

DISASTER PREPAREDNESS AND MANAGEMENT MECHANISMS IN ZIMBABWE:
A CRITICAL ANALYSIS OF THE TOKWE-MUKOSI FLOODS IN MASVINGO
PROVINCE.

BY

MOYO SHELTON

R112191H

FACULTY OF SOCIAL SCIENCES

DEPARTMENT OF POLITICS AND PUBLIC MANAGEMENT



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APPROVAL FORM

MIDLANDS STATE UNIVERSITY

The undersigned officially state that they have read and recommended to the Midlands State University for acceptance as a dissertation entitled: **DISASTER PREPAREDNESS AND MANAGEMENT MECHANISMS IN ZIMBABWE: A CRITICAL ANALYSIS OF THE TOKWE- MUKOSI FLOODS IN MASVINGO PROVINCE.**

STUDENT.....DATE...../...../.....

SUPERVISOR.....DATE...../...../.....

CHAIRPERSON.....DATE...../...../.....

EXTERNAL EXAMINER.....DATE...../...../.....

Submitted in partial fulfilment of the Bachelor of social sciences Honours Degree in Politics and Public Management.

DEDICATIONS

This thesis is dedicated to my parents Mr and Mrs Moyo and all family members for the assistance and care they have been giving me. I am thankful to them for their monetary support and words of encouragement for without them this work would have been impossible. I am also indebted to my project supervisor for his support and supervision during my study. I'm above all grateful to Mr M F Chikovo the Provincial Administrator for Masvingo who gave me the permission to carry out my research in his province. He also gave me the much needed information for my research.

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May the lord be with you forever and ever. Amen.

ACRONYMS

CC	Climate Change
CCA	Climate Change Adaptation
CPU	Civil Protection Unit
DDF	District Development Fund.
DRR	Disaster Risk Reduction
EMA	Environmental Management Agency.
GOZ	Government of Zimbabwe
INGOs	International Non Governmental Organisations.
MSD	Metrological Services Department
NGOs	Non Governmental Organisations
PTUZ	Progressive Teachers Union of Zimbabwe
RDC	Rural District Council
SADMA	South African Disaster Management Act
SIRD	Scientific Institute Of Research and Development Cooperation.
UN	United Nations
UNFC	United Nations Framework Convention on Climate Change.
UNICEF	United Nations Children’s Emergency Fund.
UNISDR	United Nations International Strategy for Disaster Reduction
WHO	World Health Organisation
ZINWA	Zimbabwe National Water Authority.

ABSTRACT

This study examined Zimbabwe's disaster preparedness and management mechanisms. It used the Tokwe Mukosi floods as a case study. The study employed both qualitative and quantitative approaches. The study had discussions with key stakeholders at provincial, district and community level as well as randomly sampled households. Quantitative Household Questionnaires and Qualitative Key Informant Interviews were used to collect the data. The study established that Zimbabwe's disaster management strategies are very poor for the government on its own cannot curb these disasters. These recommendations have been proposed:

- ❖ The government should have a policy framework to cope up with disasters.
- ❖ Disaster risk management should be integrated in development planning and management at whatever level of governance in Zimbabwe and even at schools.
- ❖ The civil protection unit should conduct trainings at national, provincial, district and community level on disaster risk reduction. Communities themselves should not only blame the government but also try their best to protect themselves from disasters.
- ❖ The government should have an operational budget to facilitate quick responses when disasters occur. Currently the government has no standing budget for disaster risks. This has caused the government to fail to curb disasters in time as it will need to first seek support from the international community and nongovernmental organisations when disasters happen.
- ❖ The government has failed to fully compensate the flood victims. Therefore the researcher recommends the government to formulate a broader framework for restoring livelihoods and compensating the victims who will have lost many valuables from the disaster.
- ❖ According to experts there is now 90% probability for high rainfall because of climate change. Therefore the government should facilitate evacuations before climate induced disasters occur. People should be removed from river basins to areas which are not flood prone.
- ❖ The responsible authorities especially the metrological services department should conduct awareness campaigns on impending seasonal hazards.

❖ The impact of disasters is now known to be devastating basing on the Tokwe Mukosi disaster. Therefore there should be the establishment of civil protection committees at community level to national level with clear terms of reference to improve the response rate, when disasters strike.

❖ Reliance on early warning systems is also another recommendation. It is alleged that the Tokwe Mukosi disaster has been detected by meteorologist but no action was taken. This may be because weather forecasts especially in Zimbabwe are not reliable. People should rely on weather forecasts.

❖ The government should invest in technical capacity for quick and accurate assessments of disaster situations and a rapid mechanism to active support from the international community because it is standard practise that international aid agencies will not offer support unless government calls .

❖ Furthermore the government should not abuse NGOs operating in their country. This can lead to withdrawal of aid as witnessed by UNICEF and OXFAM.

❖ The government should be found on the forefront when disasters occur and what people witnessed at Tokwe- Mukosi where NGOs were found highly active than the government itself. NGOs should play a second fiddle.

DECLARATION

I do hereby declare that this thesis submitted for the HONOURS DEGREE in SCIENCE IN POLITICS AND PUBLIC MANAGEMENT at MIDLANDS STATE UNIVERSITY is an independent work and that it has not been previously submitted at another university. I had referenced wherever possible.

STUDENT'S NAME:.....

STUDENT'S SIGNATURE:.....DATE.....

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CHAPTER 1

1.0 INTRODUCTION

The overall objective of the research is to present a crucial analysis of the disaster preparedness of the Zimbabwe Government using the Tokwe-Mukosi floods as a case study. In February 2014 in Masvingo province in Chivi district there happened disastrous floods which disturbed the social life of the villagers. The victims are now in Chingwizi resettlements in Mwenezi district. This brought all the victims at risks which include fear of cholera outbreak, poor health conditions, and disturbance of children's education rights, inadequate food supplies, water shortages, overcrowding and loss of conjugal rights. With all these risks the researcher found it sensible to analyse the effectiveness of Zimbabwe's disaster management system.

1.1 BACKGROUND TO THE STUDY

The incidence of natural disasters has become an ordinary phenomenon in Zimbabwe and all over the world. There is significantly a rise in the occurrence and intensity of natural disasters. This intensity is possibly a result of climate change. The frequency of floods in Zimbabwe was the foundation of study. Floods which are the focal point of the study have impacted people's social and economic lives. This has been evidenced by the disaster that struck in Masvingo province at Tokwe -Mukosi dam. The occurrence of floods in Zimbabwe, according to some scholars, is primarily attributed to poor strategies in Zimbabwe's disaster management system. The area received rainfall which was far much higher than any other year. The intense rains and consequent floods negatively affected.

It is vital to formulate mechanisms to alleviate and cater for sudden, existing and emerging disasters. Disaster management and preparedness work in Zimbabwe is the obligation of local governments and much of the devastations, deaths and demolition from disasters attest to a true depiction of Zimbabwe's disaster management system. It exposes that the government in union with its stakeholders are ill prepared for disasters.

The Minister of Local Government, Public Works and National Housing while addressing students at the National Defence College highlighted that the country's funds on disasters needs to be increased. Also he added that there is need for making amendments on the country's disaster management policy. As if that was not enough he pointed out that there is need for strong regional cooperation in disaster management. The Minister made it clear that the disaster management system in the country is very critical as it faces challenges of

centralisation of resources, rescue equipment and manpower. With this at hand, we can therefore conclude that disaster preparedness and management mechanisms in Zimbabwe are very incompetent as it has no capacity to deal with disasters facing the country.

In disaster management pre-disaster preparation and awareness establish the success of post calamity action. Thus disaster preparedness is the foundation of disaster response. Zvidzai (2014) after the Tokwe –Mukosi disaster concluded that Zimbabwe lack a notion of risk budgeting, a strong and well developed disaster risk reduction institutions, strong disaster prediction mechanisms such as weather forecasting and lack of a disaster risk fund. Zimbabwe fails to deal with disasters chiefly because of limited resources.

The Chingwizi human catastrophe is a clear indication that disasters now falling to people are a result of poor disaster preparedness and management. Poor foresight planning, denial of people's rights and lack of an active disaster response system are the contributing factors to continuing devastating disasters in Zimbabwe. Really a government with people at heart cannot wait for rainfall come to relocate people around the Tokwe Mukosi dam. This raises a lot of question on how representative the government is. As the dam construction work picked pace over the past three years, it required all but common sense for anyone to realize that the homesteads built 150 metres away from the dam wall would be submerged in water come the best ever of the rainfall season in a traditionally low rainfall Masvingo Province (The Standard, 23 – 29 March 2014, page 11).

According to the land use law no settlements or any farming activity should be done 50 meters from the river. This however has not been found to be useful in Zimbabwe since in the past years rivers have been flooding reaching such levels maybe because of scientific basis. The law has not been followed since nowadays in Zimbabwe there are high cases of stream bank cultivation hand human settlements along rivers which may be attributing factors to the Tokwe Mukosi disaster. A case in point is the Tokwe- Mukosi settlements which were located a few metres away from the dam.

Weather forecasting in Zimbabwe is very poor. It lacks accurate forecasts. It may happen that the Meteorological Services Department (MSD) may warn people of the impending disaster and the forecasts may not be materialised. People begin to doubt these weather forecasters. This has led to people being affected by disasters due to poor preparedness. People in Zimbabwe at times fail to take weather forecasts seriously due to past immaterialised warnings. A clear example is the coming of cyclone Eline. The meteorological department

has warned people that there were heavy rains to come but people did not take it seriously possibly because of previous false forecasts. Many people in Muzarabani and Guruve died as a result of cyclone Eline. This also happened on the Tokwe Mukosi disasters. People have been alerted on the impending high rainfalls but no action was taken until people suffered the consequences of the disaster.

In spite of having a disaster risk reduction framework Zimbabwe is still at the brink of natural disasters. Basically there is need for an increment in funds allocations and a reinforcement of regional mutual aid in disaster management.

The disaster that occurred in Masvingo came not as a shock to Zimbabwe. The state lacks disaster awareness. This has been uncovered way back. In 2011, former army commander Solomon Mujuru's house was consumed in an ablaze. From the researcher's point of view the fire management team was ill equipped to quench the fire. It is known that in disasters such as fire outbreaks there is need for hose layers. This was not the strategy used by the fire brigade. The Harare fire station applauded that the use of the hose layer was inadequate for the disaster. Furthermore one thing to note is that for hose pipes to stop an ablaze they should have water pumps. It has been reported that the hose pipes didn't have water pumps. This led to the death of Mujuru. Thus the civil protection unit is ill equipped for disasters.

In essence the chief responsibility of Zimbabwe's emergency reaction squad is to offer instant support to sustain life, progress health and prop up morale to the sufferers of disasters. Aid range from provision of transport to victims to move from the affected area to the resettlement, provisional shelter, food stuffs, clothing and constructing semi lasting settlements in camps and other locations as well as providing psychosocial support to the affected. The team is also accountable for offering first response to the disaster. Thus they should give basic requirements of people awaiting more permanent houses are built and helpful solutions can be established.

The government and its wing the CPU are supposed to be found down to business when disasters come. They should be found in an emergency mode. Nonetheless when the Tokwe-Mukosi disaster came there was little to no sign of preparedness even though the meteorological department had given early warnings to the people about the coming rains. Almost 300 families were temporarily housed in schools after their homes were flooded. This

has disturbed the learning process in the area. Therefore the government's failure has been shown when it failed to quickly counter the crisis caused by these demoralizing floods

Authorities have reported that they have managed to transfer 36 out of 2230 families which were in danger. Mavhinga (2014) commented that when the disaster came government officials were asleep on duty. This mean to say that they were not prepared for any disaster. Thus the Tokwe- Mukosi catastrophe has evidently exposed Zimbabwe's inability to wholly respond to national disasters in ways that curtail damage and preserve human needs. This is an obvious indication that Zimbabwe has a way to go in the concept of disaster management.

When the account of the Kariba dam wall structural weakness was told, the state decided to take the matter as less important, dismissing the information as trivial, and as an effort to criticize an attentive management. It is a shame that news of the possible collapse of the wall have first been discovered Zambia a country which is also served by the Kariba dam for their social and economic life. The Minister of Energy and Power Development Hon Mavhaire had to delegate the whole ministry to have a critical assessment on the severity of the situation and find the way forward. Not considering of how government would like to play down the development, the issue of dam rehabilitation is supposed to be taken with cognisance as it is a daunting truth.

Astonishingly the development has been kept as a strictly shielded top secret with no plans or desire to have repairs for the damage. The information should have been known to entrusted teams responsible for the administration of the dam regardless of public domain. The event shows once more, that as a state we are reactive to situations instead of being proactive. It was the same with Tokwe-Mukosi dam. Over again, a government delegation had to be sent to find more information on things they already know. The two occurrences demonstrate beyond any doubt, Zimbabwe as a nation does not have vibrant early warning systems and working risk reduction strategies to deal with destructive disasters. Almost every time, the government has a tendency of waiting to act in response to disasters. Furthermore when it reacts it lacks resources to deal effectively with disasters.

Even though it is relatively obvious who is to shoulder the blame for the Tokwe -Mukosi disaster, the government is trying to shoulder the blame to local people whom it say refused to leave the area. This is not genuine since the responsible ministries have not been showing any plans for the relocations and there were no funds for the compensation of the affected.

The government, according to Harris (2014) is urged to strengthen disaster response mechanisms. The country has to urgently reinforce mechanisms that deal with disaster management following the floods that have caused mayhem in most parts of the country. There should be a closer look on the country's budget. The government should include disasters on their budgets. It should also fortify and expand disaster risk managing institutions in the country, reinforce disaster forecast mechanisms such as weather forecasting and the formation of a disaster reduction fund.

According to Makusha (2014) people are disgruntled by the government's lack of disaster preparedness and absence of a clear cut policy on disaster risk reduction and disaster mitigation. He added that people should have been resettled during the land resettlement scheme but it was government officials who were seen grabbing vast pieces of land.

All in all government is always unprepared for disasters. The Tokwe-Mukosi is a critical example. It is astounding that our government does not have budgets set aside for such emergencies as well as a rescue team to offer hasty reaction to up-and-coming disasters. The team only take action to disasters when they take place. They cannot even prepare or foresee for disasters since they use the contingency approach to disasters.

Furthermore, the government has no capacity to have rapid and precise assessments of disasters and formulate quickly strategies that can avert the situation before danger. The international community chips in disaster situations when the government declares it a disaster situation. The Tokwe -Mukosi dam has been used as a winning policy for aspirant members of parliament. Thus when they were campaigning they gave citizens hope that they were to be relocated and given their compensation as soon as they get in office. However this was just a pie in the air never to be eaten. Parliamentarians spend much of their time spreading propaganda in an attempt to buy votes. This is what philosophers call the populist ideology. By the time they get into office they ignore they those who made them get into their posts and start dining with beautiful concubine as Makusha said. (Makusha: 2014). Surprisingly it is now two decades the dam has now been finished and not even half of the affected people have been resettled.

The provincial leaders have shown incompetence especially the Provincial Administrator and the Provincial Affairs Minister Cde Bhasikiti. A multiplicity of questions rose after the Tokwe Mukosi disaster. Provincial leaders were expected to be proactive to the disaster since people have been warned. They should have processed relocation plans for the people in the area but

he was found very inactive. Many people asked on what were the leaders' plans with the villagers on the dam basin. People commended that resettlements should have been done way back. If there were heartfelt and competent leaders they could have facilitated the resettlement of people rather than waiting for a catastrophe to happen.

After the disaster the President condemned responsible ministries hence sleeping on duty. According to the P.A for Masvingo province a few villagers have been compensated but they have never been told where they were going to be resettled. Some who have been compensated have used the monies to improve their standards of living while others used the funds for enjoyment at Ngundu townships. Others have died because of these monies. People didn't spent all these funds because of poor planning but because the government has not allocated land for them. Was the government expecting villagers to grab land on their own?

Zimbabwe has got no database on Disaster Risk Reduction. Information is still circulating through reports, minutes, newsletters and e-mail facilities. However, some UN agencies have developed websites and are working towards the establishment of databases to facilitate genuine time information sharing with concerned partners.

The department's infrastructure is obsolete. Up to date infrastructures make possible speedy communication as well as coordination between Disaster Risk Reduction institutions and study centres. However the existing schedule has the prerequisite to enable communication and networking by establishing a disaster management centre where pertinent stakeholders will find time to discuss and come up with a disaster risk reduction plan.

Information is communicated using newspapers, pamphlets and road shows. Meagre budgets make it impossible for the use of electronic media whose effect is far reaching. The Government of Zimbabwe (G.O.Z) engages active institutions for the carrying out scientific researches on disaster risk reduction. For instance informational research on disaster risk reduction is got from the University of Zimbabwe and the scientific Institute of Research and Development Co-operation (SIRDC).

While it is quite real that natural disasters cannot be prevented from happening, their effects can however be reduced through early warning systems and efficient emergency preparedness, alleviation, disaster response and early recovery systems.

Thus it was against this background that the researcher finds it important to analyse the disaster preparedness and management mechanisms in Zimbabwe as it has shown that it is always a failure.

1.2 STATEMENT OF THE PROBLEM

Even though the government has an arm that oversees all disaster management needs the country is still facing a lot of disasters. Zimbabwe has the C.P.U as an arm that has a legislative law and enforces law on disaster management. However this arm is failing to be fully active in fulfilling its obligations. This could be attributed to poor planning and lack of legislation on disaster management. The government's lack of disaster planning appropriate authorities and the communities at risk exacerbate the impact of hazards on susceptible people and their belongings. The disaster management system lacks a national budget for emergencies.

Thus with this background the study offered a critical analysis on the disaster preparedness and management strategies of the Government of Zimbabwe since the Tokwe- Mukosi disaster highlighted that there are some loopholes.

1.3 OBJECTIVES OF THE STUDY

- a. To scrutinize the efficacy of disaster management mechanisms in Zimbabwe.
- b. To identify community coping mechanisms engaged when disasters occur and strengthen positive coping mechanisms.
- c. To establish flood Disaster Risk Reduction mechanisms at present practised in Zimbabwe.
- d. To offer the way forward in disaster risk reduction in Zimbabwe.
- e. To offer a crucial analysis on the response strategies employed by responsible authorities to disasters.

1.4 RESEARCH QUESTIONS

1. What are the impacts of disasters as floods on the lives of the affected people?
2. To what extent is the process of disaster management in Zimbabwe effective?
3. Does the disaster management system of governmental, municipal, NGO's, INGO's and UN agencies work in Zimbabwe capable to cope the disaster?
4. What are the strategies to be employed when disasters occur?

5. What are the flood disaster risk reduction efforts being practised in Zimbabwe?
6. What intensifies the occurrence of floods in Zimbabwe?
7. What are the affected people's coping mechanisms when disasters occur?

1.5 JUSTIFICATION OF THE STUDY

This study is crucial since it tries to give a clear picture on the efficacy of Zimbabwe's disaster preparedness and management mechanisms. It is noteworthy since it tries to provide a synopsis of the impacts of disasters particularly on people's day to day living. The research findings will contribute to amendments on Zimbabwe's disaster risk reduction strategies and planning. More importantly, it is envisaged that the outputs of the study will be the key inputs in the designing of sustainable mitigation measures to reduce the impact of hazards and the associated risks. More so the findings will contribute to attempts by responsible authorities in enhancing Disaster Risk Management.

1.6 LIMITATIONS OF THE PROJECT

One of the constraints to the researcher was accessibility to the area of my study. The area was inaccessible for infrastructure destruction has made it for vehicles to move to the place. The researcher has to do transact walks to the area. Another constraint was falsification /over exaggeration of information as some people throughout maybe the exercise was going to benefit them since Zimbabwean people are suffering from a dependency syndrome. That is they rely more on aid. In his research the researcher faced the problem of low response rate. Some respondents did no manage to complete questionnaires due to illiteracy, negligence and lack of interest. Some of the key informative personnel did not complete the questionnaires for reasons of anonymity. Confidentiality is also another problem that the researcher faced. Some people especially responsible authorities decided to hide information for confidentiality reasons. They decided to hide maybe because they didn't want to expose their weaknesses. Timeframe was also another limiting factor. There was a wide coverage for the researcher. Therefore some of the key informants were not reached.

1.7 DELIMITATION OF THE STUDY

The researcher's area of specialisation was on the disaster preparedness and management mechanisms in Zimbabwe. The study offered its analysis using the Tokwe- Mukosi disaster that happened in Masvingo province in Chivi district in February 2014. Tokwe-Mukosi is an

area found in the semi arid region in Chivi District in Masvingo province. In the early months of 2014 the area received around 850mm of rainfall – double the normal. The 2013/14 season broke the record in Zimbabwe. Intense rains and the resultant mudslides led to the collapse of the dam, resulting in floods. Tokwe Mukosi is located about 72 km south of Masvingo in Masvingo province in Zimbabwe. The focus of the research was on villages that were nearby the dam in Chivi district. The area is semi-arid and falls in Zimbabwe's agricultural regions 4 and 5. Thousands of people have reportedly been evacuated after torrential rains caused by the partial collapse of the Tokwe-Mukosi dam in Zimbabwe's Masvingo Province threatening over 600000 people. The study will cover visiting the District Administrator's offices, local authority offices, District Development Fund offices (DDF), Zimbabwe National Water Authority (ZINWA), responsible local nongovernmental organisations as well as some selected communities.

1.8 ETHICAL CONSIDERATIONS

The researcher in his research urged respondents to participate on a voluntary basis, that is, participants were expected to freely offer the data required. If they had reservations, they were kindly excused. Respect for the participants was cultivated in the research. To this effect, the following guidelines were proposed and adhered to during data collection by the researcher:

1. No-one was to be coerced into participating in the study against his/her will.
2. No financial disbursements were promised or made to the participants. That is to say respondents were to give information without reward.
3. The rights and interests of all participants was to be protected and ensured
4. Confidentiality of all information gathered from the participants was to be maintained.

There is greater need for in-depth research onto the ways in which humans can adjust to disasters, particularly preparedness and response strategies. In addition to that research should also focus on early warning systems to these disasters.

1.9 BREAKDOWN OF THE STUDY

This research has five chapters which are introduction and background to the study, review of related literature, methodology, data presentation and analysis and lastly summary, conclusions and recommendations.

CHAPTER 1: INTRODUCTION AND BACKGROUND TO THE STUDY.

In this section the student explained the problem statement, study objectives, research questions, the rationale to undertake the study, limitations of the study as well as delimitations.

CHAPTER 2: REVIEW OF LITERATURE AND THEORITICAL FRAMEWORK.

The chapter will be a review of past research findings and some additions to the study. This chapter will go on providing disaster management concepts. It will provide the causes and effects of floods. The chapter will also provide the theoretical framework to the study.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

In chapter three the researcher will explain how he carried out his research .Writings will include the research design, sample selection and size, data collection procedures, data collection instruments used as well as an analysis of data.

CHAPTER 4: DATA PRESENTATION AND DISCUSSIONS.

The chapter will present research findings. This comes after the researcher has gone to the field to collect data. It will go on discuss the results, response strategies, disaster preparedness, mitigatory ways, government intervention, Zimbabwe's pre and post disaster management mechanisms, NGOS intervention as well as community coping strategies

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

This chapter will give a summary of the project, conclusions as well as recommendations.

CHAPTER 2

REVIEW OF LITERATURE

2.0 INTRODUCTION

Review of literature helps the student to fully understand all the basic components of his research. The researcher will be looking on the available knowledge. He will be analysing all what have been written by various writers. Literature review is very crucial in any research. The basis for this proclamation was that it is essential in view of the fact that it provides a hypothetical background to the study, helps in conceptualising results and refining your research methodology. The chapter will provide all literature related to disaster preparedness and disaster management mechanisms. The chapter will give definitions to all disaster management components and will use them consistently.

2.1 DISASTERS

Nott (2005) defined disasters as unexpected events and natural tragedies that causes immense damage or loss of life. Thus disasters are natural catastrophes that disturb human life. The Oxford dictionary (1998) goes on to define a disaster as a sudden event, such as an accident or natural catastrophe that causes great damage or loss of life. Therefore according to this explanation disaster ought to be understood as rigorous disruptions that agitate the smooth performance of societies for disasters may leave people not capable to cope using their own resources. According to the South African Disaster Management Act (SADMA) a disaster is a function of a risk process. This explained that disasters are the actual comprehension of risks.

Nevertheless, many other international and local organizations and institutions have used varying definitions. The definition coined by the World Health Organization, which elaborates the impact on health, is worth citing: ‘‘A disaster is any occurrence that causes damage, ecological disruption, loss of human life, or deterioration of health and health services on a scale sufficient to warrant an extraordinary response from outside the affected community or area.’’(World Health Organization, *Coping with emergencies: WHO strategies and approaches to humanitarian action*, 1995, Geneva).

At a country level, the working definition of disaster in Australia is worth citing: ‘‘A serious disruption to community life which threatens or causes death or injury in that community and/or damage to property which is beyond the day-to-day capacity of the prescribed

statutory authorities and which requires special mobilization and organization of resources other than those normally available to those authorities.” (Natural Disasters Organization, Australian Emergency Manual, 1987, Canberra).

There are principally two types of disasters that is manmade and natural. The commonwealth Government in 2002 defined natural disasters as serious disruptions to the community or region caused by the impact of a naturally occurring rapid onset event that threatens or causes death, injury or damage to property or the environment and which requires significant and coordinated multi-agency and community response. (Commonwealth of Australia, 2002). Bushfires, floods, drought, storm surges, thunderstorms, landslides, cyclones, tornado, tsunami fall under natural disasters for they pose serious destruction to the society as well the environment which people live.

2.2 DISASTER MANAGEMENT

Disaster management involves reacting, being alert and capacity to resurge so as to lessen the impacts of disasters. Thus disaster management is an attempt to reduce all the risks and hazards that may lead to disasters. This conception includes disaster preparedness which calls for foreseeing, relying on forewarning signs and coordination. Disaster management is important to a country for it tries to lessen and decrease the physical, human and economic fatalities by the society. That is to say disaster management is aimed at reducing the socio-economic impacts brought by disasters to humans and their environment.

2.2.2 STAGES OF DISASTER MANAGEMENT

Phase number one- the first and foremost action to disaster management is the preparatory phase. Under this phase people will be drafting disaster management plans. People will be doing risk mapping, hazard ranking. Thus in this stage people will be drafting response plans, disaster management legislative frameworks, developing procedures and gathering all the resources that may be needed in disaster management. More so it is in this phase that people will be unconscious of what disaster is possible to come. Activities in this stage are deterrence, alleviation and preparedness.

The second stage in disaster management is the warning phase. This happens before any disaster. In this phase people are being alerted on impending disasters. Specialists will be trying to detect disasters that are likely to come thereby informing the population. It is in this

phase that specialists who include the Meteorological Services Department will be providing weather forecasts. This stage helps in disaster prevention. In some instances this stage is called the disaster forecasting stage. This has been seen in many countries. In Zimbabwe before the Tokwe- Mukosi disaster struck Masvingo province the M. S.D has warned that heavy rains were to come. This stage alerts people of the impending disaster which give them time to make a decision to leave the area or devise means of preventing it.

The third stage of disaster management is the emergency phase. This is the initial phase after a disaster has occurred. In this phase a disaster management team will be trying to save lives of the inhabitants of the area so as to reduce human suffering. In this stage disaster managers provide everything needed by victims for their instant rescue. In this stage let's take for example a flood disaster has affected an area. People need to be quickly evacuated from the area. Also there is need for responsible authorities to communicate with stakeholders on these disasters for help. Furthermore, in the phase people will be given provisional shelter, food and water.

The fourth stage is the rehabilitation stage. This stage comes immediately after assessments have been conducted. Lets take for example floods have struck an area there by destroying infrastructure, shelter and all social amenities. In the rehabilitation phase people will be trying to get things back to normal conditions. It involves repairing of damaged infrastructure and taking essential measures to help disaster sufferers. This on the other hand is for the most part complicated for the affected as some may not have the competence to revive. In this phase relief services are not essential for people have to regain self reliance.

The final stage of disaster management is the reconstruction stage. In this phase people begin to construct houses and other facilities and agriculture returns back to normal. In simply terms every person will get back to his business. However the real time span for this stage cannot be definite as it may take years to rebuild. A case in point is the disaster that occurred in Mberengwa in the early months of 2013 where people were left homeless. They were provided temporary tents but a year has passed some are still using tents as their shelter.

2.3 DISASTER RISK REDUCTION (DRR)

According to the UNISDR (2009) Disaster risk reduction refers to the conceptual framework of elements considered with the possibilities to minimise vulnerabilities and disaster risks throughout a society, to avoid (prevention) or to limit (mitigation and preparedness) the adverse impacts of hazards, within the broad context of sustainable development. Thus it is

an attempt to lessen the risk of disasters. This has not been achieved in Zimbabwe since they failed to reduce the risks at Tokwe Mukosi in 2014 that led to people's suffering.

2.4 EMERGENCY MANAGEMENT

This involves gathering of resources to deal with a certain emergencies. Resources include labour, technical, monetary and the like. This falls under the emergency phase of disaster management. An emergency calls for an urgent response. Successful emergency management avoid a disaster from increasing. It involves policy and institutional arrangements to engage and direct the efforts of the government, NGOs, voluntary and private agencies in an all-inclusive and synchronized ways to respond to the whole range of emergency needs (UNISDR, 2009). Successful emergency managers are supposed to be at all times in the emergency mode. This is the reason why ambulance drivers for most companies have the privilege to stay with ambulances at their residences. Effective emergency action can shun the acceleration of an incident into a disaster. Zimbabwe has proved to be less equipped in emergency management. Instead of providing psychosocial support to the victims they forcibly moved people to Chingwizi without proper compensation. The government has no an emergency team that caters for disasters at the initial stage.

2.5 PREPAREDNESS

Preparedness involves capabilities and information established by disaster management teams and communities to effectively foresee, respond to, and recuperate from the impacts of likely, looming or existing hazard events or conditions. Disaster management teams here will be structuring capacities to deal with disasters and administer all forms of emergencies. Preparedness is a result of an investigation of disaster risks and good linkages with early warning systems and includes such activities as contingency planning, stockpiling of equipment and supplies, the development of arrangements for synchronization, mass departure and public information, and associated training and field exercises. These are supported by formal institutional, legal and budgetary capacities. According to the UNISDR (2009) the related term "readiness" describes the ability to quickly respond when response is required. Zimbabwe has shown to be unprepared for disasters since people have not been relocated for all along. People should have been relocated before the disaster. Responsible ministries started to point fingers at one other when the disaster occurred but they have been knowing that at one time the dam was going to swell. One victim pointed out that the government has not been thinking of relocations.

2.6 DISASTER PREVENTION

This refers to the procedure of avoiding the impacts of hazards. This involves taking action in advance. Examples include relocations, building of dams, land use planning, building strong structures and the like. According to the UNISDR (2009) words prevention and mitigation are interchangeably used. Stephenson (1994) and Kesten (2006) defined mitigation as measures taken in advance of a disaster aimed at reducing its impacts on society and the environment.

2.7 CONTINGENCY PLANNING

This is administration procedure that involves assessing definite possible events or situations that are likely to emerge. It involves establishing ways in advance to deal with such events and situations. It results in planned and coordinated courses of action, associated to their resources and institutional roles, information processes, and functioning arrangements for specific actors at times of need. (UNISDR, 2009).

2.8 EARLY WARNING MECHANISMS

This is also another important aspect of disaster management. For disaster managers to give successful response they have to make stronger mechanisms for early warning. These refer to appropriate and perfect communication of significant information about disasters/events that are likely to take place to circumvent losses or damages. Mostly catastrophes are unpredictable but some can now be predicted. These may include cyclones and droughts.

2.9 CAPACITY

This refers to the capability of a community, society or organisation to embark upon a crisis. This involves combining obtainable human resources, finance, infrastructure and information about a problem. A society needs to be assessed on its ability to deal with disasters. In disaster management the government should have full capacity to deal with whatever disaster.

2.9.1 CAPACITY ASSESSMENT

This refers to a thorough analysis on the government, community, district's ability to deal with a certain thing. Thus in disaster management people will be looking on what does the country has that it can deal with disasters. In capacity assessment there are questions like, "Does the government has sufficient financial and human resources to deal with a disaster like for example an outbreak of anthrax?" Those who will be assessing look if there are people from the department of livestock production, veterinary services, available chemical and the like. If all these are available one can depict that the disaster will be fully combated.

2.10 PUBLIC AWARENESS

This refers to the ability to get hold of basic information about catastrophes, their causes as well as how best to deal with them. Public awareness is also one of the chief factors of disaster risk reduction. People need to be aware of impending disasters for them to get prepared. It is achieved through spreading of information through media and educational channels, establishment of information centres, networks and community or participation actions, and advocacy by senior public officials and community leaders (UNISDR,2009).)

2.11 ENVIRONMENTAL IMPACT ASSESSMENT

This refers to the process by which environmental costs of a planned project or programme are evaluated, undertaken as an essential part of planning and decision making processes with a view to limiting or plummeting the undesirable impacts of activities from conception to decision making. It is utilised widely in national programming and project support processes and for international development assistance projects. Assessments should include detailed risk assessments and provide alternatives, solutions or options to deal with identified problems (UNISDR, 2009). Responsible authorities did an environmental impact assessment at the Tokwe Mukosi dam and recommended that people should be moved to faraway places from the dam but no action was taken by the government.

2.12 HAZARD

Hazards are defined as incredible proceedings that take place in a natural and man- made environment. Hazards have an effect on the livelihoods of citizens socially and economically. Hazards can lead to disasters as long as they affect human life. The UNISDR (2002) define hazards as potentially damaging physical event, phenomenon and /or human activity which may cause loss of life or injury, property damage, social and economic disruption or environmental degradation. They have varying characteristics that differentiate them. Among others these are magnitude, location, extent, frequency and probability, duration, predictability, rate of onset and exposure (NOAA, s.a; Kent, 1992; Benson And Twigg, 2007). Location, extent and rate of onset and exposure can be attributing hazards to the Tokwe Mukosi disaster.

2.13 RISK

This refers to the likelihood of detrimental costs or expected losses. These include loss of property, infrastructural damage, loss of life, disturbance of economic activity and environmental degradation. These may result from the interactions between natural or human induced hazards and vulnerable conditions. According to Sphere (2004) and Kesten (2006)

risk are the likelihood of a disaster happening. They illustrated risk with an equation below: $R=H \times V + C \times M$ Where R=Risk, H=Hazard, V=Vulnerability, C=Capacity and M=Manageability. That is to say if there is a hazard there is probability that something may happen. If people are exposed to unfavourable conditions there will be at risk.

2.13.1 RISK ASSESSMENT OR ANALYSIS

It is the process where risk managers calculate the nature and degree of expected increase. It is an investigation of the extent and damage that may be caused by a certain hazard. People will be basing on people's vulnerability that can pose harm to humans, livestock, infrastructure and property as well as the environment they depend upon.

2.14 VULNERABILITY

This refers to the magnitude of exposure to a hazard. Thus how a person is exposed to problems. For example a family with low income earners. Also uneducated people are more vulnerable to different catastrophes. This family may be vulnerable to problems since they may not have the capacity to deal with such problems. Also people whose houses have been built of weaker structures are more susceptible to disasters as whirlwinds, hailstorms, cyclones and the like. Some areas are said to be vulnerable to disasters especially where there is little vegetation. Vulnerability is determined by physical, social, economic and environmental factors which augment people's defencelessness to disaster impacts. According to the SADMA (2003) vulnerability refers to the extent to which an individual, household, community or area may be adversely affected by a disaster.

2.14.1 SOCIO-ECONOMIC VULNERABILITY

This refers to the extent to which the populace is affected by a hazard will not just lie in the physical components of vulnerability but also on the socio-economic conditions. Social status can lead a person to become vulnerable. Thus they do not blame nature but themselves for some disasters. Poverty of the people also determines the greatness of the impact. For example, people who are poor and living in the river basin do not have the capacity to build strong structures to prevent them from being disturbed when disasters strong winds And cyclones come. Because of their poverty they too are not able to re-erect their houses.

2.15 RESILIENCE/RESILIENT

This is the ability of disaster sufferers to get back to usual conditions after a disaster. Thus being able to bounce back. It is based on how communities are able to organise themselves to boost their ability for learning from precedent disasters for better future protection and develop risk reduction measures.

2.16 CLIMATE CHANGE (CC)

Climate change is said to be an attributing factor to most natural disasters nowadays. The Inter-Governmental Panel on Climate Change in the UNISDR of 2009 defined climate change as a change in the state of climate than can be identified (e.g. by using statistical tests) by changes in the mean and/or the variability of its properties, and that persists for an extended period. C.C is a change a result of changes in climate patterns primarily attributed to changes in global temperatures and emissions of green house gases. This has been witnesses in the beginning of the 20th century where countries receive highest amounts of rainfall. The amount of rainfall received in Masvingo province is a true reflection of climate change. Masvingo has been well known as an arid or semi arid region but in the year 2014 the area received high rainfall than normal. The UN Framework Convention on Climate Change has it that climate change which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable periods. Nonetheless the UNFCCC's explanation on climate change is the more limited one as it did not explain climate changes attributable to natural causes.

2.16.1 CLIMATE CHANGE ADAPTATION

This refers to the ability of people to adjust to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities. (UNFCCC in UNISDR, 2009). Disaster management mechanisms totally contribute to better climate change adaptation. Nations should learn on how they can adjust to climate change.

2.17 RECOVERY

This is the course of re-establishment and upgrading of damaged infrastructure, services, livelihoods and living standards of disaster affected populations. This is the process of rehabilitation and restoration. This comes as soon as the emergency stage ends. It is based upon pre-existing strategies and policies that ease clear institutional responsibilities for recovery action and facilitate public participation. According to the UNISDR (2009) it is called the "build back better principle."

2.18 FLOODING

Floods are familiar phenomenon in Zimbabwe. They are well-known for menacing the well being and food security of Zimbabweans, particularly in rural areas (Gwimbi, 2009; Mazzeo, 2011). Floods can be as a consequence of intense precipitation during the rainy season

(November-April) or by tropical cyclones that originate from the Indian Ocean. Flooding causes a disturbance on agriculture, infrastructural destruction, loss of belongings and general outbreak of diseases in Zimbabwe.

A flood is a downpour of large amounts of water beyond its normal limits, particularly over what generally is dry land. This is what happened in Masvingo when water spread from the Tokwe- Mukosi dam to villages. Floods also have some intangible losses which include increased levels of physical, emotional and some psychological health problems. (Stephenson, 1991).

2.18.1 TYPES OF FLOODS

There are two types of floods namely seasonal and cyclone induced floods. Seasonal floods are recurrent in Zimbabwe as they usually occur from November to April. The second type of floods is the cyclone induced floods. These types of floods have become more common than before. In February 2000 Cyclone Eline hit the basin bringing with it forceful storms. In March 2003 the basin was yet again hit by Cyclone Japhet which caused extreme damage in Guruve and Muzarabani because of their setting. The two are situated downstream of Kariba dam but upstream Cabora Basa and at the union of Manyame and Msengezi. This is the same situation in Masvingo province where people who have settlements downstream Tokwe-Mukosi dam were affected by floods that occurred in February 2014. The swelling of the Tokwe –Mukosi dam led to flooding in the area understudy. This has led to loss of livestock, infrastructure as well as crops.

2.18.2 FLOOD MANAGEMENT MEASURES IN ZIMBABWE

Basically there are two types of flood alleviation in Zimbabwe. These include structural and non structural. Structural ways consist of erection of dams and weirs to store overflow of water. However the impact of dams in flood control is limited to the amount of storage available and the way these dams are operated before and during the rainy season. One thing to note is this country is in a semi arid region. It is then tricky for water managers to discharge water in anticipation for floods. What if these floods fail to materialise at the time when there is little water in the dam.

The other type of flood mitigation is the non structural type. This involves flood forecasting to rescuing operations as well as identifying areas to settle the population that is likely to be affected. The metrological services department provide flood forecasts throughout the year.

During the wet season the MET office monitor the condition of the atmosphere and foretell the quantity of rainfall to be received in the next few days.

The information got will then be used to calculate the river flows and thus be in a position to tell whether there will be floods or not. With this information the responsible authorities take required action to make sure information is circulated and the likely victims evacuated before or during flood events. However flood forecasting can be criticised for only seeing closer events. People will not find enough time to prepare for such causalities.

2.19 THEORITICAL FRAMEWORK.

For the purpose of the research, contingency theory has been used as the theoretical framework. The need for a theoretical framework in this undertaking is clued-up by the fact that it would present the much required analytical anchorage for the dissertation. It would also influence critical systematization in such a way that enhances a good clarification of the area under discussion.

The rising frequency of emergencies in the contemporary world has necessitated the need for a theory, concepts and proven practices of disaster management. (Pine, <http://www.risk.isu.edu>.) In respect of a theory disaster management in Zimbabwe as a field has benefited notably from the contributions of the contingency theory of management. The contingency theory is a class of behavioural approach. It claims that there is one single way of organising cooperation, to manage a company and to make decisions. According to this theory disasters can only be managed depending on the internal and external environment. According to Fiedler (1976) a contingent leader deals with situations that are at hand.

The theory argues that there must be effective planning to guarantee that organisational goals are obtained. This theory of management is an endeavour to come up with a pragmatic paradigm for strategic management. This theoretical tradition has been influenced by Galbraith (1973) and Scott (1981). According to Okenwa and Ugbo (2003, p.36) this school of thought states that the application of management principles and practices should be contingent upon the existing circumstance and that functional, behavioural, qualitative and systems tools of management should be applied situational.

The theory highlights that managers need to know the existing sub-systems of certain organisations are exclusively interrelated within a given environment and how best to deal productively with a particular problem. Thus disaster managers should be creative when

disasters occur. Zimbabwe's disaster management system should have its hazard profile to see which disasters are most likely to occur and what response mechanisms are to be employed.

This theory is generally called the "it all depends" theory. This is because when you ask a contingency thinker for a certain answer like how do you deal with such problems, the best response he can give is it all depends. While this may appear simplistic, assessing the contingency on which decisions depend can be very intricate. Proponents of this theory try to identify and measure the circumstances under which things will likely take place. The term contingency as used in contingency is related to its use in direct practice. A contingency is a relationship between two phenomenon. If one phenomenon exists, then a conclusion can be drawn about another phenomenon.

The theory posits that what constitutes effective management varies with the specificities and peculiarities of the organisation's total environment, as well as the makeup of the organisational subsystems (Okenwa and Ugbo, 2003).

The theory is conflicting to the conservative theory since the conservatism theory suggests that a solitary form of organisation or management is the best in all circumstances. Perversely it holds that the most suitable form of management is the one that is best appropriate to the kinds of action which the organisation undertakes.

The theory stresses that organisational decisions depend upon the condition on ground hence 'it all depends.' Thus, the performance of each managerial role is influenced by the situation that is on ground. This therefore calls for a highly situational and adaptive pattern of management, organisational leadership and strategy (Fielder, 1976).

Contingency management is a management process that involves analysing precise possible events or situations that are likely to surface. This theory involves developing ways in advance to go on board on such events and situations. It results in organised and coordinated courses of action, aligned to their resources and institutional roles, information processes, and operational arrangements for specific actors at times of need. (UNISDR, 2009).

The theory as a management approach grew out of the Germanic tradition of management scholarship which gained popularity during the 1960s and 1970s (Encyclopaedia Britannica in Okoli, 2012). The hypothesis rose in relation to the mechanistic system of management, dominant among which is the bureaucratic theory. Burns and Stalker (1961) are of this view

that a mechanistic system of management characterised by specialisation of functions, precise role definitions, hierarchical structure, centralisation of authority, etc. It is more effective in environments (operational/organizational contexts) that are stable while an organic system is more effective in unstable and crisis-prone environment (Inegbenebor 2005).

This management theory typifies the realistic system of management by virtue of its philosophical direction. In this respect, Inegbenebor (2005, p.29) concisely asserts that this is a management system in which tasks are less structured and more flexible and individuals are better able to exercise discretion in utilizing their knowledge, skills and experience.

The contingency theory suggests that organizational ethics and practices are dependent relative to the existing circumstances. Therefore different circumstances are unique and call for different managerial responses that are based upon particular considerations and variables. Therefore, it is crystal clear that for successful management of disasters people have to deal with the present situation.

Emergency managers have to build an organisational culture and structure that improvise and acknowledges that each disaster is exclusive. Disaster management according to the theory should be based on the nature and character of the problems and who needs to be involved. (Kreps, 1991). In essence this is to say people need to have a capacity assessment to identify responsible people for specific problems. This is what is happening in Zimbabwe where each sector has its part to play in disaster management.

Zimbabwe has adopted the contingency theory. Its disaster management system presupposes that successful disaster management requires a very adaptive and situationally agreeable approach, predicated on contingency ways. This is in view of the fact that every emergency situation constitutes an eventuality that requires a great deal of pro-activeness, pragmatism and operational caution in handling.

The contingency theory suggests that the appropriateness of every disaster management principle and methods should be dependent on situational dialectics, dynamics and exigencies. Therefore, different disaster situations call for varying management responses, based on particular considerations and suitability. Thus for disaster managers and associated stakeholders to succeed in disaster management, successful application of any operational principle or concept should be determined by the nature of the disaster situation. Therefore

emergency managers must make an effort to build an organisational structure and culture that improvise, acknowledging the fact that each disaster situation is exclusive in its respect.

The implication of the foregoing is that emergency management in Zimbabwe has changed from the traditional thinking of reactive relief approach to a vibrant order that is agreeable to contingency thinking and technique. In other words, we must depart from that custom that awaits disaster to take place before action is taken to a more dynamic, pragmatic, flexible and proactively engaging approaches capable of prompting disaster happening and putting measures in motion to either forestall or mitigate same. This is the essence of the prevailing global paradigm of disaster management as encapsulated in the concept of disaster risk reduction.

The theory agrees with modern thinking in disaster management. It makes a radical departure from the traditional approach, which has been criticised as limited in analytical utility. Thus according to Luthans (1976) the traditional approaches to disaster management were not essentially wrong, but today they are no longer sufficient. The needed breakthrough for the management theory and practice can be found in a contingency approach.

However this theory has faced a lot of denigration in the literature. Eminent among criticisms are the following:

1. It is not new; there is nothing novel about it as some of its principal propositions have been adverted to in Fayol's principle which sought to resolve the issue of multiple contingencies.

11. It is too miscellaneous in approach in that it predicates the function of management on a diversity of situational factors.

111. The various factors that the theory recommends managers to take into account are not well articulated; similarly the actual relationship between these factors and managerial behaviour are not well defined.

1V. The theory can also be criticised for not being able to effectively address and resolve the issue of multiple contingencies, which often impose the dilemma of conflicting demands and conflicting responses on the management within the context of strategic decision making(Okenwa and Ugbo,2003;Inegbenebor,2005).

In spite of all the criticism the theory has faced it however still holds much water in explaining disaster management. It enables managers to come to terms with the need to

cautiously establish and decide on the suitable approach that promises the best results for a given situation. The adoption of the theory for the purpose of analysis in this study is informed by its vintage logical usefulness in situating the essence of disaster management, which calls for a highly adaptative and dynamic administrative approach agreeable to the exigencies of a specific disaster situation.

CHAPTER 3

RESEARCH METHODOLOGY AND OUTLINE

3.0 INTRODUCTION

The student in chapter 3 will highlight how he has gathered his information. The chapter will provide the research design, sampling procedures, sample size and population as well as research instruments and analysis of data.

3.1 RESEARCH DESIGN

According to Pannerselvam (2005) once a project is identified clearly, the next stage is to design the research. He added that a research design provides guidelines for data collection. Kerlinger (1986:279) defined a research design as a plan, structure and strategy of investigation so convinced so as to obtain answers to research questions. He added that the plan is to complete scheme or program of the research. Huysamen (1993:10) offers a closely related definition of design as the plan or blue print according to which data is collected to investigate the research hypothesis or question in the most economic manner.

Basically a research design outlines all methods that have been used during research. Selltitz etal (1962:50) also defined a research design as the arrangement of conditions for collection and analysis of data in a matter that aims to combine relevance to the research purpose with economy in procedure. It involves sampling techniques, data analysis plans, data collection methods and all sources of information. Kerlinger (1986:50) has it that a research design is important since it ensures research procedures are adequate to obtain valid, objective and accurate answers to the research questions. He called this function the control of variance.

Leedy (1980) acknowledges that there are different major decisions which are related to the purpose and procedure of research but all seek to systematically collect, present and analyse data.

Further Strydon, Fouche and Delpot (2005:269) argue that the research design used vary depending on the purpose and the study, the nature of research questions and the skills and the resources available to the researcher.

The researcher used descriptive research design in his study. A descriptive research design looks on the accurateness of the problem at hand. After studying the problem at hand the researcher will then describes what he is seeing. Descriptive research designs are very

functional in explanation of existing trends about a certain population. It is mostly used by many researchers.

Furthermore this method is most importantly used to collect raw data directly from people about diverse aspects such as their background, way of life, feelings and stuff. More so descriptive surveys are good in establishing, describing and interpreting trends in given area. In this context the disaster that happened Tokwe- –Mukosi area is a typical example of a problem at hand. Basically descriptive research designs involve data collection in an attempt to analyse and offer a conclusion on the current subject matter.

3.1.1 RATIONALE FOR USING A DESCRIPTIVE RESEARCH DESIGN

Before undertaking the research he weighed all research designs and chose to use a descriptive research design because of its advantages. This type of design was chosen for it only chooses a small population to provide information representing the whole population. There is no need for every member of the population to be questioned but a sample. Furthermore a descriptive survey entails a study of a limited number of cases with a view to coming into conclusions that cover the overview of the whole group under view. A survey seeks to provide conclusions about a chosen population .these conclusions are based on samples. That is how the research will be conducted. A small population in Chivi district will be chosen to give information about the effectiveness of Zimbabwe's disaster management mechanisms.

The method was also chosen because it allowed for a sample of the population and was concerned with description rather than explanation because explanation falls in the realm of analysis survey research.

In addition to that the method was also selected for it is the best design especially when there is no much time for the research, financial resources. This saves time and resources. The main methods of collecting data in the descriptive survey design are questionnaires, observations and interviews.

Despite advantages outlined above the method as well have its own loopholes. It can lead to falsification of information. It is highly likely that people may get a wrong picture of the whole population by taking a sample. This is because have different religious, political, economic, social, ethnic and cultural backgrounds. Some samples can give data that is not true of the whole population (Dooley, 2003). Some respondents might not respond to and

return the mailed questionnaires. More so, some subjects may excuse themselves from scheduled interviews. Nevertheless, the researcher took necessary precautions in order to elicit data from participants. Firstly questionnaires were personally administered to respondents and collected within a time frame. Secondly the researcher was patient enough to reschedule the time for the interviews to suit their times and not affect their commitments.

The qualitative research design is that it does not usually provide the research with a step by step plan or fixed steps to follow. In quantitative research the design determines the researcher's choices and action, while a qualitative research the researcher's choices and actions will decide on the design or strategy. Put more simply qualitative research will during research process create the research strategy best suited to the research or even design their whole research around the strategy selected.

In eliciting the appropriate research design for this study therefore the above approaches were in the study taken into consideration. The study employed both quantitative and qualitative approaches. The study was conducted in Chivi district in Masvingo province. In selecting the appropriate research design for this study, therefore, the above approaches were in selecting the appropriate research design was taken into consideration.

The district was selected because it has experienced floods in 2014 during the rainy season. The study had discussions with key stakeholders at district and community levels as well as randomly sampled households at community level.

3.2 SAMPLE SELECTION AND SIZE

Kumar (n.d) defined sampling as the process of selecting a few (a sample) from a bigger (the sampling population) to become the basis of estimating or predicting the prevalence of an unknown piece of information, situation or outcome regarding the bigger group. In simple terms he defined a sample as a subgroup of the population you are interested in. Due to limited time and resources the researcher found it impractical to carry out his research on the whole population of Zimbabwe and use the information gained to infer the whole population. This was due to factors as expense, time and accessibility. There was need for sampling so as to get manageable number of participants who would be involved in the study. According to Strydom et al (2005:193) sampling means taking any portion of a population. It is generally stated that the larger the population or universe as representative of that population. Sampling enables generalization of information. After a short period of time researchers will quickly draw conclusions. It is generally stated that the larger the population the smaller percentage

of that population. The smaller the percentage of that population the sample needs to be and vice versa. If the population itself is relatively small, the sample should comprise a reasonably larger percentage of the population. Large samples enable researchers to draw more representativeness and accurate conclusions and to make more accurate predictions than in smaller samples. Furthermore, Strydom, Fouche and Delport (2005:194) state that the major reason for sampling is feasibility. A complete coverage of the total population is seldom possible and all the members of a population of interest cannot possibly be reached.

Even if it were theoretically possible to identify, contact and study the entire relevant population time and cost considerations usually make this a prohibitive undertaking. The use of samples may therefore result in more accurate information than might have been obtained if one had studied the entire population. This is because, with a sample, time, money and effort can be concentrated to produce better quality research, better instruments and more in depth information.

The target population, therefore, for the study that is, households, institutions and community leaders and practitioners was purposively selected at household, district and community respectively. According to Strydom et al(2005), purposive sampling is entirely based on judgement of the researcher, in that a sample is composed of elements that contain the most characteristics, representative or typical attributes of the population.

Due to time and financial resource limitations, a few households were randomly sampled and interviewed at community level.

3.3 STUDY METHODOLOGY

The study used both quantitative and qualitative approaches. According to Strydom et al (2005) qualitative data collection methods often employ measuring instruments. Measurements refers to the process of describing abstract concepts in terms of specific indicators by the assignment of numbers or other symbol to the indicators while in qualitative research, the researcher's choice and actions will determine the design or strategy.

As stated above, the study employed both approaches for the purpose of triangulation. The concept of triangulation is based on the assumption that any bias inherent in a particular data source, investigator and method would be neutralised when used in conjunction with other data sources, investigator and methods.

3.4 DATA COLLECTION PROCEDURES

The student first went to his supervisor for his research questions to be approved. He then was given a letter to go be accepted in the area he was to undertake his research. He then went to the provincial offices for permission to undertake his research in the province. The researcher also sought permission from Chivi district offices .the questionnaire was administered to councillors, council authorities as well as the affected population.

3.5 DATA COLLECTION INSTRUMENTS

Several methods can be used in data collection. However the choice of a method depends upon the purpose of the study, available resources and skills of the researcher (Kumar, n.d).the researcher decided to use questionnaires and interviews to collect primary data.

3.5.1QUESTIONNAIRES

The research used questionnaires. Questionnaires are questions addressed to a defined population to get more information which person might have interest in. These are mostly used to get information on the directly affected population. Questionnaires are compiled and arranged in a systematic manner. Questionnaires are probably the most generally used of all. Kumar (n.d) has it that a questionnaire is a list of questions, the answers to which are recorded by respondents. According to him respondents read the questions, interpret what is expected and write down the answers. This is different to an interview on which the interviewer records responses in his interview schedule. Questionnaires come in two forms which are open ended and close ended. In this study both types were used to bring out data from directly affected victims, local authorities and all other key informants including government officials. The close ended questionnaires contain definite, concrete and directed questions which needs answers like yes/no. As for open ended questionnaires there were partially completed questions or statements which the respondent completed. There are several qualities of a good question. A good question should evoke the truth, accommodate all possible answers and produce variability of responses, among other things. The open ended items gave respondents to clarify their responses. In this particular study, primary data was obtained by directly talking to the interviewees at household level so as to get very reliable and accurate information.

Data was collected through per households from Chivi district. The households were interviewed from their individual homes.

3.5.1.1 THE RATIONALE TO USE QUESTIONNAIRES

Kumar (n.d) has it that a questionnaire is advantageous in that it is less expensive. He supported his argument like this as you don't interview respondents, you save time, human and financial resources. Questionnaires were used for large quantities of data from a considerable population were collected on disaster management and management mechanisms in Zimbabwe. Thus is how Zimbabwe responds to disasters. He added that there is great anonymity in using questionnaires. This is because there is no face to face interaction between the respondents and interviewer. In the absence of the interviewer respondents feel free to provide information. This increases chances of getting accurate information.

3.5.1.2 PROBLEMS FACED WHEN THE RESEARCHER USED QUESTIONNAIRES

The researcher has faced a lot of problems from respondents through using questionnaires. Questionnaires can work effectively on populations that are literate. In some cases the researcher met some populations who were illiterate .According to Kumar (n.d) there is low response rate in questionnaires. Some questionnaires were not returned due to respondents' interest and illiteracy. Also the low response h rate has been caused by the length of questionnaires. Lucky enough the researcher managed to obtain more than 50% response rate. Kumar also highlighted that there is lack of opportunity in clarifying issues. That is to say questionnaires may not be filled because some people may not be able to clarify questions .In spite of the numerous disadvantages mentioned above, questionnaires have some disadvantages. They often have poor return rate or non-response by the respondents. This forced the researcher to personally administer the questionnaires. They are also brief and provide no/little room for respondents to give as much information as they would want. Some respondents were not responding at all and at times they give the questionnaire to others to complete it for them maybe due to illiteracy. Some respondents were having problems in understanding the questions and terms. In this study the researcher attempted to construct simple and clear questions.

3.5.2 INTERVIEWS

The researcher used interviews. Interviewing is a commonly used method of collecting data from people (Kumarn.d). He added that any person to person interaction between two or more individuals is called an interview. In interviews they are personal interactions. It was a question and answer exercise on which the researcher asked questions and informants responded at that time. It requires physical proximity of two people though it can be carried out through phone.

The researcher designed focus group interviews with the affected that he asked problems they encountered during the disaster, how they were rescued and the effectiveness of the rescue systems employed. Haralambos and Holborn (2004) are of this view that focus group interviews are better as compared to one on one interview in that they produce more valid data because participants can think more deeply about the answers and reflect critically about their answers.

The interviews were held with key informants using a checklist of both district and community levels. The composition of key informants comprised of almost all critical players that have a role in the management of disasters. Some notable organisations and individuals at district level included the following:

At community level, the interviewees were representatives of the community. It was envisaged that the representatives would give typical perceptions on the subject matter. The interviews were conducted at a venue organised within the community.

3.5.2.1 RATIONALE FOR USING INTERVIEWS

In undertaking his research the researcher realised that interviews were advantageous. He found out that interviews were suitable for sensitive and complex questions like the one that was being investigated. The researcher found time to explain deeply the questions so as to get the rightful answers. The researcher probed his questions so as to make the respondents give the right answers. The interviewer was able to follow up incomplete responses by asking additional probing questions. The researcher made explanations and adjustments to questions in the process of the interviews. Interviews were characterised by a high response rate.

Bias and lies could be detected in the way interviewees expressed themselves facially and in their voice projection. This assisted the interviewer to detect false and correct information.

3.5.2.2 PROBLEMS ENCOUNTERED DUE TO THE USE OF INTERVIEWS.

Generally interviews are time consuming. The researcher went to the field when he was out of time. Populations being investigated were scattered over a wide geographical area. The researcher minimized it by the use of structured interviews which were mostly a question and answer session. The interviews were influenced by the presence of the interviewer. The interviewees gave the answers they believe the interviewer wants to hear rather than what they truly believe.

Fortunately the researcher's information was aided by use of secondary sources. There are occasions when your data has already been collected by someone else and you need only to extract useful information for your study (Kumar, n.d). Secondary sources used by the researcher include government or semi government publications, earlier research for some concepts especially disaster management concepts, personal records, reports and mass media including newspapers ,magazines and so on.

However secondary sources may not provide the adequate and needed information. Kumar(n.d) has it that when using secondary sources researchers need to be careful as secondary sources may have problems with availability, quality and format of data. One problem with using secondary sources is validity and reliability of information. Politics of the nation may have influence on the quality of information. For example in Zimbabwe the opposition parties may do smear campaigning on the ruling party when a certain problem happen. They may publish wrong information.

3.6 DATA ANALYSIS

According to Delpont et al (2005) means finding answers by way of interpreting the data and the results. Interpreting is just explaining so as to find a meaning. The researcher will use descriptive statistics to analyse the data collected on necessitated the disaster, how responsible authorities reacted and how people have recovered so far in the Tokwe -Mukosi area.

Tabulations, frequencies and percentages are to be used to illustrate figures. There are some situations that can be better explained in numbers than words for example rainfall patterns. However tables on their own cannot explain a phenomenon but are aided by words. Thus, there are some situations where a combination of quantitative and qualitative is ideal.

On data gathered through questionnaires qualitative methods were used. Thus tables displayed data in their raw form and in percentages. Quantitative methods ought to establish relationships. Equally the same data collected through interviews was quantified

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF RESEARCH FINDINGS

4.0 INTRODUCTION

In this chapter there is going to be discussion of the data that has been obtained from the field research on disaster preparedness and management mechanisms in Zimbabwe. The researcher did his field research in Masvingo province. The information was obtained from the provincial administrator's office, the Minister of Provincial affairs, Chivi RDC, Chivi district offices, Rural and Urban Development, Environmental Management Agencies (EMA), the Provincial Agricultural offices, Ministry of Lands, ZINWA authorities, local nongovernmental organisations, traditional leaders and victims as well.

4.1 QUESTIONNAIRES

The researcher drafted 50 questionnaires to collect data in the province. 80% of the questionnaires sent were responded to and returned back to the researchers whereas only 20% failed to return the questionnaires.

4.1.0 ADMINISTRATION OF QUESTIONNAIRES

Department	Questionnaires Administered	Questionnaires Returned	RESPONSE RATE
Provincial Administrator	1	1	100%
Provincial Minister	1	1	100%
Provincial Agricultural Office	1	1	100%
Chivi RDC	2	2	100%
District Administration	1	1	100%
LANDS	1	0	00%
EMA	2	1	50%
ZINWA	1	1	100%
DDF	3	3	100%
NGOs	9	7	78%
Councillors	7	5	71%
Traditional Leaders	6	4	67%
Victims	15	13	87%

Total	50	40	80%
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4.2 INTERVIEWS

Twenty four interviews were administered in the province. The researcher almost obtained the information he needed. The researcher was expecting to interview forty people but only twenty four were interviewed for others were committed to their businesses. There was 60% attendance .The table below shows administration of interviews.

4.2.0 ADMINISTRATION OF INTERVIEWS

Table 2

Key informants	Expected	Actual	Attendance percentage
Government officials	5	3	60%
Local authorities	5	2	40%
NGOs(civic organisations)	9	6	67%
Traditional leaders	6	4	67%
Victims	15	9	60%

4.2 CLIMATE CHANGE AND DISASTER MANAGEMENT IN ZIMBABWE.

Natural disasters in Zimbabwe and the world over are suspected to be a result of climate change. To explain the link between natural disasters and climate change the chapter will first present rainfall performances for 2011/2012 and 2013/2014 seasons for the province in an attempt to answer why the disaster has been concluded as different to other disasters in the province. The table below shows rainfall figures for Masvingo province for 2012/13 and 2013/14 seasons. It will be an attempt to show the differences in trends for the two seasons.

4.2.0 ANNUAL RAINFALL FIGURES FOR MASVINGO PROVINCE FOR THE 2012/13 AND 2013/14 RAINFALL SEASONS

TABLE 3 shows difference in rainfall patterns for 2012/13 and 2013/14 seasons.

Season	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	total
2012/13	6	0	2	29.6	3.6	72.5	200	40.9	18.8	22	7.1	0	394.9

2013/14	0	4	3	30.4	45	213.8	259.5	125.1	130.6	17.3	0	0	822.4
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Source: Metrological Services Department, Harare.

Having a closer analysis on the above table the researcher concluded that there is a great difference in rainfall intensity between the two seasons. According to the Provincial Administrator for Masvingo the rains received in the province have not been received any other year. He said this could be an explanation why people around the Tokwe- Mukosi dam experienced the disaster. Rainfall figures for the season have doubled the previous season by 208.3% its rainfall figures for 2012/13 that is 822mm in the 2013/14 has more doubled (208.3%) its rainfall figures for season 2012/2013 that is 822mm in the 2013/13 season compared with 394mm in the 2012/13 season. Gwaze (2014) is of the view that to suddenly receive annual rainfall figures in excess of 800mm/annum is quite extraordinary if not phenomenal.

The table below shows responses given by various key informants. Some linked the disaster to poor disaster management in the country while others linked it to climate change.

TABLE 4

Key informants	Poor disaster management	Climate change
Government officials	00%	100%
NGOs	80%	20%
Local authorities	50%	50%
Traditional leaders	40%	60%
Victims	100%	00%

When the key informants were asked gave different views on climatic change and disaster management. 100% of government officials interviewed all agreed that climatic change was the real cause of the disaster that occurred in Masvingo Province. Of all the local authorities interviewed 50% agreed that it was climate change and the other half disagreed giving reasons of poor disaster management in Zimbabwe. When the researcher interviewed various NGOs 80% linked the disaster to poor disaster management. The remaining percentage linked the disaster to climate change. This may be because they wanted to maintain good

relations with the government. 60% of traditional leaders responded that climate change led to the disaster. Lastly all victims linked the disaster to poor disaster management.

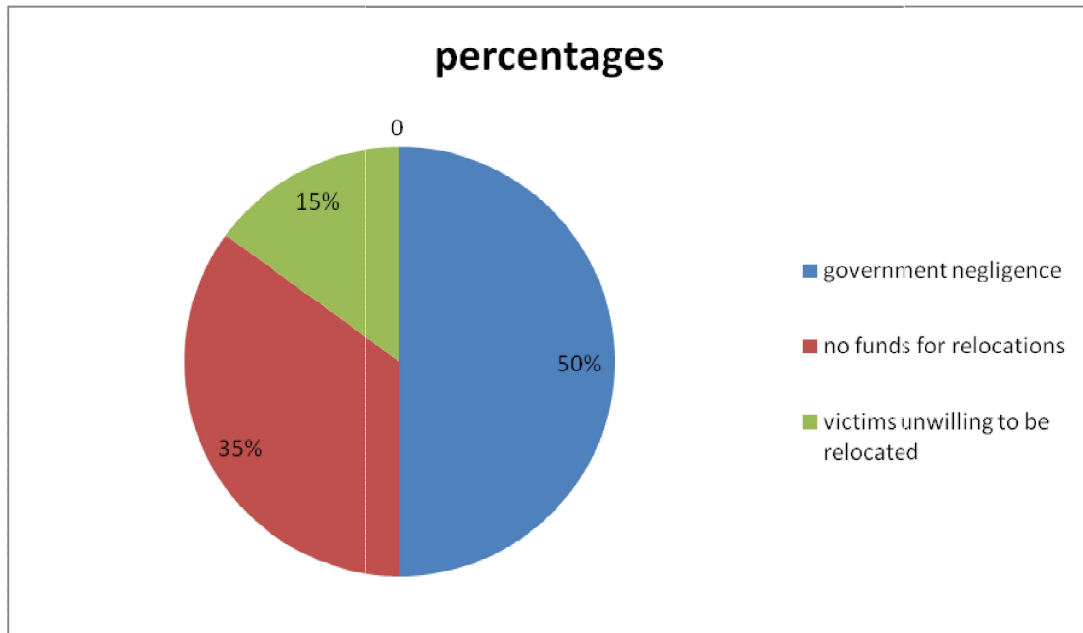
The researcher in his research discovered that the government of Zimbabwe was not even concerned about preparing for the disaster despite being warned by the Metrological Services Department. There is a responsible ministry that studies about climate. Therefore it should have advised the government to relocate people years before.

The unanticipated heavy rains pounded Zimbabwe from January until present leading to flooding of the dam basin where people were settled. Because of the delays in transfer, the heavy rainfalls have aggravated the situation into emergency due to increase in volume of water in the dam reservoir. (Oxfam report, 2014). Thus the government has been delaying in the transfer of villagers to areas that were none prone to disasters.

4.3 ENVIRONMENTAL IMPACT ASSESSMENT AND DISASTER MANAGEMENT STRATEGIES IN ZIMBABWE.

According to the Oxfam Report an environmental impact assessment for the Tokwe Mukosi Dam construction was done, the consultant recommended relocation of 6393 households from within the dam basin and immediate catchment areas. After the recommendation Chingwizi was chosen as the most suitable relocation site in Mwenezi District. However the Ministry of Lands which was responsible for the relocations had been inactive with the move. The Ministry of Lands' delay in the relocation of people is another contributing factor to the disaster. When asked why the victims have not been resettled before the disaster they highlighted that the government has been delaying with the relocations. Another reason why villagers were not relocated was refusal by villagers to move out of the place because of climatic conditions in the area. The villagers were also refusing to leave the area because they said it was their inherited land. This can be illustrated by the pie chart below:

FIGURE 1 shows responses given by key informants on why people have not been relocated.



SOURCE: Primary data questionnaires and interviews on the 6th of October 2014

From the table 50% of the respondents agreed that the disaster was a result of government negligence. 35% of the key informants concurred that the Tokwe- Mukosi disaster happened because the government lacked funds for relocations. The remaining 15% said that villagers were not willing to relocate.

Thus with this background one can depict that Zimbabwe is not even prepared for disasters hence ineffective in disaster preparedness.

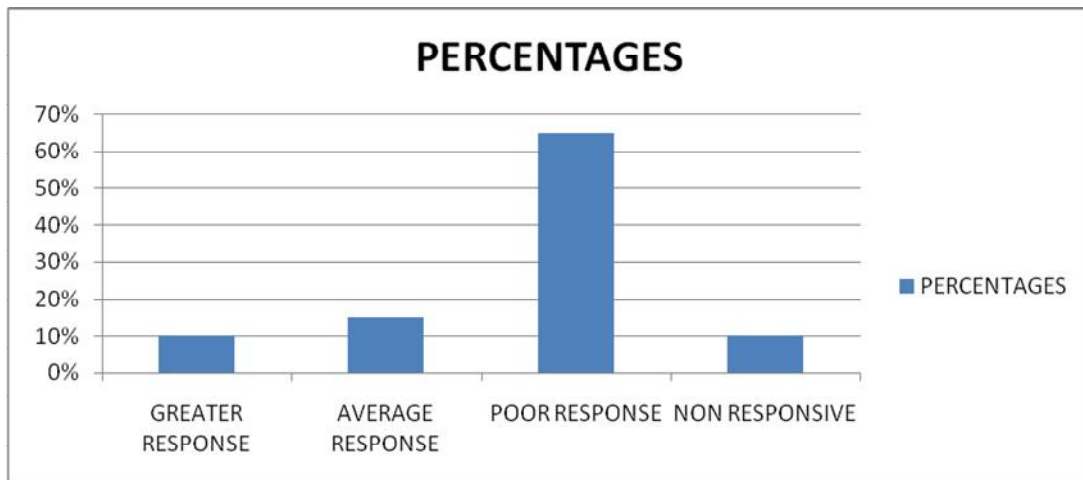
4.4 ZIMBABWE'S DISASTER MANAGEMENT STRUCTURE AND PROCESS.

The researcher went on asking about Zimbabwe's disaster management structure and process in attempt to iron out how the government respond to disasters. The responses were varied on personality basis. Government officials responded that the rains were unanticipated. The victims said the government has been uncaring to the lives of people. Villagers highlighted that the government wasn't even concerned about people in the river basin.

From all the interviews conducted to non government officials, government officials, victims, local authorities as well as traditional leaders 90 % of the respondents said that the country's

disaster management system is very poor whereas only 10% said Zimbabwe's disaster management is very active. There is poor and some government officials it is crystal clear that the government is ill equipped in disaster management. Most respondents showed that the government is ill equipped in disaster management. This can be illustrated by the bar graph below. The graph below is an explanation on how responsive the government is when disasters occur.

FIGURE 2



Source: Questionnaires 06 October 2014

The graph above is a true reflection that most respondents were for the point that Zimbabwe poorly responded to the disaster. 65% the respondents said that the country has a poor response to disasters. Only 10% applauded the government in disaster management. Only a few government officials said that Zimbabwe is always prepared for disasters. Thus there is poor disaster preparedness in Zimbabwe and also management mechanisms they employ ineffective.

4.5 RAINFALL FORECASTING AND DISASTER PREPAREDNESS IN ZIMBABWE

Some government officials blamed the Metrological Services Department's failure to forth tell that the rainfall to be received was to be more than normal. The responsible department used the past trends system. They used the rainfall trends for the past 40 years. They had estimated that the water was going to reach 650 m from the river basin. However the water exceeded such a point. The water level rose to 675m. This also has been used as an excuse by responsible ministries. People didn't anticipate that the water levels were going to rise to such levels. The metrological services department should have detected the rainfall intensity and

not just tell people that the area was going to receive high rainfall. It should have detected the intensity of the rainfall.

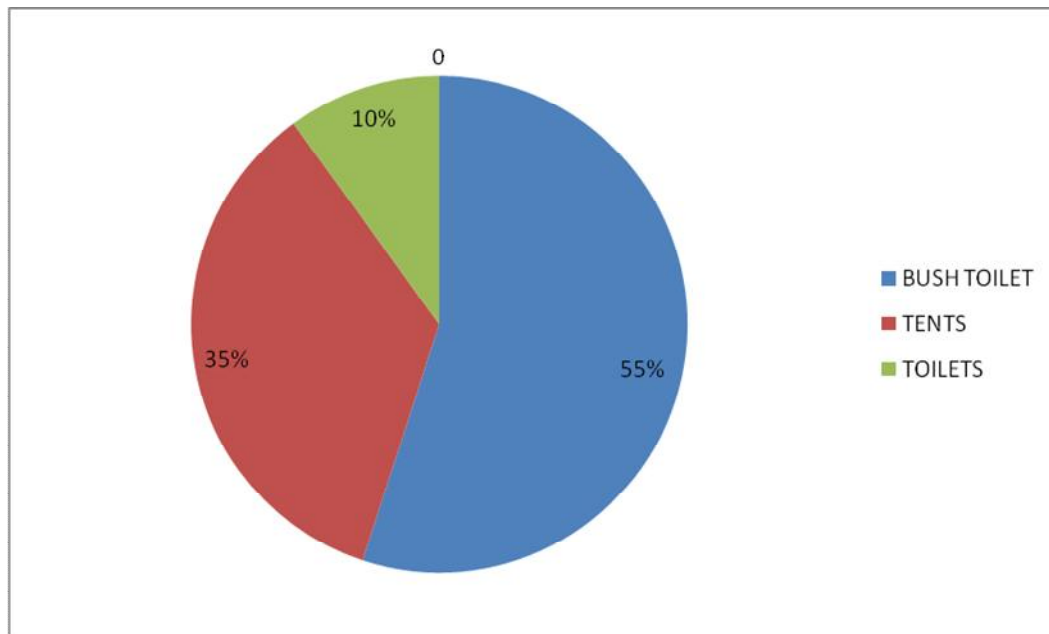
4.6 POSTDISASTER MANAGEMENT IN ZIMBABWE

When asked what are the most horrifying problems they are facing at the new settlement they mentioned shelter, education, water shortages, food shortages, infrastructure, health (clinics) and hygiene. They highlighted that people are suffering because of these problems. The victims have been relocated at a time when their crops have been washed away. When the respondents were asked highlighted that they feel insecure because of the impending rainy season. They highlighted that they do not have adequate farming inputs. This put them at risk of famine. Yes they have been given food to eat for the time being but they should be focusing on the future. The rainy season is by the corner but it's only a few who can access seeds, fertilizer and any other farming necessity. People are not satisfied by the aid being given

A large population that has been evacuated from the dam basin are still suffering. A total of 3000 households who have been residing in South East Masvingo have been compelled to resettle by the government. Resettling people was a noble idea but people were resettled on small pieces of land which were also infertile. At the onset the state was in a dilemma. Basically what it knew was that victims have to be resettled but it didn't have a guaranteed place for the relocations. The government tries to defend itself saying victims have been refusing to go to their relocation areas. However the victims told the researcher that they have not been told where there were going to stay. Thus the government had no plans for victims. Rusvingo in the *Newsday* of 8 March has this to say, "The always clueless Government had not as yet identified a suitable site to resettle the families who were then reported surviving on donor handouts from civil society groups chief among them, the much abused Non-governmental sector." The government is expected to be on the forefront in disaster management but during the Tokwe- Mukosi disaster the government relied on civil societies which they at times abused.

The nature of sanitary used at Chingwizi also elucidate how equipped is Zimbabwe when it comes to disaster management. The Chingwizi area is reported to be polluted with human waste. One commentator has it that the Chingwizi area is now looking like a refugee camp with big green flies all over the area. Many people are using bush toilets because there are no toilets. This can be illustrated by the below pie chart.

FIGURE 3



SOURCE : Interviews on the 6th of October of 2014.

From the above pie chart 55% of the respondents told the researcher that they are using bush toilet, 35% using tents and the remaining percentage has toilets. The area has poor and out of standard toilets. The chart shows that many people use the bush as their most accessible toilets. Some resort to using tents. Thus with this at hand the researcher concluded that Zimbabwe is poor in as far as post disaster management is concerned. Despite having these few outdated toilets, victims still find it difficult for themselves to reach the toilets because of distance.

The victims at Chingwizi are also facing the problem of water and sanitation. There are few boreholes in the area. Some people resort to using river water for drinking. Victims of the disaster also highlighted the existing few boreholes are not sufficient to cater for their daily water requirements. The area has no adequate safe water sources.

There are few safe and clean water sources in the area. Reliable sources of water for the victims are rivers Runde and Mukume, running during the rainy season and very unsafe. Non governmental organisations have constructed a few boreholes but people have to move more than 30 km to these boreholes. The country has many reported cases of pay scandals but

people are suffering at Chingwizi. Instead of using money for public use public sector directors resort to using public funds for personal use. For example a person is said to take home more than a million a year while the government is said to be in short of funds. The government is failing to raise \$9 million as compensation to thousands of families whilst a few people are squandering monies. This is a true reflection of Zimbabwe's uncaring stance on the citizens.

The government had denied children their educational rights due its inactiveness failed to respond to the disaster. Children who are going to school are the most disadvantaged. The disaster occurred in February on which children are expected to be going to school. Almost 800 primary and 500 secondary school children that have been affected are not attending their lessons since their schools have been destroyed. Towards September people have been worrying if their children were going to go to school like others. The new site was in short of schools which led to the establishment of four temporary schools housed in tents as classrooms. This has led to the poor learning conditions. According to a report by the Progressive Teachers Union of Zimbabwe (PTUZ) in July entitled 'dilemma of learning at Chingwizi, the high dropout rate had resulted in many young girls at Chingwizi becoming pregnant. The secretary general for PTUZ condemned the government for neglecting the education of children. Community spokesperson Wilfred Mano in the standard newspaper of 9-15 March 2014 said that the community is planning to take the government to court for violating their rights. Children have to walk longer distances to attend their lessons. It is very far and there are just poles and a tent and the roof leaks when rain falls in a Masvingo Province which is suddenly the highest rainfall province in Zimbabwe because of climate change (The Standard 9-15 March 2014, page 8-9).

The unexpected intense rains destroyed many make-shift tents at Chingwizi Transit Camp where the victims have been temporarily stationed. The heavy storm which lasted over six hours also destroyed the tent covering the main food store house where donors kept mealie-meal and other food stuffs for distribution to the flood victims (Newsday, 14 March 2014, page 1). These storms went on destroying a temporary clinic as well as destroying drugs and equipment in hospitals.

According to the Standard on 23-29 March 2014, page 9 the untold human suffering and congestion at Chingwizi Transit Camp could have been avoided if Government, in another show of disaster unpreparedness, had not carried out a wholesale eviction of people living

near the Tokwe-Mukosi dam project. There were reports of relocation of people who were not under threat to the Tokwe- Mukosi disaster. The government should have first evacuated those who were at high risk to the disaster than removing every person. This has created congestion in the area. Plus or minus 20 000 families had taken refuge with some living in the open (The Standard, page 9). Marwizi in the Standard Newspaper of 23-29 March 2014 added that the heart-wrenching situation at Chingwizi could have been less distressing if only those people directly affected by the floods had been moved out of the area. The situation could have been lessened if the government had evacuated the needy at first. It employed a random evacuation programme without proper assessments.

Some affected villagers, many of them resident at Chingwizi had returned to their old homes to harvest their crops after experiencing extreme hunger at the transit camp (The Standard 23-29 March 2014, page 9). Almost every person who has been evacuated is raising concerns that they are in a desert at Chingwizi. This is just like what happened to the Israelites when they were rescued from the house of bondage. They started to complain when they were suffering in the wilderness. Some even wished they could not have been rescued from pharaoh. With these human sufferings the victims are still wishing to get back to their original places. They said that if they had not been commandeered to leave their houses, the overcrowded Chingwizi could have less people, making it easy for Government and donors to provide them with food and shelter (The Standard 23-29 March 2014, page 9). Victims highlighted that the government took the Tokwe Mukosi disaster as an excuse to evacuate people without compensation. This may be the reason why the state did forceful evacuations.

In an interview with the provincial administrator for Masvingo on the 6th of October 2014, the researcher was told that only \$2 million has been released and \$6 million remained outstanding. According to the community spokesperson the government failed to keep its promise of providing 4 hectares of land to the victims as well as compensation.

According to Marwizi in the standard newspaper of 23 – 29 March 2014 the humanitarian disaster at Chingwizi was a clear result of lack of forward planning, failure to respect peoples’ basic rights and poor disaster response. Why had the government had been delaying to evacuate people before the disaster than doing this haphazard move? As the dam construction work picked pace over the past three years, it required all but common sense for anyone to realize that the homesteads built 150 metres away from the dam wall would be

submerged in water come the best ever of the rainfall season in a traditionally low rainfall Masvingo Province (The Standard, 23 – 29 March 2014, page 11).

The army is said to have ordered people to move out of their houses. Surprisingly the area is said to have been planned to be used as a game park. How can a sensitive government evacuate people who were not affected for a game park's sake? The effect of these blanket evacuations brought calamity and hardship to people who could otherwise have been well off considering the bumper harvest in the area driven by the best ever summer season in a traditionally low rainfall Masvingo Province (The Standard, 23 – 29 March 2014, page 11). How can the government take people from somewhere to nowhere. People were left in an open space yet some of them have their houses not destroyed. This raises a lot of questions. Was it that the government was concerned about people's lives or it was trying to avoid compensating people? Back at Chingwizi Transit Camp itself, rows of tents greet every visitor to the camp. One commentator has it that the Chingwizi camp was like a refugee camp in a war zone. All in all the Tokwe- Mukosi disaster can be said to be a man- made disaster for the government has been delaying the relocation exercise.

4.7 THE ROLE OF NON GOVERNMENTAL ORGANISATIONS IN DISASTER PREPAREDNESS AND MANAGEMENT.

Had it not been for Nongovernmental organisations' intervention people could have been suffering to a greater degree. Top government officials are claiming credit telling the victims that the aid is coming from the government yet in actual fact the aid is from civil societies. Organisations like the Red Cross, Action Faim, Oxfam, Christian Care, Christian Aid, BASO, CARE and UNICEF have been highly supportive in disaster management. However these organisations did not enjoyed their independence since they are always suspected to be masterminding their political agendas. They provided tents, logistics, soaps, water and sanitation, food aid and the like. Surprisingly the government failed to raise \$9 million for compensating the victims. Also donors of food aid had stopped providing aid when there were reported cases of corruption. Police officers and camp officials are said to have been using donations for their personal use. This led to NGOs withdrawing their aid. This has been aggravated by the fact that the donations were now being used for political campaigns

The table below shows how responsive were NGOs when the disaster occurred.

TABLE 4

ORGANISATION	PERCENTAGE
Government	22%
NGOs	76%
Others	0.2%

The table above shows that NGOs were highly active when the Tokwe Mukosi disaster. Only one helicopter was provided by the government to rescue the victims. From the respondents NGOs contributed 76% in rescuing disaster victims. The government contributed 22% and other companies contributed 2%. Mr Chikovo, the Provincial Administrator when interviewed by the researcher concurred that NGOs were on the forefront in disaster management.

4.8 POOR PRE DISASTER MANAGEMENT IN ZIMBABWE

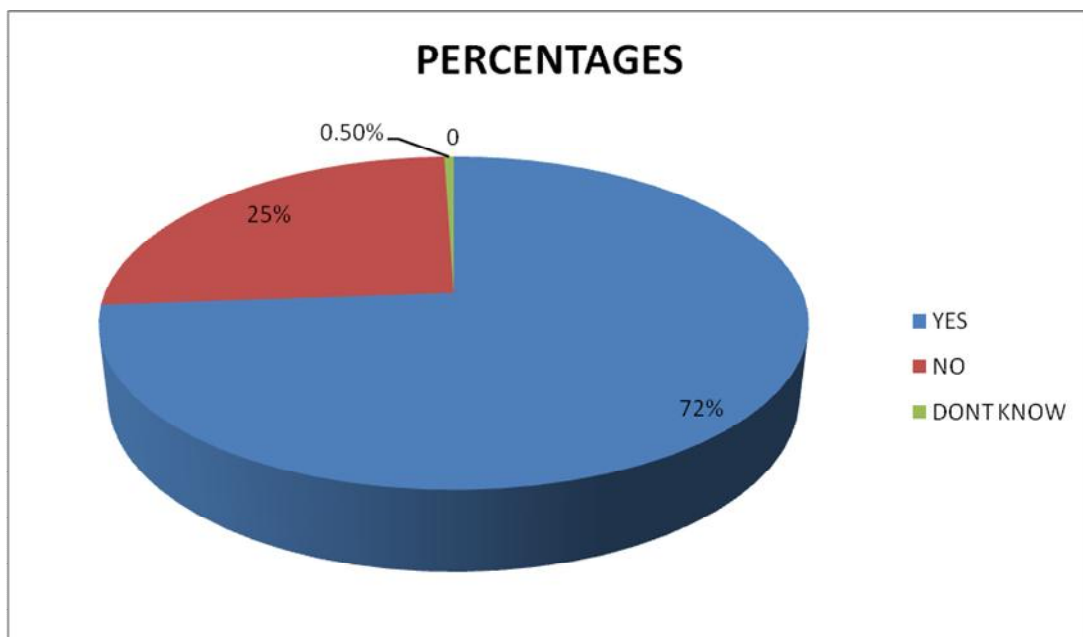
Even though the government is facing financial instabilities, it should have not forced people to get out of their original homes. Worse still their property, assets, crops and clothes have been lost. It is definitely not correct to compel the vulnerable villagers from their inherited land to a place with no infrastructure. These unfortunate people have lived in their area for many years and relocating them without taking due regard to these sober facts is tantamount to disregarding their human rights and freedom of expression. (Newsday 05 April 2014, page 6).

From the Tokwe-Mukosi struggle for self-determination and impartiality the culpability for the tragedy lies exactly on the shoulders of government. The Government knew that the work-in-progress Tokwe-Mukosi dam would on completion hold more than a billion cubic litres of water and it would be disastrous to have settlements precariously near such a huge water body (Newsday 15 March 2014, page 6). The state has been warned that the incomplete dam was feeble and it was going to break during the rainy season. It is apparent that the government should have relocated people to safer areas before the erection of the dam. It is quite astonishing that the government did nothing about the issue. The government should have done something before the disaster than doing rush decisions when the disaster occurred. They knew that the vast populations who were residing at the dam basin were at risk but they

did nothing to avoid the disaster. What this goes to show is that the government notorious for parroting to claim to champion the humanitarian cause of the people has no concern whatsoever with the issues to do with humanitarian matters (Newsday 15 March 2014, page 6). The government should have taken this risk as a number one priority hence developing mitigation strategies to the disaster.

When asked if the disaster was avoidable or non avoidable most respondents specifically NGOs and victims responded that the disaster was not supposed to happen if the government was well organised. This can be illustrated by the chart below:

FIGURE 5 shows responses by key informants.



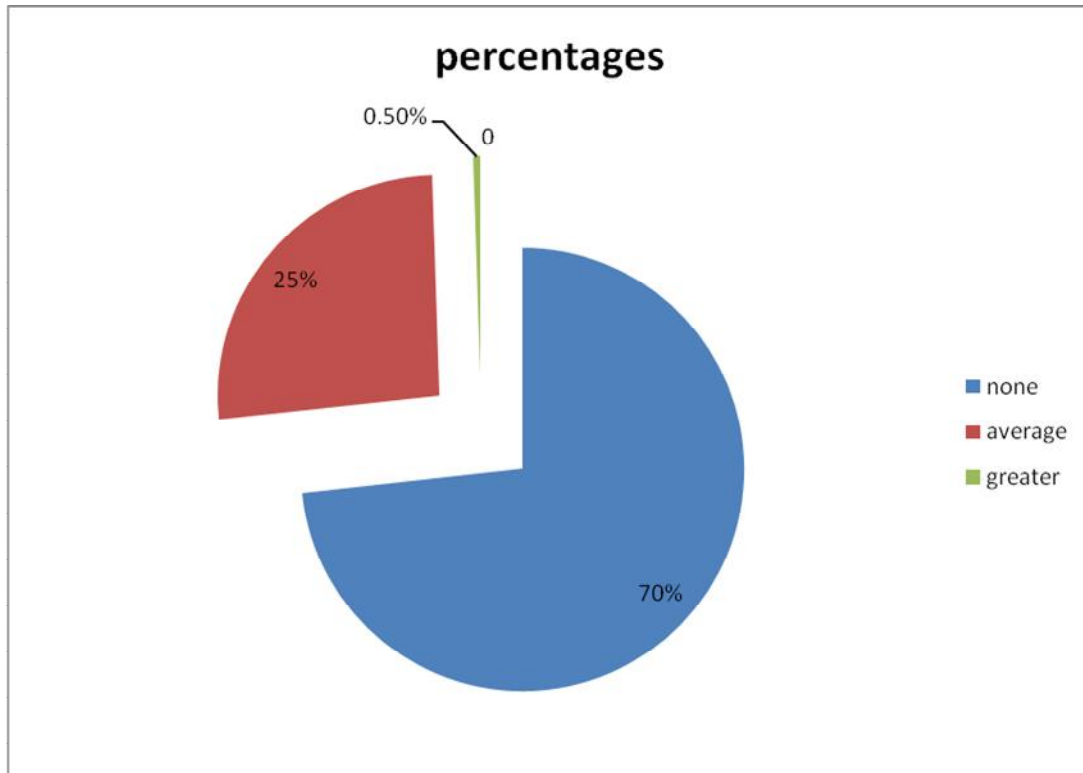
From the pie chart one can depict that a larger population of people agreed that the disaster was avoidable. 72% of the respondents agreed that the disaster was avoidable. 25% of the respondents said that the disaster was unavoidable. The remaining percentage especially the uneducated didn't have knowledge on disaster management. Only a few officials disagreed with this assertion. As earlier noted that a disaster can only be a disaster when it brings harm to humanity, if people have been displaced before it was not going to be a disaster.

4.9COMMUNITY DISASTER MANAGEMENT MECHANISMS

The victims themselves have not recovered from the disasters. This is because they don't have the capacity to deal with disasters on their own but they always need external forces.

When asked why people have not recovered the P.A responded that people now have a dependency syndrome. That is to say people mostly depend on aid. Only a few populations have recovered from the disaster. This may be because of difference in social status. The pie chart below shows the extent to which people have recovered from the disaster.

Figure 6 shows the level of recovery by victims.



Source: QUESTIONNAIRES AND REPORTS.

Responses above can conclude that people have not yet recovered from the disaster. The main reasons mainly being lack of funds to restructure their homes. From the table 5% of the displaced population have recovered from the disaster. 25% of the population are on their way to recovery and 70% have not yet recovered. This also because the government did not manage to release the \$8 million that was needed for compensation. The money that was given was not sufficient for the relocations. Those who have been compensated have used the monies for livelihood concerns. Only a few who were already privileged managed to recover from the disaster.

CHAPTER FIVE

SUMMARY ,CONCLUSIONS AND RECOMMENDATIONS

5.0 INTRODUCTION

In this chapter the researcher will present a summary, conclusions and recommendations that he identified during his study. The researcher has used secondary and primary sources of data to make the study successful. He also used these sources to offer conclusions and recommendations. This research was guided by the disaster risk reduction framework which emphasize on the need for governments to be prepared for disasters. The study was an attempt to answer the question: is Zimbabwe well equipped in disaster management. Thus it went on analysing the effectiveness of Zimbabwe's disaster management system.

5.1 SUMMARY

The study was an attempt to scrutinize Zimbabwe's disaster management mechanisms. The study wanted to see how the government prepare for disasters and how does it react when a certain disaster occur. This is the reason why the researcher used the recent Tokwe -Mukosi disaster as a case study for he has seen a lot of gaps in Zimbabwe's disaster management system.

5.2 CONCLUSIONS

From the above examination it has been revealed by the research that Zimbabwe has a way to go when it comes to disaster preparedness and management. Thus Zimbabwe has a meagre disaster management system. It largely relies on the international community, civil societies and Non -governmental organisations in disaster management. The government cannot depend on its own in disaster management. Zimbabwe's disaster preparedness is very pathetic taking into consideration the Tokwe Mukosi disaster.

The government showed that it was not prepared for the catastrophe when it did haphazard decisions of relocating people to the area it has not developed. Responsible ministries from the start knew that people need to be relocated but they have been delaying mostly because they didn't have funds for compensation.

Forceful evacuation is a show case that they didn't have money to reimburse people. People were compelled to leave the area without no plans for reimbursements. Where was the government thinking that the victims were going to get the money to get recover from the disaster?The government has for all along knowing that floods were going to strike the area but no action has been taken. This is a clear sign that the country is not proactive for disasters.

Zimbabwe's disaster management mechanisms have also been condemned in this study. The relocation areas were very poor. How come can the government knowing that people have lost everything in the disaster wait for NGOs to intervene? The government gave an excuse of shortage of funds. How can a government claiming to be well prepared for disasters say it failed to tackle a disaster for its has no funds for disasters? This is a clear indication the Zimbabwe is not equipped to deal with disasters on their own. The government relies on NGOs for food, temporary shelter, medicines as well as clothing.

Zvidzai (2014) after the Tokwe –Mukosi disaster concluded that Zimbabwe lack a notion of risk budgeting, a strong and well developed disaster risk reduction institutions, strong disaster prediction mechanisms such as weather forecasting and lack of a disaster risk fund. He added that resources for flood management are very little. Little funds allocated for disasters in Zimbabwe annually contributes to continuing disaster suffering.

Poor foresight planning, denial of people's rights and lack of an active disaster response system are the contributing factors to continuing devastating disasters in Zimbabwe. Weather forecasting in Zimbabwe is very poor. It lacks accurate forecasts. It may happen that the meteorological services department may warn people of the impending disaster and the forecasts may not be materialised. People begin to doubt these weather forecasters. This has led to people being affected by disasters due to poor preparedness. People in Zimbabwe at times fail to take weather forecasts seriously due to past immaterialised warnings.

The government of Zimbabwe lacks a legislative framework that punishes those who establish their homes restricted areas. The land act restricts people from staying near river basins but people at Tokwe Mukosi were living at the basins on the dam. The disaster was as a result of high rainfalls yes but location also contributed.

Delays in the relocation of people are also a true reflection of poor disaster preparedness in Zimbabwe. The government has been warned long back that there are possibilities of floods on the Tokwe Mukosi dam basin. The Ministry of Lands has been told to relocate people. Surprisingly a few people have been relocated.

The government of Zimbabwe cannot stand on its own in disaster management. It relies on the international community, NGOs, civil society organisations, private companies and individuals. This has been evidenced by Telecel, Econet, Netone, NGOs who were actively involved in rescuing the Tokwe Mukosi victims. If these have not intervened people would have been perishing.

5.2 RECOMMENDATIONS

After a close analysis of the failure of the government to curb the Tokwe Mukosi disaster a multiplicity of recommendations have been identified.. Zimbabwe's disaster management system has a lot of weaknesses. The researcher found these recommendations as feasible.

First and foremost the government should have a policy framework to cope up with disasters. That is to say the government should have a clear cut policy which has an outline of how they can prepare for disasters and how best they can deal with them. This has been supported by Matereke a Save the Children official while addressing a workshop on disaster risk reduction in Mberengwa district in May 2013. She highlighted that the country should have disaster risk management enforcement and a plan in place. This recommendation is also as a result of the complaints made by various people commenting on the Tokwe Mukosi disaster.

Disaster risk management should be integrated in development planning and management at whatever level of governance in Zimbabwe and even at schools. Thus disaster management should be studied even at school. Children should also be taught about disaster management at school. Children should act as agencies of disaster management in the country.

The civil protection unit should conduct trainings at national, provincial, district and community level on disaster risk reduction. Communities themselves should not only blame the government but also try their best to protect themselves from disasters. People at various levels should have knowledge on disaster management. There should be community disaster risk reduction committees. They must comprise of people from various ministries say example in the ward.

The government should have an operational budget to facilitate quick responses when disasters occur. Currently the government has no standing budget for disaster risks. This has caused the government to fail to curb disasters in time as it will need to first seek support from the international community and nongovernmental organisations when disasters happen. The Tokwe Mukosi disaster is said to have been aggravated by poor budgets the country has. The government should involve disaster risk reduction votes on their budgets instead of viramenting funds when a certain disaster happens. The government should not rely much on NGOs in disaster risk reduction. However Zimbabwe seems to be more dependent on NGOs when disasters occur.

The government has failed to fully compensate the flood victims. Therefore the researcher recommends the government to formulate a broader framework for restoring livelihoods and compensating the victims who will have lost many valuables from the disaster. According to the Provincial Administrator for Masvingo only \$2000000 out of \$8000000 was released as compensation. Also instead of being given four hectares of land the victims were given one hectare each household. This is not sufficient for people who rely on farming for their lives. This is the reason why some are still crying to be taken back to the dam basin.

According to experts there is now 90% probability for high rainfall because of climate change. Therefore the government should facilitate evacuations before climate induced disasters occur. People should be removed from river basins to areas which are not flood prone. This is basically disaster preparedness. It has been warned that high rainfall is going to be received but no action was taken by responsible authorities.

The responsible authorities especially the Metrological Services Department should conduct awareness campaigns on impending seasonal hazards. Awareness campaigns should be done even during winter for preparations. All people should be aware of any dangers that may come.

The impact of disasters is now known to be devastating basing on the Tokwe Mukosi disaster. Therefore there should be the establishment of civil protection committees at community level to national level with clear terms of reference to improve the response rate, when disasters strike. People should be knowledgeable in disaster management. They should be taught first aid activities.

Reliance on early warning systems is also another recommendation. It is alleged that the Tokwe Mukosi disaster has been detected by meteorologist but o action was taken. This may

be because weather forecasts especially in Zimbabwe are not reliable. People should rely on weather forecasts.

The government should invest in technical capacity for quick and accurate assessments of disaster situations and a rapid mechanism to active support from the international community because it is standard practise that international aid agencies will not offer support unless government calls .

Furthermore the government should not abuse NGOs operating in their country. This can lead to withdrawal of aid as witnessed by UNICEF and OXFAM. The government should not politicise aid.

The government should be found on the forefront when disasters occur and what people witnessed at Tokwe- Mukosi where NGOs were found highly active than the government itself. NGOs should play a second fiddle.

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APPENDIX 1: INTRODUCTORY LETTER AND QUESTIONNAIRE

My name is Shelton Moyo, a student at **Midlands State University** undertaking Bachelor’s Degree Honours in **Politics and Public Management**.

I am carrying out a research on **Disaster preparedness and management mechanisms in Zimbabwe** using the Tokwe- Mukosi floods as a case study. May you please bear with me that the information gathered will be purely used for academic purposes and your responses will be treated as confidential, so feel free to complete this questionnaire. Your names and any form of identity are not required on this questionnaire to maintain your anonymity. Your co-operation will be greatly appreciated.

Please read the following instructions:

1. Please tick in the appropriate box.
2. Tick only one box per question.
3. Provide an explanation if needed.

DISTRICT AND COMMUNITY QUESTIONNAIRE

DISASTER PREPAREDNESS AND MANAGEMENT MECHANISMS IN ZIMBABWE.A CRITICAL ANALYSIS OF THE TOKWE- MUKOSI FLOODS IN MASVINGO PROVINCE.

Province Name :

District /Community Name:

Date of Interview :

Name of interviewee/s (To be administered only to key district officials and community members).

1. How is the disaster different from any other disasters that have occurred so far? Explain.

.....
.....
.....

2. What was the most underlying cause of the flood disaster in the area?

Poverty high rainfall location

3. In your opinion was the disaster avoidable /unavoidable? Give reasons for your answer.

YES NO

.....
.....
.....
.....

4. What are the three main coping strategies if any, that people of the district/ community employ during floods? Have you employed these strategies?

Making fallows/canals Relocation Construction of sand banks None

.....
.....
.....

5. To what extent has the government responded to the disaster?

Strong response Poor average none

6. How cooperative have been the international community and civil societies when the disaster occurred?

Greater cooperation average none

7. What form of assistance was provided to the disaster victims?

Food shelter clothing all of the above

8. Are the disaster victims satisfied by the aid that has been provided? What other assistance is needed?

Strongly satisfied satisfied averagely satisfied not satisfied

.....
.....
.....
9. Have the victims compensated for the relocations?

YES NO

10. Has the government been showing any sign of preparedness to the disaster? If yes/no explain.

YES NO

.....
.....
.....
11. Have the victims recovered from the disaster so far? Explain.

Speedy recovery gradual recovery poor

.....
.....
.....
12. How resilient is the community when disasters occur? EXPLAIN.

Strongly resilient Average Poor

.....
.....
.....
13. Does the community have the capacity to deal with disasters? EXPLAIN.

YES NO

.....
.....
.....

14. Why have the people not relocated before the disaster?

No funds Government negligence Victims not willing

15. What is the most disturbing problem facing victims on their resettlements?

Health Education Housing Agriculture Water shortage Infrastructure All of the above

16. What is the type of sanitary used at the resettlement area?

Toilets No toilets Pits

17. How has the disaster impacted on the following? :

Crop
(Production)
..... Crop

(Stocks)
.....

Livestock
.....

Health
..... Water (Access)
.....

Infrastructure
..... Housing
.....

Property
.....

INTERVIEWS

INTRODUCTION

I am Shelton a fourth year student at Midlands State University undertaking a degree in Bachelor of Science in Politics and Public Management. I am here undertaking my project on disaster management in Zimbabwe. May you please help me get the required information? I require you to pay attention to the questions i will be asking. The information you will give will be useful for my education only and not for any other use. Thank you.

My thesis reads: ***DISASTER PREPAREDNESS AND MANAGEMENT MECHANISMS IN ZIMBABWE. A CRITICAL ANALYSIS OF THE TOKWE- MUKOSI FLOODS IN MASVINGO PROVINCE.***

Province Name :

Organisation Name:

Date of Interview :

- What are the underlying causes of the flood disaster in the area?
- In your opinion was the disaster avoidable /unavoidable? If yes /no give reasons.
- Who are the most vulnerable groups?
- How is the disaster different from any other disasters that have occurred so far? Explain.
- What are the three main coping strategies if any, that people of the district/ community employ during floods? Have you employed these strategies?
- What are the development options that might address the flood patterns in both short and long term in the district/community?
- How has the government responded to the disaster?
- How responsive were civil societies and NGOs when the disaster occurred?
- Have all civic organisations and non- governmental organisations been active during the disaster?

- What form of assistance was provided to the disaster victims?
- Are the disaster victims satisfied by the aid that has been provided?
- Have the victims compensated for the relocations?
- Are victims satisfied with the relocations?
- Has the government been showing any sign of preparedness to the disaster? If yes/no explain.
- What are the government's future plans with the victims?
- How has the community responded to the disaster?
- Have the victims recovered from the disaster so far?
- How resilient is the community when disasters occur?
- Does the community have the capacity to deal with disasters?
- Why have the people not relocated before the disaster?
- What do you think the government can do to curb your problem?
- What other help do you think the victims need?
- What are the problems that are faced in the resettlements?

SUPERVISION CHECKING LIST

NB. THIS FORM MUST BE ATTACHED TO THE FINAL COPY OF YOUR DISSERTATION

NAME OF STUDENT.....REG no.....

STEP 1 LIASE WITH SUPERVISOR FOR TOPIC

SUPERVISOR.....SIGNATURE.....DATE.../.../....

Topic.....
.....
.....
.....

STEP 2 SUBMIT TOPIC TO DISSERTATION COMMITTEE

CHAIRPERSON SIGNATURE.....DATE.....

COMMITTEE

COMMENTS.....
.....
.....

Date of Approval.....

STEP 3 SUBMISSION OF PROPOSAL

SUPERVISOR SIGNED.....DATE.....

STEP 4 DATA COLLECTION

Approved to proceed to data collection.....signeddate

STEP 5 PRESENTATION OF DATA FROM THE FIELD (RECORDINGS, QUESTIONNAIRES, INTERVIEWS.....)

SUPERVISOR.....SIGNED.....DATE.....

STEP 6 SUBMISSION OF THE DISSERTATION

SUPERVISORSIGNED.....DATE.....

STEP 7 SUBMISSION FOR VIVA-VOCE

CHAIRPERSON.....DATES.....