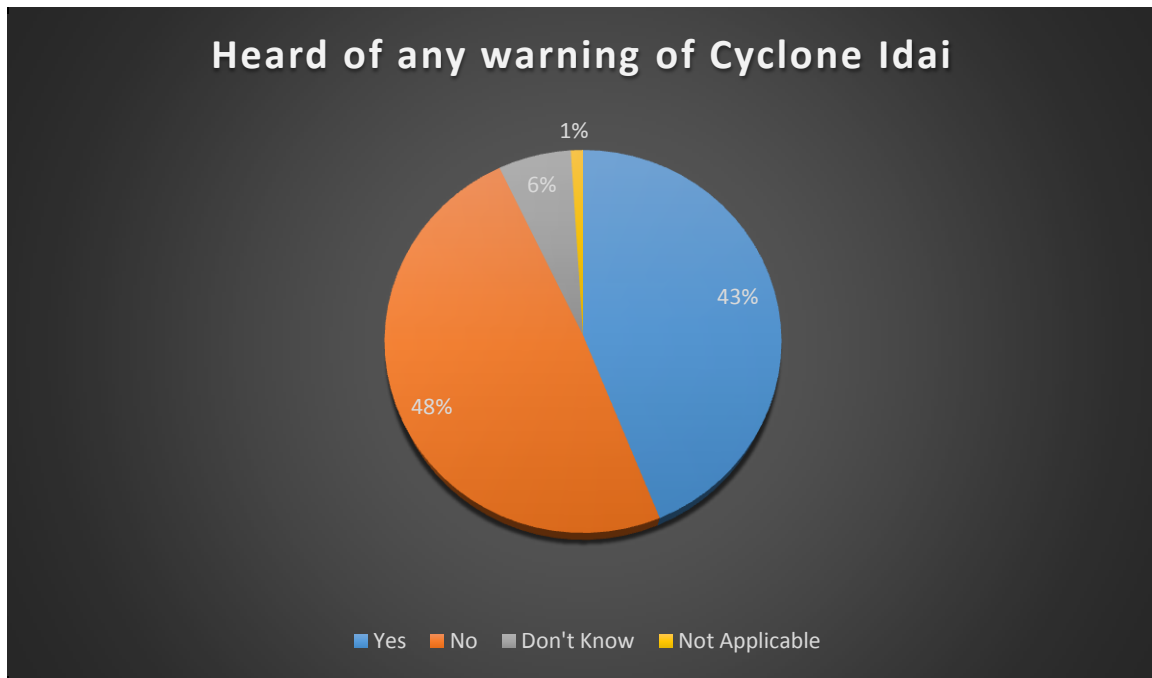


Fig 5.5: Did the Chimanimani people receive any warnings before the disaster

From the pie chart above, it can be noted that in terms of hearing any information about the cyclone before it happened most participants highlighted that they did not receive information about the cyclone or any warning before it happened. From the pie chart above it can be noted that 48% of the participants cited that they did not receive any information about the cyclone before it happened whilst 43% did acknowledge that they received the information before the cyclone happened. However, 6% Of the participants highlighted that they did not know whether they received the information about the cyclone or not.

In the survey conducted most participants highlighted that there was poor communication about the disaster to the people in the Chimanimani. In as much as the disaster had been forecasted in the weather reports the reluctance of the government to act caused people also not to take it seriously.

In an interview with Mirriam aged 36 she explained that,

isu zvecyclone Idai takambakuzvizwa asi chiro chakatinetsa ndochokuti hurumende haina kana shoko rayakatiuudza kuti tochifamba wani ye todii. Isu hatinakubviro tondera nokunisngisa kuti chiro chii chainzi Idai chingazotiurayira ana mwamuna wedu ngendaa yokuti hurumende haina chayakabviro taura pamusoro pazvo (We heard about cyclone Idai, but we did not take it serious as the government did not give us any information on what to do. We did not know that the cyclone could be this

deadly and would end up killing our relatives because no word from the government about such impact had been communicated.)

In addition to this, other workers who worked for government departments highlighted that there was no formal communication in the pre-cyclone days about how to deal with it when it eventually strikes. In the FGDs conducted with experts these highlighted that the government did not even communicate about steps to take when the cyclone hits the ground. In as much as the information on the forecast highlighted that the disaster would soon be upon Zimbabwe no action was taken hence causing much loss of lives. In addition to this, other participants highlighted that even taking it back to pre- cyclone Idai, for the villagers no workshops were done to inform villagers on actions to take if any disaster occurs in the area. These further added that no early warning systems had been put in place in such an area and even in our offices it was business as usual.

Additionally, lack of funding was also unearthed in the study as another challenge that could actually be noted in the study. Most of the participants highlighted that the government had not money to deal with the effects of the disaster when it happened. Ms Nyoni highlighted that with the economic woes in the country the government had no funding to deal with the cyclone both before and even after it struck in the area. This can be noted through that the government appealed for funding from NGOs and also even companies during the time as they could not even cope with the extent of the disaster that had hit the area. In line with this in the FGDs it was noted that during the time when the disaster struck the government only availed about zwl \$700 million to cope with the disaster whilst about US\$500 million came from NGOs and other private entities (ZIMSTATS).

In the study, most participants highlighted that before the cyclone hit the area there was poor infrastructure in the area. In the interviews conducted most participants concurred that the road in the area where mainly gravel roads that were rarely serviced by DDF since 2013. In addition to this these also highlighted that the bridges were also poorly constructed such that any flooding in the area could wash the people away in the area.

In light of this Chiwoniso highlighted that:

munzvimbo muno maroads edu cyclone isati yauya angeashata, kukanaya madhaka oga oga. Anhu aigonakutoyeredzwa ngehova dziapfuura nemunzira dzkaita saana

Nyahode naRusitu. Zvino pakazoite mafashama ecyclone aya zvakatozoiite worse nekuda kwekushata kwakakaite zviro. (Before the cyclone most roads in the area were in bad state as they were too muddy. People could be washed away when flooding could occur in the area)

Not only was the infrastructure, such as roads, down but also the services that are in the area were also affected. In the study it was noted that the poor infrastructure and response equipment at Provincial and district levels could be noted as both the provincial hospital and local clinics did not even have adequate facilities to deal with any fatalities in the area. Most participants in the interviews concurred that the local clinic at Rusitu was heavily incapacitated before the time of the cyclone and with the cyclone's pressure increased. In addition to this both key informants and other participants interviewed highlighted that the Provincial offices and district office had no vehicles before the cyclone and could not even help during the cyclone. Adding on to this, these concurred that equipment to clear the sludge from the rivers and flooding residue was only ferried from Harare to Mutare in the post cyclone era to do the job whilst some excavators came from local companies that donated help.

Moreso, it was also highlighted that, even at National level, response mechanisms were not put in place fully to the cyclone. Key informants interviewed highlighted that in as much as the ZNA did a formidable work to save lives, government was not fully organized to intervene in the cyclone. These highlighted that the government only sent one helicopter to save lives whilst the other only came from South Africa and the other came from UNICEF to help in saving those that were trapped. These also added that even the national army was not even clothed for the occasion together with the other staff at clinics which depicted the lack of organization and also food response from the government.

5.6 Ways in which the government of Zimbabwe can improve its disaster management system basing on the Cyclone Idai experience

In the FGDs conducted with experts, it was noted that the Zimbabwean state and its citizens can draw some useful lessons from Cyclone Idai although it had multiple negative effects. The CPU has the mandate to direct absolutely disaster preparedness events but it found itself during a position where it does not have means to alleviate against disasters that befall throughout the country. This is also supported by the views from the NGOs representatives interviewed who highlighted that many disasters occur and communities are partially

prepared for the disasters. It was also noted that stakeholders needed to work together in order to reduce the impact of disasters. This shows that the Department of Civil Protection need adequate capacity and resources, including for research and core equipment to gather the knowledge necessary to understand and prepare for the disasters to which Zimbabwe is prone.

Furthermore, in the FGDs conducted that had the village leadership and experts in disaster management it was noted that anticipatory hazard profiling helps build local preparedness and capacity, and anchors sustainable (hazard-resilient) development. In other words, communities should come up with various ways of improving disaster preparedness. Community sensitization and awareness on disasters is one of the popular suggestions and there should have the formation of disaster committees in each ward/district. Sustainable local development (social, economic and ecological) allows communities to have appropriate natural and other infrastructure that can help them cope with disasters. This shows that there is need for a bottom- up approach planning that is planning that involves communities.

Experts interviewed highlighted that Cyclone Idai caused a lot of damage and it had long-term effects on specific social groups. Building of the local capacity is necessary to ensure ongoing psychosocial and material support is critical for recovery. The case of strengthening the capacity of village health workers after Cyclone Idai reflects this lesson, which is true of other local structures involved in development planning and management. Integration of survivors within their own communities helps with healing, as opposed to settling IDPs in camps

In the FGDs conducted, it was noted that relocation of people who have been displaced by disasters or who live in risk-prone areas is an important and growing response that should be applied in Zimbabwe. The government of Zimbabwe should have well planned resettlements and implemented in a participatory manner that is guided by an appropriate support framework based on new legislation.

5.7 Chapter Summary

The chapter presented, the study findings directed by the research objectives. The findings were presented in relation to the data that has been discovered in the study. Both qualitative and quantitative data were presented concurrently augmenting each other thereby reinforcing

the reliability of research results. The chapter was divided into different themes drawn mainly from the objectives of the study.

CHAPTER SIX: DISCUSSION OF FINDINGS

6.1 Introduction

This chapter discusses the findings that were unearthed during the study on assessing the extent of government's preparedness in the case of Cyclone Idai that hit Chimanimani. The chapter will be pivoted on the data unearthed in the study presented in chapter five, the literature review and the theoretical framework. The chapter is divided into different segments that are representative of key ideas noted in the study.

6.2 Government pre-disaster incapacitation leading to vulnerability

According to the DRAF theory, risk is viewed as the sum of hazard, exposure, vulnerability and capacity measures. Risk is analysed based on the extent of the hazard and how exposed the particular group of people in question are. The risk is further compounded by vulnerability of the nation and the group of people in question as seen in their livelihood options and the capacity to bounce back. In light of this, in disaster analysis index most developed countries are though they are exposed their risk is regarded as low based on the capacities to bounce back whilst developing nations such as those in Africa are high risk countries in terms of vulnerability (Belle et al, 2017). In line with this, it can be noted that before the hazard was even there, the whole Chimanimani community was exposed as the nation was not adequately prepared to deal with the disaster. This can be supported by what was unearthed in the study that the government was ill prepared in the wake of Cyclone Idai disaster that hit Chimanimani. The CPU gave warning signs late to people in Chimanimani. In line with this, (Hill and Nhamire, 2017) highlights that the exposure of the people to the hazard of Cyclone Idai can be seen in that before the disaster struck the government did nothing and was ill prepared to deal with any emergency. In an interview with the village leaders in the area, they cited that the government was ill prepared as shown through the weak communication systems which made it difficult to pass on the message to people in Chimanimani in time. This was also confirmed in the study by Nemaconde and Niekerk (2017) who highlighted that most governments in the developing nations especially in Africa are rarely prepared to intervene in disasters due to lack of capacity to do so.

Furthermore, Bhaiseni (2017) highlights that the vulnerability people in a situation is not caused by themselves but sometimes authorities, neglect makes the people more vulnerable to hazards. In line with this in the case of Cyclone Idai, the authorities neglected the people of Chimanimani as it was not fully prepared to deal with the impending crisis that was to come. From the study conducted, it was noted that the government was not fully prepared for the

Cyclone Idai disaster that hit Chimanimani from the perspective of the participants in the survey. 72% of the participants highlighted that the government was not prepared to deal with the disaster when it struck in Chimanimani whilst about 24% stated that the government was prepared to deal with the disaster that struck in Chimanimani. In line with this, Hill and Nhamire (2017) highlighted that in Mozambique when cyclone Elin struck government response was slow and very minimal which led to the death of so many people. Government neglect which is rampant in Africa is thus a key issue causing loss of lives in many Africa nations. Based on this it can be noted that government preparedness before the cyclone was very much questionable as it led to various vulnerabilities of the people that are living in Chimanimani such as hunger, poverty and also the loss of lives.

In addition to this, in pre-disaster times, the government should be widely capacitated to be able to meet the needs of the people after the disaster strike. In developed nations such as Japan, USA and the United Kingdom the countries are widely capacitated to deal with disasters before they struck with good early warning systems and also good intervention mechanisms. Unganai (2016) explains that most developed nations are strongly capacitated in dealing with the natural disasters due to a vibrant economy and strong early warning systems in place in these nations. However, the Zimbabwean government was heavily incapacitated by the time Cyclone Idai came and hit the nation. In line with this, Robert et al (2009) explains that in order to deal with a disaster there is need for the government to have reserves in stock for emergencies which helps increase its capacity to deal with any emergencies. In line with the above, it was also noted that the state of unpreparedness could also been seen in the reserves that were needed for the intervention. Most participants highlighted that in the first weeks after cyclone the government failed to provide food, tents and even blankets to those that were affected. Most provisions came through NGOs such as Red Cross, World Vision and UN agencies such as UNDP, UNICEF and other private organisations such as churches. The role of the government was to coordinate and facilitate the smooth clearance of such goods to Chimanimani. This was noted in the FGDS that were conducted in the study.

6.3 Faulty reaction and limited reaction in times of crisis

In the pre-cyclone times, the government took time to warn people and even pool resources together to deal with the cyclone but this was not enough as it was not commenced in time. The reaction started two days before the cyclone whilst the cyclone had been forecasted two

weeks before it even struck. However, in nations such as Japan and South Korea disasters are forecasted three months before they struck and preparation starts immediately after the forecast, but in developing nations the case is far much different (Pyles, 2017). In addition to this even though the government reacted after the cyclone it took many days and up to a week to get organized and save lives hence causing the loss of the lives along the way. In line with this, Belle et al (2017) stipulates that minimal and limited reaction after a disaster has been forecasted shows the insincerity of the authorities and further increases the vulnerability of the state to the impending disaster. The reaction of the government before the Cyclone Idai struck was minimal and actually hit the peak two weeks after the cyclone had struck in Chimanimani Zimbabwe based on the different perspectives of the participants in the survey. In the study it is noted that before the cyclone hit, 8% of the participants highlighted that the government was involved in dealing with cyclone issues before it happened, whilst 15% of the participants highlighted that 3 days after the cyclone hits its involvement grew up. However, 35% of the participants highlighted that a week after the disaster struck the government reacted whilst 45% of the participants highlighted the reaction after two weeks.

The reaction of the government was not swift in the time of crisis. The reaction was faulty as the early warning systems were not in place and there was no adequate funding that was allocated for such a disaster. In line with this, Iravani and Parast (2014) highlight that for a government to be regarded as prepared in times of crisis there is need for good early warning systems, proper financing and also good networking with other partners from outside government. In line with this, from the survey conducted most of the participants highlighted that the government was highly unprepared for the Cyclone Idai disaster that hit Chimanimani areas. 37% of the participants highlighted that there were no early warning systems that were put in place before the disaster struck whilst 26% of the participants also highlighted that there was poor communication about the disaster and its severity. Adding on this 22% of the participants highlighted that there was lack of funding allocated to disasters before even the cyclone struck and in the whole process of dealing with the disaster coordination was poor. In contrast to this, in the developed nations there is swift reaction as their early warning are strong to warrant good responses in times of crisis. In line with this, it can be noted that in countries such as Singapore and Indonesia when monsoons and tsunamis hit the reaction is swift and well-coordinated. From this analysis it can be noted that the

reaction to the cyclone Idai disaster was faulty as all lines that warranted being prepared were not in order by the time the disaster struck.

Moreso, as stipulated in the DRAF theory, when a country is prepared for a disaster all systems should be on standby for intervention and the authorities should not be caught unawares. In addition to this, there should be a smooth flow of the intervention procedures to show that the disaster was anticipated though the authorities did not know the extent of its damage. In line with this, it can be noted that also in the FGDs conducted that the arms of government were caught unawares by the disaster. Adding on this, most of the participants agreed that arms of government responsible for disaster management such as the CPU were not even prepared to save lives. In addition to this, it was also discovered that the CPU at the time did not even have vehicles to move in to help people, supplies such as blankets and food together with essential communication equipment that would be needed. Nyong and Fiki (2005) explains that when governments are usually got of guard in dealing with disasters their people become more and more vulnerable to the prevailing hazard.

6.4 Bureaucratic delays in disaster intervention

Centralization delays government intervention when it comes to crisis that would have hit the country. Too much centralization is a factor and basis that clearly explains the governmental delay in dealing with disasters as this process involves a lot of consultations. In support of this, Puloni (2017) posits that the centralization of decision making makes it very difficult in making quick decisions in times of disasters. When the government is ill prepared in that it has no direct access to funds for the disaster as there is no arm that was given the sole responsibility and resources to deal with disasters leads to calamities. In line with this, in the study it was discovered that arms of government work hand in hand, hence no department was prepared enough to deal with the disaster at hand. Most experts highlighted that when the CPU wanted to react it had to go through Provincial officers that had no data of the extent of the disaster who would also go down to the District offices also that and no personnel to deal with the emergency hence the delay that ensued in the intervention in Chimanimani. Thus, too much centralization of decision making in government departments during the Cyclone Idai disaster that struck in Chimanimani.

More so, in the study it was also noted that even the food sector was not prepared for any disasters forecasted in Zimbabwe. In the FGDs conducted it was highlighted that in as much

as the cyclone has been forecasted weeks before no level of preparedness in terms of movement of food to arrears closer to where the disaster was about to hit was done. Other participants highlighted that in the food reserved there was nothing that had been allocated yet for disasters hence the difficulties to respond in such a short time after the disaster struck. Adding on to this, Fidelis aged 24 a victim of the disaster weighed in by stipulating that the government had nothing in stock saved for disaster hence relied more on the NGOs donations to come and give us.

In addition to this, the issues of coordination in times of the disasters is very crucial for the success of any intervention. The smoother the coordination the more likely the intervention would be successful. In line with this, in the study it was noted that the state was ill prepared as can be noted in lack of coordination that was seen in the government in intervention efforts. In the study it was highlighted that the intervention efforts were not structured properly as sectors poorly coordinated. The MOHCC and Ministry of Labour and Social Welfare had different way of intervening. The lack of good coordination can also be seen in that the statistics given of dealing with the disasters varied and some were in error. The research wing of the government in disaster remained not functioning well due to ill preparedness of the government in dealing with the disaster.

6.5 Politicization of disaster intervention

The effectiveness of the government intervention is questionable based on the politicization of aid that was received. In the study, the coordination of the intervention was heavily politicized. The distribution of the supplies that even had come from NGOs was very partial as it was distributed using the ZANU PF party members are the priority. In line with this, Adger (2003) highlights that any act of politicization of any intervention that is to be given to the people defeats the whole purpose of the intended goal that was sought to be achieved with that intervention. In the case of Cyclone Idai in Chimanimani, the distribution was very partial as it was done based on how it's run in the ZANU PF party putting their people first. Thus, as a result of this partially in the intervention by the government the sincerity of helping during the Cyclone Idai disaster becomes questionable as it left some of the people behind.

Furthermore, the politicization of disaster is also seen through political grandstanding that happens in disaster times. In most countries that are developing politicians are mainly using

disasters to cement their political positions and for corruption purposes. In the cases where the disaster struck such as Nigerian, Mozambique and also Malawi political grand standing has been seen through how politicians would delay disbursing supplies waiting for official opening of these so as to paint a picture as if they are the ones who donated. In support of this, Makumbe (2009) highlighted that the political grand standing in disaster set up has led to more loss of lives in Africa through the heartless acts of politicians. In line with this, this was also noted in Zimbabwe as there were celebrations held for donations such as that of 2.5 million dollars that came from the USA whilst many people went to sleep in Chimanimani without food as official celebrations of the donations were held. Moreover, corruption took its toll in these activities as no clear monitoring and evaluation of donations was done as part of these donations were diverted for some personal use by politicians from the ruling party. Thus, the politicization of disaster greatly affected the people of Chimanimani in Zimbabwe.

6.6 Government's coping capacities during the Cyclone Idai disaster

The government intervention though minimal was very fundamental in the interventions that were done in Chimanimani. The government plays a pivotal role in any intervention as it is the one that would have been having the blueprint and particular details that help in providing assistance to anyone in the disaster. In support of this, Pyles (2017) explains that the government plays a pivotal role in any intervention in disaster situations as it acts as the gatekeeper and at the same time coordinator of all intervention efforts. In the study, it was noted that the government played a pivotal role as it coordinated the interventions of other NGOs and private companies into Chimanimani. The government had insights into the most affected areas through the structures that worked at village level, district level and provincial levels which are very vital in any intervention. Though it had limited funding to deal with the disaster, government provided the personnel need to trace bodies and even reconstruct infrastructure that was damaged.

Furthermore, the coping capacities of the government of Zimbabwe can also be noted through how it played a crucial role in rescuing people and reconstructing Chimanimani through the army. The government was crucial manpower through the army that helped in rescuing and reconstructing Chimanimani after the cyclone. The government rescued people during the disaster through the ZNA. The ZDF wing of the Air force managed to rescue people that had been trapped during the cyclone just a day after it had struck Chimanimani. Supporting the above heroic acts, Mavhura et al (2017) posits that in times of the disaster the government is

of great help in that it provides essential support through both man power and ideas that help deal with the problem at hand. In addition to this, the ZNA managed to clear roads and built temporal bridges in the area which were very crucial in bringing in supplies in the area. Thus, from this analysis it can be noted that the coping capacity of government though was not well coordinated was great as it helped in saving lives.

Moreover, the effectiveness of the government could be seen in coordination roles and on the ground hands on roles. In the study, participants acknowledged that the government role was seen through the ZDF that operated in the area who were excellent in building temporal shelters, tracing bodies and clearing roads. These further added that the government also played a pivotal role in processing papers of NGOs to operate in the area. The clearing of goods was done on time which further added to the swift reaction all emanated from the government. Based on this analysis, though criticized, the role of the government can be clearly be noted as it helped in making sure that there is smooth intervention in dealing with Cyclone Idai disaster.

6.7 Chapter Summary

In conclusion, it was noted that the government was not well prepared to deal with the Cyclone Idai disaster. As highlighted in the discussion above, despite the forecast having been given weeks before the disaster struck no real tangible pooling of resources together had been done. The government's early warning systems were so down and also communication was not done in time. No evacuations of people were done as the only intervention done by it was done during the cyclone and post cyclone times. Thus, there is need to develop better ways of dealing with disasters in time before the loss of lives through developing a very good system of dealing with any forecasted disaster.

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