# Midlands State University

# Faculty of Social Sciences Department of Politics and Public Management



DISASTER MANAGEMENT AND PREPAREDNESS AS A WAY OF FOSTERING SUSTAINABLE LIVELIHOODS IN ZIMBABWE A CASE STUDY OF MUTOKO DISTRICT(2009-2016)

 $\mathbf{BY}$ 

**MUTONGI TARIRO KAWARA** 

**REGISTRATION NUMBER: R134040V** 

SUPERVISOR: MR A F CHIKEREMA

**JUNE 2017** 

Dissertation Submitted to the Midlands State University in Partial Fulfilment of the Requirements of Bachelor of Science in Politics and Public Management Honours Degree.

### MIDLANDS STATE UNIVERSITY

# SUPERVISION ACKNOWLEDGEMENT FORM FACULTY OF SOCIAL SCIENCES

### DEPARTMENT OF POLITICS AND PUBLIC MANAGEMENT

STUDENT: Mutongi Tariro Kawara R1340404V

The undersigned certify that they have read and recommended to the Midlands State University for acceptance as a dissertation entitled: Disaster Management and Preparedness as a way of fostering sustainable livelihoods in Zimbabwe: A case study of Mutoko District (2009-2016)

SUPERVISOR	DATE/
CHAIRPERSON	DATE/
EXTERNAL EXAMINER	DATE/
Submitted in partial fulfilment of the Bachelor of Honours Degree.	Science in Politics and Public Management

### **DECLARATION**

I Mutongi Tariro Kawara (R134040V) do hereby declare that the work contained in this
dissertation is my own work with only the exception of quotations and references that have been
attributed to their sources. I further declare that this work has never been previously submitted to
any university and is being submitted in the partial fulfilment of the Bachelor of Science
Honours Degree in Politics and Public Management at Midlands State University.

Mutongi Tariro Kawara	Doto

### **ACKNOWLEDGEMENTS**

I would like to thank the Lord Almighty for his grace and mercy without which I would not have gotten this far.

My gratitude goes to my supervisor Mr Chikerema whose assistance through the course of this research guided me into producing the final document. This research would not have been complied without the knowledge and skill I acquired during the course of my undergraduate academic years which was imparted to me by the staff at the Department of Politics and Public Management at Midlands State University, for this I am truly grateful.

I am heavily indebted and grateful to the community of Mutoko, members of the DCPC and all the other organizations, whose cooperation, assistance and feedback assisted in compiling this work.

I would also like to thank my family for their support, love and encouragement; it carried me through both the difficult and great times.

### **DEDICATIONS**

I dedicate this piece of work to my sisters Agnes Katuruza, Tendai Murewi, Tamara Kawara and to my late father James Kawara.

### **ABSTRACT**

The issue of disaster management and preparedness cannot be over emphasized in a world where disasters pose a threat to not only to the lives and livelihoods of communities but also to the environment and development of society. This research is aimed at investigating the various disaster management and preparedness initiatives and their effectiveness in promoting sustainable livelihoods in Zimbabwe with a particular focus on Mutoko District. The research was inspired on the premise that, although hazards are an inevitable phenomenon with unpredictable effects that bare a great magnitude, the adoption and inclusion of effective disaster management and preparedness initiative and policy can reduce the impacts of disasters in order to foster sustainable livelihoods. Additionally, the research was based on the notion that government had a responsibility to communities to ensure effective disaster management and preparedness that would not only help them in times of disasters but could also enhance their capacity and capability in mitigating disasters. Qualitative research design was used to acquire knowledge on the disasters present in the district and research tools mainly interviews, questionnaires and observation were used to measure people's attitude towards disaster management and preparedness initiatives in order to analyse the effectiveness of said measures. Thematic analysis was used to analyse data in order to fully comprehend the impacts of disaster and mitigation measures implemented to deal with them. Findings from the research showed that the District Civil Protection which is the main body governing disaster management and preparedness was not well equipped to implement effective measures that enhanced community's capacity and capability as data analysis evidently showed that without government reactive measures and the help of civil society and non-profit groups communities are vulnerable to the harsh effects of disasters. The overall research concluded that the district civil protection is lacking in terms of proactive measures to dealing with disasters which are mainly reactive to resolve immediate shocks.

**ACRONYMS** 

**DCPC**...... Department of Civil Protection Committee

**DMP**..... Disaster Management and Preparedness

**CPU**... Civil Protection Unit

**DDF** ......District Development Fund

**DCPCC**......District Civil Protection Coordinating Committee

**EMA** .....Environmental Management Agency

**HFA**.....Hyogo Framework of Action

GoZ.....Government of Zimbabwe

IOM.....International Organisation for Migration

MSW.....Ministry of Social Welfare

**MWAGCD**......Ministry of Women Affairs, Gender & Community Development

MPSLSW......Ministry of Public Service, Labour & Social Welfare

MLGRDC......Ministry of Local Government & Rural Development,

Preservation of National Heritage and Culture

MRDC......Mutoko Rural District Council

MAMID......Ministry of Agriculture, Mechanisation and Irrigation Development

NGOs.....Non-Governmental Organisations

**UNDP**......United Nations Development Program

**ZIMVAC**.....Zimbabwe Vulnerability Assessment Committee

### **Table of Contents**

ACKNOWLEDGEMENTS	1
DEDICATIONS	4
ABSTRACT	5
ACRONYMS	6
CHAPTER 1	10
1.1 INTRODUCTION	10
1.2 BACKGROUND OF THE STUDY	10
1.3 STATEMENT OF THE PROBLEM	14
1.4 RESEARCH OBJECTIVES	15
1.5 RESEARCH QUESTIONS	15
1.6 JUSTIFICATION OF THE STUDY	15
1.7 LIMITATIONS	16
1.8 DELIMITATIONS	16
1.9 ORGANISATION OF THE STUDY	17
CHAPTER TWO: LITREATURE REVIEW	18
2.1 INTRODUCTION	18
2.2 DISASTER PREPAREDNESS	18
2.3 DISASTER MANAGEMENT	19
2.4 DISASTER MANAGEMENT & PREPAREDNESS AND SUSTAINABLE LIVELIHOODS	21
2.5 CASE STUDY OF DISASTER MANAGEMENT, PREPAREDNESS IN AUSTRALIA	21
2.6 LEGAL AND INSTITUTIONAL FRAMEWORK FOR DISASTER MANAGEMENT AND PREPAREDNESS	22
2.7 CIVIL PROTECTION ACT	23
2.8 EMERGENCY MANAGEMENT AND PREPAREDNESS ACT	23
2.9 INSTITUTIONAL FRAMEWORKS: CIVIL PROTECTION COMMITTEE	24
Fig 2.1: Structure of Civil protection in Zimbabwe	25
2 9LOCAL ALITHORITIES IN DISASTER MANAGEMENT AND PREPAREDNESS	26

2.1.0 CAPABILITIES AND VULNERABILITIES THEORATICL FRAMEWORK	27
Fig 2.2: Three-part theory	27
2.1.1 CHAPTER SUMMARY	30
CHAPTER 3:	32
3.1 RESEARCH METHODOLOGY	32
3.2 RESEARCH DESIGN	32
3.2.1 EXPLORATORY RESEARCH DESIGN	32
3.3 QUALITATIVE RESEARCH METHOD	32
3.4 TARGET POPULATION	33
Table 3.1: Target Population	33
3.5 SAMPLE AND SAMPLING TECHNIQUES	34
3.5.1 SAMPLE SIZE	34
3.5.2PURPOSIVE SAMPLING	34
3.6 DATA COLLECTING METHODS	34
3.6.1 QUESTIONNAIRES	35
3.6.2INTERVIEWS	35
3.6.3 OBSERVATION	36
3.7 DATA ANALYSIS AND PRESENTATION	36
3.7.1 THEMATIC ANALYSIS	36
3.8ETHICAL CONSIDERATION	36
3.9 CHAPTER SUMMARY	37
CHAPTER 4: DATA PRESENTATION AND ANALYSIS	38
4.1 INTRODUCTION	38
4.2 QUESTIONNAIRE RESPONSE RATE	38
Figure 4.1: Questionnaire response rate	38
4.3 INTERVIEW RESPONSE RATE	39
Figure 4.3 Interview response rate	39
4.4 VULNERABILITY OF COMMUNITIES TO DISASTERS IN ZIMBABWE	39
4.5.1 DISASTER MANAGEMENT AND PREPAREDNESS STRATEGIES	43
4.5.2 THE EFFICIENCY OF DISASTER MANAGEMENT AND PREPAREDNESS STRAIN ZIMBABWE	
4.5.3 COMMUNITY BASED DISATER MANAGEMENT, PREPAREDNESS AND SUSTAINABLE LIVELIHOODS	46
4.6 LEGAL ERAMEWORKS AND ENFORCEMENT	48

4.7 CIVIL SOCIETY AND DISTRICT CIVIL PROTECTION RELATIONS	51
4.8 CHAPTER SUMMARY	52
CHAPTER 5	53
5.1 INTRODUCTION	53
5.2 SUMMARY OF FINDINGS	53
5.3 CONCLUSION	54
5.4 RECOMMENDATIONS	56
5.5 CHAPTER SUMMARY	57
REFERENCE	58
APPENDIX 1: INTERVIEW GUIDE	61
APPENDIX 2: QUESTIONNAIRES	62

### **CHAPTER 1**

### 1.1 INTRODUCTION

Hazards are inevitable and unpredictable, they have greater effects on environments/areas that do not prepare or have a proper disaster management strategy that is the effects of disaster are much more devastating where preparedness and mitigation plan are absent or ineffective therefore the presence and effectiveness of disaster management and preparedness mechanisms and policy cannot be over emphasized. The scope of disaster preparedness and management is based on preparation and response to alleviate shocks involved with before and after occurrence of hazard which can be understood as the role not only of governments but it also that of society and individual, (www.drr-law.org/...ources/DRR-Report-full-version.pdf.

The main thrust of this research is to analyze the concept of disaster preparedness and management in building resilient communities, nations through fostering sustainable livelihoods in Zimbabwe with a particular focus on Mutoko as a case study. The research investigates the role of the Civil Protection Department, Non-Governmental Organizations in the district and the community in implementing disaster preparedness & disaster management mechanisms, given the importance of these mechanisms in mitigating the catastrophic impacts and risk involved with the occurrence of hazards to a nation. This will be done in order to bring forth empirical evidence that can help in understanding the effectiveness of disaster management and preparedness mechanisms in fostering sustainable livelihoods.

### 1.2 BACKGROUND OF THE STUDY

Governments world-wide face several challenges such as great magnitude of vulnerability to hazards, due to climatic changes. The nation Zimbabwe is no exception to the occurrence of

hazards, as past reference to experiences show that it has faced some disasters. According to Prevention Web (2012) Zimbabwe is liable to a number of hazards which include floods, veldt fires, droughts, storms to mention but a few. According to the Civil Protection Act chapter 10:06 Act chapter 10:06 part 1(2) puts forward that, "disaster" means "any (a) natural disaster, major accident or other event howsoever caused; or (b) destruction, pollution or scarcity of essential supplies; or (c) disruption of essential services; or (d) influx of refugees; or (e) plague or epidemic of disease; that threatens the life or well-being of the community;".

Disasters often disrupt the lives and livelihoods of many Zimbabweans as they cause death, food insecurity and poverty to note but a few. The effects and impacts of natural disasters has been exacerbated by the prevalence of the HIV/AIDS pandemic as this has led to death of the families' bread winners leaving them vulnerable to catastrophic events which disrupt their livelihoods. Harab (2009). The scope of disaster preparedness and management is based on alleviation of shocks involved after and before occurrence of disaster, that is aiming to preserve sustainable livelihoods which can only be achieved by proactive mechanisms rather than reactive counter measures. Given the evidence by the Zimbabwe Vulnerability Assessment Committee (2012) 1.3 million people out of a population of approximately 14 million were in need of food assistance in times of dry spells (droughts) and the number subsequently shifted to 2.4 million in the years 2015-16, Zimbabwe Vulnerability Assessment Committee (2016). This shows that disaster management and preparedness mechanisms to dealing hazards such as drought have not been effective enough to bring forth sustainable livelihoods.

Concern that inspires this research is based on the notion that communities and government in Zimbabwe lack disaster preparedness and management practices as solutions to disaster risk which are mainly reactive rather than proactive. This view is supported by Harab (2009) the challenge when it comes to disaster is to prevent them from developing into major catastrophes through adaptation, increased coping capacity and decreased vulnerability. This can be attributed to by a number of factors, according Chikoto (2004) low budgetary allocation for disaster management, stimulated by political instability and economic collapse and politicization of the security sector have affected Zimbabwe's disaster management system. These factors amongst others have led to communities and government being affected greatly by the occurrence of

disasters thus leading to these entities being reactive in order to deal with shocks of disasters rather than proactive.

Management strategies for dealing with disaster such as the formation of civil protection committee, resuscitation programs and food assistance programs help greatly mitigating problems associated with disaster. These however decrease the nation's resilience and have caused dependency on the Government and the NGOs. Important to note is given the monetary constraints that the government is facing at the moment and the lack of resources dependency by communities only ensure that the government would be under more strain and supposed to think of ways by which they can help communities. The proclamation of 2015-2016 drought as a State of Disaster serves to show that government had to source for aid because they could not reduce shocks of drought thus showing reactiveness than then pro activeness. Proactive measures would ensure sustainable livelihoods in and that communities' have ways of coping and will only call for government's supplementary assistance on the disaster management and preparedness measures they would have taken.

There is long history of disaster occurrences throughout the history of Zimbabwe these range from earthquakes, floods, droughts storms, and veldt fires. According to Gwimbi (2009) disasters greatly affect livelihoods and have an impact on human lives. Droughts have been one of the major disasters experienced in Zimbabwe as well as they were experienced in the years 1921,1946.1967,1972,1981,1982,1992-93,2002,2008-9, 015-16. Under the devastating impact of the El Nino phenomena most Southern African countries have experienced change in climatic conditions which has adversely caused various natural disasters chief among them being drought Zimbabwe as one the countries in the Southern region has not been spared as it has faced the severe impacts of the drought season which lead the honorable Head of State R.G Mugabe declaring the drought season of 2015-2016 "a state of disaster". The ultimate result of this drought has seen several households in deficiency in terms of food security, given the condition that a total of 70% Zimbabwe's economic input is based on the agricultural sector also taking into consideration the country's demography which is comprised of mostly rural based community 60% whilst 40% covers the urban communities. This disaster has seen the

government implementing various drought mitigation strategies in order to eradicate the impacts of this Drought.

In the case of floods Zimbabwe has not been left unscathed, Gwimbi (2009) asserts that flooding is a persistent problem that hinders the lives and livelihoods and well as food security in rural based Zimbabweans. Flooding can be caused by changes in climatic conditions which may result to periods of heavy precipitation during the rainy season. Additionally communities are susceptible to floods due to, according to Gwimbi (2009) human settlement on floodplains which offers both aspects of fostering sustainable livelihoods in as much as it hinders them which resultantly leads to disasters as people residing there are often susceptible to floods. The 2012/2013 rain season floods were experienced in Tokwe Mkosi basin in Masvingo district, the flooding which caused the partial collapse of the dam resultantly rendering several families homeless, government had to appeal to the international community for help. However, it should be noted that this was a reactionary measure the government did not have any funds to help community after such a catastrophic disaster.

A tropical cyclone (Cyclone Eline) occurred in Zimbabwe in February 2000, it was characterized by strong winds and heavy rains. The major effects of Cyclone Eline were witnessed in the East and Southern part of Zimbabwe as these areas are located close to the Limpopo river basin. Muzarabani, Masvingo and some parts of Matabeleland are some of the examples of the places affected. The Chronicle (2017) the effects of the cyclone where that of a great magnitude, owing to the floods more than a 100 people were killed and approximately 59 184 people lost their homes hazard lasted labelled the devastating five decades. was most in (http://www.chronicle.co.zw/cyclone-to-hit-southern-zimbabwe/).

According to the World Wide Fund (2001) fire outbreaks have resulted in increased loss of agricultural produce, reduced food availability for both humans and animals, and reduced growth rate of vegetation and loss of equipment. People in Zimbabwe use fire for various purposes however improper use of fire leads to veldt fires which are blazes that get out of control thereby destroying extensive trade of grasslands and forest sand may result in loss of biodiversity, wildlife and hindrance of socio economic projects in the country and worldwide.

The research is conducted in Mutoko District, the district is located in the Northern Highlands. Mutoko falls under Mashonaland-East Province. The district has twenty-six wards. The government departments deal with matters concerning drought relief, water and sanitation activities with help of some non-governmental organizations in the district. Mutoko is located in Natural Ecological Regions II-IV similar to other parts in Zimbabwe; it is an agro based community with some of the communities practicing mixed farming. These regions receive from 450-1000 mm of rain per FAO report (2011) natural region IV is prone to dry spells, natural region II receives moderate rainfall were maize and small grains are the dominant crops in this agricultural zone, providing both food and income. According to ZimVacc Rural Livelihoods assessment (2016) 52.7% are food insecure in times of dry spells which equals to 83 388 of the total population.

The government of Zimbabwe enacted a legislation for the management of hazards and through these legislations, the government has been able to facilitate management strategies such as drought relief, food for work, presidential inputs scheme, child supplementary feeding scheme, groan loan scheme and cattle rescue operation. The Civil Protection Act Chapter 10:06 of 2001 is the main piece of legislation governing disaster management and preparedness thus under its provisions the enactment of the Civil Protection Unit as a department that deals with disasters has been meet Chikoto (2012)et al. The department of civil protection has been the main body mandated with the responsibility of setting up emergency plans from the national level. The department is housed and operates under the Ministry of Local Government as the implementing body Chikoto (2004). The department is responsible for conducting all national response efforts, based on the Civil Protection Act (2001, chapter 10:06). Its primary mandate includes preparing for prevention where possible and mitigating the effects of disasters as they occur. Largely the Department of Civil Protection's mandate is to encompass resource mobilization in preparation for managing and responding to major events and disasters.

### 1.3 STATEMENT OF THE PROBLEM

Disaster preparedness and management ought not only to be reactionary in order to lessen the impacts of disaster but also a proactive means to enhance capacity, reduce vulnerability in order to bring about sustainable livelihoods. The efforts by government and stakeholders have led to problems of dependency upon these programs and assistance, the communities do not have well-

structured self-help systems which is one the major reasons that lead to the escalation of the effects of disaster. Observation and analysis point out that disasters cannot be eradicated seeing as they are natural and unpredictable however the impacts through good preparation and management can be lessened in order for the communities to self-sustain. This has not been the case in Zimbabwe as the impacts of disasters have been severe in most parts of Zimbabwe with this problem statement there is need to engage in preparedness and management strategies that are less palliative rather more proactive.

### 1.4 RESEARCH OBJECTIVES

- To examine the nature and effects of disasters in Mutoko,
- To examine the management and preparedness strategies implemented by Mutoko Civil Protection Unit
- To examine the effectiveness of disaster management and preparedness and shortcomings in bringing about sustainable livelihoods
- To asses' general view of the populace in regards to disaster management and preparedness
- To give recommendations for increasing sustainability rather than vulnerability

### 1.5 RESEARCH QUESTIONS

- What are the nature and effects of disasters occurring in Mutoko district
- What are the disaster management and preparedness strategies implemented by Mutoko Civil Protection Unit?
- How effective is disaster management and preparedness?
- How has disaster management and preparedness strategies benefited the people? Have these strategies brought about sustainable livelihoods if so how?
- To what extent are these disaster management and preparedness important in bringing about sustainable livelihoods?

### 1.6 JUSTIFICATION OF THE STUDY

The motivation of the investigation is based on the severity of disasters on the populace and the impact disaster preparedness and management strategies in helping the population at large in bringing about sustainable livelihoods in the events of disasters. With the world faced with

increasing frequency and intensity of disasters, the need for efforts toward building disaster resilient communities cannot be overemphasized. The major observation is that the disaster preparedness and management strategies do help targeted vulnerable who receive help in cases of droughts, floods etc. but this does not ascertain that the rest of the population know how to self-sustain or cope when disasters occur in a way that does not cause damage to their livelihoods. This view is supported by ZimVacc Market Assessment Report (2015:15), "rural households are highly dependent on agriculture as their main livelihood activity, so they are very unlikely to be able to access sufficient food without resorting to negative coping mechanisms(such as cutting portion sizes or the number of meals they eat per day" Over the period of the El Nino Southern Oscillation (ENSO) years the possibilities of drought and floods have always been predicted, the policy frameworks have only been about absorbing shock rather than increasing adaptability that is coping. This research study is going to contribute in raising awareness to the general public about the changing environment, where disasters have become a major cause for concern as Zimbabwe continues to face these thus disaster preparedness and management strategies need to ascertain that after intervention people have sustainable livelihoods. There is need for a system of interdependency between state and populace rather than dependency were by conventional methods are put in place of ensuring sustainable livelihoods which will in turn mean less harm to the country's economy.

### 1.7 LIMITATIONS

The study is limited to the effectiveness of disaster management and preparedness measures in harboring sustainable however the scope of disaster and that of disaster management and preparedness is that which encompasses a broad spectrum, this research only focuses on specific elements whilst other continuum exists. Additionally, some of the targeted informants, were not at liberty to share some information as the mechanisms surrounding disaster management and preparedness involve policies and mitigation strategies by the Government of Zimbabwe thus some respondents had responsibility to preserving privacy of some information. Furthermore, some respondents were not forthcoming with information due to fear of political victimization.

### 1.8 DELIMITATIONS

The research is going to be limited to Mutoko district in Mashonaland-East Province one of the nation's small towns, its total population size makes up a small fraction to the total population of

Zimbabwe. The district is made up of twenty-nine wards which are in a sparsely distributed. Mutoko is a rural community thus it is in the process of transgressing into an urban town, the roads are not yet tarred, they are still just gravel and sand thus even local transport is hard to come by as the drivers fear for the upkeep of their vehicles after ferrying people to and from various areas.

### 1.9 ORGANISATION OF THE STUDY

This research has five chapters, chapter one has the introduction, background, statement of the problem, aims, objectives of the research topic, limitations, delimitations that is limiting factors that were encountered or that surround the topic the effectiveness of disaster management and preparedness in harboring sustainable livelihoods. Chapter two has the literature review this chapter will solely focus on review secondary sources such as texts, journals article and any material of academic importance on the information about disaster management and preparedness in order to review the work done on the related topic to in turn establish a gap in the knowledge that justifies doing this research topic. Chapter three is the research methodology, the methods employed by the researcher to achieve research objectives and answer research questions, in this research qualitative method was used. Chapter four is the research findings and data analysis and presentation which is going to be done through the use of thematic analysis. Chapter five has the recommendations and conclusions.

**CHAPTER TWO: LITREATURE REVIEW** 

2.1 INTRODUCTION

In this chapter the researcher will critically interpret the concept of disaster preparedness and management and evaluate its importance to any country in minimizing disaster risk with the aid of relevant theoretical framework. In addition, the research is going to be aimed at synthesizing studies that relate to disaster preparedness and management in order to establish gaps in the

existing knowledge thus bringing out the role of current research.

2.2 DISASTER PREPAREDNESS

Kent (1994) views disaster preparedness as taking precautionary measures/predicting threat when advance warnings are possible. UN/ISDR (2012) defines preparedness as methods or measures put in place or taken by government, communities' organizations in order to lessen the impacts involved with disaster. Disasters need convectional means of dealing with them, that is the best way of prepare for impacts of hazard is through effective disaster preparedness

mechanisms.

According to UNDP (2010) disaster preparedness also involves planning, which can be defined as readiness to deal with disasters. Kent (1994) agrees with this view, preparation to hazards recuperates response to the impacts of a disaster by enabling effective aid. In Africa, South Africa is an example of how other developing countries are implementing management and disaster preparedness activities. According to Vermaak and Niekerk (2004) NGOs, universities and other businesses are working hand in hand to come up with disaster preparedness initiatives to help in preparing and minimizing risk, the Mandisa Project of the University of Cape Town is an empirical example. This shows that that disaster preparedness has reached a paradigm shift were it was once focused on forecasting and planning for impacts of disaster it's also focusing on

18

the after aspect of occurrence of disaster through sustainable livelihoods thus the gap in the study.

Preparation of legislative and institutional framework, training, early warning systems and information dissemination are major components of effective disaster preparedness which goes a long way as it helps in disaster management. According to Government of Zimbabwe (2016) the government ought to implement the provisions of the DRM strategy and Bill this will help improve data management for preparedness and increase the overall resilience of the nation. Evidently preparedness fosters resilience thus the capability and capacity of people in the events of disasters hence the gap that is in the knowledge that seeks to be filled by this research, that effective disaster management and preparedness harbors sustainable livelihoods. Reducing the impacts of hazards on the people of Zimbabwe lies on the adoption of both mitigation and preparedness strategies, Chikoto (2004). According to Government of Zimbabwe (2016) engaging in disaster preparedness initiatives strengthens the country's risk assessment measures and early warning systems.

In terms of early warning systems Zimbabwe conducts livelihoods, market assessment through the Zimbabwe Vulnerability Committee results are used as disaster preparedness as they are used to asses, predict possible outcomes of the impacts of disaster. According to Betera (2011) early warning systems that are in place the Metrological Office, NEWU, FEWSNET and Drought Monitoring Centre (DMC). According to Matambanadzo and Mwando (2003) government of Zimbabwe should adopt advanced technology such as Geographic Information Systems (GIS), Global Positioning Systems (GPS) and Satellite Remote Sensing in ensuring that communities are well prepared for disaster this in turn ensures a more resilient nation.

### 2.3 DISASTER MANAGEMENT

Perry (2003) is of the view that disaster management is centered on recovery, response, mitigation and rehabilitation all in an effort to minimize disaster risk/effects that is disaster risk reduction. When hazards occur they come with a number of risks in mortality, morbidity destruction that of homes, economy to mention but a few. UNDP (2014) supports this view disaster management is the body of policy and administrative decisions and operational activities which pertain to the various stages of a disaster at all levels. It is therefore important to mitigate

disasters in a manner that enhances sustainability as hazards are a series of repetitive cycle of events that require attention thus the aim of this research.

Globally according to IRDR (2014) the impacts of disasters in 2011 rose to losses reaching a record US\$ 371 billion in 2011, this figure may underreport the true losses by 50% or more. In 1998, hurricane in Central America caused severe losses in human lives and estimated losses of about US\$ 6 billion, the impacts were more severe in Honduras (Ensor 2009). The occurrence of disasters are a global problem that lead to destruction of livelihoods and lives hence attention has been redirected to including sustainable development to improve livelihoods in order to mitigate disasters. International legal framework for managing disasters in manner that enhances livelihoods have been put forth through various policy framework such as the Hyogo framework for Acton (HFA) 2005-2015 and most recently the Sendai framework 2015-2030. UN (2005) the framework includes the integration of disaster management into sustainable development processes as a strategy to building resilience. Resilience among communities through effective disaster management will ensure that their livelihoods are protected in the event of disasters, thus if the community's livelihoods have enough capacity and capability to deal effects of hazard, mitigation/management strategies will ensure community resilience IRDR (2014) hazards may be natural but their impacts depend on the circumstances of people, households and societies that is their livelihoods.

Disaster management is a continuous and integrated multi-disciplinary process of planning and implementation of measures aimed at preventing or reducing the risk of disaster, emergency preparedness, a rapid and effective response to disasters and post-disaster recovery and rehabilitation Kynsa (2010). In Zimbabwe according to Government of Zimbabwe (2016) challenges affecting Disaster Risk Management stem from a lack of integrated information management system, lack of a systematic framework for capturing drought losses and impacts, limited awareness, lack of a comprehensive social protection policy that integrates post-disaster recovery, lack of sectorial policies. Disaster management measures for hazards should therefore surround response and recovery in a manner that is effective such that hazards do not escalate into major catastrophes through proactivity in the form of early warning systems and ways to effective mitigation measures that bring forth sustainable livelihoods, this is what the research is focused at.

### 2.4 DISASTER MANAGEMENT & PREPAREDNESS AND SUSTAINABLE LIVELIHOODS

According to Conway and Chambers (1992) a livelihood is sustainable which can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, both now and in the future, while not undermining the natural resource base. The occurrence of disasters however hinder efforts targeted towards sustainable livelihoods as when disasters occurs it causes damages to the assets that increase capability and capacity in their day to day lives. Ashley and Carney (1999) support this view livelihood, productive economic activity and households' resources are compromised by the occurrence of disasters. It is on this notion that disaster management and preparedness over the years has transitioned to including measures that bring forth sustainability thus the gap this research seeks to fill.

Sanderson (2000) the key element of livelihoods approaches is that people are the starting point. Thus disaster management and preparedness measures need to be targeted towards helping the people in a manner that enhances their capability and capacity as people are the owners of the property or assets, which make up their livelihoods, which are affected by disasters hence they have to be empowered in such a manner that helps them protect their livelihoods. Government of Zimbabwe (1998) community's own adaptive strategies can be the central locus in developing sustainable livelihoods. Sanderson (2000) much legislation, still results in increased vulnerability of the poor this hinders livelihoods as capability and capacity is limited in order to make livelihoods sustainable.

According to Marksey (1997) the concept of disaster risk reduction ought to be accentuated on as opposed to solely emergency response. Thus the relevance of this research as it seeks to address the gap that disaster management and preparedness ought to be proactive rather than palliative to reduce immediate shocks.

### 2.5 CASE STUDY OF DISASTER MANAGEMENT, PREPAREDNESS IN AUSTRALIA

Australia is a country that's disaster management and preparedness was taken into consideration of being a case study as it represents a developed country whereas South Africa represents a developing country. Australia is one of the countries whose emergency response is worth modelling to for other countries to achieve effective civil protection that is disaster management and preparedness, Jones (2007). Bearing in mind that hazards are inevitable at occur at a global

scale developed countries such as Australia have been of exception to the occurrence of hazards. Cook (1997) supports this view "natural hazards are the result of climatic and geological variables that are largely independent of human control...". Some of the major hazards occurring in Australia are due to climatic and geographical location and variation of the location of the country these; according to Peters & McEntire these include cyclones, droughts, floods, and hailstorms, bushfires, man-made hazards and earthquakes.

In order to deal with these disasters Australia has adopted measures of emergency response by creation of legislation and an institution that solely deals with disasters. The enactment of a national fund for disaster and Emergency Management Australia (EMA) are such initiatives. According to Commonwealth of Australia (2009) EMA is guided by four pillars which include both hazard and comprehensive approach to include disaster phases, all agencies approach to include government and NGOs, prepared community approach and Emergency Management Australia Manual. According Peters and McEntire, Australian emergency management sector can be described as one that depicts a bottom-up approach, the various state and territory governments have responsibility for emergency management within their jurisdiction thus they have their own laws towards management of disasters that is best functional in their area as they possess funding and organizational arrangements, Commonwealth of Australia (2009). According to Jones (2007), the emergency management sector in Australia is highly effective owing to the relevant organizations and agencies and their people which and who respectively deal with disasters. Peters and McEntire conclude that emergency management sector is impressive however some rectifications still need to be done in national legislation.

# 2.6 LEGAL AND INSTITUTIONAL FRAMEWORK FOR DISASTER MANAGEMENT AND PREPAREDNESS

Translegal (2015) defines legal framework as a broad system of rules that governs and regulates bonds, decision making and regulations. Institutional Frameworks are defined as rules, norms and strategies adopted by individuals operating within or across organizations. That is adoption of policy measures and operating standards that ensure effective service delivery. Legal frameworks and institutional frameworks are important in disaster management and preparedness as they offer guidelines on how the effects of disaster can be best handled. According to UNDP (2014) framework under which disaster risk reduction operates is important in addressing the effects of disasters as no institution can effectively enforce disaster management without

upholding such frames. Dube (2015) supports this view, in Zimbabwe legal frameworks surrounding disaster management include the Civil Protection Act chapter 10:06, Rural District Councils Act Chapter 29:13, Environmental Management Act Chapter 20:27and Forestry Act Chapter 19:09.

### 2.7 CIVIL PROTECTION ACT

For the intents and purposes of disaster management in Zimbabwe the government established the Civil Protection Act Chapter 10:06 of 1989. According to Chikoto (2012) et al, in the year 1982 Civil Defense Act was enacted and was repealed in favor of the Civil Protection Act of 1989 which was later amended in 2001. The act offers provisions of organisational structure and administrative duties for the practice of disaster management and preparedness through the Department of Civil protection, which is subdivided from National, Provincial to District levels. It also provides a frame in which National fund can be enacted towards Civil Protection activities this goes a long way in ensuring that effective disaster management and preparedness activities are implemented to increase capacity and capability of the local community thus sustaining their livelihoods in the event of disasters. However according to Chikoto & Sadiq (2012) legal provisions such as the Civil Protection Act chapter 10:06 put in place for setting up a National Civil Protection Fund to finance civil protection ensure effectiveness of disaster management initiatives such provisions are largely dependent on the GoZ's fiscal budget nevertheless a system on paper, absent of corresponding financial commitment hinders the practice of such initiatives. Sanderson (2000) vulnerability and proactive measures to disaster needs to be addressed by policy such that living is sustainable

### 2.8 EMERGENCY MANAGEMENT AND PREPAREDNESS ACT

According to Madamombe (2004), proposal towards modification and transformation from the Civil Protection Unit to Department of Emergency Preparedness and Disaster Management are underway under provisions of the future act on disaster management and preparedness namely the suggested Draft National Disaster Risk Management Policy. The Government of Zimbabwe in 2007 produced its first draft of the National Disaster Risk Management Policy, after some further consultations, the draft was revised in 2011 (www.jamba.org.za). The new paradigm of emergency preparedness management act is centered on decentralizing the emergency

management system by engaging and strengthening all levels of government, as well as, the nation's private and nonprofit sectors. The draft is in line with international policy frameworks like the Hyogo Framework for Action 2005-2015.

The scope of emergency management system is structured strengthen localized disaster planning and response that is management and preparedness in dealing with hazards Madamombe (2004). The emergency preparedness bill has not yet been enacted to date this leaves disaster management and preparedness initiatives in Zimbabwe lacking as without effective measures put in place for disasters people's livelihoods continue to perish in the event of disasters hence the aim of this research. According to Gogo (2014) the occurrence of disasters prove to be a litmus test for Zimbabwe's preparedness to handle disaster this is partly due to lack of clear-cut national policy and strategy to deal with such catastrophes. According to Chikoto (2012) et al lack of a relevant and well defined policy and institutional framework has led to an imprecise and unclear overall disaster management practices. Holding in regard the above views one can note that for the effectiveness of disaster management and preparedness there is need to adopt policy such that initiatives that are adopted harbor sustainable livelihoods.

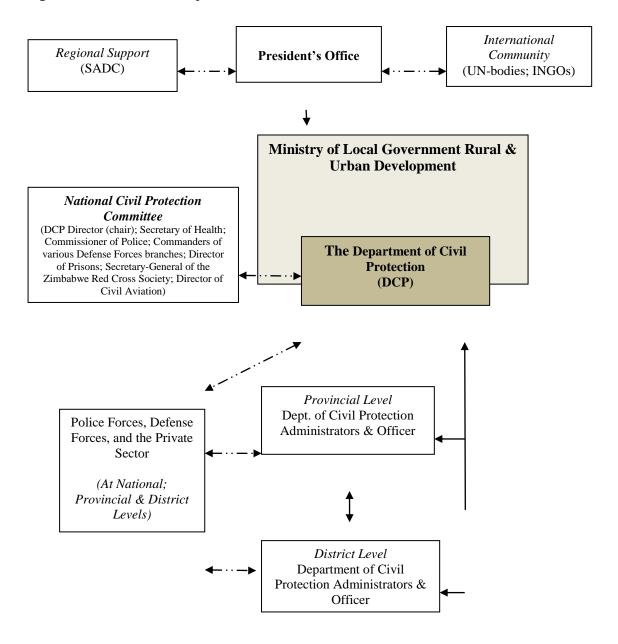
### 2.9 INSTITUTIONAL FRAMEWORKS: CIVIL PROTECTION COMMITTEE

According to the Civil Protection Act of 2001 Chapter 10:06 part 1(2) "civil protection" means any service provided or measure taken for the purpose of preparing for, guarding against or dealing with any actual or potential disaster;" . The Civil protection Act underlines the formation of the Department of Civil Protection. According to UNISDR (2005), the Department of Civil Protection has the mandate and is responsible for coordinating all national response efforts it is lodged within the Ministry of Local Government Urban and Rural Development.

The Civil Protection Unit department's mandate encompasses acquisition of resources for disaster management and preparedness to deal with hazards additionally the dissemination of hazard related information or material, the department is also responsible for directing the training of civil protection officers, at the three levels of government from national, provincial, and district.

Various levels, namely, the national, provincial, district, local authority and Non-governmental organizations, are required to have blueprints for disasters by producing working plans for emergency preparedness and response which can be readily available in the events of a hazards UNISDR (2005).

Fig 2.1: Structure of Civil protection in Zimbabwe



Source: Chikoto and Sadiq (2012) Zimbabwe's Emergency Management System: A Promising Development

At the provincial level, the Provincial Administrators head and chair the Provincial Civil Protection Committees, whilst at the district level, the District Administrators head and chair the District Civil Protection Committees. Chikoto and Sadiq (2012) also go on to posit that, as per

requirement by the Civil Protection Act the National Civil Protection Committee should be consist of actors that would be involved in disaster management and preparedness in some capacity.

However, there are number of challenges that are faced by the Department of Civil Protection these inhibit the execution of their mandates in preparing and mitigating disasters. According to Madamombe (2004) low budgetary allocation for disaster management and flood management is a problem being faced in Zimbabwe. Chikoto (2012) et al the effectiveness of legal provisions put in place to deal with disaster management and preparation are highly dependent on the provision of the GoZ's fiscal budget. Financial and resource provisions are a prerequisite of any efficient and effective mitigation plan. Economic decline also is another considering factor. These problems present a gap that is to be covered by the research on whether legislation on disaster management and preparedness is effective in bringing about sustainable livelihoods.

### 2.9LOCAL AUTHORITIES IN DISASTER MANAGEMENT AND PREPAREDNESS

According to Haigh & Amaratunga (2010) Disaster management require a multidisciplinary approach which involves partnerships of various organizations and community groups. Disasters have such devastating impact a multi-sectorial approach in management and preparedness is an integral component for mitigating and preparing for the effects, it is with this view in regard Zimbabwe has critical roles to be played by local authorities in disaster management and preparedness with reference to the Rural District Council Act Chapter 29:13 local authorities play an integral part in disaster management and preparedness initiatives.

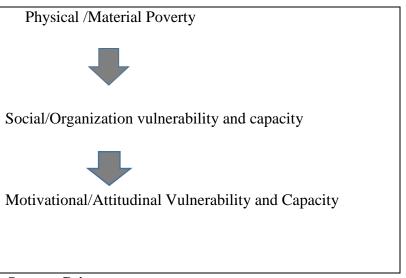
The Rural District Councils Act Chapter 29:13 stipulates the administration of local authorities, rural district councils (RDCs) and gives them duty as the protectors of natural resources. According to Dube (2015) Rural District Councils Act, Section 71 empowers the RDCs to undertake various roles among them are issues have a bearing on disaster preparedness and conservation of the environment. RDCs in Zimbabwe have adopted global frameworks in dealing with disasters such as the Millennium Development Goals (MDGs) in hopes for sustainable development; goal number seven of MDGs is to ensure environmental sustainability. According to Bendimerad (2003) the central government retains authority over disaster management programs which often focus on developing response capabilities rather than proactive mitigation, and the local government action for disaster management is often given a lower priority. Giving reference to the Rural District Act in Zimbabwe this statement proves to

be true as local authorities are given marginal roles where disasters need convectional means of dealing with the effects. Local authorities face a multitude of challenges in disaster management these include inadequate financial and human resources; unstable political system; problems related to decentralisation and the nature and role of RDCs thus they are unlikely to be effective towards disaster risk reduction agenda because of such developmental problems Manyena (2006). These limitations contribute immensely to disaster management and preparedness hence effectiveness towards reaching sustainable livelihoods is difficult to obtain.

### 2.1.0 CAPABILITIES AND VULNERABILITIES THEORATICL FRAMEWORK

Government and Non-Governmental Organizations focus on disaster preparedness and management using CVA theory in order to lessen the impacts and effects of disasters. Anderson and Woodrow (1988) developed the Capabilities and Vulnerabilities Analysis (CVA) theory which is a simple matrix for viewing people's vulnerabilities and capacities in three broad, interrelated areas; physical/material, social/organizational and motivation/attitudinal.

Fig 2.2: Three-part theory



Source: Primary

According to Anderson and Woodrow (1988) physical and material poverty that is factors including land, climate, environment, health, skills and labor, infrastructure, housing, finance and technologies are some of the major determinants of the impacts/effects disaster. In this part of the theory different spectrums/groups of people from the poor to the rich, educated to those

that lack the know-how are affected by disasters differently in the way they respond or recover depending on the environment that surrounds them. Anderson (1988) et al poor people are the most are vulnerable and recover more slowly due to limited income and resources. Basing on the notion that the members of the rural community survive mainly on agricultural produce henceforth they are most affected in the event of a disaster in addition they are the ones with towns which are least developed.

Gwimbi (2009) flooding and droughts are a common problem in Zimbabwe where they threaten the well-being and food security of Zimbabweans, especially in rural areas. Furthermore, in the matter of physical environment communities' vulnerability in Zimbabwe to hazards such as floods may be due to the location of homes in floodplains. Madamombe (2004) supports this view, communities living in the lower Zambezi valley such as in the Muzarabani and Guruve are prone to the effects of floods, Important to note is the dependence on natural resources makes Zimbabweans vulnerable to climate change Chitiga and Chigora (2010) in the face of deteriorating environmental conditions Gwimbi (2009) that threaten the depletion of these natural resources.

Government in Zimbabwe therefore realized this disadvantage amongst rural communities of the country's demography which is comprised of mostly rural based agrarian communities 60% whilst 40% covers the urban communities thus the creation of Disaster Management legislation in form of the Civil Protection Act. Chikoto and Sadiq (2012), after independence, the Government of Zimbabwe approved a supportive legislation framework to create a national emergency system. The Civil Protection act of 1989 articulates that during an emergency, the system would activate all available resources towards civil protection, such as the setting up of national civil protection fund, which will be used deal with emergencies.

In Mutoko district, disaster preparedness and management is done by the District Civil Protection Committee through the implementation of drought relief schemes, food for work programs, presidential inputs scheme, and programs for farming drought resistant crops. Important to note is that these programs and schemes are of great help to the community however a gap can still be recognized as according to ZimVacc Market assessment (2015:7) each year members of Zimbabwean communities will have to reduce their meal rations to at least one meal per day furthermore an estimated 1.3 million people of the total population would be in

need of food assistance, Mutoko constitutes about 6% of that estimation. Chigodora (1997) recommends that the Government of Zimbabwe put in place poverty alleviation and drought preparedness programs. Furthermore IFPRI (2008) is of the notion that implemented programs such as Food for Work and Public Works by Government of Zimbabwe ought to be expanded to the extent of them being convectional and holistic. Observation then shows that regardless of the various schemes and programs that have been implemented in order to deal with disasters they have had a limited effect as evidence of the people reacquiring aid escalates in the event of natural disaster.

The second part of the theory by Anderson and Woodrow (1998:11) argue that "poor societies that are well organized and cohesive can withstand or recover from a disaster better than those where there is little or no organization and people are divided." That is vulnerability is determined by how society is organized, its internal conflicts and how it manages them. UN/ISDR (2006) defines vulnerability as physical, social, economic and environmental factors or processes which increase the susceptibility of a community to the impact of hazards. This aspect includes formal political structures and the informal systems through which people get things done. For example, in Tanzania according to Robert (2009) et al, in order to minimize hazards in both formal and informal settlements, disaster risk reduction measures should be an integral part of the policies, law and planning procedures.

Once institutionalized, these polices should be consistently enforced and ensure community participation, since it is essential in terms of intervention. In Zimbabwe Chitiga and Chigora (2010) notes that lack of effective environmental management measures makes Zimbabwe vulnerable to environmental hazards which are caused by climate change. Another thing that make Zimbabwe vulnerable to disasters is that of low budgetary allocations that are given for the disaster risk reduction programs as the civil protection. The low budgetary allocations are a result of corruption, poorly timed policies like the land policy, and Zimbabwe's participation in the DRC war which led to the economic decline of the nation Hondora (2009). According to Gwimbi (2009) Zimbabwe lacks investment in the prevention programs and there must be effective early warning systems if the adverse impacts of disasters are to be reduced in Zimbabwe. Zimbabwe Independent (2014) given early warnings of the consequences of heavy

rains that lashed most parts of the country it was expected government and its arm, the Civil Protection Unit (CPU), would be pro-active by preparing well for the threat of floods.

The last component of the theory is based on the concept of motivational or attitudinal vulnerability and capacity. According to Anderson (1988) et al attitudinal vulnerability is focused around the idea that communities that share strong ideologies or belief systems, or have experience of cooperating successfully, may be better able to help each other at times of disaster than groups without such shared beliefs or those who feel fatalistic or dependent. This part of the theory is based on the premise that people ought not to look at themselves as victims in cases of disasters rather look at themselves as problem solvers in order to enhance sustainability.

Noticeably various communities in Zimbabwe regarding how they have become to view themselves in a way that is depredatory and dependent in nature to the harsh effects of disaster. This however by every means is counter-productive to the notion of effective disaster preparedness and management policy as these are aimed not only at recovery or response but also at preparation, mitigation, prevention resilience Hondora (2009). Aid in Zimbabwe has resulted in a donor dependency syndrome where communities no longer fend for themselves knowing that donors provide aid. That is instead of finding ways to prepare or effective response communities in Zimbabwe now find themselves as passive recipients to aid provided for them. According to Makanganise (2011) some communities in Hurungwe and Siyakobvu in the period November 2010 gave evidence of donor in these communities, instead of preparing their land for planting villagers were expectantly waiting for aid.

### 2.1.1 CHAPTER SUMMARY

This chapter on literature review addressed some of the research questions through a careful overview of information from past researches. The research questions from chapter one addressed in the preceding chapter are establishing impact of disaster management and preparedness; examining the importance of implementing disaster management and preparedness strategies in bringing about sustainable livelihoods Although this chapter has managed to point out the importance of disaster management and preparedness to a country in bringing about sustainable livelihoods, careful digging of the information sources led to the discovery of a research gap that this research will fill. The sources investigated failed to address the following question as set in chapter one, how have disaster management and preparedness strategies

brought forth sustainable livelihoods if so how? These questions were not addressed by other past researches as was revealed by the literature review as well as the investigations on other disaster management and preparedness sources that are not part of this research.

The author is of a strong conviction that disaster management and preparedness program structured towards success should be integrated into the community's individual responsibility in a manner which convectional and discourages passiveness. Governments are migrating towards using disaster management and preparedness mechanisms as a tool for promoting resilience rather than mere recovery. By implementing disaster management and preparedness countries are less susceptible to the extreme effects of hazards. In this way they ensure that, they do not succumb to the calamities of disasters thus in turn enhance capacity, reduce vulnerability in order to bring about sustainable livelihoods. The next chapter on research methodology will address the issues to do with how data is going to be gathered and analyzed so as to address the questions that the literature review did not address.

### **CHAPTER 3:**

### 3.1 RESEARCH METHODOLOGY

This chapter focuses on the major methodological mechanisms that were employed in the study. According to Polit (2001) research methodology is defined as the analytical procedures that are employed to collect information and data for the purpose of conducting research. These procedures show how the research was carried out, they include the research design, target population, sampling, data collection procedures, and the data presentation and ethical considerations. The researcher employed qualitative approach were data was obtained systematically through a set of procedures and data collection techniques

#### 3.2 RESEARCH DESIGN

Burns and Grove (2003) define a research design as a manner in which study can be conducted with complete ability to control influences that may interfere with the rationality of the findings. An effective research design is relevant in acquiring data that responds to questions additionally researcher can note mistakes or errors. It is of vital importance for the researcher to make a choice on research design or method that is applicable to research study. In this study exploratory research design was used.

### 3.2.1 EXPLORATORY RESEARCH DESIGN

Exploratory research design is understood as, study that is initiated when not much is well-known about the area of particular interest, in order to investigate the full nature of the spectacle and other factors connected to it, Polit (2001) et al. In this study the approach gave critical insight about what is happening in terms of disaster preparedness and management in Mutoko seeking information from responsible authorities' questions surrounding disaster phenomena in the area.

### 3.3 QUALITATIVE RESEARCH METHOD

Parahoo (1997) defines qualitative research as that which focuses on the experiences of people, it is a form of social enquiry that focuses on the way people interpret and make sense of their experience Holloway and Wheeler (2002). The researcher chose a qualitative approach in this research in order to investigate and explain the opinion of people in communities on their perspectives, experiences of the impacts/effects of disaster in order to emphasize the importance

of proactive and effective disaster preparedness and management mechanisms in harboring sustainable livelihoods.

### 3.4 TARGET POPULATION

According to Kotler (2003) target population is defined as that group of people that have one or more common characteristics of interest to the researcher. Burns and Groove (2003) define target population as all the people, factors that meet the criteria for inclusion in a study. In the case of this research the population that was chosen is that, which is affected by the disasters and the people responsible of implementing disaster management and preparedness mechanisms these include members of the District Civil Protection Committee (DCPC) and NGOs.

Fifty (50) respondents were chosen in this manner, twenty members of the DCPC from different departments such as Ministry of Social Welfare, Ministry of Public Works, AGRITEX, Ministry of Local Government Urban and Rural Development and Mutoko Rural District Council, EMA and other Non-Governmental Organizations. These were used they are the departments and organizations that are the responsible in mitigating and preparing for disaster at District level thus they have in-depth information and professional insight on the disaster preparedness and management mechanisms employed in the District.

Table 3.1: Target Population

	District Civil	Community
	Protection Committee	
Target population total of 60(sixty) participants	20	40
Questionnaire	*	✓
Interview	✓	*
Observation	*	<b>√</b>

**Source: Primary** 

Thirty people from the community in three wards, these people have firsthand knowledge and they are the ones affected by hazards. Also it is in these communities that disaster management and preparedness initiatives are implemented thus their responses provided empirical evidence on how these initiatives enhance sustainability in their livelihoods hence addressing the research question and objective.

### 3.5 SAMPLE AND SAMPLING TECHNIQUES

### 3.5.1 SAMPLE SIZE

Polit (2001) et al defines a sample as a proportion of a population. The researcher had a sample size of sixty (60) respondents. Forty respondents were chosen purposely from the community were hazards occur and their livelihoods are disrupted by the occurrence of disasters hence their insight was very important. Twenty participants were chosen from the members of the DCPC and other organizations practicing disaster management and preparedness strategies.

### 3.5.2PURPOSIVE SAMPLING

A non-probability sampling technique known as purposive sampling was applied in this research. In non-probability sampling the researcher used her judgment to select the subjects to be included in the study based on their knowledge of disasters, Parahoo (1997) asserts that, purposive sampling is a sampling method where by researcher deliberately selects respondents to include in the study based on their capacity and capability to deliver necessaryinformation. The rationale for choosing this approach was that the researcher was that the impacts of disasters are different to every individual this is largely dependent on their capability and vulnerability. The responses that were given were used to address the research questions synthesizing it with the statement of the problem in order to understand the role of disaster management and preparedness initiatives in enhancing sustainable livelihoods.

### 3.6 DATA COLLECTING METHODS

The researcher used questionnaires, interviews, observations and as instruments of collecting data from the field. The researcher used these multiple instruments of data collection in order to ensure credibility, as the pitfall of one method in conducting this research compensated was compensated for in the use of another instrument. This proved useful as the topic under study is that which was of a broad spectrum.

### 3.6.1 QUESTIONNAIRES

Kotler (2003) defines questionnaires as a set of written, typed questions that are directed to the respective respondents in a research. Questionnaires were used as the most suitable method to enable the researcher to reach out to a total of 30 respondents. The questionnaires were used in order to get information from different people on what they know about Disaster preparedness and management mechanisms in Mutoko District. The researcher used quantitative technique by using questionnaires because they have the potential of yielding largest quantity of research data. Structured and unstructured questions were used in designing the questionnaires.

This made this method a very effective and useful data gathering method as it was able to gather specific research data that answered specific research questions. The research also observed the drawbacks of questionnaires such as ambiguous replies or omission of replies altogether to certain questions which in turn made interpretation to omissions difficult.

### 3.6.2INTERVIEWS

Interviews can be defined as conversation between two or more people, the rationale behind using these in the research was aimed at understanding people's impressions or experiences and learning more about their answers to questionnaires. In this research 20 in depth interviews were conducted. Boyce (2006) defines in depth interviews is a qualitative research technique that involves having intensive individual interviews with the aim of getting perspective on particular program or situations. Patton (2002) is of the view that in-depth interviews are useful one wants detailed information about a person's thoughts and behaviors or want to explore new issues in depth.

In this research in depth interviews were used because the researcher wanted to understand the participants' expectations in relation to the disaster management and preparedness initiatives that is the thoughts processes, and outcomes in order to address the research objective and question. The researcher obtained a clear picture of expertise background and experience in mitigating hazards. Seidman (1998) supports this view, knowledge of interviewee experience helps in understanding better, the context for an individual's behavior and decision-making rationale. However, the researcher came across some pitfalls associated with the interview technique such as time taken to conduct interviews were participants had other matters to attend to additionally difficulty in approaching some officials that were not easily approachable under this method.

#### 3.6.3 OBSERVATION

According to Powell E & Steele (1996) "observation" is way of gathering data by watching behavior, events, or noting physical characteristics in their natural setting. Natural hazards leave a trial of visible after effects in terms of both infrastructural and physical harm to the people who live in the community where they occur. It is on this notion observations proved to be a useful research instrument to the researcher as visual supporting evidence was gained in addition to the answers given by respondents on the actual effects of hazards. Hancock (2009) et al observation is, in some part, an intuitive process that allows individuals to collect information about others by viewing their actions and behaviors in their natural surroundings.

The researcher was able to use this as an advantage, in order to address the research objective in finding out whether disaster preparedness and management was effective in fostering sustainable livelihoods in Mutoko. Important to note are other merits that come with using observation, information that was omitted by participants during interviews and questionnaires about the effectiveness of disaster preparedness and management in promoting sustainable livelihoods was captured through observing them in their natural surroundings in terms of how they cope with hazards.

#### 3.7 DATA ANALYSIS AND PRESENTATION

#### 3.7.1 THEMATIC ANALYSIS

In this research, analytical qualitative processes surrounding data analysis was used in the form of thematic analysis. Braun and Clarke (2006) define thematic analysis as a method for identifying, analyzing and reporting themes within data; themes capture important information that relates to the research question. This qualitative method of reviewing data was used in this research as the researcher was able to look at typical disaster management and preparedness mechanisms in comparison to those in Mutoko District through synthesizing themes surrounding data from the research. Data was presented in the form of texts, graphs and tables.

#### 3.8ETHICAL CONSIDERATION

Ethical consideration can be described as the moral standards and values a researcher is supposed to conform to when carrying out a research in order maintain dignity of participators in research and integrity on the part of the researcher. Polit (2001) et al supports the claim, social scientists are expected to observe the highest level of scientific and professional integrity. Hence it is this regard that these ethical issues must be observed and honored. Respondents were guaranteed

firm word of confidentiality of information collected from them it would be used for the academic purposes only. The researcher made sure that after analysis and presentation of data all questionnaires were destroyed so as to maintain privacy and obscurity of respondents. The information collected was applied through research methodology and was justly analyzed and presented.

#### 3.9 CHAPTER SUMMARY

Chapter 3 focused on the research methodology that was employed by the researcher in conducting the study whilst carrying out the research. The research used the qualitative research design as a basic form of research design. Purposive sampling method was used by the researcher for selecting disaster management and preparedness experts/enforcers and individuals from the community. Questionnaires and personal interviews were used as the methods for data collection. The chapter also looked at ethical considerations how ethics were preserved by the researcher and how data was going to be presented in the following chapter.

#### **CHAPTER 4: DATA PRESENTATION AND ANALYSIS**

#### 4.1 INTRODUCTION

This chapter presents data collected during the study of disaster management and preparedness, it seeks to analyze and present findings of how disaster management and preparedness initiatives help in promoting sustainable livelihoods in Mutoko. The researcher used qualitative technique in researching, interviews and questionnaires were used as methods of data collection. Mostly text was used to present data with the inclusion of graphs and texts for further elaboration.

### 4.2 QUESTIONNAIRE RESPONSE RATE

The response rate is critical for accuracy of research findings in any study. The researcher used questionnaires for forty people in community. The respondents were chosen deliberately on the basis of their insight on the initiatives that are employed in times of disasters and their effectiveness in sustaining their livelihoods addressed the research questions and objectives. Of the forty questionnaires distributed twenty nine were fully responded, five were partially responded whilst six were not answered at all.

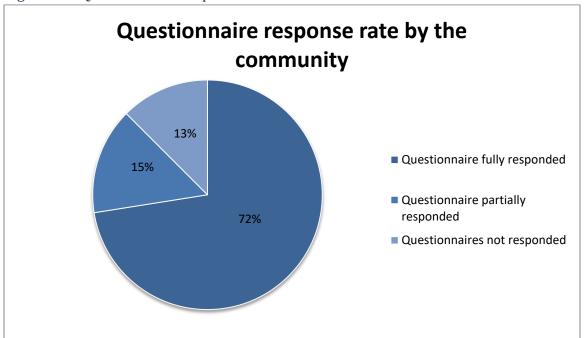


Figure 4.1: Questionnaire response rate

Source: Primary source

#### 4.3 INTERVIEW RESPONSE RATE

In-depth interviews were conducted with twenty (20) members of the district civil protection committee and other organizations implementing disaster management and preparedness initiatives. The participants were chosen in this manner two from the Ministry of Health & Child Welfare, two from the Ministry of Rural Development, one from Ministry of Women Affairs and Community Development, two from Ministry of Social Welfare, one from the Metrological department, two from the District Development Fund, two from Environment Management Agency, two from Mutoko Rural District Council, one Mutoko Grain Marketing Board, and two from Agritex. Other NGOs were also interviewed amongst them was UMCO were two respondents were interviewed. Eighteen interviews were conducted successfully whilst two interviews were not conducted successfully.

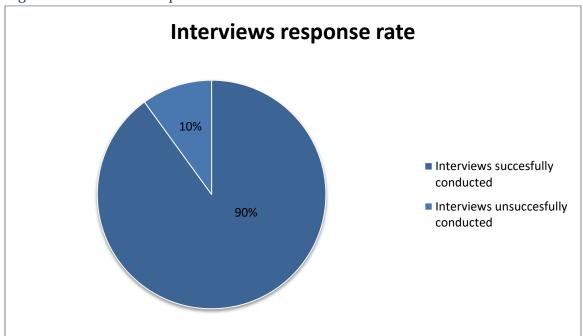


Figure 4.3 Interview response rate

Source: Primary

#### 4.4 VULNERABILITY OF COMMUNITIES TO DISASTERS IN ZIMBABWE

All of the respondents confirmed that the occurrence of disasters left them vulnerable to their effects. A respondent, a member of the D.C. P. C from the department of Agritex in an interview when asked about the vulnerability to common disasters in Mutoko District said that: "The

occurrence more often than not leaves the communities vulnerable to their catastrophic effects, increased vulnerability is owing to the ineffectiveness of mitigation and preparedness measures. In Mutoko district droughts are the most common disasters this is owing to low rainfall patterns that are experienced in the district".

It was noted that the severity of drought is different throughout the district as it not under a single agro ecological region, which are regions II, III and IV. Areas in region II and IV are the main wards that experience the severity of drought, According to Betera (2012) regions IV and V are usually termed drought prone areas. This has been exacerbated by the EL-Nino Southern Oscillation (ENSO) phenomena that has altered rainfall patterns around countries in Africa. Instead of the anticipated average rainfall Zimbabwe and many countries in Southern Africa received low rain. In the years 2010-2014, rainfall seasons received rain had accumulated 300mm-500mm of rainfall whereas in 2015/16 rainfall season a greater part of the country received less than 300mm. Mazzeo (2011) droughts in Zimbabwe are caused by the El Nino-Southern Oscillation phenomenon .Resultantly crops wilted and failed, people lost their livestock due to lesser pastures especially in Udye, Chidye, Charehwa, Chisambiro these are some of the wards that fall under region IV.

In an interview with a respondent from Agritex, a government department that is also member of DCPC was asked about the effects of droughts—respondent said that; "...long periods of low rainfall make the communities more vulnerable to disasters both in time and resources put into farming process that is affected by low rainfall also in potential income as some of the families look to their crops and livestock as a source of income and supporting their livelihoods hence they invest much into them". Droughts are a major hazard in Mutoko that disrupts the livelihoods of the people in the communities as most families' lack the capacity to deal with their effects in a manner that is sustainable and less detrimental to their lives. Rural population constitutes 80% of the total population of Zimbabwe, the area under study makes up a portion of this percentage, these communities are depend on farming activities sustain their livelihoods hence the are more vulnerable to disasters. Chitiga (2010) et al supports this view, the dependence of Zimbabweans on natural resources makes them vulnerable to climate change, resilience can only be ensured by less engagement in hazard vulnerable actives such as agriculture, Manyena (2009). Thus there is need for effective disaster management and preparedness strategies in order for communities to preserve their livelihoods.

Fifty percent 50% of the respondents in both the interview and questionnaires that were undertaken pointed out that hailstorms were disaster of measurable frequency in the district especially in some wards more than others like Kawazva, Kawere, Nyamuzizi, Chibeta and Chidye. In an interview a respondent from MET said that "...the geographical location of some of the homes and schools make them more vulnerable to the heavy winds that usually accompany hailstorms as some people reside in mountainous areas where their homes are located in the center, surrounded by mountains thus when heavy winds meet the mountain that is no escape route they bounce back and destroys the homes downhill". Respondent pointed out that some of the houses are not built using strong material thus under the exposure of violent winds and rain they are destroyed, some respondents also reported that they suffered some injuries. In some areas daily use necessities, food stocks were completely destroyed which left them in dire need of support for help. Hailstorms lead to the destruction in schools and homes, entire rooftops are carried away by the heavy winds this disturbs the learning process of the school children and it causes damage to their learning material. According to Zimbabwe Daily (2015) three Early Childhood Development (ECD) children died in Bulilima District on their way home from school due to the heavy rains experienced during hailstorm, additionally hailstorms can result in the destruction of hundreds of hectors of crops such as tobacco, Betera (2011). Some of these crops are used as a means of supporting livelihoods thus their livelihoods remain vulnerable to occurrence of hailstorms thus there is need for disaster management and preparedness to be inclined towards protecting these means of livelihoods in order to make them sustainable.

Veldt fires were also noted as an occasional hazard in the district mostly in Charehwa ward, 40% of the respondents affirmed this. Participants pointed out that fire was another disaster that the district faced, a respondent from EMA said that, "communities are more vulnerable because of their activities that can ultimately lead to veldt fires, fires can get out of control when people use fire as a method of clearing the grounds in order for new fresh grass to come out which is later used as pastures for cattle grazing by the farmers". Community's vulnerability is due to poor environmental management practices, through activities such as these, Chikoto (2012) et al. Veldt fires destroy people's assets, what they use to sustain their livelihoods, hence disaster management and preparedness should be aimed at addressing such problems in order for them to harbour sustainable livelihoods.

It was also noted from responses on questionnaires that occasionally veldt fires were also caused by lightning. In an interview another respondent from the EMA agency, "said that causes of veldt fires in the district can be attributed to by lightning, in some parts of Mutoko such as Chidye and Chisambiro, lightning in the rainy season is not a rare occurrence. When the fires get out control they tend to demolish everything in their path from natural to man-made that is the loss of human life, animals that are part of the eco system and livestock. Additionally fires can lead to the loss of productive areas such as the communities' farms where they would have invested a lot of income in hopes of reaching certain gains. According to National Weather Service, strikes of lightning have a high possibility of starting fires.

Respondents also pointed out road accidents are very common in the district. This is mainly due to the fact that Mutoko is located along the Nyamapanda boarder post-Harare route, because of the fact that this is directly in the highway road accidents are very high. In an interview with an official from Agritex the respondent said that, "Some of the residents especially those located in the resettlement areas practice mixed farming they use road transport to ferry their produce to the markets for selling, they travel early mornings between 1-4am this makes them susceptible to accidents due to weather conditions and fact that the roads are bad, the drivers sometimes have difficulty navigating when it is dark outside resultantly in the event of an accident people lose their lives and their produce which sustains their livelihoods" Road accidents cause loss of life amongst the residents of Mutoko especially those that travel at night to go to market areas to sell their produce this hinders their livelihoods as the people that are usually affected are the breadwinners to whom they look up to sustain their livelihoods. Peace and Maunder (2000) the rainy season in Zimbabwe causes a rise in road accidents another factor leading to accidents is the damaged and narrow roads McSweeney (2011)et al.

Kawazva and Kabasa are some areas whereby respondents pointed out that there were minor problems with deep holes left behind by mining activities which are left unclosed, uncovered or they are not barricaded in a manner that protects the people of the community or their life stock. If cattle other wild animals fall in they usually end up dying, in the rainy season water collets in these holes such that they become pools this in turn possess risk to the children walking to and from schools.

#### 4.5.1 DISASTER MANAGEMENT AND PREPAREDNESS STRATEGIES

Through observation, questionnaire and interviews the researcher sought to analyze efforts and strategies of disaster management that are made in times of disasters. Responses showed that some disaster management and preparedness strategies are implemented by the District Civil Protection whilst some are implemented by NGOs. Of the questionnaires administered and responded to the community results showed that 60% of the respondents pointed out District Civil Protection strategies which included drought relief scheme which provided them with grain in times of disasters such as droughts, food for work programs where they would receive food supplies in exchange of their labor. 20% respondents pointed out they could get access to grain at GMB which was being sold at a reduced price. In an interview a respondent from the Ministry of Local Government, Rural Development, Preservation of National Heritage and Culture (MLGRDPC) said that "members of the community who could not meet the criteria for drought relief program because of set criteria had a chance to engage in the food for work program or could access grain at a deducted price at the Grain Marketing Board"

70% of the participants noted the strategies implemented by NGOs such as food aid for some of the people who were not receiving anything from the above mentioned strategies. In an interview with a representative from United Methodist Committee (UMCO) responded that: "we engage in food aid program, which is facilitated by World Food Program, we give out food to the vulnerable affected by the effects of drought"

Some responses pointed out that government department such as Agritex offer and Ministry of Livestock offer technical know-how in dealing with pests that affect crops and diseases that affect livestock. It was highlighted that Agritex offers information that helps in understanding the environment better in terms of land, rain, crops and pests, such information helps in understanding the most vulnerable areas.

In terms of preparedness data collected showed that programs such as the presidential inputs scheme have been implemented in the district to prepare for disasters. Other methods include awareness campaigns, sensitization workshops, and capacity building projects that is provision grants for loans toward engagement of income generating projects.

# 4.5.2 THE EFFICIENCY OF DISASTER MANAGEMENT AND PREPAREDNESS STRATEGIES IN ZIMBABWE

70% from respondents on interviews postulate that, disaster management in Zimbabwe was not effective in bringing about sustainable livelihoods whilst 30% thought it was effective. Ministries in the DCPC such as the Ministry of Social Welfare, facilitated programs such as Drought relief scheme programs which was offered to the supportive families, (widowed, poor health,) old aged people, child headed families. In each ward this constituted about 20% of the total population. The food for work program was implemented by the District Development Fund in coordination various other ministries whereby the individuals from the community were to work in repairing roads, clearing roads cutting trees and doing all the manual labor necessary for the of the community. Some did not meet the criteria of the above strategies thus they did not receive food aid under these programs however it was noted that due to the long duration of drought almost everyone was in need of food assistance hence the choosing of some people left other community members who were vulnerable to the disaster. Important to note is that these relief programs though extremely helpful in resolving short term shocks they were to some extent solely based on responding and addressing immediate effects. Chitongo (2013) supports this view the effects of natural hazards have been exacerbated by efforts solely based on crisis management which are palliative and temporary.

Most people 70% pointed out that the DCPC was not effective, this may be owing to the fact that the DCPC lacks funds of its own that is in terms of transportation or monetary means to deal with disasters this may also be the resultant cause of the DCPC arriving after a long period of time after disaster is announced mainly because as a committee they have to rely on resources from their various departments These factors exacerbate the effects of disasters to the affected civilians. According to Ndlovu (2007) efforts for implementing priorities of the Hyogo Framework for Action have been challenged by financial constraints for consultative purposes and the purchasing of needed material for response.

The questionnaires and interviews and observations are aimed at analyzing the preparedness initiatives and the way in which they bring about sustainable livelihoods. In an interview a respondent from EMA said that, "The DCPC lacks some important disaster preparedness measures such as practicing mock drills this is owing to the lack of funds or a budget for the committee, in the event of disasters members have to sit first to source for funds". The DCPC is

supposed to have mock drills were they practice escape routes, how to react in times of hazards such as veldt fires however they lack the necessary funds to practice these. This shows that disaster preparedness activities are not given warranted attention in order for them to be effective enough to bring forth sustainable livelihoods. Sutton and Tierney (2006) support the views above, preparedness efforts ensure that the required resources for are in place and can be accessed for immediate response.

Disaster preparedness initiatives were also put in place in the past years in order to prepare for hazards. As a way of preparing for drought various ministries which are also in the DCPC work towards preparing for disasters. In an interview a member from the MLGRDC when asked about preparedness initiatives put in place to deal with disasters said that "...the department in collaboration with some partners from the NGOs conduct workshops with local leadership traditional leaders, councilors were information is presented by organizations like EMA on how to react in case of hazards e.g. veldt fires is shared,". In reference to the above response it is important to note that NGOs are a major contributing entity towards disaster preparedness initiatives which is applaudable however an important question of whether the civilians or DCPC have capability in preparing for disaster still remains in a situation where there is no donor help. Other departments such as the DDF, MWAGCD, EMA prepare for hazards by partaking in awareness campaigns in order to give out knowledge on how to cope with disasters however it was noted through responses from participants that these awareness campaigns at times are not enough in an interview a respondent from the MWA said that; "Awareness campaigns are used as a method of disaster preparedness these give people knowledge about disasters however even if the district get warnings of incoming disaster the district does not or resources to help people evacuate areas were hazards have been predicted to occur".

Other departments such as DDF, help in drilling boreholes and borehole sinking as water is more difficult to find after a long duration of low rainfall. AGRITEX in collaboration MSW help in preparing for disasters by implementing programs such as the food for work, presidential inputs scheme and drought resistant crop farming schemes to better help people prepare for droughts by having a sustainable produce. Communities were also encouraged to focus on farming drought resistant crops, follow ups and evaluation of how the communities focused on farming drought resistant crops is a way of focusing on disaster preparedness. These methods worked to some extent but however due to the low marginal rainfall patterns outcomes were not always favorable

to intended results .IFRPI (2002) is of the view that the GoZ has implemented disaster preparedness programs such as food for work, however these programs need to expanded in order to build community resilience to the impacts of disaster. According to ZimVacc (2016) several districts benefited from the input support programs however preceding long dry spells belittled such efforts.

Analysis of the responses showed that 40% of the respondents were aware of the presence of civil protection committee they noted that the DCPC was effective to some extent as their engagement in coming to assess damages caused by disasters usually followed with some aid to deal with the effects of disaster. 50% of the respondents pointed out that the disaster management initiative, in response to disasters, were not highly effective in promoting sustainable livelihoods. 10 % of respondents were of the view that they did not know the DCPC at all. This lead to the researcher understanding that the DCPC was not well acquainted with the members of the community at grassroots level thus the reason why the community was not sure about their role.

# 4.5.3 COMMUNITY BASED DISATER MANAGEMENT, PREPAREDNESS AND SUSTAINABLE LIVELIHOODS

The people in the community face dire effects of in the event of hazards. It was observed by responses from interviews who showed that 45% believed in community' capability in dealing with disasters whereas 55% argued that communities were not capable enough to deal with disasters, responses showed that the people are active participants in trying to mitigate some of the effects of disasters although in some cases they face challenges, the least affected families offer help in the form of shelter, food and other basic utilities for those that have their homes destroyed during disasters or transportation for those with cars to ferry the injured this goes a long way in keeping the culture of the people of Mutoko of standing together in times of crisis "kubatana panguva yematambudziko". Of the 45% of respondents on interview that posit that community is capable in mitigating the effects of disaster, one respondent from DDF said that, "...after a hazard occurs, the DCPC needs to sit for a meeting so that they pool in resources in the form of transportation, fuel and personnel, to go and assess damage caused by disasters and possible ways in which they can help at district level, this may take time of one to three days the communities in turn find ways to help each other were the least affected help those that are more

affected by disasters take for example the people from Mushimbo after occurrence of a hailstorm that left "

However it was noted that of the 55% of key respondents on interviews that argued that communities were not capable of effective disaster management and preparedness pointed out that in at times when hazards like droughts occur child headed families, the elderly face the dire effects as they do not have capability do deal with the effects. Additionally even the least affected in such scenarios do not have the capacity to help all of those that are in need as they also need to cater for their livelihoods. This shows that disaster management measures taken by the community are inclined towards reacting to the effects of disasters this may be owing to the fact that the community lacks capacity and capability in the form of resources. In an interview with a respondent from MWAGCD, "....people are empowered by the knowledge attributed to by campaigns however they do not have the capability because they lack the resources to act this leaves them more vulnerable to the effects of hazards"

20% of the key respondents on questionnaires argued that they (local community) have effective mechanisms for disaster preparedness in terms of early warning systems they use traditional methods of predicting rainfall patterns thus they can adequately prepare for disaster like droughts. In this way they store grain in their barns for later use however sometimes this is not enough as most of the people in the community look towards farm produce as a way of generating income thus at times when drought come around there will not be enough grain to sustain them through drought hazard season.

The people also believe in traditional means of evading disasters such as droughts, by praying for the rain this is done in their customs of traditional banquets "bira", these rituals are of the appearament of spirits done in the sacred caves "madzimbahwe" in the different wards, these rituals are led by traditional leaders the headmen, chiefs and chieftainess.

Programs in the various wards spearheaded by chiefs like "Zunde Ramambo" also work as preparedness mechanisms in the district. This is where by every citizen within a chief's jurisdiction come forward for a few days to cultivate crops that are stored in the chief's barn and they are supplied to the needy families in times of disasters. However such traditional methods seem to be moving out of trend maybe this is owing to the effects of ongoing changes such as globalization. According ZimVacc (2013) communities identified projects livestock projects

which had a rating of 15.1% as some of the key activity that they would be willing to engage in, only 2.1% advocated for activities such as zunde ramambo as methods of ensuring food security.

#### 4.6 LEGAL FRAMEWORKS AND ENFORCEMENT

80% of the respondents during interview were of the view that legal framework for disaster management and preparedness exist, however they pointed out that they were facing problems with their enforcement. In an interview when respondent was asked about knowledge of existence of legal frame surrounding disaster management and preparedness respondent anonymous said that: "Legal frameworks exist that regulate disaster management and preparedness however some of the stipulations therein do not encompass effective blueprint for proactive initiatives and of the existing stipulations they offer unconventional approaches to disaster management and preparedness that undermine the functions of District Civil Protection". The Civil protection Act chapter 10:06 section VIII (1) states that,

"If at any time it appears to the President that any disaster is of such a nature and extent that extraordinary measures are necessary to assist and protect the persons affected or likely to be affected by the disaster in any area within Zimbabwe, or that circumstances are likely to arise making such measures necessary, the President may in such manner as he considers fit declare that, with effect from a date specified by him in the declaration, a state of disaster exists within an area defined by him in the declaration".

From the response given above in contrast in the provision of the civil protection act, it can be noted that some of the provisions therein are not favorable to effective implementation of disaster management and preparedness as they preserve highly bureaucratic structures. Muhonda (2009) supports this view the Civil Protection Act does not provide for effective enforcement mechanisms for sectorial disaster planning and response.

In another interview respondent from Ministry of Women affairs said that:, "The district civil protection committee in times of disaster uses stipulated measures from the Civil Protection Act in Zimbabwe, however due to the unavailability of resources these measures, are often limited to response with immediate resources which do not hold much effectiveness in preparing and mitigating for disaster". According to Chikoto (2012) et al, the Department of Civil Protection has always been in charge of setting up emergency management plans. However from the response above it can be noted that without the resources to implement such measures the efforts

for disaster management and preparedness are greatly undermined. According to the Civil Protection Act chapter 10:06 section 29:1 "There is hereby established a fund to be known as the National Civil Protection Fund... (5) The Fund shall be vested in the Minister and, subject to this Act, shall be administered in accordance with his directions". Dube(2008) the civil protection system faces a constraint that it lacks finance to implement disaster management at both provincial and district level, furthermore it is alleged that corrupt officials misappropriated some of the monies from the national fund, Chikoto(2012)et al.

Notably amongst officials implementing disaster management and preparedness knowledge of the legal frameworks exist however most responses pointed out that knowledge without the effective tools to mitigate disaster it is difficult to ensure that disaster management and preparedness measures are effective enough to bring forth sustainable livelihoods amongst the people affected by disasters. In an interview with an official at EMA when asked about the importance of legal frameworks in disaster management the interviewee said that: "Legal reduction as they are a blueprint and they provide a checklist of the margins and the best way disaster management and preparedness activities should be aligned. however the without monitors on the ground who look out for violation of provisions within these frames, upholding stipulations is left to the moral of a person that is whether or not they want to follow guiding principles, an example is the legal frame Forestry which prohibits cutting down trees and use of fire that might lead to veldt fires, some members of the community do not preserve these regulations resultantly hazards occur due to their failure to abide to such regulations in some cases this can be accounted to lack of knowledge of existing policies.

Such responses show that although people may be fully aware of the regulations they do not follow through on the regulations that could possibly avert disasters thus even if disaster management and preparedness initiatives are implemented they may fall short in fostering sustainable livelihoods.

In another interview a respondent was asked about the presence of implementation of disaster management activities and institutional frameworks guiding these activities the respondents from MWA, DDF, MPW, MLGRDC gave similar responses a respondent from DDF said that:, "As an institution we implement disaster management and preparedness activities however as a department we do not have specific institutional frameworks, the Civil Protection act 'which is the main legal framework used by the District Civil Protection in is the main legal frame that

we use as an organization this proves useful for us as through the DCPC we are able to collectively pool in resources and ideas on the most effective disaster management and preparedness initiatives." This shows that organizations in the District Civil Protection wait for the legal frame governing them as a committee individually they have no legal frames that guide them in implementing disaster management and preparedness, however policy are an important tool in mitigating problems in this case hazards thus one can note that without an institutional framework how well equipped are the organizations in promoting disaster management and preparedness. According to the Sendai Framework 2015-2030, effective institutional arrangement is essential for mitigating disasters, thus organizations implementing disaster management ought to have developed disaster management master plan.

Analysis of the responses from the questionnaires showed that 30% of the participants had knowledge of the policy they marked their knowledge between average-good. However they pointed out of the implemented mitigation and preparedness measures they did not see much effectiveness of disaster management and preparedness in Mutoko. 40% further argued that although they were aware of the policies they did not fully comprehend what was there in. Notably this shows that the community is not well concentized about disaster management and preparedness policy such as the Civil Protection Act, Forestry act, or the Draft Bill on Emergency Management bill. Muhonda (2011:40) supports this view "...there is no clear arrangement in the legislative framework to strengthen local community structures to effectively manage disasters". That is the community's role is not clearly stated within legal frameworks and is undermined.

30% of the responses to questionnaire were of the view that they did not have knowledge of disaster management and preparedness policy. Thus it can be noted that lack of knowledge of existence of such policies is either ignorance or lack of access to such information. However lack of knowledge depicts that the community is not fully aware of the prerequisites of disaster management and preparedness activities that are found within such acts hence even if these measures are implemented their specific and precise use is not given the attention it deserves hence the reason why disaster management and preparedness have been able to a lesser extent to foster sustainable livelihood. The Civil protection act denotes that everyone has the responsibility to act or avert disaster and to act in the event of disaster however it can be noted that one cannot act when they do not have full knowledge of their role in Disaster Management

and preparedness According to Chaminda (2014) policy knowledge, together with good practices and lessons learned from implemented measures, undoubtedly support effort through well-informed mitigation measures and preparedness planning.

#### 4.7 CIVIL SOCIETY AND DISTRICT CIVIL PROTECTION RELATIONS

From the review of the information acquired from the questionnaires and interviews it was noted that, 90% of the respondents were of the view that civil society and non-profit organizations have played a pivotal role in implementing disaster management and preparedness these have been effective in emergency. In times of disasters due to the fact that the DCPC lacks funds and resources to go and asses the damages of disaster in order, they engage other partners from the business community and seek resources from NGOs operating in the district. Because they lack funds they cannot implement some disaster management activities owing to the fact such activities require funds. It was noted that civil society operating from within and outside Mutoko have implemented disaster management activities like giving aid, rehabilitation of affected families, provision of food supplies in the events of disasters such as drought amongst various other activities. In disaster preparedness these institutions have managed to implement sensitization programs, empowered people through promoting their livelihoods.

The DCPC looks to civil societies to help implement both disaster management and preparedness, it was noted that they help in the facilitation of these programs. In an interview a respondent said that non-profit organizations have been of great assistance to the district of Mutoko in empowering the communities in ways that prepare for disasters by implementing programs that boost their livelihoods in preparation of incoming disasters that might hinder their livelihoods, organizations like Cluster for Agricultural (CADS) who have given grants for community gardens and projects that sustain their livelihoods"

In another interview another respondent from the MWACDG said that: "as an organization we share knowledge with the communities during awareness campaigns however, projects have been facilitated by ILO for not only the promotion of livelihoods to ensure that the knowledge we share preparing for hazards can be acted upon"

These activities although they ensure that the communities are well equipped to deal with disasters such as drought which are very prominent in Mutoko as these projects secure assets investment that is their livelihoods. However important to note is that without the civil society

the DCPC lacks depth and area of actually implementing these strategies because they lack capacity.

The responses from the members of the community showed that the communities believed that civil society help greatly in the times of disasters. It was noted that majority of the participants believe in the efficiency of civil society groups in the event of disaster they alluded that the civil society tend to respond earlier in times of disasters and that at times the help that they give in the form of aid can actually be more than what the District civil protection are able to give. A respondent pointed out that "pakaitika mhepo yakasimba mvura yakanaya zvakanyanyisa nekuda kwekudaro dzimba dzedu dzeakaparadzwa pamwe chete nemudziyo yedu, veIOM vakatibatsira zvikuru nekuti bvisa mudambudziko iri vakakwanisa kutipa zvekudya, midziyo yemumba, magumbeze nezvimwewo izvo zvakabatsira zvikuru"

Responses show that people greatly appreciate programs implemented by civil societies in disaster management some even went on to say that the food that was distributed by UMCO since early 2016 has helped a lot to sustain their livelihoods. They pointed out that due to the effects of the 2015-2016 droughts they were unable to harvest hence they had bee I much need of food assistance, a small number pointed out they had been left out of government drought relief programs thus the engagement of civil society in providing food aid was very helpful and commendable action.

#### 4.8 CHAPTER SUMMARY

Chapter 4 is about data presentation and analysis. The chapter presents data on the disasters that frequent Mutoko district. It also looks and disaster management and preparedness mechanisms implemented in order to bring forth sustainable livelihoods by the people and disaster management and preparedness team. The next chapter focuses on the recommendations and conclusions.

#### **CHAPTER 5**

#### **5.1 INTRODUCTION**

The research sought to understand the role of disaster management and preparedness in promoting sustainable livelihoods using Mutoko as a case study. In order to do this qualitative means were used to review secondary data thus the literature review. The researcher went on to use interviews, questionnaires and observations as methods for data collection in order to address the research objectives. Data collected was presented and analyzed in relation to the statement of the problem which encompassed the notion that disaster management and preparedness initiatives have not been proactively inclined in order to reduce impact and effects of disaster, in turn creating sustainable livelihoods rather they have been reactive in resolving effects of disaster.

#### **5.2 SUMMARY OF FINDINGS**

In the preceding chapters research data was presented in a manner that addressed the research questions and objectives. It was noted that disasters do occur in Zimbabwe as well as they occur in Mutoko droughts, veldt fires, hailstorms, mining activities and road accidents and in some cases floods which were reported to have a marginal effect. Communities' vulnerability to disasters was also discovered to be a major cause for exacerbated effects of hazards. Analysis from the data collected showed that the communities in Mutoko are subject to the effects of disasters as in some cases they lead to effects that hinder their livelihoods.

From the findings it was not that strategies of disaster management and preparedness are in place in terms of disaster management they involve drought relief schemes, food for work programs, deducted prices on grain, assessment of areas affected by disaster amongst other measures. In disaster preparedness measures implemented include inputs programs concetization workshops, awareness campaigns. The above mentioned are the strategies for disaster management and preparedness implemented in the district by the DCPC and NGOs operating within the district and outside the district.

Information that was gathered showed that most respondents did not believe that disaster management and preparedness to a greater extent effective, in contrast some respondents were of

the view that disaster preparedness and management strategies were effective enough to deal with disasters and bring forth sustainable livelihoods. This is due to the fact that as a committee they do not have emergency response resources such as trucks, ambulances, fire brigade.

Observation from the findings acquired during the research show that communities in Mutoko adopt disaster management and preparedness in the event hazards and in preparing for hazard. They pool in resources in order to help individuals within their communities that are affected more by disasters. It was noted that communities also prepare for disasters by using various traditional methods such as predicting rainfall patterns, storing grain, investing in projects, participating in "zunde ramambo" and appeasement of ancestral spirits and participating in concetization workshops and campaigns.

Findings showed that legal frameworks surrounding disaster management and preparedness exist however the problem is in their enforcement. As the legal frameworks such as the Civil Protection Act require the DCPC to assist in case of disaster in order to minimize the effects of disasters however the fact that the DCPC lacks needed resources, expertise that are needed to deal directly with disasters and that they face a problem of enforcing laws that protect the environment because of the lack of stuffing

Due to the above challenges the effectiveness of the measures implemented by the DCPC have been non-existent or effective to a less extent that they have to look at civil society and international organisation in order to enforce disaster management and preparedness. Such factors have undermined their role as the DCPC as people seem to be more aware of civil society's presence rather than DCPC's presence.

#### 5.3 CONCLUSION

How to mitigate and prepare for a disaster is a major issue of concern worldwide as disasters continue to occur, causing diverstating effects that affect people's life. Zimbabwean communities can account for part of the world's population that has been severely affected by these disasters this is owing to various reasons chief among them are the changing climatic conditions. The research findings depict that droughts, veldt fires, hailstorms, mining activity and road accidents are the main disasters occurring in the district and of a small magnitude pest and livestock diseases are also a problem. The Civil Protection committee is the main body which

implements disaster management and preparedness in the case of Mutoko the DCPC has implemented strategies in order to prepare for disaster and mitigate their effects. However it was noted that these strategies have not been effective.

Various management and preparedness measures have been adopted most with marginal success whereas some with great success. These measures have been reactive to deal with immediate shock of disasters rather than proactive in order to mitigate and prepare for disaster effects in such a manner that helps in enhance resilience amongst the communities that is in terms of capacity and capability. Noticeably, looking at statement of the problem it was noted that disaster management initiatives are mainly reactive in trying to curb the effects of disasters hence the role of disaster management in promoting sustainable livelihoods has been severely undermined. Sustainable Livelihoods centres on coping from shocks/stresses that are resultant of catastrophic events such as disasters in manner that increases capability and lessens vulnerability to disasters.

The research also showed that there are no effective disaster preparedness measures as evidenced by the way people look up to aid to help them cope. The communities in the district have not been able to effectively prepare for disasters as they occur as they lack adequate training and resources to implement effective disaster preparedness initiatives. Additionally, the DCPC lacks adequate disaster preparedness such as early warning systems thus it is a challenge to prepare for the effects of disasters. Nevertheless, it is important to note that lack of preparation or preparedness measures exacerbates the effects of disasters as shown in the study

The problems being faced by the DCPC are the fact that people in the community are not fully aware of their role as the DCPC and also the communities are not aware that they should be more engaged in disaster management and preparedness in order for it to be effective. Furthermore, where awareness is mute communities continue to be exposed to the harsh effects of disaster as the best way to avoid disaster from turning into catastrophic event is to ensure that communities prepare and mitigate for natural hazard in a manner that lessens the impact of the hazards to give way into catastrophic disasters. The DCPC is also facing the problem that they cannot fully enforce legal frameworks surrounding disaster management—this is owing to the fact the civil protection unit lacks funds to effectively discharge its mandate due. Lack of resources and lack

of funds is a major hindrance because without adequate resources it is difficult for the DCPC to implement effective disaster management and preparedness strategies.

Additionally, the presences of bureaucratic structures are also a problem with DCPC's authority. Bureaucratic structures undermine the power of the DCPC as in the event of disasters the district civil protection have to report to the provincial before any action is taken. This exacerbates the effects of disasters minimizing the chances of creating sustainable livelihoods. Findings showed that the DCPC is highly dependent on civil society whom the DCPC engage in the time of disaster this shows, that as a committee they lack the capacity and capability to deal with disasters thus concluding to the point that with absence of any real capacity as the DCPC it would be impossible to impart effective measures disaster management and preparedness to community. This dependency also limits the people's ability to trust in the DCPC

#### **5.4 RECOMMENDATIONS**

The District Civil Protection needs to be more empowered in enforcing legal frameworks surrounding disaster management and preparedness as the current existing frameworks owing to the highly bureaucratic structures limit their role as a committee in implementing effective disaster management and preparedness. That is District Civil Protection Committee should be given more scope of autonomy and funds to discharge their mandates.

There is need to adopt the draft bill on emergency management as existing legal framework do not encompass global standards such as the Hyogo Framework for Action within them which are part and parcel of the draft bill. This may be a factor that has led to the ineffectiveness of disaster management and preparedness. That is disaster management and preparedness policy framework needs to learn from other countries' implemented mechanisms in disaster risk reduction and preparedness those who have adopted frameworks such as the H.F.A 2010-2015 and the Sendai framework 2015-2020.

There is need for a good cordial relationship between the DCPC and the community such that they can be interdependent in achieving the goal of promoting sustainable livelihoods in order to help them with increasing capability and lessening vulnerability such that they do not remain as passive recipients. Thus the community need to be aware of their role in disaster management and preparedness and in order for there to be sustainable livelihoods.

Disaster management and preparedness policy should be more inclined towards proactive mitigation rather than reactive response through adoption of disaster preparedness initiatives such as early warning system, evacuation, emergency drills which need to be put in place such that everyone knows what they ought to do in event of disaster this will increase capability.

#### **5.5 CHAPTER SUMMARY**

Chapter five presents the summary, conclusions and recommendations derived from the findings of the study. It was understood that globally disasters are an ever present phenomenon especially now with the change in climatic patterns their occurrence is much greater the effects much more catastrophic, Zimbabwe as a developing country has witnessed these catastrophic effects as disasters have an impact on human lives and its economy. Using a case study of Mutoko the researcher noted that the effects are much greater where disaster preparedness and management initiatives are not inclined in promoting sustainable livelihoods that is reducing vulnerability and enhancing capability. It was noted that disaster management and preparedness mechanisms exist in the district however there are some problems in implementing them such as lack of funds, lack of autonomy in Mutoko District Civil Protection Committee. Furthermore, some of the disaster management and preparedness initiatives are reactive in dealing with the impacts of disasters and not proactive in preparing and preventing disaster risk.

#### REFERENCE

Ashley. C, & Carney D (1999) <u>Sustainable Livelihoods: Lessons From Early Experience</u>, Department for International Development Publication: London

Bendimerad, F., (2003) <u>Disaster Risk Reduction and Sustainable Development</u>: The Role of Local Governments in Reducing the Risk of Disasters, unpublished article

Blaikie.P, Cannon. T, Davis.I & Wisner. B, (1994), *At Risk: Natural Hazards, People's Vulnerability and Disasters*, Routledge:London.

Chambers, R & Conway G (1992) <u>Sustainable rural livelihoods: practical concepts for the 21st</u> <u>century</u>, IDS Discussion Paper

Chikoto, G. L. (2004). Zimbabwe's Emergency Management Systems, *Disaster Management Class Project*. Georgia State University, Atlanta, Georgia.

Chikoto G,L and Sadiq A(2012 ) Zimbabwe's Emergency Management System: A Promising Development unpublished paper

Chitiga, G and Chigora P. (2010) An Analysis of the Implications of the Fast Track Land Reform Program on Climate Change and Disaster Management in Zimbabwe: A Case of Chegutu District." *Journal of Sustainable Development in Africa*. 12(2) accessed at 12 February 2017 at <a href="http://www.jsdafrica.com/Jsda/V12No2\_Spring2010\_B/PDF/An%20analysis%20of%20the%20implications%20of%20the%20frtLRP%20on%20Climate%20Change%20and%20Disaster%20management.pdf">http://www.jsdafrica.com/Jsda/V12No2\_Spring2010\_B/PDF/An%20analysis%20of%20the%20implications%20of%20the%20FTLRP%20on%20Climate%20Change%20and%20Disaster%20management.pdf</a>

Chitonga, L. (2013), Towards Comprehensive Disaster Risk Management in Zimbabwe: Evaluating Masvingo Rural District's Community Drought Management Program: International Journal of Economy, Management and Social Sciences. 644-653 accessed at <a href="https://www.ijsr.net/">www.ijsr.net/</a>

Dube, E. (2015) 'Improving disaster risk reduction capacity of District Civil Protection Units in managing veld fires: A case of Mangwe District in Matabeleland South Province, Zimbabwe', *Jàmbá: Journal of Disaster Risk Studies* 7(1) accesed at http://dx.doi.org/10.4102/jamba.v7i1.143

Government of Zimbabwe, Civil Protection Act, Chapter 10:06

Government of Zimbabwe, Rural District Councils Act Chapter 29:13

Gogo, J(2014) The Herald 6 January 2014, Formulate Disaster Management Policy

Gwimbi, Patrick. (2009). "Linking Rural Community Livelihoods to Resilience Building in Flood Risk Reduction in Zimbabwe." *Journal of Disaster Risk Studies*. 2(1): 71-80. Accessed 13, 2016 <a href="http://web.ndmc.gov.za/docs/publications/Jamba.pdf#page=82">http://web.ndmc.gov.za/docs/publications/Jamba.pdf#page=82</a>>.

Gwimbi, P (2009). The effectiveness of early warning systems for the reduction of flood disasters. Some examples from cyclone induced floods in Zimbabwe. Journal of sustainable development in Africa, volume 9, accessed at <a href="http://www.jsd-africa.com/jsd/V9n4winter">http://www.jsd-africa.com/jsd/V9n4winter</a> 2007/pdf/effectiveness Earlier Warning System.pdf

Haigh & Amaratunga, (2010) <u>An integrative review of the built environment discipline's role in the development of society's resilience to disasters</u>, International Journal of Disaster Resilience in the Built Environment, Vol. 1(1)

Hondora, T. (2009). *Economic Sanctions Undermine Zimbabwe's Economy*, accessed September 18, 2016 at http://www.newzimbabwe.com/pages/sanctions32.13170.html

IRDR (2014) <u>Disaster Risk Reduction and Sustainable Development</u>, Issue brief New York, unpublished paper

Manyena, S.B. (2006) <u>Rural local authorities and disaster resilience in Zimbabwe: Disaster Prevention and Management</u>, International Journal, Vol. 15(5)

Marutha, N.S (2011), <u>Records Management in Support of Service Delivery in the Public Health</u>
<u>Sector of the Limpopo Province in South Africa</u>, Thesis, University of South Africa (UNISA).

Maksey, A.(1997), *Report on National and Local Capabilities for Early Warning*, unpublished article

Mazzeo, J. (2011). "Cattle, Livelihoods, and Coping with Food Insecurity in the Context of Drought and HIV/AIDS in Rural Zimbabwe." *Human Organization*. 70(4): 405-415.

Muviringi, M.R. (2014) <u>Road Traffic Accidents in Zimbabwe: Influencing factors and strategies</u>, Development Policy & Practice Amsterdam, The Netherlands

PreventionWeb (2012). <u>Zimbabwe Disaster Statistics</u>, accessed on 20 September 2016 at http://www.Disaster%20statustics%20-%20Zimbabwe%20%-%20Africa%20-

 $\underline{\%20 countries \& \%20 Regions \%20-\%20 Prevention Web.net.htm}$ 

Rotimi, J. O., Wilkinson, S., Zuo, K. & Myburgh, D. 2009. <u>Legislation for Effective Post-Disaster Reconstruction</u>. International Journal of Strategic Property Management, 13(2), pp. 143-152.

Rupp, S (2009) <u>Consultancy Africa</u>, accessed at on 20 September 2016 at africa.watch@consultancyafrica.com

Sanderson. D, (2000) <u>Cities, disasters and livelihoods</u>: Environment Urbanization Journal Vol 12 (2) accessed February 2017 at <a href="http://eau.sagepub.com/content/12/2/93">http://eau.sagepub.com/content/12/2/93</a>

Sutton J.N & Tierney K.J (2006) *Disaster Preparedness: Concepts, Guidance and Research,* Disaster preparedness Conference

The Chronicle (2017) accessed @

http://www.chronicle.co.zw./cyclone\_to\_hit\_southern\_Zimbabwe on 12 April 2017

United Nations, 2005. Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters Report

UNDP. (2010). <u>Project Facts - Zimbabwe: Support for Strengthening National Capacity for Disaster Management</u>, United Nation Development Programme. Accessed 21 January 2016 at <a href="http://www.gripweb.org/gripweb/?q=countries-risk-information/documents">http://www.gripweb.org/gripweb/?q=countries-risk-information/documents</a> publications/project-facts-%E2%80%93-zimbabwe-support-strengthening

UNISDR (2005) Disaster Risk Reduction Efforts in Zimbabwe' unpublished paper

Vermaak, J & Niekerk D (2004) Disaster Risk Reduction Initiatives in South Africa, Development Southern Africa

#### **APPENDIX 1: INTERVIEW GUIDE**

Interview guide for members of the Civil Protection Committee on gathering information on
Disaster Management and Preparedness
Name of Organization
Date of interview

- 1. In your view what the nature and effects of disasters occurring in Mutoko district
- 2. In your experience what have been the disaster preparedness and management mechanisms in the communities?
- 3. In what capacity have you or your organization been involved in disaster management and preparedness initiatives, if your organization has been involved does it have an institutional legal framework governing disaster management and preparedness?
- 4. I understand that the district civil protection committee deals with disasters, in your view how effective has it been in disaster preparedness and management?
- 5. Some scholars are of the view that disaster preparedness and management enhances sustainable livelihoods, in your experience what have been the methods implemented by DCPC in dealing with disasters and how effective have they been in promoting sustainable livelihoods
- 6. I understand that disaster preparedness and management mechanisms have great effect in coping with disaster, in your opinion how has disaster management and preparedness strategies benefited the people? Have these strategies brought about sustainable livelihoods if so how?

### **APPENDIX 2: QUESTIONNAIRES**

My name is Mutongi, T. Kawara and I am doing a BSC Honors degree in Politics and Public Management with Midlands State University. My research is on Disaster Preparedness and Management initiatives in promoting sustainable livelihoods. May you please kindly spare a few minutes of your time to answer a few questions below on this topic.

## **INSTRUCTIONS**

- i) Tick [x] where applicable.
- ii) Write your answers on the spaces provided below.
- iii) Do not write any names on the questionnaire.

## **SECTION A: BACKGROUND INFORMATION**

1. How is your kno	owledge of	Disaster Prepared	ness and Manage	ment?		
a) Good		b) Mod	erate $\square$			
c) Average		d) Poor				
2. In your view	what do	you think about	this practice of	Disaster	Preparedness	and
Management?						
a) Very Appro	priate 🗆	b) Approp	priate $\square$			
c) Inappropria	te 🗆	d) Not sure	e 🗆			
3. Do you know th	ne policies o	on disaster manag	ement and prepar	edness		
a) Yes		b) N	lo 🗆			
4. How is your kno	owledge on	disaster managen	nent and prepared	ness policy	y	
a) Good 50 -100	0%					
b) Moderate 40	- 1%					
c) Poor 0%						
SECTION B: DISA	ASTER M	ANAGEMENT	AND PREPAR	EDNESS	AS A WAY	<u>OF</u>
CREATING SUSTA	INABLE I	LIVELIHOODS				
3. In your own view	what do yo	u understand by s	ustainable livelih	oods, are th	hey important?	
	• • • • • • • • • • • • • • • • • • • •				• • • • • • • • • • • • • • • • • • • •	
		•••••				

4. In your experience what are the management and preparedness strategies in Mutoko District
that you are aware of?
5. Some scholars are of the view that disaster preparedness and management enhances
sustainable livelihoods, In your experience what have been the methods implemented by Mutoko
DCPC in dealing with disasters and how effective have they been in promoting sustainable
livelihoods.?
SECTION C: CHALLENGES FACED IN THE EVENT OF DISASTERS IN MUTOKO
CASE STUDY OF MUTOKO 2011-2016
6. In your experience what are the challenges faced in the event of a disaster.?

7. As a mem	iber of	f the community what d	o you t	think are the pro	blems faced by Distric	ct Civil
Protection in	dealin	ng with challenges?				
• • • • • • • • • • • • • • • • • • • •						
SECTION	D:	EFFECTIVENESS	OF	DISASTER	MANAGEMENT	AND
PREPAREI	ONESS	S IN CREATING SUST	TAINA	BLE LIVELIH	OODS	
8.How effect	tive are	e disaster preparedness a	nd man	agement strategi	es?	
		ENEFITS OF DISAS				
STRATEGI						
9. In your op	oinion	what are the benefits of	disaster	r preparedness ar	nd management strateg	ies as a
way of foster	ring s	ustainable livelihoods?				