AN ANALYSIS OF THE STATE OF PREPAREDNESS BY CIVIL PROTECTION COMMITTEES IN ZIMBABWE: CASE OF THE BEITBRIDGE CIVIL PROTECTION COMMITTEE'S MANAGEMENT OF THE 2000 CYCLONE ELINE IN BEITBRIDGE

BY LOUD RAMAKGAPOLA

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ABSTRACT

The purpose of Civil Protection Committees is toassist protect lives of people in all corners of Zimbabwe. These committees are governed by the Civil Protection Act and are in existence in each district**.** The researcher‘s null hypothesis is that Beit Bridge Civil Protection Committee was not well prepared for the disaster and did not manage it well. The alternative hypothesis is that Beit Bridge Civil Protection Committee was well prepared for Cyclone Eline 2000 and managed it well.

Questionnaires, interviews and library research were used to solicit information. A total of 100 questionnaires were distributed to individuals and 15 to organizations. Research findings indicate that very weak preparation was done prior to cyclone in 2000.It is however, worth noting that when the disaster struck the Beit Bridge District Civil Protection managed it well using resources mobilized from government and donors. Strengthening of the committee should be done and disaster management plans should be cascaded to the communities.

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ACRONOMYS

CRED-Centre for Research on Epidemiology of Disasters

EMDAT-Electronic Medical Dictation and Transcription

HIV/AIDs-Human Immuno Deficiency/Acquired Immune Deficiency Syndrome

IDNR-International Decade for Natural Disaster Reduction

ISDRR-International Strategy for Disaster Risk Reduction

ISPRS-InternationalSocietyforPhotogrammetryandRemoteSensing

LDS-Lutheran Developments Services

NGOs –Non Governmental Organisations

NUST-National University of Science and Technology

ORAP-Organisation of Rural Association and Progress

SPSS-Statistical Package for Social Scientists

YMCA-Young Men Christian Association

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CHAPTER 1

1. INTRODUCTION

This research evaluates disaster preparedness and management of disasters in Zimbabwe with particular reference to Beit Bridge Civil Protection Committee's management of the 2000 Cyclone Eline. The case study of the 2000 Cyclone Eline is used to assess the adequacy of the disaster preparedness and the effectiveness of disaster management by Beit Bridge Civil Protection Committee. This chapter outlines the background to the problem, objectives of the study, justification of the study and the limitations and delimitations of the study. The chapter closes with a brief overview of the organisation of the research.

2. Background to the problem

The area of study is BeitBridge district. This is one of the seven districts in Matabeleland South province situated in the southern part of Zimbabwe. Beit Bridge just like most parts of Zimbabwe, experiences disasters ranging from droughts, major traffic accidents, floods, famines and cyclones. In February 2000, Beit Bridge district was hit by Cyclone Eline disaster and the Beit Bridge Civil Protection Committee had to deal with the disaster. The state of preparedness for the disaster and how the disaster was managed is the focus of this study.

According to 2002 national census, BeitBridge had a population of 104 212 people scattered over 12 communal wards, 2 resettlement wards and 4 urban wards. The district lies in agro-

ecological region four. It receives rainfall of +/3000mm per annum.Beit Bridge also hosts one of the busiest border posts in sub-Saharan Africa and due to the high inflow and outflow of human and vehicular traffic, the border is always susceptible to traffic disasters and contagious diseases.

When Cyclone struck Beit Bridge District in February 2000, it caught a lot of people unprepared and the damage it caused was least expected. According to a United Nations Rapid Assessment Report*(unpublished)*for the assessments done on 11-12 March 2000 and 20-22 March 2000, a total of 2 333 homes succumbed to the disaster, 250 kilometres of roads and 14 schools were damaged by the cyclone, four major irrigation schemes had canals destroyed and engines washed away, several people were injured while nine (9) people lost their lives. Some people also lost livestock and certain areas were cut off from communication due to damaged bridges or gravel roads which were impassable and the telephone net work in rural areas was out of order. The United Nations Rapid Assessment cited above established that the worst affected areas were in Beit Bridge central, which encompasses three wards .The researcher intends to make Beit Bridge Central and in particular Lutumba village in Beit Bridge Central to be the focus of this study.

When cyclone hit BeitBridge in 2000, the Beit Bridge Civil Protection Committee with the assistance of the Provincial Civil Protection Committee had to send a distress call to Central government, Non-Governmental Organisations (NGOs), private companies and individuals. In response to the distress call, the President of the Republic of Zimbabwe, Robert Gabriel Mugabe declared a state of disaster on 24 February 2000 for all the districts hit by the Cyclone Eline.

As a result of the declaration some organisations began to respond to the disaster. Some of the organisations and private companies which responded to the disaster are Zim Sun/Holiday Inn, Lutheran Development Services (LDS), World Vision, Organisation of Rural Progress (ORAP) Red Cross, Young Men Christian Association (YMCA), Dabane Trust, Evangelical Fellowship of Zimbabwe and the Moslem community. These organisations assisted in providing shelter, rehabilitating people's homes, provide clothing, food, and restore water supplies and donations in cash.

It is worth noting that the 2000 Cyclone Eline also affected almost the entire Indian Ocean region and made devastating strikes on Mozambique, Madagascar and Mauritius. Between February 3 and February 23 2000, Cyclone Eline struck Mozambique, Madagascar and Mauritius. The storm was first identified as a tropical low south of Java at February 3,200 by Perth Tropical Cyclone Warning Centre in Australia. By February 12, 2000 Eline began to gain strength. Cyclone Eline made land fall at Madagascar on February 17, 2000 about 30nm north of Mahanoro.The storm weakened considerably over high, mountainous terrain of central Madagascar, but it retained its tropical characteristics, despite being down graded to tropical depression by the time it emerged again at the western coast of the island on February 19, 2000.It began to slowly reintensify and regained tropical storm strength later that day. On the 21st, it once again reached hurricane strength over Mozambique Channel. On the morning of February 22, 2000, Intense Tropical Cyclone Eline made landfall about 40nm south of Beira with estimated maximum sustained winds of 115knots or 135 mph.

Eline caused considerable destruction in Madagascar. Over 60 000 people were affected with at least 10 000 being left home less. At least 64 people were listed as dead.Mahanaro was reported to have suffered 80% destruction.

Damage to Mozambique was even worse, though difficult to estimate. When the storm struck the country was already suffering from disastrous flooding and heavy rainfall, some of which was associated with earlier cyclone Connie. At least 300 000 people were already displaced by this disaster when Eline struck in the middle of it, seriously disrupting already stressed relief effort. For example Eline sank four ships on BeiraHarbour, delaying arrival of emergency food shipments. Up to 150 people were reported dead because of the storm, but total casualties from flooding, some of it caused by Eline, may have reached 1000.

The other area affected by Cyclone about the same time as Zimbabwe was Australia. Tropical Cyclone activity in Australia region picked somewhat in February 2000 with three cyclones being named during the month as opposed to one in January 2000.Australia was affected by Cyclone Leon in early February and it later became the long lived and destructive Tropical Cyclone Eline.It was also affected by cyclone Marcia which was short lived. At the end of February the region was hit by a severe tropical cyclone Norman.

3. Statement of the problem

Disasters such as cyclones can be forecasted by weather bureaus (meteorological services) well before they occur. This information is vital for disaster preparedness and management.

Onewould have expected BeitBridge district to use such information to minimise the effects of such a disaster. However, this does not seem to be the case as witnessed in the Cyclone disaster.

It is against this background that the study perceived the presence of a problem in disaster management by the Beit Bridge Civil Protection Committee. Consequently the research focuses on the nature of the response by the Beit Bridge Civil Protection Committee and its effectiveness in responding to the 2000 Cyclone Eline disaster. As such, this study intends to investigate the state of preparedness of Beit Bridge Civil Protection Committee to manage and deal with disasters of the magnitude of the 2000 Cyclone Eline.The researcher noted that when the disaster struck it found people unprepared hence the need to investigate the state of preparedness of the Beit Bridge Civil Protection Committee.

4. Objectives of the Research

The main objectives of the research are to:

a. Evaluate the Beit Bridge Civil Protection Committee's disaster management plan and its state of preparedness for such eventualities, in particular readiness to respond to the 2000 Cyclone Eline.

b. Assess the Beit Bridge Civil Protection Committee's response to and management of the 2000 Cyclone Eline in BeitBridge district.

c. Draw lessons from dealing with the 2000 Cyclone Eline disaster and come up with recommendations to the Civil Protection Committees for proper management of such disasters in future.

5. Research hypothesis and Research Questions

The researcher hypothesises that: *H0* Beit Bridge Civil Protection Committee was not well prepared for the disaster and did not manage it well.

H1- Beit Bridge Civil Protection Committee was well prepared for Cyclone Eline 2000 and managed it well.

A well prepared Civil Protection Committee is one which has a working disaster management/preparedness plan and resources to deal with disaster when it happens.

In order to carry out the research the following research questions were asked:

a) Did Beit Bridge Civil Protection Committee have an adequate disaster preparedness plan to deal with a disaster such as the 2000 Cyclone Eline?
b) Did the Beit BridgeCivil Protection Committee give adequate warning on the impending disaster?
c) Did the Beit BridgeCivil Protection Committee have an effective management system to deal with the Cyclone disaster?

6. Justification of the Study

The research has utility in that no systematic study has been done on 2000 Cyclone Eline in BeitBridge especially centering on the adequacy of the state of preparedness of the Civil Protection Committee. It can be used as a source that can help readers, policy makers and administrators understand the management of disasters. The study is premised on the discovery that there is so far very little documentation available in Zimbabwe on the practical management of Cyclones.

Summary reports were done by the Ministry of Local Government, Public Works and National Housing through review workshops, Department of Meteorological Services and Non governmental Organisations like Christian Care and ORAP, but these are isolated reports and are only particular to each organisation and therefore do not give a full picture of the extent of preparedness and management of the Cyclone by theBeit Bridge Civil Protection Committee.

The study can be used as a source of information to help readers understand how the 2000 Cyclone Eline was responded to and managed. It will be a useful basis for authors who have an interest in disaster preparedness and management. It can assist disaster management bodies to come up with effective disaster management systems and the Beit Bridge Civil Protection Committee in particular and other actors in general deal with disasters in future and improve their effectiveness and state of preparedness.

Delimitation and limitations

The study had several limitations such as time, financial resources and limited published material about disaster management in Zimbabwe. There is very little documented information on the 2000 Cyclone Eline in BeitBridge.

The delimitation of the study is that it treats the 2000 Cyclone Eline in Beit Bridge as the major disaster of focus. The study is narrowed to the Cyclone Eline in 2000 even though cognisant of other types of disasters which obtained in BeitBridge, nationally and the world over. While BeitBridge was not the only place hit by the Cyclone Eline disasters, the study only focused on BeitBridge as a study area.

There are other areas hard hit by the 2000 Cyclone Eline like some districts in Manicaland province, districts in MasvingoProvince and the other six districts of Matabeleland South but BeitBridge was chosen as the study area. This is because there was no time to cover all areas affected by the 2000 Cyclone Eline and the resources to do that were not available. At district level the study is further narrowed to Lutumba village in ward five precisely because Lutumba, according to the United Nations Rapid Assessment cited above, was said to be the hardest hit by the 2000 Cyclone Eline.Therefore, all other areas in the district affected by the Cyclone Eline are not part of the study area.

Organisation of the research

The study is organised into five chapters as follows:

Chapter One is the introduction and covers background to the problem, statement of the problem, objectives of the research, research hypothesis and research questions, delimitations and limitationsand justification of the study.

Chapter Two is an in-depth outline of Literature Review which covers review of related literature on disasters and case studies.

Chapter Three will cover the Methodology used in the study. The research discusses research design, sampling and sampling techniques and research instruments/tools.

Chapter Four is the Data Presentation and Analysis of Research Findings.

Chapter Five presents Conclusion and Recommendations.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter reviews some of the literature on disasters preparedness and disasters management as explained by different authors. It presents some literature on global experiences on disaster preparedness and management. Literature review will assist the researcher evaluate his/her own efforts by comparing related efforts done by other authors.

Analytical Framework

This chapter is driven by the fact that the world is increasingly and constantly facing many disasters of different kinds. Disasters whether the result of natural phenomena, collapse of organised society or failure of human-made technology, affects us all. It is therefore important that everyone is prepared for a disaster. Literature review in this chapter intends to share experiences on disaster preparedness and management. This research is working on the framework that disaster management bodies need to be well resourced and well equipped if they are to effectively respond and manage disasters. Information is also fundamental in the response to and management of disasters.

Conceptual considerations

Disasters are becoming more frequent, more costly and disruptive than ever before. To make matters worse, each disaster brings more shattered lives, more suffering families and more

stricken communities. According to the Civil Protection Act, Chapter 20:06(1989), disasters mean any

a) Natural disaster, major accident or other however caused; or

b) Destruction, pollution or scarcity of essential supplies; or

c) Disruption of essential services; or

d) Influx of refugees; or

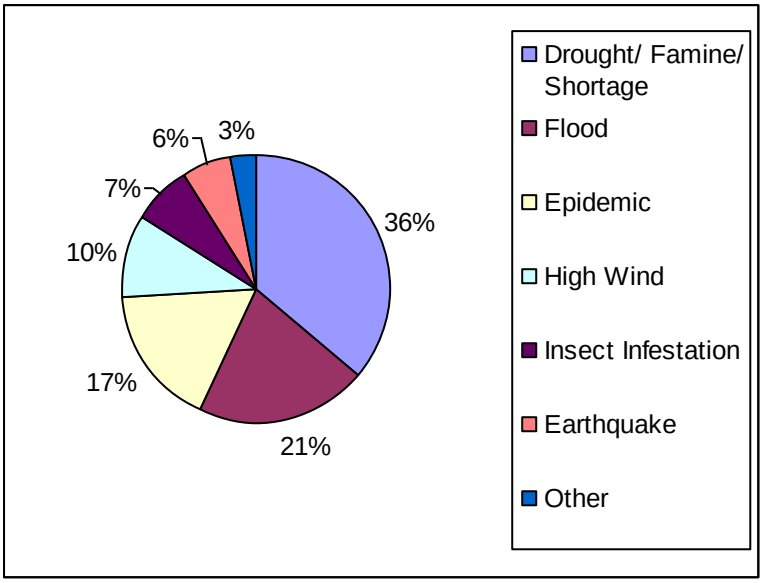
e) Plague or epidemic of disease that threatens the life or well being of the community

Typologies of Disasters

Disasters strike in different ways at different times. Some countries face persistent low onset disasters that occur almost on an annual basis during three to five year cycle affecting substantial portion of society while others face chronic sudden onset threats.Wiljkman, Anders and Lloyd Timberlake (1994:180 point out three major causes of disasters: Human vulnerability, due to poverty and inequality; environmental degradation, stemming from poor land management and rapid ppulation growth among then poor. From this explanation it can be discerned that disasters can be classified into natural disasters and manmade disasters. Natural disasters as indicated in the diagram below include drought, famine, shortage, floods, epidemic, high wind, insects infestation, earthquakes and others.

Fig 2.1NATURAL DISASTERS

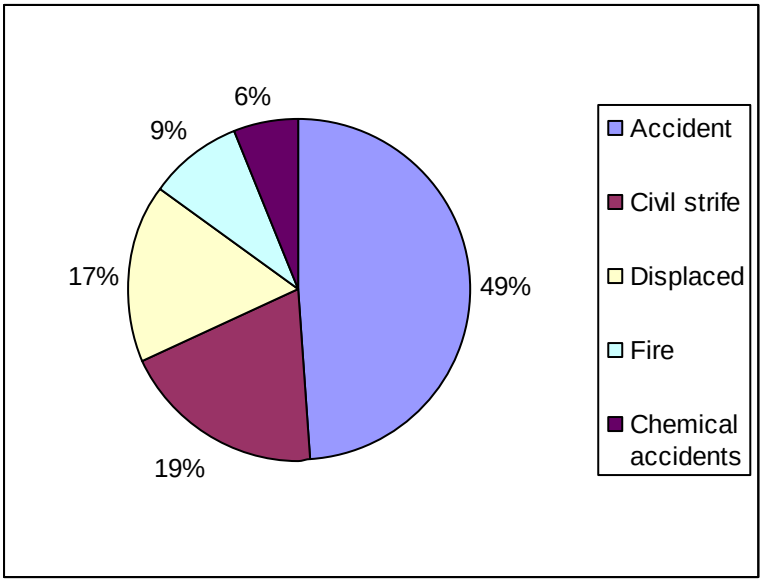
The diagram(Fig 2.1) below shows the distribution of the types of natural -disasters:



Source**: EMDAT Database, Centre for Research on Epidemiology of Disasters(CRED),** Brussels.

Fig 2.2 MAN-MADE DISASTERS

The diagram below shows the distribution of the types of man-disasters:



Source: **EMDAT Database, Centre for Research on Epidemiology of Disasters (CRED),Brussels.**

Man-made disasters cover accidents, civil strife, displaced people, fire and chemical accidents. A combination of both natural disasters and man mad disasters can be deadly and destructive. There is thus need for know which type of disasters obtain in each geographic area so that disaster management bodies can better prepare to respond to them.

Disaster Preparedness

Disaster Preparedness refers to the state of readiness to respond to a disaster. It can be classified as passive or active preparedness. Passive preparedness is the preparation of disaster manuals, stock piling of relief goods and development of computer lists of resources and personnel. Active disaster preparedness includes development of plans, monitoring of hazard, threats, training emergency personnel and members of the community.

According to *Guiding Framework of Disaster Management in South Africa, General Notice 974*(2004:58) "emergency preparedness contributes to risk reduction through measures taken in advance to ensure effective response to the impact of the hazard including timely and effective early warnings and temporary evacuation of people and property from threatened locations". Emergency preparedness differs from prevention and mitigation in that it focuses on activities and measures taken in advance of specific threat or disaster. Disaster preparedness enables the organisation of the state and other institutions involved in disaster management to mobilize and provide relief measures to deal with an impending or current disaster or effects of a disaster. If Beit Bridge Civil Protection had prepared for the cyclone it would have been expected to have put in place well in advance such measures to minimise the effects of the disaster.

Phillippe Boulle (1998:2) asserts that preparedness for response is an essential element of disaster preparedness as part of a comprehensive approach to prevention. There is need to continue to improve and strengthen the response to capacity, while engaging in working together to build a 'global culture of prevention' ".The preparation of an emergency understood from "knowing how to act" is a valid concept. Disaster preparedness is important not only for those involved in the preparation but also for the citizen who has to know about the danger he/she faces. Koffi Annan(2001:1) stated that "building a culture of prevention is not easy. While the costs of prevention have to be paid in the present, its benefits lie in the distant future. Moreover the benefits are not tangible: the disasters that did not happen". This is the reason some many governments and institutions including Beit Bridge Civil Protection Committee are not willing to invest in prevention and vulnerability as resources are needed for disasters that may not happen.

Case of lack of preparedness-Honduras

The opposite of lack of preparedness can be more costly. For example, in the last week of October 1998 Honduras was struck by Hurricane Hitch leaving in its wake 5.657 deaths and 8.058 disappearances, almost 1.5 million people affected. Rosa del Carmen Aguilar Borjas (2001:43) points out that "unmistaken lack of preparedness displayed by the population during the response made it clear that there was need to launch concrete activities to promote a culture of disaster prevention".

Disaster preparedness enables the organs of the state and other institutions involved in disaster management to mobilize and provide relief measures to deal with an impending or current disaster or the effects of a disaster.*The Guiding Framework of Disaster Management in South Africa* cited above points out that emergency preparedness involves planning seasonal threats, anticipating and planning for potential dangers, establishing clear

information dissemination process to alert risk communities of an impending seasonal threats and specifying evacuation procedures.

How disaster was managed in Sudan

Yousef Bakhait Idris(1988:3) argues that the Sudanese government's decision to form a national network of flood committees is making a difference in how local authorities reduce vulnerability to floods. Khartoum, Sudan's capital is situated at the juncture of the white Nile and Blue Nile rivers. The city population has swelled in recent years to 4.2 million people; 1.6 million have migrated to the city due to civil strife and famine. In 1988, the floods from seasonal rains covered nearly 40% of Khartoum. The city residents had no warning about the impending flood, which was the worst one to hit the area since 1946.Million of dollars worth of property were destroyed and 28% of the people were affected. These floods were used as a case study at a National workshop of the United Nations Disaster Management Training Programme attended by government officials, NGOs and UN agencies in 1993.Following the workshop recommendation, the Sudanese government subsequently decided to form a National Flood Committee and additional sub committee in flood communities throughout Sudan. A local sub Committee immediately started work on flood embarkment, with help from the national government, Non Governmental Organisations and community residents. In 1994, Sudan experienced floods similar to those in 1988.A combination of the awareness made a difference. In 1994, there was very little damage to areas previously affected by flooding mainly because there was preparedness for the floods.

Preparedness and mitigation in India

Another example of preparedness and mitigation is India's approach of the 1987 drought as compared to how they approached the 1965 drought. Failure of the monsoon prolonged dry spells in western India and severely affected agricultural production, causing the fourth serious drought disaster in the 20th century. Crops were damaged in an area of 59 million hectares spread over 267 districts and 22 states. Of the 285 million people affected by drought, 92 million belonged to vulnerable groups including subsistence farmers and agricultural labourers. The previous worst drought occurred in 1965 when India had to import grain to mitigate the resulting famine. In mid July 1987 when it appeared that conditions were likely to have serious impact on agriculture, the government of India took initiative to mitigate the impacts rather than wait from requests for assistance. A Committee of Secretaries on drought was set up and an action plan was developed. The implementation of drought relief programmes was monitored almost on a daily basis by a Crisis Management Group under the Central Relief Commissioner. Steps were taken to improve agricultural prospects in drought affected areas through a timely supply of seeds, obtaining credit through banks, rural electrification and generation of power. An information campaign was undertaken to cascade information to all people.

The Indian experience bears testimony to the effectiveness of formulating development and preparedness policies to meet predictable natural disasters. A comparison of how the 1965 drought and the 1987 drought were managed indicates that with proper preparedness extreme destitution was avoided. The 1987 drought also highlighted the importance of information dissemination and making available adequate resources at the operational level to assure timely response.

Disaster Management

Disaster management involves the response to or anticipation of a hazardous event. The South African Guiding Document: *Framework of Disaster management, General Notice 974* of 2004 states that (2004:34) "Disaster management is a collaborative process that involves all spheres of government as well as Non Governmental Organisations, the private sector, a wide range of capacity building partner and communities". It also requires capabilities to manage risks on an ongoing basis and to effectively anticipate, prepare for, and respond to an adverse range of natural and human caused threats. This capability depends on access to reliable disaster risk information. It requires systems and processes that enable timely and appropriate decision making in times of emergency on the part of government officials and other role players as well as risks communities and house holds. It also depends on an informed public able to take responsibility for managing known risks wherever possible. Flood disaster management is an end-to-end process for recognising and effectively combating the risk associated with floods through a suite of planned actions. There is need for pre-disaster-preventative measures and preparedness; during the flood-disaster relief, response and mitigative actions and post disaster-rehabilitation, reconstruction, economic recovery and efforts to assess and fine tune preventative measures.Ali Mansourian and others in *ISPRS Workshop on Service and Application of Spatial Data Infrastructure XXV1(4/W6)* point out that recent huge bad unexpected disasters such as earth quake and Tsunami in the Eastern Asia(2004) and the attack to World Trade Centre and Pentagon on September 11,2001 have increased world wide attention to disaster management. Disaster management is a cycle of activities beginning with mitigation, the vulnerability and negative impacts of disasters; preparedness for responding operations; responding and providing relief in emergency situations such as search and rescue, fire fighting and aiding in recovery

which includes physical reconstruction and the ability to return to quality of life to a community after a disaster.

Yousef Bakhait (1988) argues that the unpredictable nature of disasters make it attractive for local political leaders to ignore them either hoping that disaster will not strike their city or that if it does they can rely on outside assistance. He further states that this type of thinking needs to be changed if cities in the developing world that are at risk to disasters are going to achieve long term sustainability. It is also important to note that although there will always be a need for outside assistance in the wake of a disaster, it is in the threatened area's interest to take pro-active steps to reduce vulnerability to disasters. Some people believe that natural disasters including floods, cyclones and droughts are acts of God and very little can be done to prevent them or reduce their effects. Lloyd Timberlake(1994:19) argues that it is "not that weather patterns are changing to produce more floods and not that earthquakes and volcanic eruptions are more frequent but that more and more people are exposed to trigger events". The poor, the malnourished, the young and the old are disastrously vulnerable to disaster triggers. For a hazard to become a disaster it all depends on how man deals with the potential danger and the effects or impacts on human lives, property and the physical environment also depends on how the disaster is consequently managed. A glance at the number of natural disasters and complex emergencies in Africa reflects the depth of human tragedy in the continent. Yet when disasters occur; both Africans and the international community are taken by surprise. For example in a country like Benin, violent tornadoes and torrential rains produce situations of a disaster scale every year or two, thousand are left homeless, many places are flooded especially the country's capital Cotonou.Inspite of all these each time disaster strikes people are still caught not prepared for it. Beit Bridge Civil Protection had adequate warning signals before Cyclone struck BeitBridge

coming from Mozambique and Madagascar but they did not seem to have acted or put in place preventative measures so that when the cyclone comes it will find communities ready for it. There was need for Beit Bridge Civil Protection to make predisaster mitigation but this does not seem to be the case.

Governments need to have a fund which can be relied on when disaster strikes. In the case of Mexico, the Federal government determined that the country was losing too many lives and spending too much money on reconstruction following natural disasters hence came up with a fund for disasters. Its fund for natural disasters developed transparent cost sharing formulas for disaster relief and reconstruction activities that communicate to state and municipal governments the possible costs they will incur from a disaster and thus spar them to develop ways to mitigate their vulnerability.

Egypt's culturally based disaster management

Mahfouz Mahmoud Mohammed (1994) in *From Disaster management to sustainable Development: How the Public and Private Sector Voluntary Organisations can work together* points out thatEgypt provides a classic example of a culturally based disaster preparedness and management. Egypt has a population of 57 million who live in about 5 % of the country's total surface area of one million square metres. Egyptians have always been vulnerable to disasters. To cope with disaster such as flash floods from the Nile, drought from Sahara desert, conflict and other catastrophes, Egyptians developed community traditions. As far back as the premonolithic period (7000- 2000BC), Egyptians offered non-human sacrifices to prevent disasters. Community traditions to cope with disasters were tied to religion. They perceived disasters as "Acts of God".

CHAPTER THREE

METHODOLOGY

Introduction

In this chapter the researcher focuses on the techniques used in acquiring knowledge that is sources for collection of information relevant to the research study. The chapter aims to detail the methods and techniques used in the collection of data. Methodology refers to techniques used to obtain data. It is the specification of the procedures for collecting and analyzing data in order to assist in identifying a problem. These include questionnaires, interviews and documented information. Research methods must be appropriate to the objectives of the study.

Research Design

Research design aims to explain how events are related. Gilbert and Churchill (1998) refer to research design as a framework for a study, which directs the collection and analysis of data. It is defined by Borg and Hill (1993:517) as the arrangement of concepts for both collection and analysis of data in a manner that aims to combine relevance to the research purpose. A research design is a plan for collecting and utilizing data so that desired information can be obtained with sufficient precision so that a hypothesis can be tested properly. It is the plan of study providing overall framework for collection of data.

Field Research

Sampling and Sampling techniques

The researcher envisaged that it is not possible to interview each person in the study area. There was, therefore, need to select a representative sample of the population of the study area.

The representative of a study area is called a sample. According to Hussey and Hussey (1997:55), a sample is "…a subset of a population and should represent the main interest of study."

Two groups were selected as focus of the study and these are the Beitbridge District Civil Protection Members and Lutumba Village residents. The District Civil Protection Committee whose memberships has heads of government departments, district heads of the private sector and district heads of Non-governmental Organizations were interviewed because their being central in dealing with issues of Civil Protection in BeitBridge district. Ninety-nine Lutumba residents were interviewed because as indicated above, the area was one of the worst affected.

The researcher used simple random sampling to select those who will participate in the research in Lutumba Village. Random sampling is whereby each member in the ward has an equal opportunity of being part of the sample. A sample of 100 residents in Lutumba in Ward 5 was randomly sampled and a questionnaire administered to them. Sampling was used because it is quicker than enumerating all the people in Lutumba village. Lutumba has a population of about 2000 people and a sample of 100 respondents was considered as sufficient for this study. With the homogeneity in experiences and status of Lutumba residents and resources constraints, a sample of 100 individuals was applicable for the study.

The researcher made use of stratified sampling in selecting the BeitBridge Civil Protection Committee as another focus of study. Stratified sampling involved separating the population elements in non-overlapping groups of similar characteristics called strata. These groups are the District Civil Protection Committee whose membership has Heads of Government departments, district heads of the private sector and District Heads of Non-governmental Organizations. They

are the people who were directly involved in the preparation for the disaster and its management when it struck BeitBridge. It was important to understand how they prepared and managed the Cyclone Eline disaster.

Of the 15 organizations sampled, 8 of them were covered in the survey. The questions were directed to a person of relatively senior position, who was knowledgeable of the organizational issues and had been in that organization for more than ten years. The individual questionnaire was administered to persons who had been in BeitBridge for more than ten years and were also above 20 years of age.

Data Collection Methodology

The first step in undertaking the study was to conduct a literature review of the documentation available on natural disasters in Zimbabwe. The next step involved the development of the survey instruments, organizational and individual questionnaires *attached*, for collecting the information.

Research Instruments/tools

After the literature review, data were collected using the two aforementioned questionnaires. A questionnaire is a list of carefully structured questions chosen after considerable testing with a view to solicit responses from a chosen sample. The questionnaires had structured open ended and closed questions to capture the perceptions of the target groups.

The merit of self administered questionnaires as data collection tools includes easy to design, respondents had freedom to express their opinions, non-verbal responses were noted and the

responses were immediate. The method was not rigid as it used structured open ended and closed questions to solicit information from the interviewees and the interviewer had flexibility to probe on certain issues. Of paramount importance was the high response rate. However, it had some draw backs such as the high cost to train the research assistants in order to remove interviewer bias, sensitive questions were difficulty to handle for the respondents sometimes turned to be aggressive. The data collection method was costly and time consuming. In some instances the cost of traveling was prohibitive thereby influencing the sampling frame.

The researcher made use of personal interview method as way of collecting the data. An interview is a way of collecting data in which selected participants are asked questions in order to find out what they know, think or feel about the subject of discussion. Personal interviews allowed for face to face interaction and immediate follow up and sought clarity on the spot.

Literature Review/Library Research

Documented information is information collection through use of records, minutes and reports. This is the use of published /written material and is usually called secondary data. The researcher consulted minutes of the BeitBridge District Civil Protection Committee meetings held before, during and after the Cyclone Eline and also an unpublished report by United Nations Assessment team, among other key documents. Data were also collected from documents of Non-governmental organization notably Christian Care, Lutheran Development Services, World Vision, Red Cross and Young Men Christian Association. These are some of the Non-Governmental Organizations who participated in the rehabilitation efforts and wrote reports on their experience during the Cyclone and rehabilitation efforts.

The assessment was done during the periods 11-12 March 2000 and 20-22 March 2000.The findings of this rapid assessment was that a total of 2 333 homes succumbed to the disaster, 250 kilometres of roads and 14 schools were damaged by the cyclone, four major irrigation schemes had canals destroyed and engines washed away, several people were injured while nine (9) people lost their lives. Some people also lost livestock and certain areas were cut off from access and communication due to damaged bridges or gravel roads which were impassable and the telephone net work in rural areas was out of order.

Data Capturing and Analysis

Two types of analysis were used; the qualitative analysis was used for information obtained with open ended questions and observations whilst a statistical package, Statistical Package for Social Sciences (SPSS) was used for the quantitative data. After data collection, a manual cleaning, editing and checking of questionnaires was done. Completed questionnaires were coded and further edited before data processing. Data entry, verification and processing were performed using the SPSS software. During data entry, secondary editing of computer identified errors was done and corrections made. Extra codes were devised to cater for missing values.

CHAPTER FOUR

DAT ANALYSIS AND RESEARCH FINDINGS

Introduction

This survey on the impact of 2000 Cyclone Eline was conducted in BeitBridge district in 2010, ten years after the disaster. The survey provides findings on the preparedness and management of the disaster by the BeitBridge Civil Protection members. On the basis of these findings, recommendations were proposed. It also solicited for recommendations on how the BeitBridge Civil Protection Committee can be improved.

Eight out of the fifteen institutions (53.3%) sampled responded to the survey while 99 out of the targeted 100 (99%) respondents were interviewed. Eight-five percent of the individual respondents were those born in BeitBridge. The disaster having occurred 10 years ago, there had been need to interview a person mature to recall the incident and having experienced the disaster.

Awareness of BeitBridge Disaster Awareness Meetings

About 35% (35) of the sampled Lutumba residents who responded to the survey indicated that they once held disaster awareness meetings while about 64.6% (64) of this sample of were ignorant of the disaster awareness meetings, the illustration is given in Table 1. The responses suggest that the awareness meetings are less frequently held, of which some district members might have missed them. There is need for the BeitBridge Disaster Management Plan and Village Disaster Management Plans to increase their visibility through advocacy and awareness campaigns.

Table 1: Distribution of Individuals Who Held Disaster Awareness Meetings

Response	Number of People	Percent
Yes	35	35.4
No	64	64.6
Total	**99**	**100.0**

Only one organization indicated that the BeitBridge Civil Protection Committee was prepared and well equipped for 2000 Cyclone Eline. The evidence shows that there was a low state of preparedness done and that there was very minimal awareness done prior to the disaster, only one respondent indicated that the BeitBridge Civil Protection Committee held awareness meetings.

The findings revealed that BeitBridge district is prone to a variety of disasters, diseases outbreaks (such as cholera, malaria, and tuberculosis) intermittent droughts, incidences of veld fires, major road accidents and invasions by alien species like locusts. HIV and AIDS have also since taken toll in the district. Malaria is endemic in the districti[i] because of the geographical location of the district, it is a malaria zone. Almost all the respondents of the individual

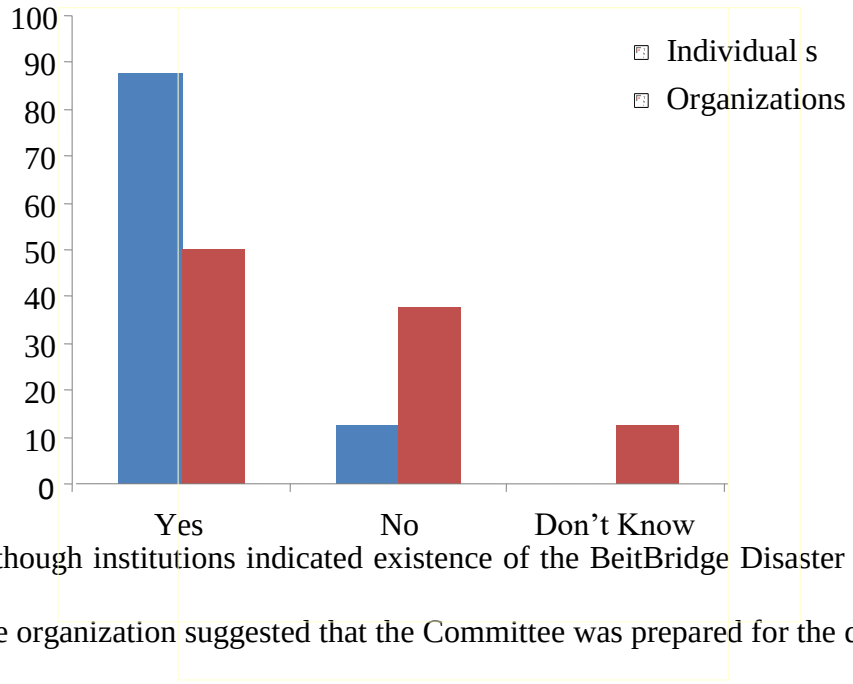
questionnaire cited droughts and malaria out breaks as common experiences in the district. *Table 2 of the attachment* shows the distribution of disaster experienced in the District.

Knowledge of BeitBridge Disaster Management Plan

Seven out of the eight (87.5%) sampled organizations who responded indicated that the BeitBridge Civil Protection Committee has a disaster management plan. Some key aspects of the plan are communication channels, evacuation plan, and disaster profiling transportation modalities. All (99) sampled respondents in Lutumba village professed ignorance of existence of any disaster preparedness plan, with 21,2% (21) indicating the existence of a disaster management plan in the villages. The response reveals the need for robust awareness campaigns for the disaster management plans to villagers.

Figure 1: Percentage Distribution of Organizations and Individuals by Knowledge of Beitbridge Disaster Management Plan

Percentage



Although institutions indicated existence of the BeitBridge Disaster Management Plan, only one organization suggested that the Committee was prepared for the disaster, Figure 1 depicts the knowledge of the BeitBridge Disaster Management Plan and individual organizational ones. Some organization had their own independent disaster management plans 50% (4) with 12.5% (1) not sure whether their organization had a disaster management plan or not. In preparation for the disaster, the Beit Bridge Civil Protection committee had fire fighting machinery and construction vehicles for the disaster management.

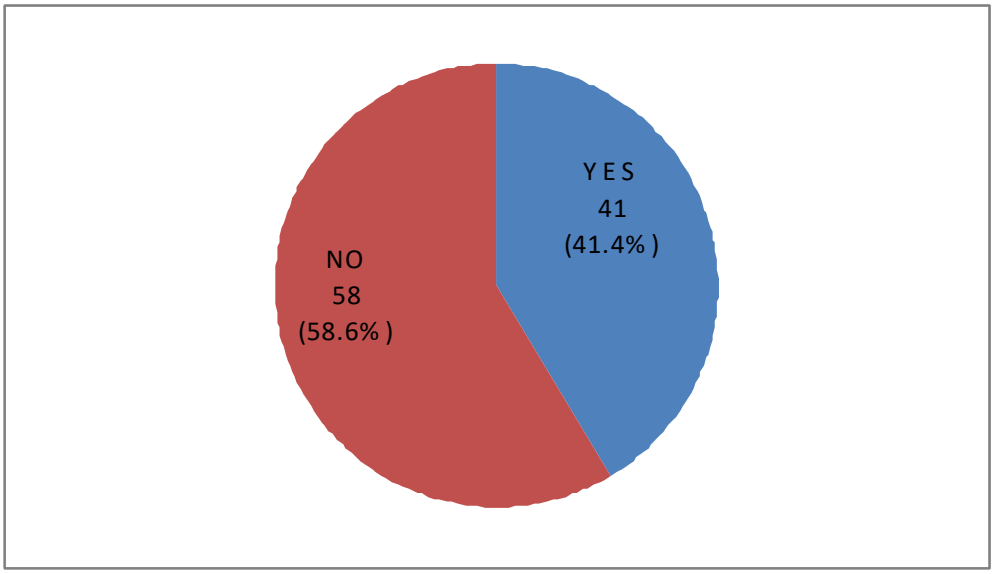
Individual Awareness of Disaster Management Plan

Figure 2 depicts the proportion of 41.4% (41) of Lutumba residents who were aware of Beitbridge Disaster Management Plan. The Plan covers, the organizational structure of the committee, communication and transportation channels including the satellite phones to be used

in disaster cases and strategies for preparedness. It also contains the response plan such as an evacuation plan, coordination of resources. History of most common disasters like floods,

fires, diseases such as malaria and road accidents is provided in the Plan. While the Plan is detailed there is need to buy in the residents.

Figure 2: Distribution of Lutumba Residents by Awareness of Beitbridge Disaster Management Plan Status



Duration of Stay in Case Study Areas

About 22.2% (22) of individual respondents expressed that there are warning signals for pending disasters in the village. As regards to the 2000 Cyclone Eline, the majority of respondents showed that there were no warnings observed of the disaster that struck Beitbridge, 1% (1) of

the individual respondents while the other 1% (1) was not clear whether there were warning signs or not. Table 2 shows the percentage duration of stay in Lutumba village by awareness

of warning signals. To reaffirm that there was minimal preparation for the disaster, only one individual respondent said awareness materials such as flyers were issued out.

Table 2: Percentage Duration of Stay in Lutumba Village by Awareness of Warning Signals

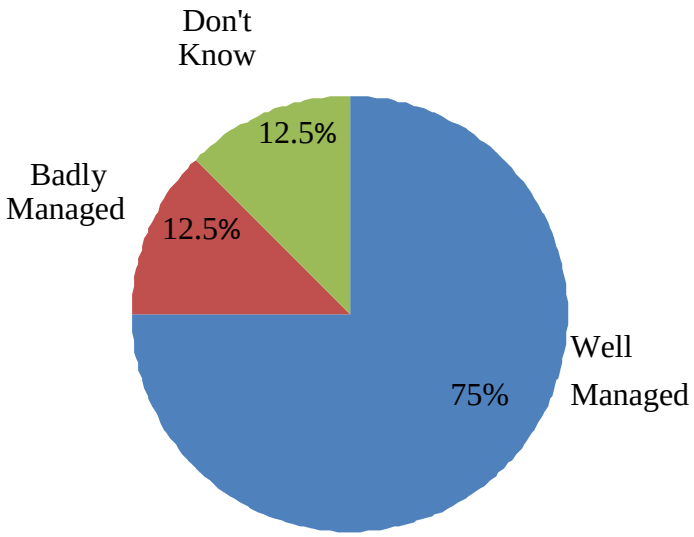
Period of Stay in Lutumba	Warning Signals in the Village		
	Yes	**No**	**Total**
Since Birth	20.8	79.2	100.0
More than 10 Years	23.9	76.1	100.0
Total	**22.2**	**77.8**	**100.0**

Views on the Management of the Disaster

Despite that BeitBridge Civil Protection Committee was not fully prepared for the disaster, a majority of the institutions interviewed, 75% (6) had the opinion that the disaster was well

managed while 12.5% (1) of each said was unsure and badly managed. Figure 3 shows the institutional opinion of how the disaster was managed.

Figure 3: Organizational Opinion of How the Disaster was Managed



The main reasons for asserting that the disaster was well managed are early evacuations, provisions of basic need such as shelter and food, co-ordination of the donor community twined with resource mobilization and conduction of awareness campaigns during and after the disaster. Transportation of victims was done expeditiously and permanent shelter started to be built soon after the disaster.

This averted other subsequent disasters like disease outbreaks such as cholera. However, the organization that felt it was badly managed attributed it to poor access roads. The poor state of the roads could have been exacerbated by the cyclone.

The organization that felt the Beitbridge Civil Protection Committee was ready for the disaster was due to the fact that there was parallel dissemination of information through extensive media coverage and cascading of information through traditional leadership, ward and village committees. The local structures are an effective means of communication at community level.

Given that the majority of the people of Lutumba were not aware of the pending disaster, 99% (99) of the sample, the disaster caught the people unaware. About 98% (97) of the people were not ready to deal with the disaster. Generally the individuals were satisfied with the management of the disaster, 97% (96) felt it was well managed.

The findings showed that the BeitBridge Civil Protection Committee meets at intervals, 50% (4) of organizations said it meets quarterly while 37.5% (3) said they meet once per year and 12.5% (1) said they meet when need arises. Individuals felt the BeitBridge Civil Protection Committee's meetings were very minimal, 99% (98) of them indicated that they neither hold meetings nor issue out flyers. This could be because of the fact that there is more of organizational involvement than the local community members. However, at village level they

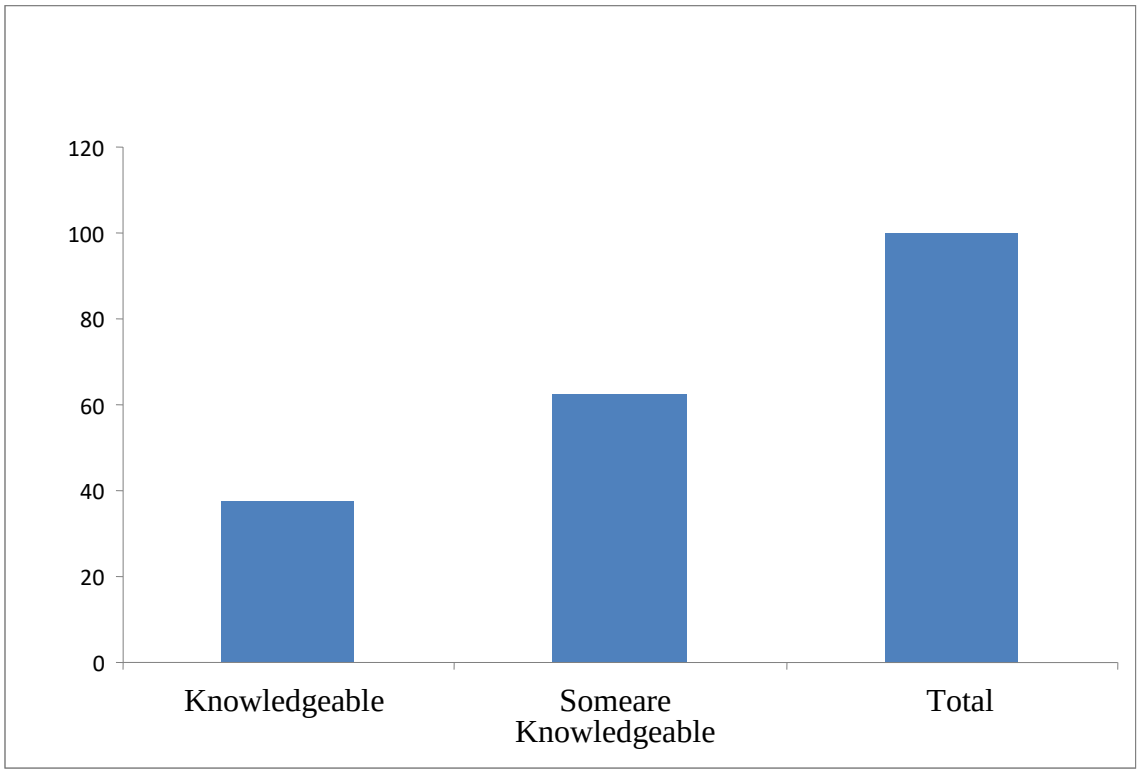
hold disaster awareness meetings, 35.4% (35), hence the need for a strengthened collaboration between individuals and organizations on disaster preparedness and management issues

Knowledge on Disaster Management

All the eight organizations interviewed felt that the Beitbridge Civil Protection Committee members are knowledgeable of disaster management issues, although there are some new members who need training. Figure 4 illustrates the knowledge of members on disaster management issues. Some organizations, 12.5% (1), believe all members got trained and an equal proportion understands that information is transmitted through line management in organizations. The transmission of information through line management suggests that information flows in some organizations. The survey revealed that while all organizations are knowledgeable of disaster management issues, there are some members who were unaware and needs training, especially new staff 62.5% (5). For the old staff there might be need for conduction of refresher courses. One organization (12.5%) highlighted that surveys were carried out for assessment

Figure 4: BeitBridge Civil Protection Committee Members' Knowledge of Disaster Management

%


120
100
80
60
40
20
0
Knowledgeable
Someare Knowledgeable
Total

Chapter 5

Summary Findings and Recommendations

This chapter provides the summary findings of the research with their respective recommendations which are italicized.

1. The survey revealed that there was minimal and weak preparation for the Cyclone Eline disaster. Organizations and individuals interviewed share the same perception.

   BeitBridge Disaster Management Committee should be strengthened and always be prepared for disasters.

2. The Research findings indicate that less than half (35%) of the sampled Lutumba residents were aware of disaster awareness meetings as well as the BeitBridge Disaster Management Plan (41.4%). There was no disaster management plan at community level and no warnings were given to the community before the cyclone struck. This was despite the fact that the Cyclone had struck Madagascar and Mozambique three weeks earlier. However, the Plan is rather comprehensive covering salient issues on disaster management such as communication and transport, evacuation plan and coordination of resources.

   There is need to massively publicize and educate residents of BeitBridge on the BeitBridge Disaster Management Plan and frequently hold disaster management meetings given that the District is a disaster prone area. Villages should also have localized disaster management plans.

3. Awareness of disaster management was fairly well although there some members within organizations still need to be trained on disaster management issues.

   The BeitBridge Disaster Management Committee must establish a disaster management programme for organizational employees and the communities and frequently hold refresher courses.

4. Both organizations and individuals interviewed expressed satisfaction with the disaster management and the synergy created during the disaster by various stakeholders.

   Stakeholder collaboration should be strengthened and maintained for efficient and effective disaster management.

However, it also noted that once the disaster struck, BeitBridge Civil Protection Committee managed the disaster well. This was acknowledged by both organization interviewed and the individuals in Lutumba Village. The BeitBridge Civil Protection Committee did the best with resources it mobilized once the cyclone struck.

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Annexure1

Survey and Self Introductory letter

To Who it may Concern:-

Iam a student at the University of Zimbabwe, doing a research on the Cyclone Eline, which occurred in 2000. I request your assistance in completing the questionnaire which may take about 10 minutes. Please be advised and assured that the information will; be used for academic purposes only and strict confidentiality will be observed on all information collected.

Thank you .

QUESTIONNAIRE FOR BEIT BRIDGE CIVIL PROTECTION MEMBERS(*Circle the appropriate response)*

Were any preparations made by the Beit Bridge Civil Protection Committee prior to the 2000 Cyclone Eline?	Yes	1
	No	2
	Don't know	3
Does Beit Bridge Civil Protection Committee have a disaster management plan?	Yes	1
	No	2
	Don't know	3

2b. If yes, what key issues does the plan cover

Does your organization/ department have disaster management plan?	Yes	1
	No	2
	Don't know	3
To the best of your knowledge, is Beit bridge Civil protection Committee well equipped to deal with disasters?	Yes	1
	No	2
	Don't know	3

_____

4b. If yes, what equipment does it have?_____
_____
_____

5. In your opinion, do you think the Beit Bridge Civil Protection Committee was ready for the Cyclone when it occurred in February 2000?	Yes	1
	No	2
	Don't know	3

5b. If yes, explain why you think it was ready for disaster?_____
_____
_____

6. In any particular year, how often does the Beit Bridge Civil Protection Committee meet to deliberate on disaster preparedness?	Monthly	1
	Quarterly	2
	Half yearly	3
	Once a year	4
	Never meets	5
Do you think the Beit Bridge Civil Protection Committee responded on time to the Cyclone Eline 2000 disaster?	Yes	1
	No	2
	Don't know	3
Once the Cyclone Eline 2000 disaster started, do you think the Beit Bridge Civil Protection Committee managed it well?	Well managed	1
	Badly managed	2
	Not managed at all	3
	Don't know	4

8a. If well managed, explain what makes you think it was well managed?
_____
_____
_____

8b. If badly managed, explain what makes you think it was badly managed
_____
_____
_____

Do you think the Beit Bridge Civil Protection Committee members are knowledgeable in areas of disaster management?	Knowledgeable	1
	Some are knowledgeable	2
	Not knowledgeable	3
	Don't know	4

9b. Explain your answer

_____

_____

_____

Annexure 2

QUESTIONAIRE FOR LUTUMBA RESIDENTS
(Circle the appropriate response)

1. How long have you been staying at Lutumba village?

Yes	1
No	2
Don't know	3

2. What disasters did you experience in your village before the Cyclone in 2000? List the disasters.

3. Do you have disaster preparedness plan in your village for dealing with disasters like Cyclone Eline of 2000?

Yes	1
No	2
Don't know	3

4. As a village, do you have disaster management plan?

Yes am,aware	1
No am not aware	2
Don't know	3

5. Are you aware of Beit Bridge District's Disaster Management Plan?

Yes	1
No	2
Don't know	3

6. Do you ever hold disaster awareness meetings within the village?

Yes	1
No	2
Don't know	3

7. Did Beit Bridge Civil Protection Committee hold awareness meetings and issue out flyers in your village just before the 2000 Cyclone Eline?

Yes	1
No	2
Don't know	3

8. Do you have any warning signals in your village?

Yes	1
No	2
Don't know	3

9. When Cyclone Eline struck Beit Bridge in 2000 ,were there any warnings that you observed about the impending disaster ?

Yes	1
No	2
Don't know	3

10. Would you say the Cyclone Eline disaster caught the village by surprise?

Yes	1
No	2
Don't know	3

11. Once you were aware that the Cyclone Eline 2000 was going to strike, were you ready to deal with it?

Yes	1
No	2
Don't know	3

12. In your opinion, did Beit Bridge Civil Protection Committee manage the Cyclone Eline 2000 disaster well?

Well managed	1
Badly managed	2
Not managed at all	3
Don't know	4

i[i] CSO, Multiple Indicator Monitoring Survey (MMS),2009 – Preliminary Report

Annexure 3

The frequency tables *attached* are SPSS output for each question that was administered.

Frequencies

Statistics

		Q1 HOW LONG HAVE YOU STAYED IN LUTUMBA?	Q2 WHAT DISASTERS DID YOU EXPIRIENCE IN YOUR VILLAGE BEFORE THE CYCLONE 2000?	Q3 DOES YOUR VILLAGE HAVE DISASTER PREPAREDNESS PLAN?	Q4 DOES YOUR VILLAGE HAVE DISASTER MANAGEMENT PLAN?	Q5 ARE YOU AWARE OF BBD'S DISASTER MANAGEMENT PLAN?	Q6 DO YOU E DISASTER AV MEETIN
N	Valid	99	99	99	99	99	
	Missing	0	0	0	0	0	

Frequency Table

Q1 HOW LONG HAVE YOU STAYED IN LUTUMBA?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SINCE BIRTH	53	53.5	53.5	53.5
	MORE THAN 10 YEARS	46	46.5	46.5	100.0
	Total	99	100.0	100.0	

Q2 WHAT DISASTERS DID YOU EXPIRIENCE IN YOUR VILLAGE BEFORE THE CYCLONE 2000?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1.0	1.0	1.0	
	CHOLERA, MALARIA, DROUGHT, TB, HIV/AIDS	3	3.0	3.0	4.0
	MALARIA, DROUGHT, HIV/AIDS,TB, VELD FIRES	3	3.0	3.0	7.1
	ACCIDENTS, CHOLERA, MALARIA, VELD FIRES, LOCUSTS	3	3.0	3.0	10.1
	ACCIDENTS, CHOLERA, MALARIA, VELD FIRES, TB, HIV/AIDS	20	20.2	20.2	30.3

	ACCIDENTS, MALARIA, TB, HIV/AIDS	2	2.0	2.0	32.3
	CHOLERA, DROUGHT, TB, HIV/AIDS	6	6.1	6.1	38.4
	CHOLERA, MALARIA, DROUGHT	2	2.0	2.0	40.4
	CHOLERA, MALARIA, HIV/AIDS, TB	3	3.0	3.0	43.4
	CHOLERA, MALARIA, TB, HIV/AIDS	1	1.0	1.0	44.4
	CHOLERA, MALARIA, VELD FIRES	1	1.0	1.0	45.5
	CHOLERA, MALARIA, VELD FIRES, TB, HIV/AIDS	9	9.1	9.1	54.5
	CHOLERA, VELD FIRES, DROUGHT, TB, HIV/AIDS	1	1.0	1.0	55.6
	DROUGHT, TB, HIV/AIDS, CHOLERA	12	12.1	12.1	67.7

	MALARIA, DROUGHT, TB, HIV/AIDS	14	14.1	14.1	81.8
	MALARIA, AIDS	1	1.0	1.0	82.8
	MALARIA, CHOLERA, TB, HIV/AIDS	11	11.1	11.1	93.9
	VELD FIRES, DROUGHT, TB, HIV/AIDS	5	5.1	5.1	99.0
	VELD FIRES, TB, HIV/AIDS	1	1.0	1.0	100.0
	Total	99	100.0	100.0	

Q3 DOES YOUR VILLAGE HAVE DISASTER PREPAREDNESS PLAN?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NO	99	100.0	100.0	100.0

Q4 DOES YOUR VILLAGE HAVE DISASTER MANAGEMENT PLAN?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	21	21.2	21.2	21.2
	NO	78	78.8	78.8	100.0
	Total	99	100.0	100.0	

Q5 ARE YOU AWARE OF BBD'S DISASTER MANAGEMENT PLAN?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	41	41.4	41.4	41.4
	NO	58	58.6	58.6	100.0
	Total	99	100.0	100.0	

Q6 DO YOU EVER HOLD DISASTER AWARENESS MEETINGS?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	35	35.4	35.4	35.4
	NO	64	64.6	64.6	100.0
	Total	99	100.0	100.0	

Q7 DID BBCPC HOLD AWARENESS MEETINGS & ISSUES OUT FLYERS?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	1	1.0	1.0	1.0
	NO	98	99.0	99.0	100.0
	Total	99	100.0	100.0	

Q8 DO YOU HAVE ANY WARNING SIGNALS IN YOUR VILLAGE?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	22	22.2	22.2	22.2
	NO	77	77.8	77.8	100.0
	Total	99	100.0	100.0	

Q9 WERE THERE ANY WARNINGS THAT YOU OBSERVED ABOUT THE DISASTER?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	1	1.0	1.0	1.0
	NO	97	98.0	98.0	99.0
	DON'T KNOW	1	1.0	1.0	100.0
	Total	99	100.0	100.0	

Q10 DID THE CYCLONE ELINE 2000 CATCH THE VILLAGE BY SURPRISE?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	98	99.0	100.0	100.0
Missing	System	1	1.0		
Total		99	100.0		

Q11 WERE YOU READY TO DEAL WITH IT ON STRIKING?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	1	1.0	1.0	1.0
	NO	97	98.0	98.0	99.0
	DON'T KNOW	1	1.0	1.0	100.0
	Total	99	100.0	100.0	

Q12 DID BBCPC MANAGE THE CYCLONE ELINE 2000 DISASTER WELL?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	WELL MANAGED	96	97.0	98.0	98.0
	NOT MANAGED AT ALL	2	2.0	2.0	100.0
	Total	98	99.0	100.0	
Missing	System	1	1.0		
Total		99	100.0		

		Q1 WERE ANY PREPARATIONS MADE BY BBCPC?	Q2 DOES BBCPC HAVE A DISASTER MANAGEMENT PLAN?	Q2b IF YES, WHAT KEY ISSUES DOES PLAN COVER?	Q3 DOES YOUR ORG HAVE DISASTER MANAGEMENT PLAN?	Q4 IS BBCPC WELL EQUIPPED TO DEAL WITH DISASTERS?	Q4b IF YES, WHAT EQUIPME HAVE?
N	Valid	8	8	8	8	8	
	Missing	0	0	0	0	0	

Annexure 4

Frequency Table

Q1 WERE ANY PREPARATIONS MADE BY BBCPC?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	1	12.5	12.5	12.5
	NO	7	87.5	87.5	100.0
	Total	8	100.0	100.0	

Q2 DOES BBCPC HAVE A DISASTER MANAGEMENT PLAN?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	7	87.5	87.5	87.5
	NO	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Q2b IF YES, WHAT KEY ISSUES DOES PLAN COVER?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	25.0	25.0	25.0
	COMMUNICATION CHANNELS, EVACUATION PLAN	1	12.5	12.5	37.5
	COORDINATION OF RESOURCES	1	12.5	12.5	50.0
	DISASTER PROFILE, PREPAREDNESS, RESPONSE PLAN	1	12.5	12.5	62.5

	RESPONDING MECHANISM, AREAS PRONE TO DISASTER, HISTORY OF DISASTERS	1	12.5	12.5	75.0
	ROAD ACCIDENTS, FIRE PROTECTION,DISEASES, FLOODS, FAMINE, DRAUGHT	1	12.5	12.5	87.5
	STRUCTURE OF COMMITTEE, TRANSPORT, SATTELITE PHONE FOR USE	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Q3 DOES YOUR ORG HAVE DISASTER MANAGEMENT PLAN?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	4	50.0	50.0	50.0
	NO	3	37.5	37.5	87.5
	DON'T KNOW	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Q4 IS BBCPC WELL EQUIPPED TO DEAL WITH DISASTERS?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	1	12.5	12.5	12.5

	NO	7	87.5	87.5	100.0
	Total	8	100.0	100.0	

Q4b IF YES, WHAT EQUIPMENT DOES IT HAVE?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		7	87.5	87.5	87.5
	FIREFIGHTING MACHINERY, CONSTRUCTION VEHICLES	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Q5 DO YOU THINK BBCPC WAS READY FOR THE CYCLONE 2000?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	1	12.5	12.5	12.5
	NO	7	87.5	87.5	100.0
	Total	8	100.0	100.0	

Q5b IF YES, HOW DO YOU THINK IT WAS READY?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		7	87.5	87.5	87.5
	MEDIA, VIDCOS,WARDCOS, TRADITIONAL HEADS	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Q6 PER YEAR, HOW OFTEN DOES BBCPC MEET TO DELIBERATE PREPAREDNESS?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	QUARTERLY	4	50.0	50.0	50.0
	ONCE A YEAR	3	37.5	37.5	87.5
	WHEN NEED ARISES	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Q7 DID BBCPC RESPOND IN TIME TO CYCLONE ELINE 2000 DISASTER?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	3	37.5	37.5	37.5
	NO	5	62.5	62.5	100.0
	Total	8	100.0	100.0	

Q8 DID BBCPC MANAGE THE DISASTER WELL?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	WELL MANAGED	6	75.0	75.0	75.0
	BADLY MANAGED	1	12.5	12.5	87.5
	DON'T KNOW	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Q8a WHAT MAKES YOU THINK IT WAS WELL MANAGED?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	25.0	25.0	25.0
	EVACUATIONS DONE IN TIME, TEMPORARY SHELTER, FOOD, BLANKETS PROVIDED, STRONG PERMANANT STRUCTURES IN SOME CASES	1	12.5	12.5	37.5
	EVERYTHING WAS IN PLACE	1	12.5	12.5	50.0
	NGOS WERE MOBILISED TO ASSIST WITH TEMPORARY SHELTER, BLANKETS, FOOD ETC	2	25.0	25.0	75.0
	RESOURCE SMOBILISED, DONATIONS, TRANSPORT, TENTS, BRICK HOUSES BUILT QUICKLY, MOPUP FOR REHABILITATION, AWARENESS CAMPAIGHN DURING AND AFTER	1	12.5	12.5	87.5
	TEMPORARY SHELTERS ERECTED, TRANSPORT TO FERRY PEOPLE	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Q8b WHAT MAKES YOU THINK IT WAS BADLY MANAGED?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		7	87.5	87.5	87.5
	POOR ACCESS ROADS	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Q9 ARE BBCPC MEMBERS KNOWLEDGEABLE IN AREAS OF DISASTER MANAGEMENT?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	KNOWLEDGEABLE	3	37.5	37.5	37.5
	SOME ARE KNOWLEDGEABLE	5	62.5	62.5	100.0
	Total	8	100.0	100.0	

Q9b EXPLAIN HOW KNOWLEDGEABLE OR NOT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	ALMOST ALL GOT TRAINED	1	12.5	12.5	12.5
	INFORMATION TRANSMITTED THROUGH LINE MANAGEMENT	1	12.5	12.5	25.0
	SOME NEW MEMBERS NOT TRAINED	5	62.5	62.5	87.5
	SURVEYED WERE CARRIED OUT FOR ASSESSMENT	1	12.5	12.5	100.0
	Total	8	100.0	100.0	