AN ANALYSIS OF THE IMPACT OF CONTINUOUS EXTERNAL SUPPORT ON COMMUNITY RESILIENCE IN SINANSENGWE COMMUNITY IN BINGA DISTRICT IN ZIMBABWE

By

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2007120153

Submitted in partial fulfillment of the requirements for the degree

Master's in Disaster Management

Disaster Management Training and Education Centre for Africa

At the

UNIVERSITY OF THE FREE STATE

BLOEMFONTEIN

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November 2010

DECLARATION

I, THABO NDLOVU the undersigned, hereby declare that the work contained in this dissertation was produced by me, and all sources used or quoted have been indicated and acknowledged. This is the first time such a paper has been submitted by me or any other person for the scholastic purposes at any university.

However, it should not be published without my consent.

Signature é é é é é é é é ..

Date é é é é é é é é é é

ABSTRACT

The research was conducted to analyze the impact of continuous external support on community resilience in Sinansengwe ward of Binga District in Zimbabwe. The research sought to evaluate the extent to which free handouts contribute to reducing or increasing community resilience to drought.

The Tonga people lost their valuables through forced resettlement, which did not benefit them at all. Project authorities forcibly removed them from the river valley and soldiers killed those who resisted eviction from their homes. The main research objective was to assess the impact of continuous provision of food and agricultural aid on the resilience against drought in Sinansengwe. The consulted literature revealed that resilience meant putting greater emphasis on what communities could do for themselves; how to strengthen their capacities, rather than concentrating on their vulnerability to disaster or their needs in an emergency. The information regarding the research was gathered from NGOs operating in the area, government departments, free handouts, beneficiaries and non-beneficiaries.

Questionnaires, interviews and observations were tools applied in collecting data that were presented in graphs and diagrams. Ideas, themes, trends, and SPSS were applied to analyze the data. The major findings revealed that the Sinansengwe community relied mostly on mixed farming, constituting crop rain-fed and livestock farming. However, drought had devastating consequences regarding their livelihoods activities. Children were no longer going to school and development agencies worsened the situation through food aid that weakened their livelihood activities. The research recommended capacity-building programmes to equip potential beneficiaries with decision-making skills to manage their destiny, and the introduction of micro finance programmes.

ACKNOWLEDGEMENTS

The research is the result of the collective effort and experience of all the people involved. I want to express my sincere gratitude and acknowledgement to the following:

- The Sinansengwe community for participating in this research.
- Development agencies Save the Children UK, CADEC, Binga Rural District council and Christian Care.
- The Project Supervisor, Mr A. Jordaan.
- My late wife, Sithabile Phakathi, for encouraging me to pursue this research.

ACRONYMS

AIDS	Acquired Immunodeficiency syndrome
ANSA	Alternative to Neo-liberalization in Southern Africa
AREX	Agriculture Research and Extension Services
BNA	Basic Need Approach
CADEC	Catholic development commission
CAMPFIRE	Communal Area Management Programme for Indigenous Resources
CRS	Catholic Relief Service
FAO	Food and Agriculture Organization
HIV	Human Immunodeficiency Virus
ICRISAT	International Crop Research Institute for Semi-arid Tropics
IDNDR	International Decade for Natural Disaster Reduction
IFAD	International Fund for Agricultural Development
IFSD	International Studies for Sustainable Development
IMF	International Monetary Fund
NGOs	Non-governmental organizations
PAC	Pan African Conference
UNDP	United Nations Development Programme
VET	Veterinary
ZIMVAC	Zimbabwe Vulnerability Assessment Committee

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CHAPTER 1

INTRODUCTION

1.1Introduction

The World Vision Disaster Preparedness plan (Asia Pacific, 2010) explains that communities have the capacity to develop and implement plans. Communities have the skills that need to be strengthened to mitigate, manage and respond to possible disasters. It also argues that communities affected by hazards have limited participation in programming leading to provision of aid, which is not need driven. This also results in communities being treated as objects, which makes it difficult for them to define their destiny. Holling (2001 & 2004) indicated that resilience focuses on the ability of an individual or community to bounce back from adversity. Hollingôs theory on resilience considers the key issues of adaptive capacity and ability of social systems to learn and adapt in response perturbations. Participation provides the much needed experiences
in dealing with adversity and facilitate quick response and ensure communities bounce back to pre disaster situation.

The World Bank in an effort to eradicate poverty developed a Basic Need Approach (BNA) concept in the seventies following a series of disasters. Streeten (1989) explores the BNA concept as development which ensures that all humans have the right to full life, this entails accessing basic resources such as seed to sustain life. The right to life can be attained when the affected is given a chance to air his/her views and expectations. The objective of recovery is to eradicate poverty "which" in this context (poverty) is defined as inability to meet certain basic human needs.

The approach means the poor themselves define and control their own struggle, and have the right to decide on the resources that alleviate poverty within their locality. This dissertation conducted an in-depth review of literature to determine the factors contributing to building

resilience in Sinansengwe community. The hypothesis assumes that there is resilience to hazards within Sinansengwe community because of multiple factors.

Chapter 1 discusses the research background related to an analysis of the impact of continuous external support on community resilience in Sinansengwe ward of Binga District in Zimbabwe (see Annex C). The research aims, objectives, and research questions are also stated as well as research assumptions.

1.2 Background – Sinansengwe Ward

Sinansengwe ward is found in Binga District, which lies in the Northern side of Matabeleland Northern Region where the Zambezi River (Lake Kariba) marks the boundary between Zambia and Zimbabwe. The sparsely populated ward (5 566 people according to 2002 population draft census report with 870 households) is surrounded by Chizarira National Park (1640 sq km) to the east and Chete National Park (1341sq km) to the west and towards the Zambezi river. The figures mark a remarkable increase in population by 29%, since the 1992 census pegged it at 3 949 and distributed among the five distinct villages of Chitete, Mucheni, Makondo, Malindi, and Siakabinga Chitete. The National Park prevents the Sinansengwe population from accessing water, fish and other resources from the mighty Zambezi River.

There are four types of vegetation found in the ward, namely riparian forests, alluvial woodlands, dry forests, thickets and Mimbo woodlands. The ward falls in natural region five. The majority of the inhabitants are the Ba-Tonga ethnic group who were forcibly removed from the Zambezi Valley in 1950s to give way to the construction of the present Lake Kariba. No material or financial support was rendered to them during the eviction from the valley.

According to Basilizwi's (2003) report, the Tonga people lost their valuables through forced resettlement, which did not benefit them at all and project authorities forcibly removed the Tonga people from the river valley. Soldiers killed those who resisted eviction from their homes. The Gwembe Tonga on the Zambian side and the Zimbabwean Tonga are one, but due to separation brought about by the dam they are now considered different people.

Their languages have become slightly different over the years. Some no longer speak Tonga as a result, of the fact that the people were resettled in new areas that are arid, with no institutions such as schools, clinics and basic infrastructure (Basilizwi Report, 2003).

The ward does not have its own secondary school, but relies on Siabuwa Secondary located 40km and Binga High school located 65km from the ward respectively (Zimbabwe Developing Communities Report (2006). The report also explains that, there are three primary schools in the ward, namely Mucheni, Sinansengwe and Chitete. The Binga Education report (2007) indicates that the three primary schools have a total enrolment of 1 450 pupils (775) girls and 675 boys).Most children rarely proceed to secondary education due to distance and lack of food as most resources are diverted towards meeting household food insecurity.

The illiteracy level is high according to Three-Year Rolling Plan 2002-2004 (2001:18) by Binga Rural District Council (2001). The ward has an illiteracy rate soaring at 67% when the national average stands at 50%. Owing to high illiteracy rates, the community has limited skills and knowledge to stimulate the development processes of their area that would address their needs.

The ward has no rural health centre according to Binga Rural District profile, save for one under construction by Zimbabwe Developing Communities Programme. The institution, if completed, will improve access to health services; facilitate early treatment and provision of information at any given time reducing complications, which may arise because of distance and late treatment. According to Binga District Report (Health 2005), the district malaria incidence rate was 209.6 / 1 000 population compared to 586.3 / 1000 population in 2004. Sinansengwe ward was hit hard by malaria in 2005.

The report (Binga District Health Report, 2005) further explains that an evaluation of malaria control activities in Sinansengwe ward show that most members of this community travel long distances to the nearest health facilities (40km) resulting in clients seeking treatment late. This leads to a high number of complicated cases and mortality due to malaria and other diseases.

Geologically, the ground consists of sedimentary rocks and sandstones. The soils are mostly poor for cultivation regosols (sandy and more or less useless), lithosols shallow stony, highly erodible, and unusable for agriculture) and sodic soils (attractive soils until the B-horizon is

exposed when they also become useless) (GOFRN, 1960; Gore *et al.,* 1993; Taylor, 1988 as cited by Dahl, 1997). However, the southwestern part of the district, covering Lusulu, Dobola and Lubimbi, and classified as Natural Region 4, has somewhat better rainfall (Mbetu & Conyers, 1994) although the bulk of the area is in the protected areas of Chizarira National Park and Mzola forest.

Sinansengwe ward suffers from a great deal of food deficit attributed to low rainfall, compounded by limited arable land and patch arable soils according to Mwaramba and Associates (2001). The ward has two main seasons ï the dry warm winters and the hot wet summers. The temperatures are high and rainfall quite unreliable.

Figure 1 shows the annual rainfall pattern for the period 2001 to 2009 seasons. With a range of 905mm, mean of 642 mm and standard deviation of 307, perhaps, indicates how uneven and severe the rainfall distribution is. Mid season, dry spells occur in January each year ranging from four to six weeks. The mean annual temperature is about 25°C with a range of 14°C to 38°C. These climatic conditions of low rainfall and high temperatures coupled with poor soils make cropping a risk venture (Chiduzha, 1987) hence the problems of chronic food shortages.

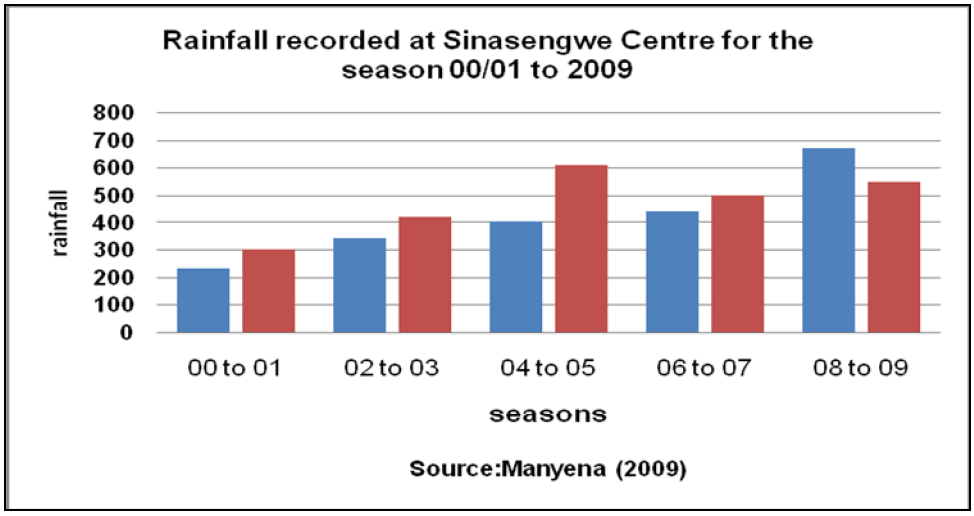

Figure1.1 Rainfall recorded at Sinansengwe Centre for the season 00/01 to 2009

Average annual yields per household range from two to three bags on the allocated five acres of arable land. This is confirmed by research conducted by Mwaramba and Associates (2001). The Sinansengwe community, as a result, has been reduced to perpetual beggars and depends on handouts from government or non-governmental organizations for food. The ward inhabitantsô agricultural activities are based on subsistence farming from limited arable land dotted across the vast undulating rocky landscapes and flood plains. Much of this rain comes late into the farming season mainly December to January. According to Mwaramba and Associates (2001), of the population that depends on agricultural activities, 16% own cattle, which could be used as draught power and eight percent own ploughs. Thus, the majority of the households use traditional hoes for cultivation and this contributes to low yields as limited acreage is covered.

The Agriculture Extension (2004) department pointed out that 95% of these farmers harvest between two to three bags of millet or sorghum per year and this is far from being sufficient for domestic consumption. It necessitates the need for external aid as the harvest cannot sustain them to the next season. The community of Sinasengwe continues to experience household food insecurity despite efforts by Government and non-governmental organizations through the provision of food handouts and agriculture inputs. The community remains vulnerable to drought and in most cases, most children fail to go to school as resources are diverted towards procurement of food.

Community continues to lose livestock through barter trade as they try to cushion themselves. In year 2008 members of Sinansengwe exchanged a goat for 5-10kg of mealie meal. Crop production in the area has gone down as farmers have lost their valuable varieties due to drought. Floods are a rare phenomenon, except for the year 2000 floods destroying small dams further worsening lives of people and affecting livestock production.

The shortage of local seed has led to communities failing to plant on time. The Government of Zimbabwe through the Grain Marketing Company and AREX and non-governmental organizations have also assisted with agriculture inputs (sorghum, maize and fertilizer) though distributions are at times done well into the season. The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) (2001) in an effort to support small grains crop production implemented a programme on micro dosing with Ammonium Nitrate.

The Zimbabwe Behavioural Change Strategy (2006) believes that the impact of HIV and AIDS has also affected agriculture activities as families dispose most of their assets (including livestock for draft power) in trying to cure the infected. People living with AIDS cannot provide the much-needed labour, and in some instances, members of the community fail to go to the fields while providing care to the infected. Draft power problems have worsened the plight of this community as they fail to plant on time and maximize on water. Hence food has become scarce and communities are forced to move to other areas in search of food.

Food aid programmes implemented in the area are perceived to be potential sources of dependency with some communities reluctant to work hard to improve their lives. Communities sell seed and fertilizer to neighbouring Zambia while some consume seed due to starvation according to Save the Children Report (2006).

1.3 Statement of the Problem

The provision of food and agriculture inputs dating back to 1982 have not addressed the problems of food and seed insecurity in Sinansengwe ward. Communities continue to lose assets in trying to meet food deficits. In some cases livestock is exchanged for a few bags of maize (in year 2008, 100kg of maize grain was being exchanged for a steer/heifer) making them more vulnerable to future disasters. Despite Government responses through the Grain Marketing Board and non- governmental organizations such as Save the Children (UK), Catholic Development Commission and Christian Care to mitigate drought impact, the number of people requiring food and seed assistance continues to rise (Save The Children Uk, 2005).

Communities of Sinansengwe continue to suffer from the effects of drought because of its magnitude. Decapitalization is experienced yearly and the communityôs standard of living is yet to improve as evidenced by critical food shortages, limited seed reserves, high school dropouts, dwindling livestock numbers (Binga District Veterinary Report, 2005) despite implementation of relief aid.

1.4 Justification of the Study

The Sinansengwe community has received food and seed aid dating back to 1982 and to date there has been little evidence to support the effectiveness of the interventions.

- The research seeks to identify the possible reasons why the community of Sinansengwe's level of resilience continues to dwindle, in view of recommending the best interventions that address community needs.

- The research will enable development agents to review their interventions and ensure they do not promote dependency, which might be one of the reasons why communities are reluctant to employ their own coping mechanisms to meet their needs.

- The research will also provide the basis for recommendations of best intervention that are compatible with Sinansengwe community.

- The research will inform participants of their strengths and weaknesses and highlight potential problems that result when aid is withdrawn prematurely or when long overdue.

- The research will also inform on best project implementation practices that will promote ownership, develop community capacity to withstand and contain future adverse conditions.

1.5 Objective of the Study

The objective of the study is to assess the impact of continuous provision of food and agriculture aid on community resilience against drought in Sinansengwe. The following sub objectives apply:

- To establish the extent to which external support has reduced and benefited the community of Sinansengwe.

- To determine the level of dependency on free handouts, and the effects of free handouts on community coping skills.

- To establish community priority programmes that enhance recovery and promotes resilience.

- To identify challenges leading to slow progress of community recovery, community involvement, in need identification and problem analysis.

The following assumptions were made from these objectives that vulnerability levels continue to rise as evidenced by the number of people requiring assistance from the World Food Programme through Save the Children (UK) Report (2005). The reliance on food handouts has entrenched dependence syndrome in the poverty-stricken population, and increased its vulnerability to drought shocks because of its magnitude. The assumptions made were that distribution of free handouts (food and seed) must be guided by an assessment to avoid promotion of dependency thereby undermining community coping abilities and potential to manage the hazard despite its magnitude. To substantiate the assumptions made, the following questions are posed:

- What is the impact of provision of food and agriculture aid on the resilience against drought in Sinansengwe?

- To what extent has food aid and agriculture input programmes reduced community vulnerability?

- Has the provision of agriculture assistance to Sinansengwe community improved household food security and enhanced resilience?

- How dependent is the community on external support?

1.6 Research Questions

The data collection instruments solicited answers from key informants and asked questions on the benefits of external support and to whom they accrue. The location of the area in relation to problems encountered will be explored by the research. The research sought more information on the effects of aid on community coping skills and the extent to which external support has benefited the community. Since the research is concerned with community priority interventions that enhance its recovery, questions will be asked on their participation in project identification, implementation and evaluation. The challenges experienced by communities in addressing their needs ought to be clarified and possible solutions recommended. The research will also seek to establish when aid is distributed, the impact of timing of the aid on their ability to contain the effects of the hazard.

Questions on the mode of distribution of aid as a vehicle of promoting resilience will also be asked. The research will seek to know whether aid is distributed freely or communities contribute a certain percentage before they receive aid. Some of the research questions that may be asked include, whether the community of Sinansengwe require agriculture and food assistance to enhance its resilience. The questionnaire will also contain questions on what people or the community think could be done to right the wrongs brought about by the continued external support and if there is possibility to enhance effectiveness of aid.

1.7 Research Methodology

The research relied on participatory rural appraisal technique to gather primary data, where focus group discussions, face-to-face interviews and questionnaires were administered with the help of enumerators. There were 22.8% (200 households) identified through random sampling to ensure every member of the ward had an equal chance of being chosen, and for the research to be reflective of the community views. The random sampling technique is simple to use and easy to apply when small populations are involved, though it is cumbersome for large populations. Each household was numbered and this was used to select the required sample.

Focus group discussions were also applied in gathering data at ward level where community members with different portfolios were involved. Those included the traditional chiefs,

beneficiaries of food aid, agriculture inputs and non beneficiaries. Face-to-face interviews were held with development agencies of both government and non-governmental organizations. A selected number of beneficiaries and non-beneficiaries of the external assistance were also included when conducting face-to-face interviews. The process sought to obtain information at household level on development activities being implemented, their benefit and community level participation in prioritizing interventions.

Questionnaires were administered especially to those not easily reachable during normal working hours as that saved time and ensured their views were taken into account during the research. This method was less costly than face-to-face and a larger sample size was reached enhancing the chances of making results more reliable (though replies were not guaranteed). Five Research Assistants were employed to assist with data collection, and those were inducted prior to ensure questions were interpreted the same. Secondary data were archives, provincial and district offices, rural district council, survey maps and reports from previous studies.

1.8 Assumptions

The community would positively participate in information gathering and devote much of their time throughout the implementation of the research project. The hyperinflationary environment prevailing would improve and ensure the allocated budget for enumerators would remain viable.

1.9 Definition of Terms

Resilience is the process of adapting well in face of adversity, trauma, tragedy, threats, or other significant sources of stress, according to Sheila Emerson Kelly (2001). It is the capacity to bounce back.

Resilience refers to capacity of a system, community potentially exposed to hazards to adapt, by resisting or changing in order to reach and maintain an acceptable level of functioning and structure. *Vulnerability* defines conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of a community to the impact of disasters (Imrie & Moore, 1997).

Risk is the probability of harmful consequences or expected losses (deaths, injuries, livelihoods, economic activity disruption and environmental damage) resulting from interactions between natural or human-induced hazards and vulnerable conditions (Ben Wisner, 2004).

Hazard is defined as the potential occurrence in a specific time period and geographical area, of a natural phenomenon that may adversely affect human lives, property or activity to the extent of causing a disaster (Bethke, 1997).

Disaster is defined as a serious disruption of the functioning of a community causing widespread human, material, economic or environmental losses which exceed the ability of the affected community to cope using its own resources (Ben Wisner, 2004).

Disaster Mitigation is a collective term used to describe structural and non-structural measures undertaken to limit the adverse impact of natural hazards, environmental degradation and technological hazards (Basabe *et al.,* 1998).

Capacity is defined as a combination of all the strengths and resources available within a community or organization that can reduce the level of risk or the effects of a disaster (Bonnard *et al.,* 1996).

According to Streteen (1989), poverty refers to the inability to meet certain basic human needs. Bennett (2001) argues that dependency occurs when interventions aimed at meeting current needs reduce the capacity of recipients to meet their own needs in future.

1.10 Delimitations of the study

The study focused on effects of continued distribution of relief assistance to communities within the boundaries of Sinansengwe. Since most development agencies stay outside the ward, face-to-face interviews were held with district staff to solicit more information regarding their operations. Traditional leaders were also part of the key informants, providing the much-needed information as they might feel the research would interfere with ongoing intervention given their level of vulnerability.

1.11 Limitations of the Study

The collection of information especially regarding food and agriculture requires authority, which might not be granted easily for political reasons. The researcher used extension workers as research assistants to collect data as outsiders might create suspicion within the local leadership. The uncertainty over performance of the economy might present some limitations, as the allocated budget would be eroded by inflation hence budgeting in American dollars.

1.12 Summary

Chapter 1 described the background to the study, the research problem, research questions and objectives. The chapter also discussed the research limitations, hypothesis and delimitations have also been explained. The chapter concluded by describing the route followed in the research through the dissertation structure. Chapter 2 reviewed related literature that was in form of a survey, which is appropriate by being economic, and yet it facilitates data collection over a large group of individuals. The dissertation begins with the methodology of the study. This is followed by the review of literature on the factors that affect nursing shortage. It presents recent statistics on the gravity of the problem. The dissertation concludes with a discussion section, which discusses possible solutions to the factors contributing to the reliance on food handouts, and increased its vulnerability to drought shocks because of its magnitude. The dissertation then reviews how community members in Sinansengwe are coping with food shortages and other hazards in their area as well as their strategy to deal with this situation.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Chapter 1 discussed the research aim, objectives, boundaries of the research, significance as well as limitations of the study. Chapter 2 focuses on areas of Community participation in decision-making and implementation of projects that build resilience and concepts that are relevant to the research topic. Some of the aspects covered by this chapter include:

- Community participation in decision-making and implementation of projects building resilience.
- Employment and income relationship with resilience.
- Effects of free handouts (food, agriculture inputs)on community resilience.
- Promoting community resilience through vulnerability and capacity assessments.
- Impact of HIV/AIDS on community resilience.
- Resources and infrastructure support on resilience.
- Inflexibility of aid affecting resilience.
- Timing of aid.
- Climate change impact on resilience.

2.2 Community Participation

According to World Vision Disaster Preparedness Plan (Asia Pacific, 2010) communities have the capacity to develop and implement plans meaning they have the skills which need to be strengthened to mitigate, manage and respond to possible disasters. The limited participation by the affected misinforms programming implementation of projects that are need-driven.

According to Holling (as cited in Sybert & Steward, 1997) resilience focuses on the ability of an individual or community to bounce back from adversity. Hollingôs theory on resilience considers the key issues of adaptive capacity and ability of social systems to learn and adapt in response to perturbations. Participation will provide the much-needed experiences to the affected in dealing with adversity and facilitate quick response ensuring communities bounce back to pre disaster situation.

The World Bank, in an effort to eradicate poverty, developed a basic need approach (BNA) concept in the seventies following a series of disasters. Streeten (1989) explores the BNA concept as development which ensures that all humans have the right to full life; this entails accessing basic resources such as seed to sustain life. The right to life can be attained when the affected is given a chance to air his/her views and expectations. This emphasizes the need not to decide programmes on behalf of the affected, but create a platform to enable them to express themselves and identify projects relevant to their situation.

Dworken and Horsen (2003) write that participation enhances feelings of control, meaning and connectedness, and that it contributes to building resilience and competencies in people as well as supporting several developmental processes. The involvement provides an opportunity to get an insight into their own problems and initiate locally adaptable solutions, which are cheaper and easy to manage. The interventions should be chosen by communities, taking into account their weaknesses, strengths and material resources available to sustain such interventions after the withdrawal of funding by donors.

The 7th Pan African Conference held in Johannesburg between 19-22 October 2009 emphasized that governments, regional and global international organizations NGOs, private sector and donors from around the world could support the achievement of community priorities and objectives through programmes which reflected the role of communities in designing and delivery of effective solutions.

According to Zimbabwe Developing Communities Report (2001), despite the amount of aid poured through government and NGOs into the Sinansengwe community to mitigate the impact of drought, the level of preparedness and resilience continued to dwindle. There were minimal

consultations during drawing of programmes for the area hence the proposal to decentralize service delivery.

The level of poverty makes it quite impossible for beneficiaries to resist any form of aid whether addressing their needs or not. The acceptance by the community of any form of aid has led to development agencies ignoring the importance of community participation when designing and implementing projects. The participation by communities is driven mainly by the need to acquire scarce resources without a careful analysis of the consequences, which continue to make them more food insecure despite provision of agriculture inputs according to Pan African Conference (2009).

The Pan African Conference (2009) further elaborates that communities inherit programmes which they do not understand, and at times with little or no capacity to handle the demands of the interventions. Participation will also facilitate and provide an opportunity for development agents to analyze community demographics, and ensure that projects will be easily accepted and implemented taking into account community composition. With reference to the Pan African Conference (2009), development agencies need to consider Sinansengwe community during planning and offer them an opportunity to prioritize needs, which are relevant to their economic and social development.

Freire (1995) indicates that the poor are creative and capable. Therefore this means that the affected must be given a chance to participate in decision-making and decide what they consider to be best to address their problem. This further explains the importance of critically looking at those issues the community speaks about most with excitement, hope and fear when identifying projects and the implementation strategies. This assists in the comprehending of the perception of the affected, and also informs of the importance a community attaches to the challenges that confronts it. This view is also supported by the international Decade for Natural Disaster Reduction (IDNDR 1994), which says *"community involvement should be actively encouraged in order to gain greater insight into individual and community for both development and risk"*. It explains the need to understand social dynamics of hazard-prone areas, their behaviour, and interaction with the environment when planning and implementing recovery initiatives.

Community involvement will enable one to determine issues, which favor and hinder prevention and mitigation of drought mostly caused by continuous distribution of inputs without careful analysis of their needs and aspirations. Communities should be involved in the planning of projects as this takes into account their problems, needs and priorities when addressing their concerns.

Swanepoel (1997) indicates that community development actions start at grass roots level and needs beneficiaries to participate as this facilitates needs identification and possible alternatives to the problem. Swanepoel further encourages development agents to exercise participatory approaches to when analyzing beneficiary capabilities and abilities as well as taking into cognizance the environmental conditions leading to development of sustainable ways of meeting community needs.

While general distributions of inputs is most favoured or applied by many organizations, it is critical that beneficiaries receive inputs they are well versed with and preferred for maximum utilization and easy adaptability to the environment. The community of Sinansengwe community has to be accorded a chance to contribute and be self-productive and enhance their economic well being through the implementation of sustainable projects. Communities are gradually becoming destitute as their strengths are not supported and very often, they are not offered a chance to express their potential to fail or succeed and emerge better tomorrow according to Catholic Relief Services (CRS) and International Crop Research Institute for Semiarid (2002).

Tropics (2002) says ó*Agricultural Recovery in Africa maintains that farmers have the right to select aid of their choice'* and this supports the fact that poor farmers are capable of making their own decisions, and it also emphasizes the need not to treat farmers as just recipients.
Huntington (1990) explains that local people need to be treated as ó*world's leading authorities'*. This means that capacity builders should assist potential beneficiaries, but realize the importance of exercising choice to manage their own destiny. The authority of the community to decide what is best for them is being overlooked and aid is decided without them expressing their desire for the intervention. The author (Huntington) further points out how choice builds resilience as farmers select interventions taking into account their strengths and weaknesses.

Elasha (2009) agrees that participatory bottom-up approaches are essential to successfully engage risks groups in decision-making processes. This will enable communities to gain better understanding of their vulnerabilities, priorities, and adaptation needs leading to design and implementation of locally adaptable solutions. The bottom-up approach will also facilitate cooperation within the community, mobilization of local resources and indigenous knowledge. According to Grassroots International (2007) the participation of grassroots women has developed innovative solutions that address practical problems of shelter, credit, livelihoods and basic services; all of which lie at the intersection of resilience and development.

Grassroots International further argues that participation will facilitate the involvement of vulnerable groups such as children and women and how their needs and aspiration will be catered for by the interventions. Participation also provides a platform to clarify roles of males, females and children, and how projects will influence their levels of vulnerability.

Governance and Social development Resource Centre (2008) argues that while it may be unrealistic to aim for community participation in the initial relief phases, it is important that communities are included in the design and implementation to encourage ownership of the planned recovery processes. The challenge with recovery processes is that they receive limited support and local coping strategies such as woodcarving, fishery and water harvesting technologies. Winter and summer cropping rarely receive support, but instead readymade interventions are imposed.

Community participation, though critical, has in some instances been captured by the elites, leaving out the most vulnerable. This leads to implementation of interventions not representative of the community needs but those of certain influential individuals. Such projects are not sustainable and rarely receive community support; some of which may even fail to complete. Participation of beneficiaries also opens up channels of communication through which communities can channel their grievances, and approach relevant authorities to facilitate timeous interventions.

'People are agents for change' says Alternative to Neo-liberalization in Southern Africa (ANSA) (2007) this can only happen through daily struggle as people defend their own right to life with dignity. Programming should endeavour to make communities independent, truly

developmental, accountable through enhanced active involvement in programme design and implementation. The International Strategy for Disaster Reduction (2008) says sustainability of interventions at community levels depends on local culture, knowledge and indigenous practices and resources that combine with new ideas to generate innovation. This emphasizes the need for development practitioners to understand and use indigenous knowledge as an effective tool when reducing risks to hazards.

Preventive measures are most effective when they involve participation at all levels from local community through the national governments to the regional and international level (IDNDR, 1994). This is critical in building resilience, as locals understand better their opportunities and constraints. Failure to involve communities often lead to top down disaster risk management, which ignores the potential of local resources and capacities. Involvement of communities will also take into account different individuals within the community and their different vulnerabilities and capacities.

Community participation can be enhanced through decentralization, which offers rural people a chance to influence decisions regarding natural resource management and planning. Coulibaly and Hilhorst (2004) suggest that challenges remain with respect to the need for greater transparency, accountability and communication. The powers to make decisions at local levels influence resilience as relevant and locally adaptable decisions are made to promote quick recovery. External aid has been viewed as almost driven by externally imposed ideas, which at times focus on paying allowances to beneficiaries after a meeting and this works against the spirit of resilience.

The power to make choices, reach decisions and engage in socially effective actions is influenced by the level of personal empowerment derived from decentralization according to Germain (1991). Participation of the poor would enable them to choose community leaders, identify and articulate their needs, to prioritize and to mobilize local resources towards community development. Gajanayake (1993:4) emphasizes that community development approaches must be based on the assumption that development starts at grassroots level and the initiative, creativity and energies of the people can be utilized to improve their own lives using democratic processes and voluntary efforts.

2.3 Employment and Income Relationship with Resilience

Income is one of the safety nets and provides an important cushion when faced with risks to livelihood according to USAID (2007). The community of Sinansengwe community bears all these risks as opposed to those in cities who transfer risks to public and private institutions through insurance schemes.

The low levels of income affect the diversity of investment that will provide the much needed cushion during drought by investing in agriculture and non agricultural resources. Hay (1986) writes that communities with low income levels cannot accumulate as many resources to spend during poor years, hence their susceptibility to shocks. This calls for a better strategy of harnessing and accumulation of reserves as storing of outputs (grain) may at times be disastrous due to its proneness to pests and diseases. The limited levels of income due to erratic flows of income increases the vulnerability of this community as they cannot insure their assets and livelihoods against future or present hazards.

According to Gebreselassie (2006), insurance delivers both social protection for farmers and agricultural growth. The low income levels within rural communities makes it impossible for insurance markets (costly) to establish service centres as very few members will subscribe. The WFP and African Development Bank seminar on food aid (1986) suggests that the vulnerability of African families lay primarily on the susceptibility of their income sources collapse.

The fluctuation in income distribution within Sinansengwe ward despite inter household transfers through liquidation of assets reduces their capacity to meet household needs when faced with droughts. Hay (1986) further states that the increase in unemployment in rural Africa is mainly exacerbated by droughts, and that this trend is likely to persist until households find an alternative source of income.

The provision of aid through budget support offers less direct contact with vulnerable groups and often creates challenges in addressing disaster risk sensitively and appropriately, for example Zimbabwe received budget support from International Monetary Fund (IMF), World Bank and African Development Bank (1988) and even today there is still very little to show after

all these resources. The limited micro finance institutions within the area and subsequent droughts lead to fewer and fewer clients being targeted.

This is supported by Inter-American Development Bank (2002), which says ó*expansion of microfinance may be hindered by microfinance portfolios which are large leading to post disaster liquidity problems'.*

2.4 Effects of Free Handouts

"We have to break this continual dependency if we are to develop". Ethiopian Minister of Agriculture (2009) emphasized that food aid created dependency that was not easy to eradicate. This was said after realization that food aid had not addressed the real problems of repeated droughts and bad governance in Ethiopia. According to Ajoa Yeboah-Afari (IRINNEWEWS, 2009), there is a story about the Liberian refugees which is While dependency is a myth, need is not unless needs are very real and pressing. Instead of giving people handouts, refugees should be allowed to contribute economically, intellectually and artistically: *"Don't create a situation where refugees are reduced to beggars".*

The community of Sinansengwe community is relying heavily on external support which has also created a false sense of security to community members who now believe NGOs will always be at their rescue should drought occur. With the free distribution of handouts, while noble, care should be taken not to destroy local capacities which are key in the recovery of communities and making them more resilient. The distribution of inputs should not only be limited to agriculture alone but also provide various options and spread the risk as supported by Inter-American Development Bank.

The Ethiopian Ministry of Agriculture spokesperson Mulugeta, ñPeople must be given other options other than Agriculture as this assists in spreading the risk should a drought occurò supports this (IRINNEWEWS, 2009). The continued provision of assistance to agriculture in face of changing climate environment further constrains agricultural productivity, which in most rural Africa is rain fed. Food and Agriculture Organization (FAO) (2006) argues that the limited support given to improving water accessibility often leads to morale hazards. FAO (2006) defines morale hazard as an unintended effect of food aid in that it may increase vulnerability of

people to adverse shocks. This occurs when households cancel other insurance options in anticipation of food aid making them unable to cope without outside assistance when a crisis occurs.

Poverty Traps (2003) emphasizes that the poor are often excessively risk averse, meaning they choose low risk, low return livelihood strategies that leave them chronically poor and vulnerable mainly due to limited capital and income for better sustainable livelihoods. Kanbur, Keen and Toumala (1994) found that most pervasive criticism of food aid was that it might discourage people from working on their own farms or any development work which required their contribution thus increasing their dependence on external aid. The food for work programmes in high food insecure areas might provide essential food today while hindering future productivity.

This is confirmed by Hoddinot (2003) who argues that disincentive effects are based on the assumption that receipt of food aid and other household characteristics are uncorrelated. If food aid given to poorer villagers who received the shocks which prevent them from returning to work, disincentive effect is merely capturing the impact of these other characteristics. According to Bennett (2001), dependency occurs when interventions aimed at meeting current needs reduce the capacity of recipients to meet their own needs in future. This is prevalent in areas where aid is provided continuously ignoring local capacities. Harvey and Lind (2005) emphasize that if aid, especially food, is provided continuously it alters the peoples behaviour and perception, as they believe that food will always be available through such interventions.

Dercon and Krishman (2003) say that communities who receive food aid are less likely to help than communities that do not receive food aid. This explains the negatives of aid as formal and non formal safety nets by the destruction of mutual assistance on which social safety is based. This also explains why some communities remain divided after such interventions because of the breakdown of community social fibre.

Food aid has also been conceived to foster bad governance as some critics have argued that aid can make the national government dependent on external budgetary and balance of payment. This is evident in Zimbabwe due to government priorities which were and are not in anywhere closer to addressing household food insecurity. This has led to poor governance causing regular shortfalls in availability of agriculture and other productive inputs, which then

have to be plugged with food aid. Seed evidences this and fertilizer shortages (*Financial Gazette,* 2009) experienced by the agricultural department due to government skewed priorities of diverting resources to other less urgent issues.

Dependency on aid also makes recipients have no will to fund other means to cope, develop their own areas and mostly fuels tension. Moyo (2008) gives Ethopia as an example where aid continues to trickle despite the fact that 90% of the population do not like the present government; thereby promoting corruption as there is limited accountability. According to Schultz (1990) food aid undermines local agriculture through destabilization of domestic food prices.

Barret (2006) writes that an influx of external aid (input) at subsidized prices discourages investment with local market institutions thereby suppressing production due to lower prices. The European Food Security Group (CONCORD) (2008) which argues that the increase in food prices, especially maize between 40%-100% at the beginning of 2008, has seen not food importing countries suffer due to their dependency on external markets, but productivity subdued.

According to Gebreselassie (1991) food aid strategies and policies aimed at improving agricultural productivity cannot go hand in hand with agricultural recovery efforts by diverting efforts towards life saving at the expense of recovery. This has also been worsened by the fact that NGOs have limited resources to meet all community competing needs. Gebreselassie (2006) explains that relief has been firmly institutionalized in the government ï donor relationship and the expectation of relief assistance have become entrenched in the government budgetary planning.

The provision of continuous aid will encourage people and government officials to externalize responsibility and accountability and consequently delay the seeking of solutions while more and more people continue to suffer. The community of Sinansengwe community experienced droughts in the past, and continued to receive aid. At the same time, limited efforts were being pursued to alleviate suffering. The local authority (council) shifted the responsibility of providing basic services such as food to nonï governmental organizations, which also targeted desperate cases leaving people more vulnerable to drought.

According to Kadzatsa (2008), food aid is the result of an international transaction to provide aid in the form of food to a country in need of receiving such aid. He further argues that such programmes have failed to address the challenges of food insecurity as evidenced by the anticipated food deficits yet to be experienced globally (FAO, 2008).

According to an analysis of impact of food aid in Murehwa district in Zimbabwe by Kadzatsa (2008) food aid generates dependency, and in some cases targeting was improper as needy was left out. This explains the continued decapitalisation of communities despite massive coverage by food aid programmes. In some cases due to the high number of dependants, food is quickly depleted, and beneficiaries are forced to dispose their assets to procure food to sustain them before the next allocation (Kadzatsa, 2008).

The targeting criteria have been criticized as working against recovery. Social welfare cases are prioritized during distribution of agricultural inputs despite their limited capacity to utilize resources effectively. Pedagogy of the Oppressed (1970) professes that true generosity is to fight to destroy the causes of false charity. This emphasizes the need to strengthen community safety nets and diversification of livelihoods to enhance future resilience to drought. Food must be distributed in the context of promoting self-reliance and avoid relegating beneficiaries to being lifelong beggars.

While food aid has minimized starvation and malnutrition, beneficiariesôcapacity to produce and sustain themselves should not be ignored during the process. The expression encourages integration of food aid into risk reduction interventions and or strategies to build on communityôs capacity to cope with minimum decapitalisation.

The provision of aid often creates disincentives for self-reliance and discourages people to work on their own farms. Poorly timed food for work programmes, may divert labour from own household enterprises during critical times of the production cycle. Grassroots International (1997) argues that in highly food insecure recipients, Food for Work programmes may provide food and labour today, but hinder labour investments in future productions.

Faminow (1995) suggests that food aid sold on local markets decreases prices and ultimately affect future investments. This also confirms that Market Assistance Programme implemented by some NGOs in the form of subsidies depresses productivity. This explains the reasons how free handouts have failed to bail the Sinansengwe community out of the difficulties of food insecurity hence their engagement in risk activities such as rain fed agriculture and poaching.

Moyo (2008) explains the notion that the reliance on Western aid has not only hindered promotion of self-reliance, but has left many African communities stagnant or with a declining economic base. Moyoôs (2008) investigations show that specific policies block meaningful development, for example the International Monetary Fund policy on Economic Structural Adjustment Programme in Zimbabwe (1990) is still today being blamed in some quarters as the major contributor to challenges being faced by Zimbabwe. Sologral (1995) says food aid must be brought out of its isolation and integrated in a broader concept of food security. This entails including food aid in the process of recapitalization of family economics and support for agricultural production.

2.5 Impact of HIV/AIDS on Community Resilience

According to the International Fund for Agricultural Development (2002), the HIV/AIDS epidemic is disproportionately affecting agriculture relative to other sectors, especially the small holder as they are much less able to absorb the impacts of the human resource losses associated with the pandemic as confirmed by the Binga District Health report (2000). The community of Sinansengwe, which relies mainly on agriculture, also experienced the impact of HIV/AIDS as evidenced by its negative impact on productive age groups (15-49). Agriculture is a labour intensive sector hence productive community demographics determine the effectiveness of age in productivity at household level.

According to UNAIDS (2002) at least ten percent of the infected are aged from five to 49. De Wall (2003) argues that it (HIV/AIDS) renders affected societies more vulnerable to future demographic changes making human resource scarcity imminent. The Integrated Support to Sustainable Development and Food Security Programme (2002 survey conducted in Uganda and Namibia, found that HIV/AIDS affected households usually had limited purchasing power to procure inputs and food hence more land was left uncultivated due to limited inputs.

Mwaramba and Associates (2002) have it that agricultural activities in Sinansengwe community are based on subsistence farming from limited arable land dotted across the vast undulating rocky landscapes and flood plains. Much of the land is left idle due to the fact that of the entire population, only 16% own cattle and eight percent own ploughs creating a serious draft power shortage. In view of the above most arable land is left fallow.

The International Fund for Agriculture Development (IFAD) (2001) in Uganda and Zambia wrote that four of the twenty-two extension members had died from AIDS thereby impacting negatively on knowledge transfer to beneficiaries. Resilience of communities is also influenced by the level of skill, knowledge existing and the transfer of the knowledge to beneficiaries impacting on community state of preparedness. Mullin (2001) emphasizes that HIV/AIDS does not only lead to loss of skills and institutional memory, but increases financial costs of training new staff thereby reducing government capacity to meet its mandate such as provision of agricultural support (inputs). This also compromises on quality of services and draws resources meant for household support during farming seasons making them more vulnerable to future calamities.

Rugalema (2000) wrote that young girls due to the pandemic dropped out of school to help in domestic work or farm work for survival and due to erosion of meagre income. The Three-Year Rolling Plan 2002-2004 (2001:18) by Binga Rural District Council confirms that the illiteracy rate is 67% for Sinansengwe community and this reflect their inability presently and in future to contribute meaningfully towards their own development. The HIV/AIDS impacts on school dropout rate which may be due to various reasons, some of which include failure to raise school fees by single or both parents and severe household food insecurity.

The survey conducted in Zambia by International Food Policy Research Institute shows that mortality rates of 0-24% was associated with a decline of six percent in cultivated land at community level.

The impact of HIV/AIDS on rural livelihoods is determined by a number of factors some of which include level of education, wealth, population density connectedness with markets and infrastructure. Community demographics play a pivotal role in mitigating the impact of HIV/AIDS and in enhancing resilience of the community.

Swift (2006) supports that female-headed households tend to be more vulnerable than male headed households due to limited alternative sources of income. This is further complicated by the fact that women household heads are less able than their male counterparts to migrate to find work elsewhere on a temporary basis hence their vulnerability to drought shocks. This affects negatively their ability to recover from adverse effects of drought given their limited livelihood options.

The impact of HIV/AIDS is mostly felt in areas where productive age groups succumb, and the very elderly and young remain behind. Such households are especially vulnerable to modest interruptions in food access (Haddad & Gillespie, 2001; UNAIDS, 2002; WHO, 2002).

2.6 Resources and Infrastructure Support on Resilience

Borton and Shohum (1990) argue that food insecurity usually occurs in areas where food is not accessible due to erosion of peopleõs entitlement to food. According to Sen (1981), entitlement refers to income and resource bundles, which households can control to secure livelihoods. Dirnwater and McEwan **(**1992) emphasizes that entitlements are based on household endowments and its position in the legal, political and social fabric of society. These assets assist communities and individuals to withstand adverse impacts of droughts.

The Binga Rural District Councilõs Three-Year Rolling Plan 2002-2004 (2001:18) supports that the level of infrastructure dilapidation in health, education and agriculture contributes to reducing the capacity of the Sinansengwe community to adequately mitigate hazard impacts. In the past the area has been receiving very little or no resources materially and financially to support capacity to building and diversify livelihoods. Alternative to Neo-liberalization in Southern Africa (ANSA) (2007) emphasizes the need to ensure equitable distribution and allocation of more resources to marginalized small-medium scale communal agricultural producers as this improves the support base upon which community programmes and intervention are sustained.

Resilience to disasters does not only rest on the traditional preparedness activities but on building economically strong communities where members can work together and use information to make decisions and act. The equity of resource distribution aids in building a sound economical community (Dortmouth Medical School, 2004; Nowis & Sherrieb, 2004). This

poor infrastructure (communication) compromises the quality of decisions being made, some of which are made late. The quality of information affects planning as confirmed by DIMTEC module on community resilience, which says, ñ*a person without spies is a person without eyes".*

This explains the absence of reliable informers and poor communication technologies leading to uninformed planning and ultimately wastage of efforts and scarce resources. The community of Sinansengwe due to poor communication networks rarely has access to information especially relating to Zimbabwean weather due to poor existing communication technologies. ANSA (2007) argues that equitable distribution and allocation of more resources to marginalized small − medium and communal agriculture producers enhances their capacity to sustain themselves against adversity.

2.7 Inflexibility of Aid Affects Resilience

Relief programmes must be flexible and timed and Benson and Clay (1998) support this. They argue that inflexibility, especially of aid, is another limitation as this explains that the inflexibility of relief programmes can limit the choice of a farmer and affect his endeavour to alleviate poverty based on what he knows and understand best. The general systems of distribution can lead to decapitalisation especially when farmers are given resources, which are not well adaptable to the environment.

With reference to the 2000-2001 drought in Southern Africa, absorption of relief was a problem and some communities are still poor because of inflexibility of aid especially regarding the way it was distributed. Dreze and Sen (1989) are of the opinion that to reduce the impact and mitigate drought, it would be more efficient to provide cash for work programmes than food interventions (general food distribution*).* Such programmes create employment for locals and provide an opportunity to develop themselves through construction of small water reservoirs, irrigation schemes and boreholes.

UNDP (1990) in Disasters and Development indicate that post disaster programmes, even reconstruction programmes, are often planned and carried out in haste. Provision of inputs to farmers must be carefully planned to meet the needs of beneficiaries and respect their choice which has a bearing on the utilization of those inputs. The rush may occur because of the

reconstruction planners perceived need to return the community to normal as soon as possible. The rush may only benefit few communities and leave the rest poor, as they would have failed to utilize resources, which are of less preference to them and are of little significance in solving their problems.

Rushing of programmes also lead to complacency, as people will believe that something has been done while most will remain vulnerable. Swanepoel (1992:25-30) states that *"a community does not exist in a vacuum". This* emphasizes the need to take into account the social and cultural values when providing aid. Any aid programme, which does not respect social and cultural values of a community, may face resistance from the community hence the need to be wary of culture.

2.8 Promoting Community Resilience through Vulnerability and Capacity Assessments

The provision of aid has to be based on need as this facilitates giving out resources that are relevant to the risk being faced. While food aid and agriculture inputs provision relies on ZIMVAC (Zimbabwe Vulnerability Assessment Committee) the ultimate results have often been disputed by some of the members constituting ZIMVAC. This has led to distortions and has affected the quantities of aid reaching beneficiaries. The ultimate release of assessment results in Zimbabwe has been the prerogative of the government who in most cases tampers with the outcome for political reasons hence the continued starvation of the populace experiencing severe food shortages.

The assessment, if done in a participatory manner, will provide insight into community coping mechanisms, knowledge and provide the basis of designing programmes that strengthen coping skills making communities much more tolerant and resilient to the risk they face. The Sinansengwe community due to flawed assessment processes has remained victims of over and under supply of resources that has significantly weakened their coping abilities and resilience following droughts.

The assessment will also provide a platform of taking collective actions for short, medium and long-term priorities for making communities safer. This is supported by the Bangladesh Red

Crescent society (2003) through the establishment of Community Based Disaster Management Committees to increase awareness towards reduction of drought risks. The process will facilitate active participation by beneficiaries in programmes and activities that reduce risks.
The communities of Sinansengwe have become recipients rather than initiators to shape their own destiny, hence low resilience to droughts.

The limited participation by communities in projects identification and implementation does not provide a clear picture of the challenges affecting them. According to Bangladesh Red Crescent society (2003) assessments such as vulnerability and capacity assessments promote community self-resilience. This will enhance the sharing of local coping mechanisms and knowledge to take collective actions for short, medium, and long-term priorities for making communities safer.

According to the Huairon Commission (2005) assessments provide a forum of discussion offering opportunities for community leaders and innovators to convey lessons learnt to policy makers and programmers to minimize on project losses and improve effectiveness. The author further reiterates that assessments integrate recovery and resilience building with ongoing development processes at grassroots. Buckle, Marsh and Sydney (2001) say that assessments of people and communities at risk should be undertaken comprehensively for each jurisdiction as an immediate activity and should be ongoing. This strengthens the need to conduct midterm project evaluations to ensure programmes being implemented are relevant and adjustments are possible.

Programmes with minimum or no assessments are likely to pursue irrelevant ideas and continue to drain resources at the expense of the at risk communities. Assessments also strengthen NGOs and government departments and all institutions involved in development work as it provides an opportunity to review strength and weaknesses as supported by Morgan and Tascherean (1996). Gaps and levels of precautions one needs to build in the proposed options are exposed.

2.9 Timing of Aid

It is important that food aid donors should be informed of circumstances leading to delays in having aid and other resources on the ground in time to prevent widespread social and economic dislocation. This also determines the speed with which communities will bounce back and sustain themselves with little or no assistance from outside. The timing of aid helps in reducing massive community decapitalization, which might occur as they try to liquidate assets to meet household needs. The 2008 drought experienced in Zimbabwe and Binga in particular witnessed an exodus of buyers of small stock as communities tried to contain drought shock through exchange for mealie-meal.

The provision of aid started very late in November 2008 with categories A (considered most vulnerable) and by then most beneficiaries had disposed most of their household assets to address food insecurity. WFP (2007) called for expediting assistance to those facing severe hunger with more emphasis on the timeous delivery of aid. Timing of aid can also be used as a tool of reducing dependency. This is supported by Barret and Maxwell (2005) who argue that the small amounts and irregular timing of aid and subsequent delivery, discourage beneficiaries from relying on it. This will encourage support to programmes which promote self-reliance. Timing of interventions is affected by observance of early warning signs, which are critical in activating intervention processes. The initiation of the food aid programme which often starts late in the area is also being compounded by the fact that assessments were done late and coupled with donor and government bureaucracy aid is always late.

2.10 Climate Change Impact on Resilience

Climate is weather averaged over a period of time usually a minimum of 30 years. The impact of climate change has led to developed countries forming international panels on climate change to devise ways upon which impact can be minimized. The change of climate in Sinansengwe community, though it is yet to be recognized, has lowered the precipitation levels far below the requirements of crops. The resilience of communities to drought because of climate change can be enhanced through policy formulation and enforcements.

In Zambia the government has ratified the United Nations framework Convention for climate change and is promoting agricultural extension service as well as adopting climate proofing technologies (UNFCCC, 2002). Professor M.S. Swaminathan says South Asia and Su-Saharan Africa will suffer from the impact as the region represents hot springs for hunger and poverty. This is due to limited options of the poor as their livelihood is dependent on the natural ecosystem. The community of Sinansengwe relies more on rain fed agriculture, and this coupled with limited or no access to radio and television transmission issues on national climate change adaptation strategies, are likely not to reach them on time hence their exposure to future vulnerabilities.

According to Information Paper 1 by International Studies for Sustainable Development (IFSD) the poor are vulnerable to climate risk due to limited survival options. This entails that communities whose livelihood is heavily dependent on the ecosystem place their welfare and survival on the performance of the environment which is influenced by climate change. Poverty alleviation is further constrained by limited capacities and resources at the disposal of the community to respond to stresses emanating from drought. The Agriculture Development President Lennart Bage says ñyields from rain fed agriculture could be reduced by up to 50% by 2020 in some countries as a result of changes in climateò

The community of Sinansengwe community, which receives less rainfall attributable to changes in climate, exposes them to drought impacts as most farmers rely on rain fed agriculture.
Climate change adaptability can be enhanced through improved natural resources and construction of more dams to support alternative livelihoods according to Buylaert *et al.,* 2006. This emphasizes the importance of having an intact natural infrastructure as it enhances populationsôability to cope to climate change.

At times rains are received early or late, and coupled with poor preparedness levels (input shortages and poor communication and early warning signs). Droughts have continued to ravage due to late planting. The fragility of livelihoods to drought may be linked to single crop dependence and greater reliance on rain fed agriculture as confirmed by SOS Sahel. The ability of poor people to cope with a changing climate is weakening as their livelihoods are sustained by natural resources.

The Royal Society 2002 argues that climate change will make the process of eradicating poverty more difficult as planned activities will prove not compatible, impacting negatively on resilience of affected communities. The development processes to enhance resiliency are likely not to achieve their objectives as higher frequencies of climate change reduces the time for poor households to recover from one climate shock to another. There is need for mainstreaming of climate risks when designing interventions. The provision of more information on climate and understanding of poor peopleôs vulnerability enhances climate adaptation. The starting point for adaptation means understanding the existing vulnerabilities to climate variability and extremes, according to Global and Local Environment Team Policy division DFID (2004).

Downing (2003) shows that inevitably it is the poor and the most vulnerable, who suffer the impacts of changing environmental conditions. Brown (2002) calls for integration of conservation concepts in any development sphere to help realize output from scarce and diminishing natural resources.

Climate change in Sinasengwe community with the same conservation concepts such conservation farming communities may increase production with minimal rainfall. There is therefore need of recognition of community engagement with resource natural management, particularly where the well-being of an ecosystem influences the survival of communities and sustains livelihoods.

2.11 Summary

The literature review has given an in-depth understanding of community resilience and livelihood support through an explanation of essential variables. It has focused on areas of vulnerability, adaptive capacity, resilience and community livelihoods as well as community behaviour, and other general development concepts that are relevant to the research topic. The community of Sinansengwe, which receives less rainfall attributable to changes in climate exposes them to drought impacts as most farmers rely on rain fed agriculture. Climate change adaptability can be enhanced through improved natural resource and construction of more dams to support alternative livelihoods according to Buylaert ***et al.*** (2006).

This emphasizes the importance of having an intact natural infrastructure as it enhances populationsô ability to cope to climate change. Rains are at times received early or late and coupled with poor preparedness levels (input shortages, poor communication and early warning signs) drought has continued to ravage due to late planting. The fragility of livelihoods to drought may be linked to single crop dependency and greater reliance on rain fed agriculture as confirmed by SOS Sahel. The ability of poor people to cope with a changing climate is weakening as their livelihoods are sustained by natural resources. The next chapter looks at the research methodology in detail and methods of data collection used by the researcher.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Chapter 2 has established from the literature review that there are various variables, which must be dealt with in order to achieve customer service excellence. Chapter 3 discusses the methodology that was followed in this study. The focus of this chapter is on the research design, methods of data collection, data presentation and analysis.

3.2 Research design

The research design refers to the way in which the researcher plans and structures the research process. Mouton (2001) explains that the research design addresses the question: what type of study is being undertaken to provide acceptable answers to the research problem or question. This research study was empirical in that it dealt with real phenomena or events in Sinansengwe community.

The research is given an empirical character in that it incorporates qualitative and quantitative approaches of structured questionnaires, structured and unstructured observations, in-depth interviews and document analysis; hence it takes a blended design (Bogdan & Biklen, 1992:29-32). Quantitative approaches dealt more with statistics that helped to profile those that participate in interviews and the graphs from the counts served to provide a visual presentation of certain variables. Most importantly, the statistics were purely descriptive in a way that strengthens the qualitative aspect of the data.

A lot of qualitative research is simply descriptive (Struwig & Stead, 2001). Quantitative and qualitative can be combined if the research so requires to form mixed research (Newman & Benz, 1998). Taylor (2000:16) explains the purpose of quantitative research as to provide phenomena numerically to answer questions or hypothesis and the purpose of qualitative research as to provide rich narrative descriptions of phenomena that enhances understanding

for it is typically conducted in natural settings. Qualitative research uses the researcher as the primary instrument, employs multiple data gathering methods, and uses an inductive approach to data analysis.

3.2.1 Research method

The research method chosen for the study was the descriptive survey. The researcher found it suitable to use this method taking other writersôviews. Cohen and Marion (1990:6) stated that the descriptive survey method of research was the process of gathering data at a particular point in time with the intention of describing the nature of existing condition. Mhlanga and Ncube (2003) professed that the survey method was suitable for describing perception of a well-defined group of population. Sinansengwe community is a well-defined population such that the survey method suits well. This descriptive survey uses direct observation, questionnaires and interviews. The target population for the data collection were community members in Sinansengwe community and key informants.

The survey method has the advantage of allowing the collection of a large amount of data from sizeable population in an economic way (Saunders *et al.,* 1997:76). Tuckman (1994) also stated that the method had an inbuilt objectivity, suitability, reliability, variability, predictability and applicability if used wisely. Clear instructions on what respondents are expected to do are a testimony to this. It also makes it easier to collect data from sample rather than from the total population of interest.

However, the method has its own limitations. For example there is a limit to the number of questions that a questionnaire can contain to ensure the goodwill of respondents. However, interviews and personal observations supplement questionnaires. Sometimes respondents could choose to ignore the questionnaire. Overall, the survey was suitable for the research.

Participatory approaches were appropriate for this study. Data was collected through semi-structured, open-ended interviews, focused discussions and observations as well as participation by the lead researcher. The researcher also had access to village household relief registers during interviews with two local leaders. This helped to gain more insight into the targeting and restricting of the coverage of intervention based on those perceived to be most at risk (Jaspars & Young, 1995). These methods allowed the community members to digress and wander around the topic, which better represented everyday life.

3.2.2 Study area

The survey was carried out on all five villages in Sinasengwe community namely Mucheni, Malinda, Siakabinga, Chitete and Makondo villages.

3.3 Population

A survey was conducted by means of a standardized questionnaire. A survey is a data collection technique in which the research participants answer questions through interviews or pencil and paper questionnaires (Struwig & Stead, 2001:245). Robson (1993:124) explains that the survey features the collection of a small amount of data in standardized form and the selection of samples from known populations. The target population comprises the community members in the wards and key informants as listed in Table 3.1:

TABLE 3.1 POPULATION DETAILS OF SINANSENGWE COMMUNITY

Name of villages	Population size (Households)
Mucheni	180
Malinda	145
Siakabinga	170
Chitete	180
Makondo	195
Total	**870**

Source: Ward registers

Target population refers to all units of the population under consideration. Five villages comprised 870 households. The study targeted all the community members that form part of the sample. Within the community members consisted of a community leader and key informants. The questions were simplified, taking into account the level of understanding of the lowest level of vulnerable members of the community, and gender issues.

3.3.2 Sample, sample size and sampling procedure

A sampling plan is the part of statistical practice concerned with the selection of individual observations intended to yield some knowledge about a population of concern, especially for the purpose of statistical inference (Dillon, 1994). District ward registers were used as the sampling frame for those who were attending community meetings, while snowball sampling was used for those that did not participate in community meetings per district, as it was difficult to get data about them.

Eight key informants (five males and three females, all above the age of 55) also participated in the study. These informants, all people who generally work or interact with community members, were selected from non-governmental organizations, local leaders, teachers and disaster management personnel.

From a scientific viewpoint, it may be problematic to generalize from a small sample of 40 community members per ward from one district, especially considering that community members have a multitude of differences such as ethnicity, social class and culture (Greig & Taylor, 1999).

However, the literature has many examples of how small samples have contributed to theory development (Bryman, 2001; Patton, 2002). The depth of the material presented is sufficiently wide-ranging and adequately highlights a õsubjective viewò of community members that may apply to community members in other contexts. It is also worth noting that the participants were not considered objects providing numerical data, but were viewed as reservoirs of untapped knowledge, intelligent and purposeful.

Therefore the level of detail from one district was considered sufficient to gain an understanding of how community membersô contribution to building disaster resilience may be realized. Five villages were selected for the study based on the fact that there existed disparities in terms of physical facilities in the different areas where the ward was located as well as patronage by support organisations. A sample is a portion or subset of a larger group called a population (Fink, 1998:79). The selected sample took into consideration the possible extremes that might exist. Mason (1996:83) clarifies that sampling and selection are principles and procedures used to identify, choose and gain access to relevant units which was used for data generation by any method.

3.4 Questionnaire Administration

Questionnaire design is one step in the process that ultimately leads to generating research objectives and questions. After the questionnaire design, the researcher carried out a pilot test of ten questionnaires to make sure it is understandable and acceptable to the intended audience. The process involved administering the questionnaires to a small group from the intended target group (few community members and informants that included teachers,

AGRITEX officials and other NGOs field officers) and then following up to get feedback on the questions.

Frank (1995) explains that for most questionnaires the minimum number for a pilot test is ten. The number of people to be chosen should be sufficient to include significant variations in the population, which are likely to be affected by the responses. For any research project there is a temptation to skip the test pilot, however, Bell (1993:84) advises ó*however pressed for time you are, do your best to give the questionnaire a trial run*ô as without a trial run, you would have no idea of knowing that the questionnaire succeeded. As a result, the objective of the dissertation might fail to materialize. As part of the test pilot, the researcher also checked each completed pilot questionnaire to ensure that respondents had no problems understanding or answering questions, and had followed all instructions correctly (Fink, 1995).

The responses from the test pilot questionnaire provided an idea of how the questions had been formulated, and whether the respondents felt comfortable answering them. The questionnaire also tested whether the respondents felt it was too long and also checked on potential barriers to getting good responses. Pilot testing also involved evaluation of other attributes, namely precision (reliability) and accuracy. These attributes are critical to developing a questionnaire whose results are reproducible. It provides the researcher with a good measurement of the phenomenon of interest. Bell (1993) suggests that a test pilot questionnaire should be used to find out:

- How long the questionnaire took to complete.
- The clarity of instructions.
- Which, if any, questions were unclear.
- Which if any questions the respondent felt uneasy answering.
- Whether in their own opinions there were any significant topic omissions.
- Any other comments.

After incorporating feedback from the test pilot test, the final questionnaire was administered to a sample from the target population. Representatives for organizations distributed questionnaires and each questionnaire had a covering note stating the purpose of the study, and that data gathered was meant for research purposes only. The community leaderôs

representative collected the questionnaire. A thank you note was sent to the communitiesô representatives as well.

3.4.1 Data collection instruments

An instrument is a device that an investigator uses to collect data (Masuku, 2000). To improve on validity, triangulation approach was used. According to Moyo and others (2002), triangulation is an approach in which multiple research methodologies are combined in an attempt to look at the research problem from different angles. Questionnaires, interviews and observation were the instruments used.

3.4.2. Questionnaire

The main type of research instrument to be used was the questionnaire. Mhlanga and Ncube (2003), explains that a questionnaire is ña document consisting of question items that solicit information from a subject that is suitable for research analysis.ò Both closed and open ended questions were in the questionnaire but there were more closed questions in order to have ease in administering and analyzing the instrument easily. Two self-administered questionnaires was used, one for key informants and another for the rest of the community members.

Pre- survey contact were done with community leaders (who are the custodians of the villages) to agree on questionnaires completion and return plans. Responses were sent back in sealed envelopes to organizations operating in Sinansengwe community for the researcherôs attention. Community members were advised that responses would be sent back in one big envelope, to give them confidence in the anonymity aspect, and make them relax. The researcher hopes that this caused respondents to provide their most honest responses.

Discussions of the questionnaires might lead to distorted results. To avoid this, key informants were requested to complete forms all at the same time. The questionnaires were developed basing on the requirements of the research questions in order to address the research objectives. Questions sought information on attitudes, community culture and ideas that motivate them to deal with issues to address their challenges.

3.4.3 Interviews

Interviews were used as a supplement to the questionnaire in data collection. The method has been selected for it brings together employees who offer services to different customers, the poor, middle class and rich. Interviews also produce very rich body of data expressed in the respondents own words and context.

It is not in any way implied that interviews do not have limitations but the advantages of interviews outweighs the disadvantages. An interview schedule with both closed, open and scale questions were used. The questions were constructed based on research objectives and problem. Interviews were conducted in the Tonga language, tape-recorded and later transcribed. The quotations used in this paper are therefore direct or literal translations from Tonga to English.

Distortion of the actual words or meanings from Tonga to English was minimal as the lead author is a native speaker of the Tonga language and translated the participantsô words into English. However, some English words have no equivalents in the Tonga language. For example, ñemergency,ò ñdisasterò and ñhazardò had no equivalents in the Tonga language and were used interchangeably. Resilience and mitigation were other constructs, which were difficult to articulate in the local language.

Further investigations into how these discourses are translated in the local context could provide some useful insights as to how they are adequate for informing disaster resilience and practice beyond their origins in largely Western discourse.

The interviewer probed respondents to obtain in-depth answers. Sommer and Sommer (1993:233) give the following examples of probes: what do you mean, anything else, could you tell me more and so forth. Robson (1993:27) explains that scale questions ask for the degree of agreement and disagreement. Responses in the interview schedule such as gender, age and qualifications were quantified to give statistics count. The information collected complimented information on the questionnaire. Respondents were given room to speak freely. The interviews revolved around four questions of each category of interviewees as follows:

TABLE 3.2 INTERVIEW SCHEDULE

Questions for community leaders	Questions for key informants
1. What are your experiences with hazards experienced in Sinansengwe community? 2. How do you address challenges presented by hazards you are experiencing? 3. What do you focus on mostly when dealing with these hazards and why? 4. Which skills do you include helping in fellow community members when dealing with climate changes issues?	1. How does your work assist in dealings with the impacts of hazards prevalent in Sinansengwe? 2. What is the focus of people in Sinansengwe community in dealings with challenges of hazards? 3. How relevant are livelihoods support given to Sinansengwe community? 4. In your opinion, are the community skills of local people in any way helping in building resilience and adaptation strategies for the Sinansengwe community?

In order to obtain a balanced view of the problem area, probing and seeking clarification on the responses of participates was done during the visits to the wards chosen for the study.
Questions were kept to a minimum and stated as broadly as possible so as to leave the talking to the participants. This gave the participants time to express their own views.

3.4.4 Observation method

The observation method is a primary and fundamental base for all research methods in social sciences (Singleton *et al*., 1988). Observational techniques help the researcher to note body language and other gestured cues that add meaning to the words. This research employed participant observation method. Detailed field notes of what the researcher observed were documented. The pertinent issues emanating from the notes were used in subsequent interviews and formal discussions with community members to develop a deeper understanding of challenges faced in Sinasengwe community.

3.4.5 Data analysis

Themes and ideas were used to analyze and interpret the gathered data. Data was also presented as raw data in the form of pie charts and bar charts, thus descriptive statistics. These

present the readers with an opportunity to quickly and easily visualize the results, come up with meaning and interpretations.

3.5 Pilot Study

The pilot study is a brief exploratory investigation (Leedy & Ormrod, 2005). Robson, (2005) is of the view that a pilot study affords the researcher an opportunity to assess feasibility of what is proposed in terms of time, effort and resources. The pilot study was conducted in the Sinasengwe community. The main purpose was to try out the proposed research instruments, methodology and determine validity and reliability.

3.6 Chapter Summary

The chapter detailed on research methodology which included the research design, research instruments, pilot testing, population of the study, sample size, data collection and procedures. These were clearly explained with justification. All this research methodology was done within the limited time available to the researcher. The next chapter focuses on interpretation of the research findings

CHAPTER FOUR

ANALYSIS OF DATA, RESULTS AND DISCUSSION

4.1 Introduction

The research presented data in both tabular format and the use of different types of graphs ranging from pie charts and bar graphs. This was done to clearly illustrate the results and to facilitate easy data analysis. The chapter has been divided into two parts, part one dealt with graph analysis of data and part two dealt with tabulated data analysis. Both parts are crucial to the aspects of the topic of the research, which is analysis of the impact of continuous external support on community resilience in Sinansengwe ward of Binga District in Zimbabwe. The parts dealt with the quantitative and qualitative data collected to address the research problem.

4.2 Discussion of Data

The main sources of data for the study were the survey questionnaire, observations, content analysis of documents and interviews that were both informal and formal. Questionnaires collected more quantitative data while interviews and observations collected qualitative data. Informal interviews with the Environment Management Agency Officer, revealed that the district was rich in wildlife especially the elephants, rhinoceros, buffaloes, leopards, lions, baboons, crocodiles and hippopotami. These species had in fact, been owned by the people themselves before the arrival of the white man as the people could hunt them at will.

However, while the philosophy of the (CAMPFIRE) project claims to ensure community ownership and empowerment of the people as a poverty alleviation strategy, the animals, especially elephants, continue to wreck havoc on the crops while the returns from CAMPFIRE do not seem to outweigh the damage done by animals. The issue of community resilience was heavily compromised due to the destruction caused by wildlife especially elephants. For instance, the communities received 37 % as the highest dividends instead of 50% since the beginning of the new millennium while the rest meets the administration costs of council due to a weak revenue collection base.

The districtôs valuable natural resources, including the Zambezi River, the abundant wildlife and the forest reserves, are managed by central government agencies (or in the case of wildlife in communal areas, subject to central government policy), and used to serve national rather than local interests (CCJP, 2001). This lack of control makes it difficult for people to tackle other problems, which affect their livelihood and building resilience. These sentiments are also best expressed in the words of some local people, recorded by Tremmel (1994):
For example:

- *We lack a role in solving problems in our community.*
- *Our leaders do not think we are intelligent enough to solve problems.*
- *Also we are not united as a people.*
- *Our elected officials in Sinansengwe do not listen to us.*
- *We are all very frustrated because, when we have tried to solve problems, no action follows.*
- *We do not have effective ways to express ourselves.*
- *The government leaders do not visit us to listen to our problems.*
- *If we inform them about difficulties with animals, they promise to help but they do not.*
- *We know how to solve problems at the level of our community, village and ward.*
- *We need to find ways to solve community problems together.*

Regarding physical resources, the most important resource of economic value is the abundant waters of Lake Kariba, which cannot only be used for such activities as fishing, crocodile farming and tourism. It was observed that Binga Rural District Council (BRDC) had 300 gillnetting fishing permits that it allocated annually to local residents of which 195 and 105 were allocated to cooperatives and individuals respectively.

In commercial kapenta fishing, out of 295 permits for the whole lake, 20 permits were issued to 11 cooperatives while 27 companies had 71 permits. Informal interviews in Sinansengwe

community revealed that campaigns to have permits had not delivered any results and remained disproportionately low. In addition, the taxes from tourist enterprises such as lodges and houseboats as well as from kapenta industry did not accrue to the local people, but to central coffers.

There is no irrigation scheme in Sinansengwe fed by the Kariba water, due to rugged terrain and poor soils. However, WCD (2000) estimates that Sinansengwe has a potential of about 5 000 hectares for irrigation development using Kariba water. The rich wild life in Chizarira National Park and Chete Safari area is another resource, which although being exploited at the moment, is not directly benefiting the people of Sinansengwe as the revenue collected goes to the national coffers. The forest areas serve as valuable reservoirs of biodiversity and help prevent soil erosion.

Story telling methods employed in this research showed that the Sinansengwe area, as already indicated, consists of a small ethnic minority group and other groups traditionally regard them as ôprimitiveô or ôbackwardô Consequently, they lack political influence and their language and culture are constantly under threat. They are also particularly vulnerable in times of national political tension and conflict. The situation of the Tonga has been further worsened, from the late 90s, by the ever-deteriorating political and economical situation in the country, This is characterized by lawlessness, high prices of basic commodities, unemployment rate of more than 70 %, international isolation and dwindling support for crucial social services such as health and education.

Formal interviews with development workers and other key informants revealed that a focus on resilience meant putting greater emphasis on what communities could do for themselves; how to strengthen their capacities, rather than concentrating on their vulnerability to disaster or their needs in an emergency. Some admitted that the activities on the ground were not concentrating on building resilience at all, that emphasis was mostly not on what communities could do themselves. The community accepted whatever programme or project that was introduced and most of the projects were food aid instead. These sentiments were consistent with Dreze and Sen (1989) who expressed that relief was a problem, and some communities were still poor because of inflexibility of aid especially on the way it was distributed.

Key informants were of the perception that *'to reduce impact and mitigate drought cash for work programmes may be more efficient than food based interventions (general food distribution)'.* Such programmes create employment for locals and provide an opportunity to develop themselves through construction of small water reservoirs, irrigation schemes and boreholes. UNDP (April 1990) in Disasters and Development indicates that post disaster programmes, even reconstruction programmes, are often planned and carried out in haste. Provision of inputs to farmers must be carefully planned to meet the needs of beneficiaries and respect their choice which has a bearing on the utilization of those inputs. The rush may occur because of the reconstruction planners perceived need to return the community to normal as soon as possible.

4.3 Questionnaire Results Analysis

Questionnaire results analysis was presented using tables and graphs to provide a clear picture of data collected by examining one variable at a time (Singleton, Straits and Straits & McAllister, 1988).

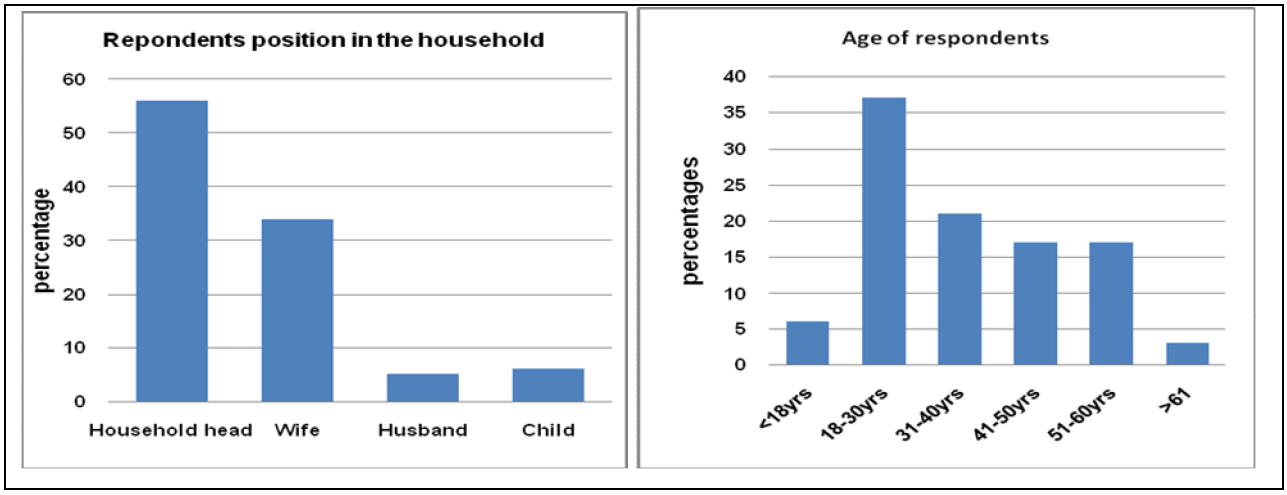

Figure 4.1: Question on respondents' position in household Figure 4.2: Question on age of respondents

The results in Figure 4.1 show that 56% of the respondents were household heads, most were between the ages of 18-30 years and 30-40 years (Figure 4.2). Wives who had their husbands migrating to other countries or urban centres due to economic hardships also acted as household heads and these constituted 33.5% of the respondents. In-depth interviews revealed that wives of those who were in the Diaspora report related to their husbands when it came to

decision-making in times of hardships. Most of these wives relied on support from organizations working in the community.

The ages of the wives varied between 31-40 and 41-50 years. Those that were in the 31 to 40 year category were considered young when it came to decision-making hence they had to follow what the elders decided on their behalf. Of those that were household heads and most of these were between the ages of 18-30 years and 30-40 years (Figure 4.2). The ages of the wives varied between 31-40 and 41-50 years. Generally decision-making was the prerogative of male elders regardless that women were in the forefront when disasters struck the community.

TABLE 4.1: STATUS OF HOUSEHOLD HEAD AND GENDER OF THE RESPONDENT

STATUS OF HOUSEHOLD HEAD	FREQUENCY	%
Chronically ill	12	6
Elderly	2	1
Disabled	2	1
GENDER OF THE RESPONDENTS		
Male	52	26
Female	132	66
Total	**200**	**100**

The tabulated data in Table 4.1 revealed that the sample had 66% males compared to 26% females. These results show that females dominated in the Sinansengwe community and looked after the chronically ill, children and the elderly. At the same time they were also expected to work in the fields. Observations made during the research revealed that the females were overburdened, and hence failing to do all the tasks had to rely on support from NGOs, the government and to some extent the community itself.

Of the sample six percent were chronically ill and one percent elderly and disabled. However, it was noted that most of the respondents were reluctant to answer the question on status of the household especially those that were chronically ill. Chronic diseases are usually blamed on cultural practices. The community of Sinansengwe like any other parts of Binga practise polygamy. Polygamy is a preserve of the culture. The community is proud of it, and wants to preserve it. They believe more work can be done easily and produce more food. Polygamy had some negative effects as it meant that when the husband was away, wives left the home to look

for work to try and support their children. HIV was also blamed on the practice of marrying more than one wife.

The respondents indicated that when one was ill most of the time was spent looking after that person instead of doing productive work to develop the household and community. The results here could mean that skills and experience of women in building and maintaining local social networks in the Sinansengwe community were greatly underutilized.

TABLE 4.2: HOUSEHOLD SIZE OF THE RESPONDENTS

HOUSEHOLD SIZE (NUMBER OF PEOPLE)	FREQUENCY	%
<5	122	61
5-10	61	30
11-15	16	8
>15	1	1
Total	**200**	**100**

Table 4.2 indicates that the size of most of the households ranged from five people to between five to ten people per household, representing 61% and 30% of the respondents. This was justified in the sense that many men had two or three wives. These results were consistent with IFAD (1993) that culture influenced household ability to meet basic needs and negotiate survival. The culture of marrying more than one wife was impacting negatively on household food security as fewer resources were channelled towards food at the expense of education and other household needs. It limited investments to building future resilience.

The large number of dependants meant that when there were hardships the community would use their assets to address food shortages. Most sacrificed asset included small livestock and at times cattle. It was also observed that the community would even engage in environmental degrading activities to make a living or desert the homestead.

TABLE 4.3: OCCUPATION OR EMPLOYMENT OF HOUSEHOLDS

OCCUPATION OR EMPLOYMENT OF HOUSEHOLD	FREQUENCY	%
Formal	3	2
Informal	17	8
Unemployed	18-0	90
Total	**200**	**100**

The results in Table 4.3 show that 90% of the respondents were unemployed. About eight percent were in the informal sector that is woodcarving, illegal hunting among some of the informal jobs in the community of Sinansengwe. Only two percent of the respondents stated that they were formally employed in either government or private sectors. The results meant that the majority of the respondents spent most of their time in the community. Their survival was based on activities in the fields or livestock owned.

TABLE 4.4: HIGHEST EDUCATIONAL QUALIFICATIONS

HIGHEST EDUCATIONAL QUALIFICATION	FREQUENCY	%
Never went to school	51	26
Primary school	121	61
Secondary school	24	11
Missing data in system	4	2
Total	**200**	**100**

TABLE 4.5: NUMBER OF CHILDREN OF SCHOOL GOING AGE

NUMBER OF CHILDREN OF SCHOOL GOING AGE	FREQUENCY	%
<3	82	31
3-6	61	1
7-10	1	1
>10	1	70
Missing data in system	55	27
Total	**200**	**100**

The respondents as shown in Table 4.4 revealed that the community was quite literate, for about 61% had attained primary education and 11% secondary education compared to 26% who never went to school. There was, however, about two percent of the respondents who did not want to reveal their educational attainment. Of concern was the number of school-going age that was not attending school.

That could be explained by the fact that resources were few due to the culture of marrying many wives and unemployment rates. In most households (Table 4.5) 31% had fewer than three children going to school compared to <3 that had 31% children going to school. In some households in the 7-10 age group, there was only one percent of the children who attended school. Children going to school formed a livelihood portfolio. The children would either spend most of their time hunting or assisting the women to carry out other tasks designated to them to assist in generating income.

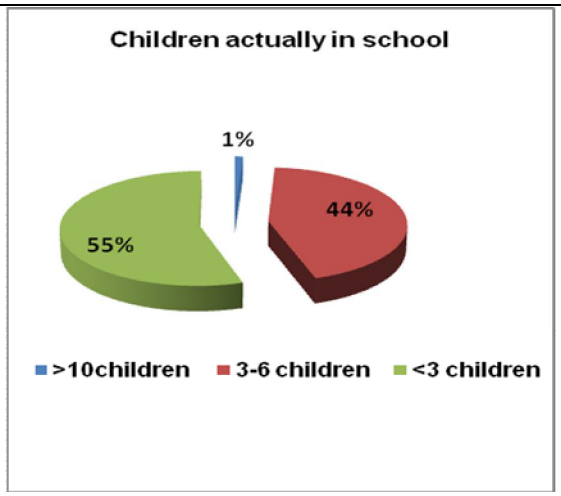

Figure 4.3: Children actually in school

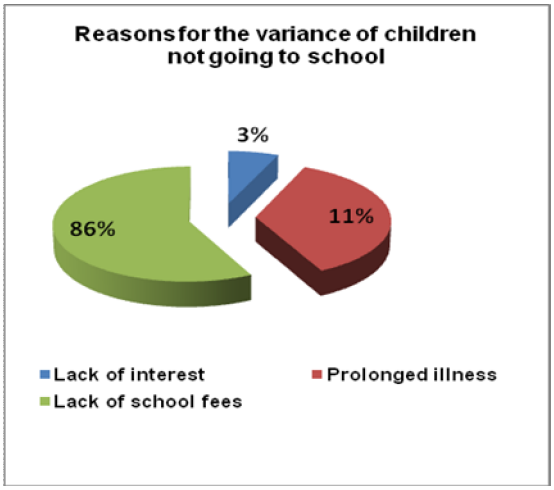

Figure 4.4: Reasons for the variance of children not in school

The diagram, Figure 4.3 shows that children in school were about 55% within families of fewer than three children per household of the respondents, compared to 44% (3-6 children per household) who were not in school. The reasons for the variances were that most the children were orphans due to HIV/AIDS prevalent in the community. In Figure 4.4 this variance is indicated. In terms of access to health care by the community, especially the vulnerable groups like the HIV/AIDS patients, while it was estimated that about 35% of the population lived within 8 km of the health facility (Sinansengwe DAAC, 2003), the majority of patients had difficulties in accessing health care.

Home based care programmes, in line with the Primary Health Care philosophy had not yet been established in the district, although plans were under way. Accessing health care not only in terms of physical distance, but also in financial terms was limited since the patients, apart from TB patients who were on government-funded free treatment, had to bear the transport costs as well as the hospital fees. Because of these constraints, some patients preferred to remain at home to be nursed by the children.

That was exacerbated by the negative impacts of the fast track land reform programme and decline in the economy of Zimbabwe. However, about 100 orphans were being assisted with fees at both primary and secondary by DAAC. There had been changes in the assets owned by the Sinansengwe community as shown by the decrease in ox ploughs owned by 36%. However, the HIV/AIDS affected households, especially the female headed ones, struggled to source food

during the 2007/8 since the household heads were sick most of the time. Crop yields were below those of the poor wealth group due to illness.

TABLE 4.6 USEFUL ACTIVITIES IN THE HOUSEHOLD

USEFUL ACTIVITIES IN THE HOUSEHOLD	FREQUENCY	%
Livestock rearing	152	76
Vegetable production	14	7
Crop rain fed production	34	17
Total	**200**	**100**

TABLE 4.7 IMPLEMENTS OWNED

IMPLEMENTS OWNED	FREQUENCY	%
Scotch cart	4	2
Ox-plough	47	24
Hoes	149	76
Total	**200**	**100**

The Sinansengwe ward is agro-based mainly at subsistence level as revealed in Table 4.6. Most of the respondents in the ward explained that they were into livestock rearing (76%), vegetable production seven percent and rain fed crops (17%). The rearing of livestock and crop rain fed production as observed was controlled by a community belief system. Several of the supernatural beliefs on livestock rearing were associated with a sacred bull. That meant that a sacred bull could not be slaughtered without consent of the ancestors even in times of hardships. That explained the reasons that there were no changes in the most useful assets in Table 4.12.

The fear of spiritual or financial penalties or community sanctions prevented some livestock from being slaughtered or sold when there was a disaster. Interviews and observations revealed that other practices followed a calendar.

For instance, according to local convention, farming activities could be done on certain days and certain days in a week people could not work in the fields. The crop production was mainly small grain. Maize seed was not prevalent in the community. Villagers were sometimes unable to provide an explanation for their following a practice. These results were consistent with ZIMVAC(2007/08) assessment that the crops grown in the communities in Binga were mainly small grains such as bulrush millet and sorghum in the poor resource Kariba Valley which covers Tyunga, Sinampande, Sinansengwe, Sinakoma, Lubu, Muchesu, Manjolo, Simatelele, Siachilaba and Saba-Lubanda wards. Maize is mainly grown in the southeastern part and to a less extent in Kariangwe, Nabusenga, Dobola, Pashu and Tinde wards.

Table 4.7 revealed that two percent of the people in Sinansengwe owned scotch carts, ox ploughs (24%) and hoes (76%) with their harvests suggesting that they cultivated 0.5 ï 2 acres. These implements were either purchased using own generated funds from sale of livelihood assets or donated by government poverty alleviation programmes.

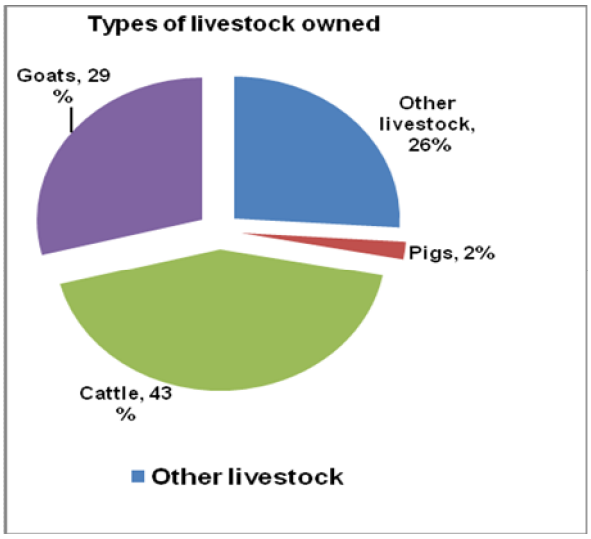

Figure 4.5: Types of livestock owned

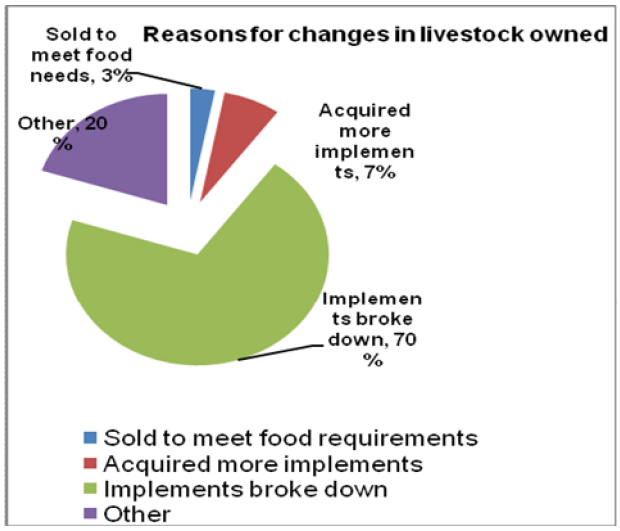

Figure 4.6: Reasons for changes in livestock owned

Figure 4.5 shows that Sinansengwe people owned goats (29%), cattle (43%) and pigs (2%) with 26% indicating other livestock. Most households had sold one to four cattle in the past two years to meet household food security, school fees requirements, paying for clinic fees and transport cost to far away health facilities. Table 4.6 shows a graphic presentation of how the money was spent. Although they defaulted on the payment of fees, they generally sent their children to primary schools, but could not afford to send them to secondary schools. Some respondents also attributed the changes in the livestock owned to repairing broken down farming implements (70%).

These results were consistent with observations made during the 2007-8 drought experienced in Zimbabwe where Binga in particular witnessed an exodus of buyers of small stock as communities tried to contain drought shock through exchange for mealie-meal. The results here, however, did not support the findings in Table 4.12 showing no change in the most important livelihoods assets.

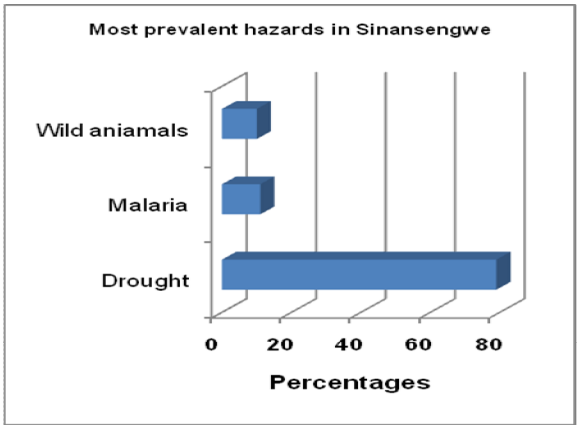

Figure 4.7: Most prevalent hazards

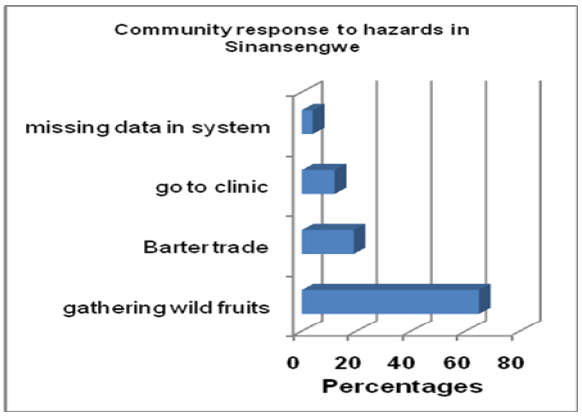

Figure 4.8: Community response to hazard

The results in Table 4.7 shows that the community was aware of the hazards they faced as 89% indicated drought while 11% indicated Malaria.

The community of Sinansengwe has put in place survival strategies to deal with these hazards like barter trade (18%), gathering wild fruit (64%), and go to clinic for those with money (16%) when suffering from malaria Evident in Table 4.8. Some members of the community, however, revealed that they used traditional herbs to cure malaria and other ailments.

The results revealed that the people had means to reduce the impact of hazards if they were in control. The gathering of wild fruits involved both male and female including children to supplement food during times of hardships. This was done especially when there was little work in the fields. All men, women and children participated in scaring wild animals from the fields.

Dworken and Horsen (2003) support that participation enhances feelings of control, meaning and connectedness and that it contributes to building resilience and competencies in people as well as supporting several developmental processes. The involvement provides an opportunity to get an insight into their own problems and initiate locally adaptable solutions which are cheaper and easy to manage. The interventions are chosen by communities taking into account their weaknesses, strength and material resources available to sustain such interventions after the withdrawal of funding by donors.

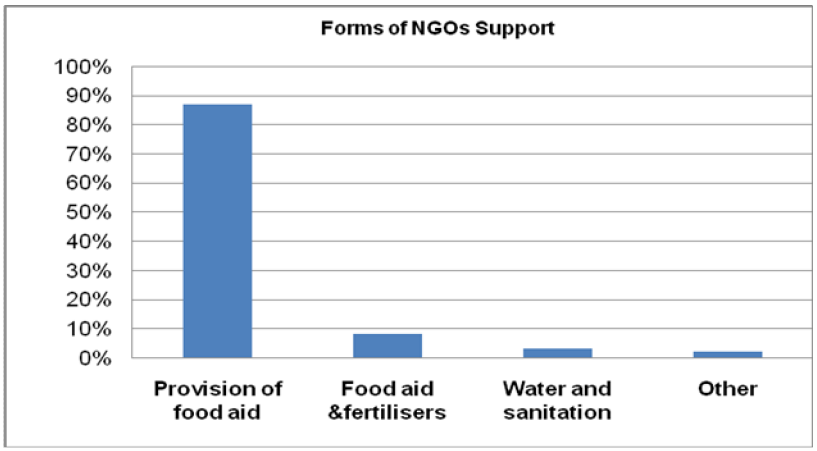

Figure 4.9: Forms of NGOs support obtained

Food aid especially from SCF (UK), CADEC and DAAC plays a significant role in improving the nutrition status of the Sinansengwe community. Income generating projects, with support from DAAC, especially in crafts like basket making ensured some little income inflow although some groups are seriously affected since they did not get any financial support. The results in Figure 4.9 shows that 86.5% of the respondents get food handouts, 8% get food and fertilizers, 2.5% water and sanitation.

Some respondents indicated that the Water and Sanitation programme, which Save the Children (UK) started in 1985, had not performed to expected levels since the boreholes and wel pumps broke down and were not repaired. Women and children still had to travel long distances to fetch water or resort to utilizing contaminated sources near their homes. The other interpretation is that there was no participation with the community involved in the project hence they did not support the project. None of the organisations that offer aid strengthen communities to pursue their livelihood options of improving marketing skills, livestock rearing or growing indigenous fruits they gather in times of drought.

TABLE 4.8: IMPROVEMENT OF QUALITY OF LIFE

IMPROVEMENT OF QUALITY OF LIFE	FREQUENCY	%
YES	40	20
NO	155	78
Missing data in system	5	2
Total	**200**	**100**

The fact that most of the organisations that were providing aid did not target livelihoods strategies for the community of Sinansengwe, about 77,5% of the respondents said the provision of aid had not improved their quality of life compared to 20% who said yes, there was an improvement in the quality of life, referring to Table4.8

Those that agreed explained that they received goats in the small livestock projects from Heifer International and those that disagreed explained that they were not targeted as beneficiaries in some of the projects, hence they felt aid disrupted cohesion in their community.

Some informants were of the perception that the community needed no formal policing or enforcement mechanism to improve their quality of life. Their reasoning was that they had observed over the years that farmers maintaining a sustainable agricultural production level, had sufficient to meet local needs through conservation farming; use of their own local capacities (that is, knowledge of resources and ecological processes) to make rational socio-economic decisions; and that the community used culturally relevant mechanisms to prevent excessive resource use. The informants blamed support form NGOs and the government to have created dependency within the community.

TABLE 4.9: COMMUNITY EXPLANATIONS ON QUALITY OF LIFE

COMMUNITY EXPLANATIONS ON QUALITY OF LIFE	FREQUENCY	%
Provision of goats	140	70
Improved quality of life	47	24
Missing data in system	13	6
Total	**200**	**100**

Results in Table 4.9 suggest that provision of goats by non-governmental organization made the lives of the respondents to improve (70%). About 24% of the respondents also acknowledged that their lives had improved, but did not indicate whether it was from their own initiatives or assistance obtained elsewhere. There were also some respondents, sic percent, that failed to explain whether their quality of life had improved through support from other organizations.

TABLE 4.10 IMPORTANT SOURCES OF LIVELIHOOD

MOST IMPORTANT SOURCES OF LIVELIHOOD	FREQUENCY	%
Vegetable production	55	28
Livestock sales	109	55
Cultivating	5	3
Lobola	9	5
Craft work	22	9
Total	**200**	**100**

TABLE 4.11 LIVELIHOOD IN TIMES OF HARDSHIPS

SOURCES OF LIVELIHOOD IN TIMES OF HARDSHIPS	FREQUENCY	%
Extended family	73	37
Community	24	12
Government	43	22
NGOs	60	29
Total	**200**	**100**

The livelihood support for the community that helps build community's resilience to drought, identified included disposal of productive assets to meet immediate household food and other needs. IFAD (1993) says culture influences household ability to meet basic needs and negotiate survival. Table 4.6 shows that among the most prevalent support activities were crop sales 28%, livestock sales 55%, lobola *(money to pay for wife*) five percent and craft work nine percent. In terms of ranking, livestock sales were ranked the highest with 55% followed by craft work nine percent and lobola five percent.

The results suggest that regardless of drought having been identified as a major hazard in the community, some individuals could still afford to have some produce through conservation farming techniques and sell their produce to those who failed to produce. However, most members in the community relied on disposing livestock to mitigate hardships.

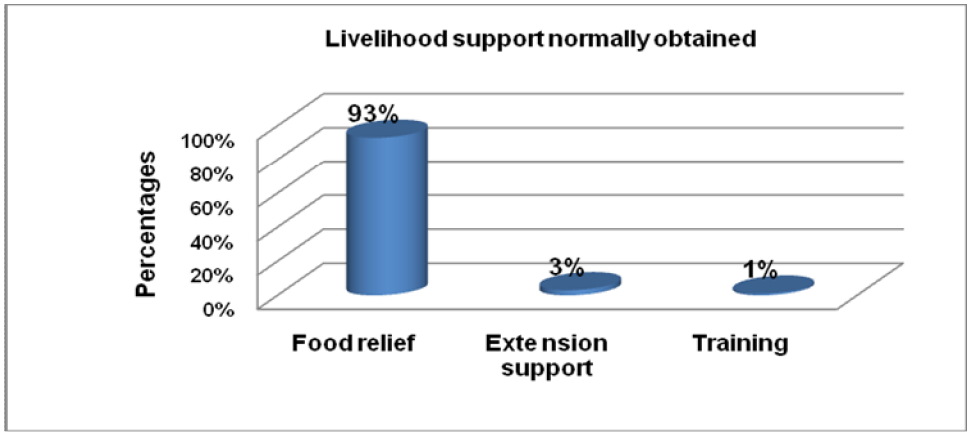

Figure 4.10 Rankings of Livelihood support

The level of a communityôs resilience is also influenced by capacities outside the community, in particular by emergency management services, but also by other social and administrative services, public infrastructure, and a web of socio-economic and political linkages with the wider world (Wickham, 1993).

Figure 4.10 shows that 93% of the respondents obtain food relief, six percent extension support and only one percent received training. Informal interviews revealed that Sinansengwe had problems of access to water for domestic and fishing purposes, a problem which was well known, but none of the aid providers was willing to assist in that area.

Informants confided that there was a proposal to build a pipeline to Bulawayo, 450 km away, while people who were 18 km away could not access that same water. The Sinansengwe community had also identified projects that would avail water from the Zambezi River to them. The results support the views aired by the informants that most of the support offered undermined building of resilience and instead contributed to the building of dependency. Virtually all communities were dependent on external service providers to a greater or lesser extent as the sections in the tables tried to capture some of these influences.

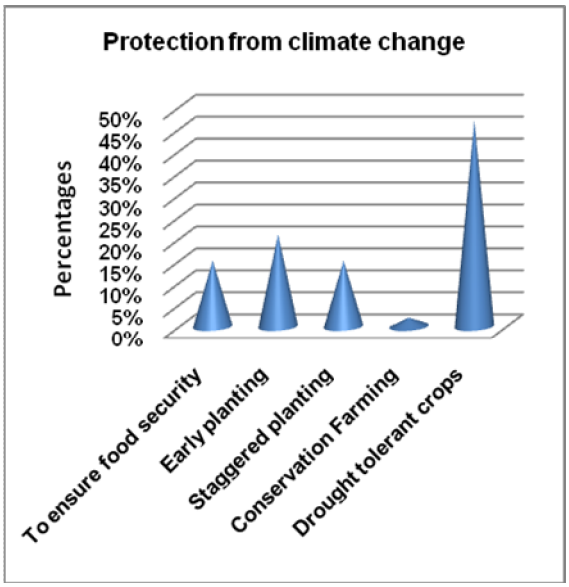

Figure 4.11: Protection from climate change

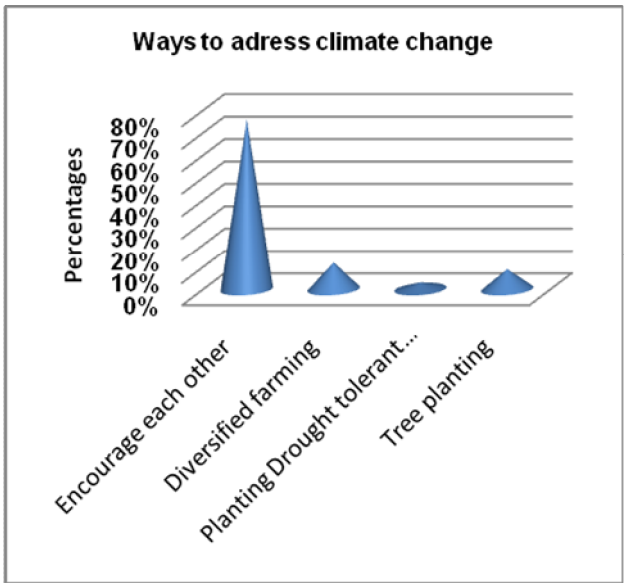

Figure 4.12: Ways to address climate change

The community of Sinansengwe was also aware of climate changes, and that they needed to protect themselves against the consequences. Figure 4.11 shows that about 20,5% stated that they needed to plant early while 14,5% were of the opinion that they stagger planting so as to ensure food security. About two percent indicated that conservation farming was the way to go compared to 48,5% who indicated that planting drought tolerant crops would deal with climate effects.

The results showed that to focus on resilience meant putting greater emphasis on what communities could do for themselves; how to strengthen their capacities, rather than concentrating on their vulnerability to disaster or their needs in an emergency. Knowledge and education levels in the community, particularly children and vulnerable groups, would help risk reduction strategies in any community (IUCN, 1997). The respondents indicated that they could encourage each other, diversify farming activities, plant drought tolerant crops, as well as plant trees to deal with climate changes (Table 4.12).
Informal interviews and observations made during the research revealed that vulnerability levels continue to rise as evidenced by the number of people requiring assistance from the World Food Programme through Save the Children (UK).

The reliance on food handouts had entrenched dependent syndrome in the poverty-stricken population and increased its vulnerability to drought shocks despite its magnitude. Observations and interviews with informants showed distributions of free handouts (food and seed) were not guided by an assessment to avoid promotion of dependency. The practice undermined community coping abilities and potential to manage the hazards prevalent in Sinansengwe despite their magnitude.

TABLE 4.12: CHANGES OVER 4 YEARS FOR MOST USEFUL LIVELIHOODS (N=200)

USEFUL ASSETS	N	INCREASED	DECREASED	NO CHANGE	TOTAL
Livestock	150	3%	43%	54%	100%
Vegetable production	14	0	29%	71%	100%
Crop rain fed production	36	0	12%	88%	100%

The results from Table 4.12 show that three percent of the respondents revealed that there was an increase of livestock during times of hardships over the past four years compared to 43% indicating a decrease in livestock. About 54% stated that there was no change in the number of their livestock. Regarding vegetable production, 29% of the respondents indicated a decrease while 71% stated there was no change. About 88% of the respondents who indicated that rain fed production was important said that there was no change and 12% revealed that there had been a decrease. The results show that the respondents were more likely to indicate that there was no change when it came to the most useful assets in their community.

The analysis of these results suggests that vulnerability to hazards by humans is usually intrinsically tied to different social processes. Exposed elements can lack resilience resulting in lack of development if there are no other options. When there is no development there is deterioration in most useful assets. The results, however, suggest there was no change in the most useful assets of the community in Sinansengwe. The respondents could mobilise own resources to respond to local hazards as a way of absorbing the impact. The results could also mean that community individuals could adjust to the changes they experienced even though, to some extent, they needed aid from other sources.

The results reveal what Dreze and Sen (1989) professed that to reduce impact and mitigate drought cash for work programmes may be more efficient than food based interventions (general food distribution). Such programmes create employment for locals and at the same time facilitate construction of structures like water reservoirs, irrigation schemes and repairing of boreholes to make water more accessible and promote agriculture. This also explains that distribution of inputs through fairs and vouchers enables farmers to develop local seed markets and create a revenue base for farmers.

TABLE 4.13: LIVELIHOODS SUPPORT DURING HARDSHIPS (N=200)

Source	N	%
Extended family	73	37
Community	24	12
Government	43	21
NGO	60	30

Respondents indicated that they did not receive support to compliment their assets as shown in Table 4.13. About 37% got support from their extended families compared to 30% who received support from non-governmental organisations. The government through the social service department and banks gave aid in Sinansengwe (21%) while the community assisted the most vulnerable (12%).

The results in Table 4.13 show that food aid has not made a great impact in reducing vulnerability. The respondents were more likely to state that they benefitted from their immediate family and NGOs. These results are consistent with Moyo's (1997) investigation that not only is the nature of aid, but the allocations of aid usually related to specific policies blocking meaningful development. For example the International Monetary Fund policy on Economic Structural Adjustment Programme in Zimbabwe (1990.), is still today being blamed in some quarters as the major contributor to challenges being faced by Zimbabwean rural communities.

4.4 Chapter Summary

Data were presented using graphs and tables to facilitate easy analysis and interpretation. The data presented was on the main variables, which are at play on the topic of the research, which is analysis of the impact of continuous external support on community resilience in Sinansengwe ward of the Sinansengwe community in Zimbabwe.

The graphs mostly presented a number of the respondents by gender and age and also level of academic and professional qualifications among other variables. The major findings in addressing the research problem were that women, who remained in the rural area when men migrated to find jobs elsewhere, lacked a role in solving problems in the community. The women were supposed to consult first with the elders. The elders were of the perception that women did not think and were unable to solve problems. In addition, the taxes from tourist enterprises such as lodges and houseboats as well as from kapenta industry did not accrue to the local people, but to central coffers and hence lack of development in the community.

The females were overburdened and failed to do all the tasks, but relied on support from NGOs, the government and to some extent the community itself. The large number of dependants meant that when there were hardships the community would use their assets to address food

shortages. Most sacrificed assets included small livestock and at times cattle. None of the organisations that offered aid strengthened communities to pursue their livelihood options of improving marketing skills, livestock rearing or growing indigenous fruits they gather in times of drought.

The reliance on food handouts has entrenched dependent syndrome on the poverty-stricken population and increased its vulnerability to drought shocks because of its magnitude. Observations and interviews with informants showed distributions of free handouts (food and seed) were not guided by an assessment to avoid promotion of dependency. Lack of development meant that there was deterioration in the most useful assets in the community.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The last chapter deals with the presentation, analysis and interpretation of the data that was collected in the field. This chapter gives a summary of the findings of the research project in relation to the research problems. Conclusions and recommendations are also given. The research problem was addressed through the analysis of the data that were collected from field officers of various organisations working in Sinansengwe community and analysed using the statistical package known as SPSS. The other problems were addressed through the analysis of documents such as registers for the wards, diaries and data collected through in-depth interviews, observations and survey questionnaire. The findings are presented in this chapter. The conclusion of the research is presented under the subheadings that refer to the specific aspects of the research.

5.2 Major Findings of the Research

The major findings based on the research objectives were:

.

- *Establish the extent to which external support has benefited the community of Sinansengwe*

Chief amongst these problems are chronic food insecurity, high incidence of diseases of the poor, a high illiteracy rate, limited access to water as well as isolation from the rest of the country. While efforts have been made to address these problems by the government and the NGO sector since independence in 1980, these problems have persisted and seem to have worsened. The land reform programmes, both the first phase of 1981-1996 and the second phase ñfast-trackò have left out the people of Sinansengwe, who instead have been confronted with an influx of outsiders. They have remained isolated from the national

programmes. This suggests that there could be deeper problems, which the development efforts are missing.

- *To establish the extent to which external support has reduced community's level of vulnerability*

The community of Sinansengwe continues to experience household food insecurity despite efforts by Government and non-governmental organizations through the provision of food handouts and agriculture inputs. The community remains vulnerable to drought and in the majority of cases most children fail to go to school as resources are diverted towards procurement of food.

Community continues to lose livestock through barter trade as they try to cushion themselves. In year 2008 members of Sinansengwe exchanged a goat for 5-10kg of mealie-meal Crop production in the area has gone down as farmers lost their valuable varieties due to drought. The community of Sinansengwe is not only vulnerable to drought but also to other epidemics such as malaria. The shortage of local seed varieties has led to communities failing to plant on time hence the Government of Zimbabwe, through the Grain Marketing Company, AGRITEX and non-governmental organizations, has distributed seed and fertilizers to facilitate community recovery from drought.

- *To determine the level of dependency on free handouts and the effects of free handouts on community coping skills*

The dominant source of livelihood for the people of Sinansengwe is agriculture. Owing to unreliable rainfall and poor soils coupled with lack of quality inputs as well as destruction of crops by wild animals, agriculture is risky. Overemphasizing the physical environment is being myopic and simplistic, and diverts attention from crucial issues.

The research established that NGOs do not offer assistance related to development of the community, instead they preferred food relief and to a smaller extent small livestock projects. Food relief created dependency among the community since they reduced the amount of work in the fields.

- *Establish community priority programmes that enhance recovery and promotes resilience*

Priority programmes Sinansengwe community identified, were conservation farming and involvement of communities in disaster risk management to unlock the potential of local resources and capacities. Involvement of communities needs to take into account different individuals within the community and their different vulnerabilities and capacities. Sinansengwe have problems of access to water for domestic and fishing purposes. A problem that is well known, is a proposal to build a pipeline to Bulawayo, 450 km away, while people who are 18 km away cannot access that same water. The Sinansengwe community also identified projects that would avail water from the Zambezi River to them.

- *Identify challenges leading to slow progress of community recovery*

Women who remained in the rural area when men migrate to find jobs elsewhere lack a role in solving problems in the community. The women were supposed to consult first with the elders. The elders were of the perception that women did not think and were unable to solve problems. In addition, the taxes from tourist enterprises such as lodges and houseboats as well as from kapenta industry did not accrue to the local people, but to central coffers and hence lack of development in the community. The females are overburdened and hence failed to do all the tasks, but rely on support from NGOs, the government and to some extent the community itself.

The large number of dependants meant that when there were hardships the community would use their assets to address food shortages. The most sacrificed asset included small livestock and at times cattle. None of the organisations that offer aid strengthens communities to pursue their livelihoods options of improving marketing skills, livestock rearing or growing indigenous fruits they gather in times of drought.

The reliance on food handouts has entrenched dependent syndrome in the poverty-stricken population and increased its vulnerability to drought shocks because of its magnitude. Observations and interviews with informants showed distributions of free handouts (food

and seed) were not guided by an assessment to avoid promotion of dependency. Lack of development meant that there was deterioration in most useful assets in the community. Exposed elements that were most useful during times of hardships were also exposed to hazards, especially droughts.

The people of Sinansengwe have limited livelihoods portfolios compared to those they had before they were removed from the present day Lake Kariba. They lost their entitlements as they lost control of the resources in their midst (Manyena, 2004). Since Sinansengwe is in a semi-arid region, the livestock project does not only sound relevant and appropriate since livestock rearing is not a foreign concept but will actually, all things being equal, provide draught power, fresh meat, milk and quick sales of income.

While donors have done a great job in Sinansengwe in the provision of some of the basic infrastructure related to health, water, education, agriculture as well as food aid, some of the donors have done more harm than good. For instance, the Water and Sanitation programme, which was started in 1985 by Save the Children (UK), has not performed to expected levels since the boreholes and well pumps broke down and were not repaired. Women and children still travel long distances to fetch water or resort to utilizing contaminated sources near their homes. In other words, there is need to review *supply side approaches* and try the *demand driven approaches* buttressed by effective learning process approaches to ensure sustainability when the NGOs pull out.

5.3 Recommendations

The findings could be used to develop a framework to reduce impact and mitigate drought. Cash for work programmes may be more efficient than food based interventions (general food distribution)ô Such programmes create employment for locals and provide an opportunity to develop themselves through construction of small water reservoirs, irrigation schemes and boreholes. In line with results of the research I recommend the following to enhance resilience of the Sinansengwe community:

- Decentralization of services will enhance decision-making at local level and improve accessibility of locals to natural resources benefits.

- Deliberate provision of free education at primary and secondary level by government to reduce illiteracy levels, which hamper effective participation in development and decision- making by communities.

- Introduction of small grain farming schemes that will help deliver both social protection for farmers and agricultural growth.

- Diversification of farming activities to spread the risk posed by drought with more focus on drought tolerant crops and livestock as well as plant trees to deal with climate changes.

- Capacity building programmes train potential beneficiaries realizing the importance of managing their own farming activities and livestock.

5.4 Concluding Remarks

The research study focused on an analysis of the impact of continuous external support on community resilience in Sinansengwe ward of Binga community in Zimbabwe. Literature review revealed that the provision of aid often creates disincentives for self-reliance and discourages people to work on their own farms. Food aid if poorly timed especially food for work programmes may divert labour from own household enterprises during critical times of the production cycle.

Grassroots International (1997) for highly food insecure recipients, Food for Work programmes may provide food and labour to people today, but hinder labour investments in future productions. Faminow (1995) suggests that food aid sold on local markets decreases prices and ultimately affect future investments. In Sinasengwe community and Zimbabwe the introduction of a Market Assistance Programme where certain foodstuffs are sold at a subsidized price, depressed the prices of sorghum and less land was being committed to this crop due reduced demand.

This research study was empirical in that it dealt with real phenomena or events at Sinansengwe ward. It was given an empirical character in that it incorporated qualitative and

quantitative approaches of structured questionnaires, structured and unstructured observations, in-depth interviews and document analysis; hence it took a blended design (Bogdan & Biklen 1992:29-32). Quantitative approaches dealt more with statistics that helped to profile those that participated in interviews and the graphs; the counts served to provide a visual presentation of certain variables. Most importantly, the statistics were purely descriptive in a way that strengthens the qualitative aspect of the data.

A lot of qualitative research is simply descriptive (Struwig & Stead, 2001). Quantitative and qualitative can be combined, to form mixed research, if the research so requires (Newman & Benz,1998). Taylor (2000:16) explains the purpose of quantitative research is to provide phenomena numerically to answer questions or hypothesis and the purpose of qualitative research is to provide rich narrative descriptions of phenomena that enhances understanding for it is typically conducted in natural settings. Qualitative research used the researcher as the primary instrument, employed multiple data gathering methods, and used an inductive approach to data analysis.

The major findings showed that one of the major problems being faced by the people of Sinansengwe, is chronic food insecurity due to narrow livelihood portfolios, which among others, is a product of lack of control of resources.

While it is clear that the people of Sinansengwe need good arable land for them to be food secure, there is need to come up with a comprehensive and sustainable land reorganisation programme, with support of the traditional and political leadership at all levels. Although this is necessary, it might take years. It is recommended that the restrictive laws, most of which, if not all, were made during the colonial government era but still applied today, be reviewed urgently so that the local people can access and control the resources in their midst.

While these laws are being reviewed, the people of Sinansengwe, should perhaps invade Chizarira National Park, Chete Safari area, Sijarira Forest, Mzola Forest and Kavira Forest to ensure the control of their resources. While there is a proliferation of NGOs in Sinansengwe, who undoubtedly have done a commendable job, especially in the provision of food aid to avert a humanitarian crisis, some of their long-term interventions need some improvements. Instead of building capacity for the communities to ensure sustainability, they have actually created

dependence. While the projects like the heifer and Sinansengwe Power Porridge40 need support and strengthening, perhaps there is need to establish people's organizations that NGOs will work with, as equal partners.

The peopleôs organizations will represent the interests of the wider community, with its leadership identifying with community values, vision and mission. In this way NGOs are likely to acknowledge and appreciate the existence of indigenous knowledge and wisdom. Once community members identify themselves with the organization, they will be more willing to participate effectively in its activities. As a vehicle for community participation, the people's organization ought to have a philosophy, common vision and values, and a flexible organizational structure, which should act as a binding force among project staff, community and committees.

However, there is need to learn from the pitfalls under which, participatory organizations like BIDA and CCJP went through. From BIDA, the greatest lesson is that so-called ôfounderô members are not necessarily leaders. The leadership and advisors should be carefully selected. From CCJP, the greatest lesson is that there is need to carry out a sensitivity analysis before embarking on a programme, especially on food aid and human rights as peopleôs organizations tend to threaten the status quo of the day.

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APPENDICES

Annex A

Preamble

My name is Thabo Ndlovu a Disaster Management student at the University of the Free State in South Africa. As part of the requirements of my studies, I am carrying out a research study, on the analysis of the impact of continuous external support on community resilience in Sinansengwe ward of Binga District in Zimbabwe.

I hereby request you to complete this questionnaire as accurately as possible so the information you provide may be used in the study. The information you provide will only be used for academic purposes and will be used confidentially and your right to privacy will be strictly observed.

Instructions:

- ✓ Please complete all sections of the questionnaire
- ✓ Please tick where appropriate

DATE _____ INTERVIEWER _____

HOUSEHOLD NO _____ VILLAGE _____

WARD _____ DISTRICT_____

A Household Demography

A1 Position of interviewee in Household	A2 Age in Years	A3 Gender	A4 Marital Status	A5 Household size (No of People)	A6 Status of Household Head	A7 Occupation/ Employment Of Household Head	A8 Highest Educational Qualification
1=Household head 2=Wife 3=Husband 4=Child	1=<18 2=18-30 3=31-40 4=41-50 5=51-60 6=>61	1=Female 2=Male	1=Single 2 =Married 3=Divorced /Separated 4=Widowed 5=Deserted 6=Never Married	1=<5 2=5-10 3=11-15 4=>15	1=chronically ill 2=Elderly 3=Child 4=Disabled 5=female 6=Male	1=Formal 2=Informal 3=Unemployed	1=Never went to school 2=Primary School 3=Secondary School 4=Tertiary Education

A9 Number of children of Primary School going age	A10 Number of Children actually in School	A11 Reasons for the Variance
1= < 3 children 2= 3-6 children 3= 7-10 children 4= > 10 children	1= < 3 children 2= 3-6 children 3= 7-10 children 4= > 10 children	1=lack of school fees 2=lack of school in area 3=child is bread winner 4=prolonged illness 5= lack of interest 6= other é é é é é é é ..

B Assets

B1	Number of household members chronically sick 1 = 1 2 = 2 3 = 3 4 = 4+
B2	Which of the following are the most useful assets in your household 1 = Livestock 2 = Vegetable production 3 = Curving 4 = Crop rain fed production 5 = Vending 6 = Other

Physical Capital

B3 Which of these implements do you own?	1 = Scotch Cart 2 = Ox - Plough 3 = Hoes 4 = Radio 5 = Other (Specify) é é é é é é é é é é é é é é
B4 Has the number of critical agricultural implements changed over the last 3 years	1 = increased 2 = decreased 3 = no change

B5 If there were any changes what were the reasons for the change	1 = sold due to pay for medical expenses 2 = sold to raise school fees 3 = sold to meet food requirements 4 = acquired more implements 5 = implements broke down 6 = Chickens/Guinea Fowls 7 = other (Specify)é é é é é é é é é é é é é é é é é é é é

B6 Type of livestock owned	1 = Cattle 2 = Goats 3 = Pigs 4 = Donkeys 5 = Sheep 6 = Other (Specify)é é é é é é é é é é é é é é é é é é é é
B7 Has the number of livestock owned changed over the last 3 years	1 = increased 2 = Decreased 3 = No change
B8 If there were any changes what were the reasons for the changes	1 = sold due to pay for medical expenses 2 = sold to raise school fees 3 = sold to meet food requirements 4 = acquired more implements 5 = implements broke down 6 = died due to drought 7 = other (Specify)é é é é é é é é é é é é é é é é é é é é
B9 Which small livestock would you prefer for your household?	1 = Rabbits 2 = Chickens 3 = Guinea Fowls 4 = Pigs 5 = Goats 5 = Sheep 6 = Other (Specify)é é é é é é é é é é é é é é é é é é é é

Hazards

B10 Which hazard is the most prevalent in your area?	1 = Floods 2 =Drought 3 = Fire 4 = HIV/AIDS 5 = Malaria 6 = other (Specify)é é é é é é é é é é é é é é é é é é é é
B11 How has the community responded if any of the above occurs?	
B12 Which organizations are operating in your	1 = Save the Children UK 2 = CADEC 3 = Basilwizi Trust 4 = ZDCP

area?	5 = Heifer International 6 = Ntengwe 7 = CAFOD 8 = FA0
B13 For how long have these organizations been operating in your area?	1= < 2 years 2= 2-5 years 3= 5- 8 years 4= 8- 10 years 5 = > 10 years
B14 How are they assisting the community?	1 = Provision of food aid 2 = Provision of seed and fertilizer 3 = capacity building through training 4 = provision of clothes 5 = Drugs e.g. Antiretroviral 6 = Water and sanitation 7 = Other (Specify)é é é é é é é é é é é é é é é é é é é
B15 Has provision of aid improved the quality of life?	1 = Yes 2 = Nos
B16 Explain your answer for B15	
B17 How are you involved in the identification, design and implementation of these projects done by organizations operating in your area?	
B18 In your own view how dependent are individuals/communities to external support?	

B20 What should be done to reduce the levels of dependency?	
B21 What challenges are you encountering in dealing with hazards which you have identified.	

C LIVELIHOODS

C1 What are the sources of income for your household? Tick all applicable	**C2** Rank the 5 most important sources of income, with 1 as the highest and 5 as the lowest
1 = crop sales 2 = livestock sales 3 = vegetables sales 4 = selling wild fruit 5 = remittances from abroad 6 = fishing 7 = selling curios 8 = other (specify) é é é é é é é é é é é é é é é é é	1 é . 2 é . 3 é . 4 é . 5 é .
C3 In times of hardships where do you get livelihood support?	1 = Extended family 2 = Community 3 = Government 4 = NGOs 5 = CBOs 6 = None 7 = Other (Specify) é é é é é é é é é é é é é é é é é
C4 What type of livelihood support do you normally get?	1 = Food relief 2 = Credit relief 3 = Cash transfer 4 = Extension support 5 = Training 6 = Other (Specify)

	é é é é é é é é é é é é é é é é é

D Hazard mitigation

D1 Are you aware of the changes in climate that are taking place in your community (please tick) 1 = Yes 2 = No	D2 Please explainé é .
D3 How have you managed to deal with changes in climate in the past five years?	
D4 What have you personally used to protect yourself from these changes in climate?	
D5 What are the main reasons for protecting yourself from climate change?	
D6 What is the community doing to address issues of climate change currently	
D7 Are you receiving assistance on time on time?	1 = Yes 2 = No
D8 What impact does this have on community recovery?	
D9 In your own view how can community resilience be improved?	

Thank you for your Cooperation

Annex B

My name is Thabo Ndlovu, Disaster Management student at the University of the Free State in South Africa. As part of the requirements of my studies, I am carrying out a research study, on the analysis of the impact of continuous external support on community resilience in Sinansengwe ward of Binga District in Zimbabwe.

I hereby request you to complete this questionnaire as accurately as possible so the information you provide may be used in the study. The information you provide will only be used for academic purposes and will be used confidentially and your right to privacy will be strictly observed.

Instructions:

- ✓ Please complete all sections of the questionnaire
- ✓ Please tick where appropriate

DATE _____ INTERVIEWER _____

ORGANIZATION _____ DISTRICT_____

A Demography

A1 Position of interviewee in Household	A2 Age in Years	A3 Gender	A4 Marital Status	A5 Indicate Household size (No of People) in community you are working	A6 Status of Household Head	A7 State Occupation/ Employment Of Household Head	A8 Highest Educational Qualification
1=Field Officer 2=Food monitors 3=Programme managers 4=Government workers 5=Teacher	1=<18 2=18-30 3=31-40 4=41-50 5=51-60 6=>61	1=Female 2=Male	1=Single 2 =Married 3=Divorced /Separated 4=Widowed 5=Deserted 6=Never Married	1=<5 2=5-10 3=11-15 4=>15	1=chronically ill 2=Elderly 3=Child 4=Disabled 5=female 6=Male	1=Formal 2=Informal 3=Unemployed	1=Never went to school 2=Primary School 3=Secondary School 4=Tertiary Education

A9 Number of	A10 Number of Children	A11 Reasons for the

children of Primary School going age	actually in School	Variance
1= < 3 children 2= 3-6 children 3= 7-10 children 4= > 10 children	1= < 3 children 2= 3-6 children 3= 7-10 children 4= > 10 children	1=lack of school fees 2=lack of school in area 3=child is bread winner 4=prolonged illness 5= lack of interest 6= other é é é é é é é é ..

B Assets

B2	Which of the following are the most useful assets in your area of operation? 1 = Livestock 2 = Vegetable production 3 = Curving 4 = Crop rain fed production 5 = Vending 6 = Other

Physical Capital

B3 Which of these implements do communities own?	1 = Scotch Cart 2 = Ox - Plough 3 = Hoes 4 = Radio 5 = Other (Specify) é é é é é é é é é é é é é é
B4 Has the number of critical agricultural implements changed over the last 3 years	1 = increased 2 = decreased 3 = no change

B5 If there were any changes what could be the reasons for the change?	1 = sold due to pay for medical expenses 2 = sold to raise school fees 3 = sold to meet food requirements 4 = acquired more implements 5 = implements broke down 6 = Chickens/Guinea Fowls 7 = other (Specify)é é é é é é é é é é é é é é é é é é é
B6 Type of livestock owned	1 = Cattle 2 = Goats 3 = Pigs 4 = Donkeys 5 = Sheep 6 = Other (Specify)é é é é é é é é é é é é é é é é é é é

B7 Has the number of livestock owned changed over the last 3 years	1 = increased 2 = Decreased 3 = No change
B8 If there were any changes what could be the reasons for the changes	1 = sold due to pay for medical expenses 2 = sold to raise school fees 3 = sold to meet food requirements 4 = acquired more implements 5 = implements broke down 6 = died due to drought 7 = other (Specify)é é é é é é é é é é é é é é é é é é é

Hazards

B10 Which hazards are the most prevalent in your area?	1 = Floods 2 =Drought 3 = Fire 4 = HIV/AIDS 5 = Malaria 6 = other (Specify)é é é é é é é é é é é é é é é é é é é
B11 How has the community responded if any of the above occurs?	
B13 how long have you been working in this community?	1= < 2 years 2= 2-5 years 3= 5- 8 years 4= 8- 10 years 5 = > 10 years
B14 How are you assisting the community?	1 = Provision of food aid 2 = Provision of seed and fertilizer 3 = capacity building through training 4 = provision of clothes 5 = Drugs e.g. Antiretroviral 6 = Water and sanitation 7 = Other (Specify)é é é é é é é é é é é é é é é é é é é
B15 Has provision of aid improved the quality of life in Sinansengwe?	1 = Yes 2 = No

B16 Explain your answer for B15	
B17 How are the beneficiaries involved in the identification, design and implementation of projects being implemented by your organizations in this area?	
B18 In your own view how dependent are individuals/communities to external support?	
B20 What should be done to reduce the levels of dependency?	
B21 What challenges are you encountering in assisting communities deal with hazards which you have identified.	

C LIVELIHOODS

C1 What are the sources of income of project beneficiaries ? Tick all applicable	**C2** Rank the 5 most important sources of income, with 1 as the highest and 5 as the lowest

1 = crop sales 2 = livestock sales 3 = vegetables sales 4 = selling wild fruit 5 = remittances from abroad 6 = fishing 7 = selling curios 8 = other (specify) é é é é é é é é é é é é é é é é é	1 é . 2 é . 3 é . 4 é . 5 é .
C3 In times of hardships where do you they get livelihood support?	1 = Extended family 2 = Community 3 = Government 4 = NGOs 5 = CBOs 6 = None 7 = Other (Specify) é é é é é é é é é é é é é é é é é
C4 What type of livelihood support do you normally provide?	1 = Food relief 2 = Credit relief 3 = Cash transfer 4 = Extension support 5 = Training 6 = Other (Specify) é é é é é é é é é é é é é é é é é

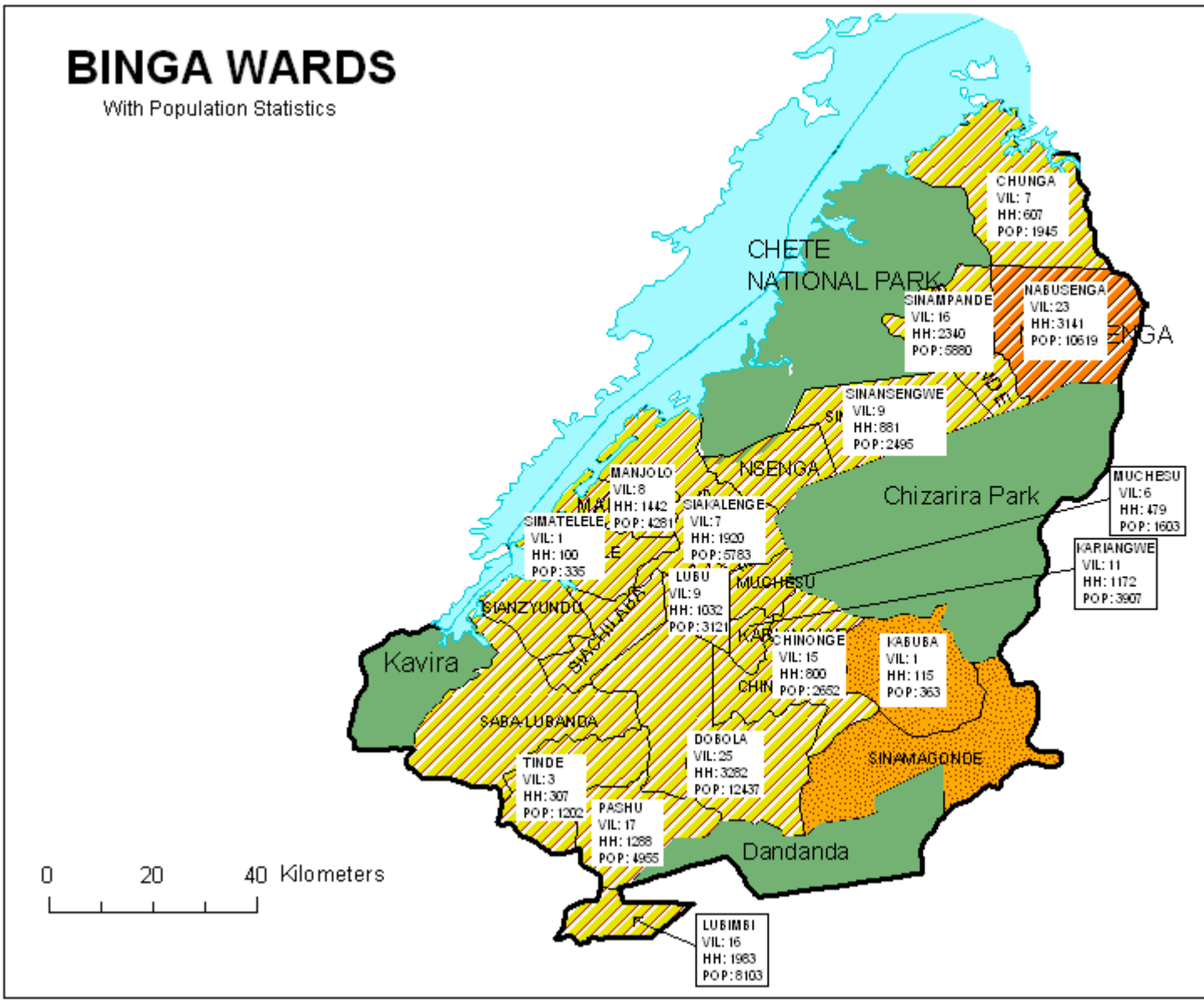
D Hazard mitigation

D1 Are you aware of the changes in climate that are taking place in your area of operation (please tick) 1 = Yes 2 = No	D2 Please explainé é .
D3 How has your organization been dealing with changes in climate in the past five years?	

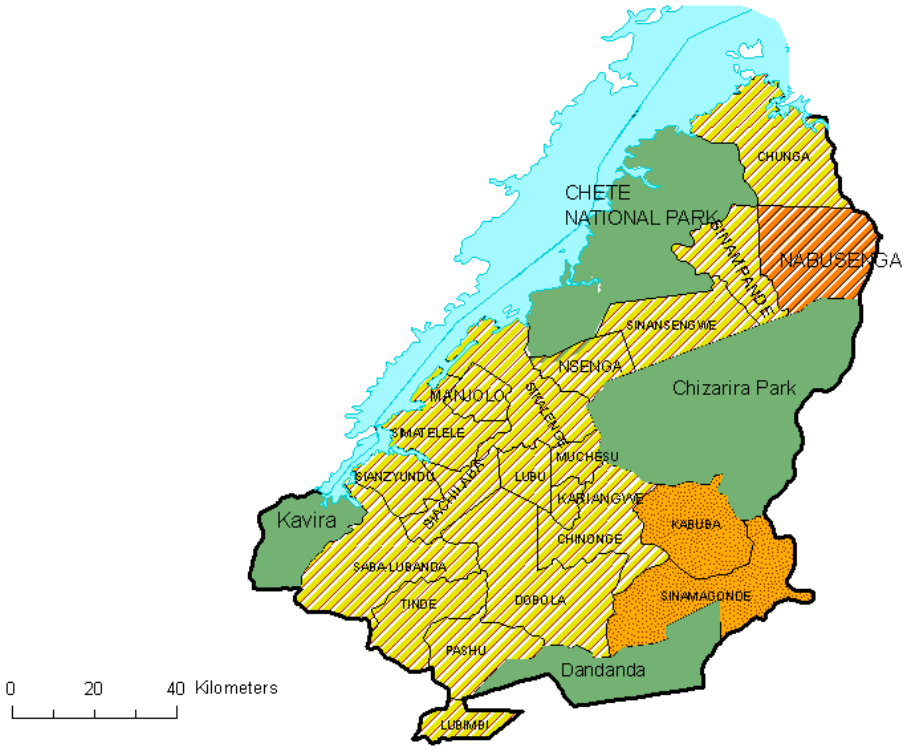
D4 What is your organization doing to protect project beneficiaries from these changes in Climate currently?	
D5 Is your organization providing assistance on time?	
D6 What impact does this have on community recovery?	
D7 How resilient is the community in dealing with hazards already identified?	
D8 ln your own opinion how can community resilience be improved?	

Thank you for your Cooperation

ANNEX C


BINGA WARDS
With Population Statistics
CHETE
NATIONAL PARK
CHUNGA
VIL: 7
HH: 607
POP: 1945
SINAMPANDE
VIL: 16
HH: 2340
POP: 5880
NABUSENGA
VIL: 23
HH: 3141
POP: 10619
SINANSENGWE
VIL: 9
HH: 881
POP: 2495
NSENGA
Chizarira Park
MUCHESU
VIL: 6
HH: 479
POP: 1603
KARIANGWE
VIL: 11
HH: 1172
POP: 3907
MANJOLO
VIL: 8
HH: 1442
POP: 4281
SIAKALENGE
VIL: 7
HH: 1920
POP: 5783
SIMATELELE
VIL: 1
HH: 100
POP: 335
LUBU
VIL: 9
HH: 1032
POP: 3121
SIANZYUNDU
MUCHESU
Kavira
CHINONGE
VIL: 15
HH: 800
POP: 2652
KABUBA
VIL: 1
HH: 115
POP: 363
SABA LUBANDA
DOBOLA
VIL: 25
HH: 3282
POP: 12437
SINAMAGONDE
TINDE
VIL: 3
HH: 307
POP: 1202
PASHU
VIL: 17
HH: 1288
POP: 4955
Dandanda
LUBIMBI
VIL: 16
HH: 1983
POP: 8103
0
20
40 Kilometers

Annex d : Binga district map



Bonnard- Large landslide movements and climate change: A long-term hazard assessment of possible disasters in Switzerland., Noverraz F., Bonnard Ch., Proc. IDNDR Symp.on Mitigation of Water- related disasters, Nagoya, Japan, Feb. 1999, pp. 143-155